

Constructing a Causal Attribution Scale for Physical Education Teachers for Physical Education Lessons in Maysan Governorate

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Abstract

Relationship between attribution and some of the explanations that the individual provides for his success and failure. He attributes this success and failure to the presence of four basic factors such as ability, effort, difficulty of the task, and luck. The research aims to build a causal attribution scale for physical education teachers in Maysan Governorate. The researcher used the descriptive approach with a sample method. The study was applied to a sample of (134) educational staff, including male and female physical education teachers in Maysan Governorate. The sample of the exploratory study amounted to (29) participants, and the main study amounted to (105) participants. They were selected randomly. The causal attribution scale was built (prepared by the researcher) and appropriate statistical treatments were used. (5) sources were identified, namely confronting anxiety - emotional arousal - self-confidence - mental imagery - emotional balance, which represent the main axes of the causal attribution scale for physical education teachers in Maysan Governorate. Existence of a strong consistency relationship between the questions posed and dimension to which phrase relates to scale of causal attribution axes, where highest consistency was recorded in the third axis (self-confidence), question No. (13), the least consistency between the questions posed and dimension to which phrase relates is in the second axis (emotional arousal), question number (17), which reached (167). The study concluded that these axes can be adopted to identify the averages and standard deviation of physical education teachers and instructors. It concluded that there are standard scores for the causal attribution axes scale and recommended the necessity of using these axes as an indicator to identify the causal attribution of physical education teachers and instructors in Maysan Governorate.

Keywords: Causal Attribution Scale; Physical Education Teachers; Physical Education Lesson; Maysan Governorate

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1. INTRODUCTION

Educational institutions today are confronted with numerous dynamic variables and systemic challenges that demand strategic, evidence-based planning to foster student growth and navigate the complexities of modern education. The objective is to cultivate a generation that is not only intellectually and socially competent but also physically and mentally prepared to face the demands of contemporary society. This holistic development aligns with the principle that "a healthy mind resides in a healthy body" (Schindler et al., 2023). Realizing this vision requires concerted efforts to improve school infrastructure, ensure adequate nutrition, and provide scientifically grounded health and physical education programs. Furthermore, equipping educational institutions with well-trained physical education professionals is essential to effectively implement the national curriculum as mandated by educational ministries and supervisory bodies (Salimi et al., 2023).

A growing body of research has explored the concept of causal attribution—the explanations individuals provide for their successes and failures. Empirical studies consistently show that individuals tend to attribute their successes to internal factors (such as ability and effort) and their failures to external conditions (such as luck or task difficulty) (Sapozhenkova et al., 2024; Hortobágyi et al., 2022). Psychologists have also highlighted the direct relationship between attribution patterns and motivational drives. Internal motivations include elements such as ambition, challenge, excitement, and self-confidence, while external motivations may involve rewards or social recognition (Durand-Bush et al., 2023). Attribution theory posits that people interpret their outcomes through four primary lenses: ability, effort, task difficulty, and luck (Méndez-Dominguez et al., 2022). Teachers, for example, may believe that their performance is driven by high or low competence, the intensity of effort, the nature of the task, or situational factors beyond their control (Storm et al., 2021). Additionally, factors like personal mood, physical illness, fatigue, personality traits, or external support can influence these attributions, which ultimately shape future behavior, beliefs, and emotional responses (Petancevski et al., 2022).

Within this framework, physical education (PE) holds a unique and indispensable place in the school curriculum. It contributes not only to physical fitness and motor development but also to students' psychological well-being, self-confidence, and social interaction. Countries that emphasize physical education tend to produce generations that excel not only in sports but also in science, technology, and industry. PE lessons serve as a platform for students to engage in structured physical activity, build discipline, participate in school tournaments, and lay the foundation for national sports representation. Physical education is distinct from other academic subjects in that it fosters joy, engagement, and motivation through movement-based learning. In the schoolyard, students experience a sense of freedom and self-expression through a variety of structured exercises and sports. The role of the PE teacher is central to this process, from demonstrating techniques and monitoring students to offering feedback, correcting errors, and managing time efficiently (Thompson et al., 2022).

These pedagogical components significantly influence the effectiveness of PE lessons. When implemented successfully, they enhance students' focus, physical discipline, and academic achievement, thereby contributing positively to individual student outcomes, school reputation, and regional educational performance (Qutaiba, 2021). However, despite its value, physical education is frequently marginalized. In many schools, PE classes are scheduled last in the weekly timetable—or worse, excluded altogether—to prioritize academic subjects. This undervaluing of physical education is reflected in several systemic problems: the absence of proper PE facilities, lack of regular supervisory evaluations, minimal access to sports equipment, reassignment of PE teachers to non-related subjects, overcrowded classrooms, and administrative decisions that prioritize academic exam preparation over physical development.

Such challenges create demotivation among physical education instructors, who often cite these conditions as reasons for their inability to conduct effective lessons. The lack of institutional support and supervision further compounds the issue, resulting in disinterest and disengagement among teachers. Some instructors become resigned to the belief that their role is nonessential, leading to apathy and a gradual abandonment of their instructional duties (Banwan shareef, 2020). Recognizing the complexity of these issues, this study focuses on the development of a Causal Attribution Scale specifically designed for physical education teachers and instructors in Maysan Governorate. The aim is to better understand how teachers perceive the factors influencing their ability—or inability—to implement physical education lessons and how these attributions correlate with motivational patterns and instructional behavior.

The novelty of this study lies in its development of a tailored, psychometrically valid attribution scale specifically for physical education professionals—something not yet available in the regional or broader Arab educational research context. While previous studies have explored attribution theory in general educational settings, none, to the researcher's knowledge, have applied it systematically to physical education in under-resourced or marginalized educational environments such as those found in Maysan. This scale will not only serve as a diagnostic tool to measure and interpret teachers' attribution patterns but also inform future interventions, policy reform, and teacher training strategies aimed at revitalizing the role of physical education in holistic student development. Kim (2022) defines it as the player repeatedly justifying the reasons for his success in sports competition to internal control factors or fixed factors, and repeating the reasons for his failure to external or unstable factors or factors that he cannot control. It is as if the player attributes the credit to himself in the case of success, and on the contrary, failure is outside the scope of his control and is attributed to external factors that he cannot control (Kim et al., 2022).

Accordingly, this study has two primary objectives: (1) to construct a valid and reliable causal attribution scale for physical education teachers and instructors in Maysan Governorate, and (2) to identify the core dimensions that define their attribution patterns in relation to the delivery of physical education lessons. The researcher hypothesizes that it is both possible and meaningful to quantify these attribution patterns and that statistically significant relationships exist between the identified dimensions and the individual items comprising the scale.

2. METHOD

Participant

This study was conducted over the period from October 8, 2022, to December 6, 2022, at the Directorate of Education, several schools, and the school activities hall under the authority of the Maysan Governorate

Education Office. The researcher employed a descriptive approach using the survey method, as it was deemed appropriate for the nature of the study and its objectives. The research population consisted of 105 educational personnel, including teachers, instructors, and holders of master's and doctoral degrees in physical education. Human resources for this study comprised physical education teachers employed in the Maysan Governorate during the 2022 academic year. A total of 134 physical education staff members, both male and female, were involved in the study. Of these, 29 participants were part of the exploratory phase, while 105 participants were included in the main study. All participants were selected using a random sampling technique to ensure objectivity and representativeness of the target population.

Table 1. Numerical description of the research sample according to academic qualifications in the exploratory study and the basic study 134 = n

Sample Bb Academic Qualification	Sample		Exploratory study		Basic study	
	Number	%	Number	%	Number	%
Diploma	12	8.95	5	17.24	7	6.7
Bachelor's	73	54.48	11	37.93	62	59.0
Master's	20	14.93	6	20.69	14	13.3
Ph.D	29	21.64	7	24.14	22	21.0
Total	134	100	29	100	105	100

It is clear from Table (1) which is related to the numerical description of the research sample that the total research sample amounted to (134) male and female physical education teachers in Maysan Governorate divided into (4) academic qualifications (Diploma - Bachelor's - Master's - Doctorate). The survey study was conducted on (29) participants between male and female teachers of both sexes at a rate of (21.64) and the highest percentage of participants was those holding a bachelor's degree, about 11 at a rate of (37.93%), followed by those with a doctorate degree, whose number is (7) by (24.14%) Followed by holders of a master's degree, numbering (6), with a percentage of (20.69), and the least participation was from holders of a diploma, numbering (5), with a percentage of (17.24). The basic study was conducted on (105 participants, with a percentage of (78.36).

The highest number of participants were those with a bachelor's degree, numbering (62). Participant at a rate of (59.0 %), followed by holders of a doctorate degree with a number of (22) participants and a rate of (21.0), followed by holders of a master's degree with a number of (14) participants and a rate of (13.3), and the smallest number of participants are holders of a diploma degree with a number of (7) participants and a rate of (6.7). The conditions for selecting the sample include that should be part of the permanent staff of the Education Directorate in Maysan Governorate. Chronological age not be less than (25) years. Specialization be physical education.

Table 2. Numerical description of the exploratory study and the primary study of the research sample is shown according to age level and gender. n = 134

Exploratory Study						
Age	Type					
	Repetition	Ratio	Female	Ratio	Male	Ratio
25-35	7	24.1	2	22.2	5	25
36-45	14	48.3	4	44.4	10	50
46-60	8	27.6	3	33.4	5	25
Total	29	100.0	9	100.0	20	100.0
Basic study						
Sex						
Repetition	Ratio	Female	Ratio	Male	Repetition	Ratio
24	22.9	11	27.5	13	20	
48	45.7	20	50	28	43.08	
33	31.4	9	22.5	24	36.92	
105	100.0	40	100.0	65	100.0	

We note from Table (2) above describing the research sample according to age level and gender for the exploratory study that the highest category was within the age level (36-45) with a number of (14) participants at a rate of (48.3) where the number of males was (10) at a rate of (50) and the number of females was (4) at a rate of (44.4) and the lowest percentage of participants was within the age level (25-35) with a number of (7) at a rate of (24.1) where the number of male participants was (5) at a rate of (25) as it is noted from the table above in the basic study that the highest category of male participants was within the age level (36-45) with a number of (48) participants from both sexes where the number of males was (28) at a rate of (43.08) and the number of females was (20) at a rate of (50) and the lowest category of participants was within the age level (25-35) where the number of males was (24) at a rate of (36.92).

Steps to Build the Scale

1) Reviewing some scientific references and previous studies related to the research topic in the field of sports psychology Brun (2021), Wei (2024) Petancevski (2022). (Brun et al., 2021) (Wei et al., 2024) (Petancevski et al., 2022).

2) The researcher formulated a number of axes related to causal attribution and presented them to the experts, whose number was (13), and they amounted to (5) axes, and they were answered, and for each axis there were (8) phrases, and the number of phrases amounted to (40).

Table 3. Percentage of agreement of arbitrators on axes of causal attribution scale for physical education teachers, n = 13 arbitrator

Axis	Agreement rate	
	Repetition	Approval rate %
Facing anxiety	10	76.92
Emotional arousal	11	84.61
Self-confidence	12	92.30
Mental imagery	10	81.82
Emotional balance	11	84.61

It is clear from Table (3) that the percentage of the arbitrators' approval reached between (92.30 - 76.92), where the researcher accepted an approval percentage of (75) or more. Thus, the axes in their initial form became composed of (5) sources, each source having (8) phrases, as shown in Table (3).

The phrases of the axes of the causal attribution scale were distributed in its final form and applied to the sample in a regular random manner so that the respondent would not be affected by the pattern of phrases for each axis. The first axis included confronting anxiety, phrase numbers (1, 6, 11, 16, 21, 26, 31, 36), the second axis, emotional arousal, consisted of phrase numbers (2, 7, 12, 17, 22, 27, 32, 37), the third axis, self-confidence, consisted of phrase numbers (3, 8, 13, 18, 23, 28, 33, 38), the fourth axis consisted of phrase numbers (4, 9, 14, 19, 24, 29, 34, 39), and the fifth axis consisted of phrase numbers (5, 10, 15, 20, 25, 30, 35, 40). As shown in the table below (4).

Validity of external and internal (apparent) consistency of causal attribution axes scale for physical education lesson

The researcher presented the scale to 13 experts who specialize in sports psychology to determine the suitability of the statements as in Table (4).

Table 4. Shows the validity of external consistency and the relative importance of the judges for the causal attribution scale in its final form and the correlation coefficient for each statement and the dimension to which it belongs. Judges n=13 - sample n=105

Phrase number	Suitable		Somewhat suitable		Not suitable		Relative importance	Correlation coefficient	Degree of confidence
	Repetition	100 %	Repetition	100 %	Repetition	100 %			
1	10	76.92	0	0.00	3	23.08	84.61	.294**	.002

2	10	76.92	1	7.69	2	15.3 8	87.17	.543**	.000
3	11	84.62	1	7.69	1	7.69	92.30	.572**	.000
4	12	92.31	1	7.69	0	0.00	97.43	.610**	.000
5	11	84.62	1	7.69	1	7.69	92.30	.317**	.001
6	10	76.92	1	7.69	2	15.3 8	87.17	.571**	.000
7	10	76.92	0	0.00	3	23.0 8	84.61	.365**	.000
8	11	84.62	2	15.3 8	0	0.00	94.87	.570**	.000
9	12	92.31	1	7.69	0	0.00	97.43	.617**	.000
10	10	76.92	1	7.69	2	15.3 8	87.17	.339**	.000
11	10	76.92	0	0.00	3	23.0 8	84.61	.362**	.000
12	9	69.23	2	15.3 8	2	15.3 8	84.61	.368**	.000
13	11	84.62	1	7.69	1	7.69	92.30	.640**	.000
14	10	76.92	1	7.69	2	15.3 8	87.17	.570**	.000
15	10	76.92	2	15.3 8	1	7.69	89.74	.260**	.007
16	11	84.62	1	7.69	1	7.69	92.30	.313**	.000
17	9	69.23	1	7.69	3	23.0 8	82.05	.167	.088
18	12	92.31	0	0.00	1	7.69	94.87	.474**	.000
19	10	76.92	3	23.0 8	0	0.00	92.30	.512**	0.00
20	10	76.92	2	15.3 8	1	7.69	89.74	.533**	0.02
21	10	0	1	7.69	2	15.3 8	87.17	.479**	0.02
22	11	84.62	2	15.3 8	0	0.00	94.87	.418**	0.01
23	10	0	0.00	0.00	3	23.0 8	84.61	.637**	0.00
24	10	76.92	1	7.69	2	15.3 8	87.17	.582**	0.00
25	11	84.62	0.00	0.00	2	15.3 8	89.74	.543**	0.00
26	11	84.62	2	15.3 8	0	0.00	94.87	.454**	0.00
27	10	76.92	2	15.3 8	1	7.69	89.74	.594**	0.00
28	10	76.92	0	0.00	3	23.0 8	84.61	.311**	0.00
29	11	84.6 2	1	7.69	1	7.69	92.30	.516**	0.00
30	10	76.92	1	7.69	2	15.3 8	87.17	.296**	0.02
31	11	84.62	1	7.69	1	7.69	89.74	.627**	0.00

32	11	84.62	2	15.3 8	0	0.00	94.87	.564**	0.00
33	10	76.92	2	15.3 8	1	7.69	89.74	.525**	0.00
34	11	84.62	0	0.00	2	15.3 8	89.74	.579**	0.00
35	10	76.92	0	0.00	3	23.0 8	84.61	.461**	0.00
36	10	76.92	1	7.69	2	15.3 8	87.17	.627**	0.00
37	11	84.62	1	7.69	1	7.69	92.30	.627**	0.00
38	12	92.31	0	0.00	1	7.69	94.87	.425**	0.00
39	10	76.92	2	15.3 8	1	7.69	89.74	.580**	0.00
40	11	84.62	1	7.69	1	7.69	92.30	.328**	.001

It is clear from Table (4) regarding the experts' opinion poll on the suitability of the phrases for the scale of causal attribution axes for physical education teachers and instructors in Maysan Governorate that the relative importance of the experts' agreement on the phrases ranged between (80 % to 97.43) and the researcher accepted an agreement rate of 80%. % or more to accept the statement, so the researcher made sure that the statements agree with the dimensions by a percentage greater than 80 % and thus the scale in its final form contains (40) statements divided into (5) axes and each axis has (8) statements as shown in Table (4). It is also noted that the correlation coefficient recorded the highest consistency in question number (13) at a percentage of (.640**) and the dimension to which it belongs and the least moral consistency was recorded in question number (17) where it reached (167).

Scale invariance

The researcher confirmed the stability of the scale using the Cronbach's alpha coefficient as shown in Table No. (5), as the scale enjoys validity, stability and objectivity.

Table 5. Shows Cronbach's alpha coefficient value

Phrases	Alpha Cronbach
48	.842

Table (5) shows that value of Cronbach's alpha coefficient (.842) This indicates that the phrases are characterized by high validity and reliability for the causal attribution axes scale for physical education teachers and instructors in Maysan Governorate, as the phrases of the causal attribution axes scale reached (48) phrases in addition to the axes of the total for each axis with the variables of age, academic qualification, and gender.

Research Design

This study employed a descriptive research design using a survey method, which was considered suitable for the objectives of constructing a causal attribution scale for physical education teachers. The research design consisted of two primary phases: an exploratory study and a main study. The exploratory study was conducted over the period from April 12, 2022, to April 17, 2022. This phase aimed to identify common question patterns among male and female physical education teachers, and to determine how clearly they understood and responded to statements that might carry multiple interpretations. The findings from the exploratory phase were used to refine the wording of the scale items, improve clarity, and ensure the validity of the instrument before full implementation.

Following the exploratory phase, the main study was conducted from May 3, 2022, to July 26, 2022. During this phase, the final version of the causal attribution scale—organized into its respective dimensions or axes—was administered to a representative sample of physical education teachers and instructors in Maysan Governorate. The aim was to assess the psychometric properties of the scale, including its validity and reliability, and to capture the attribution patterns used by teachers in relation to their success or challenges in delivering physical education lessons. The design ensured a structured, stepwise approach to instrument development and

empirical validation within the context of the educational environment in Maysan.

Data Analysis

The data analysis procedures in this study were conducted systematically to ensure the accuracy, reliability, and validity of the constructed causal attribution scale for physical education teachers in Maysan Governorate. First, descriptive statistics were utilized, including measures of central tendency such as the arithmetic mean, median, and standard deviation. These indicators were used to examine the distribution and spread of responses, assess the clarity of each item, and compare the central values across the scale components. Next, the internal consistency of the scale was evaluated using Cronbach's alpha coefficient. A value of 0.70 or higher was considered acceptable, indicating strong internal reliability. Items that negatively affected the overall reliability were reviewed and considered for exclusion.

Following this, the construct validity of the scale was examined through item-total correlations using Pearson's correlation coefficient. Each item's correlation with its respective dimension was assessed, and items with statistically significant correlations ($p < 0.05$ or $p < 0.01$) were considered valid indicators of the intended construct. In addition, intercorrelation analyses among the scale's dimensions were conducted to explore the relationships between various attribution factors and to confirm the theoretical structure of the scale. Frequencies and percentages were also calculated to describe the distribution of responses and to identify the most common attribution tendencies among teachers—whether internal (such as ability or effort) or external (such as school conditions or administrative challenges).

These comprehensive analytical procedures helped ensure the quality of the final version of the causal attribution scale. All statistical analyses were carried out using appropriate statistical software, allowing the researcher to construct a psychometrically sound instrument capable of measuring the attribution patterns of physical education teachers effectively and accurately.

3. RESULTS AND DISCUSSION

Results

Results are displayed in light of the acceptance levels of the averages according to the five-point Likert scale:

Table 6. Acceptance of averages according to five-point Likert scale

Sample orientation	Period
Strongly disagree	1.79-1
Disagree	2.59-1.80
Neutral	3.39-2.60
OK	3.19-3.40
Strongly agree	5-4.20

It is noted from Table (6) It shows the acceptance levels of the averages according to the five-point Likert scale for the basic study, where the averages ranged towards strongly agree, which is the highest percentage (5-4.20), towards agree (3.19-34), towards neutral (3.39-2.60), towards disagree (2.59-1.80), and towards strongly disagree (1.79-1).

Table 7. It shows the average answers of the research sample members to the statements of the causal attribution axes scale for the anxiety confrontation axis._n=105

Axis	Sample orientation	Percentage	Standard Deviation	Arithmetic Mean	Sample Size	Strongly Disagree	Disagree	Neutral	OK	Strongly Agree	Phrase Number
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First axis	OK	84.4	0.9	4.22	105	2	3	13	39	48	1
Facing anxiety	OK	85.4	0.97	4.27	105	3	3	12	32	55	2
	neutral	73.4	1.22	3.67	105	5	19	15	33	33	3
	OK	84.8	0.84	4.24	104	1	1	18	36	48	4
	neutral	81.6	0.95	4.08	105	3	3	17	42	40	5
	OK	80.6	1.04	4.03	105	3	5	22	31	44	6
	OK	79	1.12	3.95	105	4	8	21	28	44	7
	OK	69.2	1.2	3.46	105	8	14	30	28	25	8
Average for the year for the axis	OK	79.8	1.08	3.99	0	0	0	0	0	0	0
	OK	69.8	1.35	3.49	105	13	13	19	30	30	9
	OK	82	1.03	4.1	105	1	9	18	27	50	10
The second axis is emotional arousal.	Disagree	50.6	1.16	2.53	105	21	36	26	15	7	11
	OK	78.8	0.92	3.94	105	2	5	21	46	31	12
	OK	71.6	0.94	3.58	105	1	12	36	37	19	13
	OK	71.4	1.04	3.57	105	4	9	38	31	23	14
	OK	79.6	1.1	3.98	105	6	3	19	36	41	15
	Strongly agree	93.4	0.61	4.67	105	1	0	2	27	75	16
General average	Towards the agreed	74.6	1.19	3.73	105	103	0	0	0	0	0
The third axis	Strongly agree	93	0.53	4.65	105	0	0	3	31	71	17
	OK	72.6	1.31	3.63	105	9	14	21	24	37	18
self-confidence	Strongly agree	84	1.07	4.2	105	4	5	13	27	56	19
	Strongly agree	88.8	0.68	4.44	105	0	1	8	40	56	20
	OK	72.8	1.23	3.64	105	7	12	27	25	34	21
	OK	70	1.07	3.5	105	5	11	37	31	21	22
	Strongly agree	86	0.73	4.3	105	0	3	8	48	46	23
	Strongly agree	92.8	0.62	4.64	105	0	1	5	25	74	24
General average, third axis	OK	82.4	1.04	4.12	0	0	0	0	0	0	—

Axis IV: Mental Imagina tion	Very much agree	87.4	0.81	4.37	105	1	1	13	33	57	25
	Very much agree	85.6	0.75	4.28	105	1	0	13	46	45	26
	Very much agree	89.8	0.74	4.49	105	1	1	7	33	63	27
	OK	72.8	1.02	3.64	105	2	9	42	24	28	28
	neutral	66.6	1.22	3.33	105	11	14	29	31	20	29
	OK	74.8	1.08	3.74	105	4	6	36	26	33	30
	Strongl y agree	88.6	0.75	4.43	105	0	1	14	29	61	31
General average axis	Strongl y agree	94.2	0.49	4.71	105	0	0	2	26	77	32
	OK	82.4	1	4.12	0	0	0	0	0	0	0
	OK	76.8	0.96	3.84	105	1	8	28	38	30	33
	OK	75.8	1.03	3.79	105	2	10	27	35	31	34
	Strongl y disagree	30	0.95	1.5	105	74	19	4	6	2	35
	OK	74	1.27	3.7	105	7	16	15	31	36	36
	OK	77.4	1.1	3.87	105	4	11	15	40	35	37
Axis V: Emotio nal Balance	Strongl y agree	89.6	0.69	4.48	105	1	0	6	39	59	38
	neutral	58.6	1.11	2.93	105	14	18	42	23	8	39
	Strongl y agree	86	0.76	4.3	105	0	1	16	38	50	40
General average, fifth axis	OK	71	1.33	3.55	0	0	0	0	0	0	0

It is noted from Table (7) the average answers of the research sample members on: The phrases of the axis (confronting anxiety) constitute a relatively high acceptance, as the averages ranged between (3.46 - 4.24). The total arithmetic mean of the axis was (3.99), with a standard deviation of (1.08), and the direction of the sample's answers towards the axis of confronting the dawn was towards agree. As noted from the above table No. (7) with regard to the second axis, emotional arousal, from the average answers of the research sample individuals, it constitutes a relatively high acceptance, as the averages ranged between (2.53 - 4.67), as the total arithmetic mean of the axis was (3.73), with a standard deviation of (1.19), and the direction of the axis was towards agree. Looking at Table No. (7), it is noted that the average responses to the third axis (self-confidence) constitute a high level of acceptance, as the averages ranged between (3.5 - 4.64). We also note that the trend of the general average for the axis as a whole is towards agree, as the overall arithmetic average for the axis reached (4.12) with a standard deviation of (1.04). Returning to Table No. (7), it is noted that the average responses of the research sample individuals regarding the phrases of the axis (mental perception) constitute a relatively high level of acceptance towards agree, as the averages ranged between (3.33 - 4.71). We also note that the trend of the general average for the axis as a whole is towards agree, as it reached (4.12) with a standard deviation of (1). Regarding the fifth axis, it is noted from Table (7) that the average answers to the axis (emotional balance) constitute a relatively

high acceptance, as the averages ranged between (1.5 - 4.48). We also note that the general average trend for the axis as a whole is towards agreeing, as the total arithmetic average for the axis reached (3.55) with a standard deviation of (1.33).

Discussion

This section outlines the key findings derived from statistical data analysis. As presented in Table 4, a strong consistency was observed between the items and the dimensions associated with the causal attribution scale. The highest consistency was found in the third dimension, self-confidence, particularly in item 13, with a correlation coefficient of 0.640**. Conversely, the lowest consistency appeared in the second dimension, emotional arousal, especially in item 17, which showed a correlation of 0.167. Based on Table 7, the mean responses to items within the first dimension, coping with anxiety, demonstrated a relatively high level of agreement among participants. The item means ranged from 3.45 to 4.26, with a total mean of 3.99 and a standard deviation of 1.08. This indicates that respondents generally agree that coping with anxiety is a critical factor in the causal attributions made by physical education teachers. Wei et al., (2024) describe anxiety as a complex emotion involving internal tension, fear, and anticipation of threat, particularly when individuals feel unprepared to face challenges. Similarly, Petancevski et al., (2022) notes that anxiety can lead to a range of psychological symptoms affecting both social and professional performance.

The researcher believes that physical education requires serious attention from various institutions, including the Ministry of Education, Ministry of Youth and Sports, and the Ministry of Higher Education. Unfortunately, physical education classes are often marginalized due to curriculum overload and limited supervision. Nevertheless, physical education teachers continue to demonstrate dedication by addressing challenges such as limited facilities and large class sizes, while still striving to meet learning objectives. This aligns with the findings of Gustian et al., (2024), who emphasizes that the ability to manage anxiety is crucial in shaping a teacher's personality and achieving educational success. The second dimension, emotional arousal, also showed high levels of agreement, with item means ranging from 2.53 to 4.67, a total mean of 3.73, and a standard deviation of 0.442. Physical education teachers play a significant role in shaping student character through physical activity and sports, promoting positive values, motor skills, and social interactions (Karasiévych et al., 2021; Yu, 2021). However, excessive emotional arousal may negatively affect teachers' focus and concentration. Psychological readiness is essential for teachers to manage their emotions and maintain optimal performance (Melnik et al., 2021). This is supported by Özcan & Saraç, (2021), who found a negative relationship between emotional arousal and achievement motivation.

The third dimension, self-confidence, revealed a high level of agreement, with item means ranging from 3.5 to 4.65, a total mean of 4.12, and a standard deviation of 1.04. (Christiani et al., 2021) assert that physical education is vital for the holistic development of students—physically, mentally, and socially. A teacher's self-confidence is reflected in their ability to manage classes, interact with students, and adapt to different teaching conditions. Confident teachers can overcome challenges in lesson delivery and make sound pedagogical decisions (Wulandari et al., 2021). The researcher argues that self-confidence is essential for physical education teachers to build positive relationships with students and effectively resolve classroom issues. The fourth dimension, mental imagery, had item means ranging from 3.33 to 4.71, with a total mean of 4.12 and a standard deviation of 1.00. Mental imagery supports teachers in designing effective instruction by cognitively modeling the skills being taught. According to Ahmed et al., (2022) and Salimi et al., (2023), mental visualization enhances accuracy and performance quality. Teachers who connect sensory experiences with instructional content are more effective in guiding students toward success, even under resource-constrained conditions.

Finally, the fifth dimension, emotional balance, showed item means ranging from 1.5 to 4.48, with a total mean of 3.55 and a standard deviation of 1.33. Teachers with emotional balance are better equipped to handle challenges in the school environment, including inadequate facilities, administrative pressure, and time constraints. Johansson, (2021) highlights that emotional traits significantly impact the overall effectiveness of the teaching process. Breau et al., (2021) also confirm that physical education teachers possess good emotional balance and recognize its importance in fostering a supportive learning atmosphere. The researcher emphasizes that teachers must remain composed and wise when facing criticism or challenging situations while upholding the core values of the teaching profession. These findings demonstrate that physical education teachers in Maysan Governorate possess strong causal attribution capacities across all five dimensions: coping with anxiety,

emotional arousal, self-confidence, mental imagery, and emotional balance. The developed causal attribution scale is therefore relevant and applicable as a diagnostic tool to assess and enhance the professional competence of physical education teachers in the region.

Based on these findings, several recommendations are proposed. First, the validated sources and dimensions developed in this research should be adopted as effective tools for measuring causal attributions among physical education teachers and instructors in Maysan Governorate. Second, educational supervisors and specialists should play a more active role in ensuring that physical education lessons are scheduled during optimal periods in the school timetable and that school plans are aligned with the needs of physical education programs. Third, it is necessary to provide appropriate sports equipment and resources for both team and individual games to support effective instruction. Fourth, regular training courses should be held to improve teachers' pedagogical skills and understanding of sports regulations, with follow-up assessments to measure learning outcomes. Fifth, recognition should be given to schools and teams that achieve top positions in sports competitions through certificates and public acknowledgment to promote motivation and healthy competition. Lastly, encouraging field visits by supervisory staff can serve as a form of positive reinforcement, highlighting the importance of physical education and boosting teacher engagement and performance in schools.

4. CONCLUSION

The findings of this study reveal that the sample members' responses consistently supported the five core dimensions of the causal attribution scale developed for physical education teachers in Maysan Governorate. Specifically, the dimensions of self-confidence and mental perception recorded the highest average scores, each with a mean of 4.12, indicating a strong agreement among participants. This was followed by confronting anxiety with a mean score of 3.99, emotional arousal with 3.73, and emotional balance with 3.55. These results suggest that physical education teachers recognize and relate to these psychological and emotional factors in their teaching practices, affirming their relevance as the foundational axes of the developed scale. Despite this, the study also uncovered several obstacles facing physical education instruction in schools, including the neglect of certain sports activities such as handball, basketball, athletics, and volleyball due to a lack of equipment and facilities. Additionally, school administrations were reported to interfere with the role of physical education teachers, sometimes canceling classes or relegating them to less favorable time slots, which undermines the importance of physical education in the curriculum.

References

- Ahmed, U., Jhaveri, R. H., Srivastava, G., & Lin, J. C.-W. (2022). Explainable Deep Attention Active Learning for Sentimental Analytics of Mental Disorder. *ACM Transactions on Asian and Low-Resource Language Information Processing*. <https://doi.org/10.1145/3551890>
- Banwan shareef, Q. (2020). Effect of Using Modified Training Equipment to Develop some Soccer Skills for Youth. *Indian Journal of Public Health Research & Development*. <https://doi.org/10.37506/ijphrd.v11i4.9143>
- Breaux, R., Dvorsky, M. R., Marsh, N. P., Green, C. D., Cash, A. R., Shroff, D. M., Buchen, N., Langberg, J. M., & Becker, S. P. (2021). Prospective impact of COVID-19 on mental health functioning in adolescents with and without ADHD: protective role of emotion regulation abilities. *Journal of Child Psychology and Psychiatry*, 62(9), 1132–1139. <https://doi.org/10.1111/jcpp.13382>
- Christiani, M., Grosicki, G. J., & Flatt, A. A. (2021). Cardiac-autonomic and hemodynamic responses to a hypertonic, sugar-sweetened sports beverage in physically active men. *Applied Physiology, Nutrition, and Metabolism = Physiologie Appliquee, Nutrition et Metabolisme*, 46(10). <https://doi.org/10.1139/apnm-2021-0138>
- Durand-Bush, N., Baker, J., van den Berg, F., Richard, V., & Bloom, G. A. (2023). The gold medal profile for sport psychology (GMP-SP). *Journal of Applied Sport Psychology*, 35(4), 547–570.
- Gustian, U., Saputra, D. R., Rakhmat, C., Yustiana, Y. R., & Primayanti, I. (2024). Physical Education and Its Scope: A Literature Review of Empirical Studies with A Holistic Perspective Teaching Practices in Indonesia. *Indonesian Journal of Physical Education and Sport Science*, 4(2), 171–186.

- Hortobágyi, T., Vetrovsky, T., Balbim, G. M., Sorte Silva, N. C. B., Manca, A., Deriu, F., Kolmos, M., Kruuse, C., Liu-Ambrose, T., Radák, Z., Vácz, M., Johansson, H., dos Santos, P. C. R., Franzén, E., & Granacher, U. (2022). The impact of aerobic and resistance training intensity on markers of neuroplasticity in health and disease. *Ageing Research Reviews*, 80. <https://doi.org/10.1016/j.arr.2022.101698>
- Johansson, B. (2021). Mental Fatigue after Mild Traumatic Brain Injury in Relation to Cognitive Tests and Brain Imaging Methods. *International Journal of Environmental Research and Public Health*, 18(11). <https://doi.org/10.3390/ijerph18115955>
- Karasievych, S., MAKSYMCHUK, B., Kuzmenko, V., Slyusarenko, N., Romanyshyna, O., Syvokhop, E., Kolomiitseva, O., Romanishyna, L., Marionda, I., & Vykhreshch, V. (2021). Training future physical education teachers for physical and sports activities: Neuropedagogical approach. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 543–564.
- Kim, D., Lee, J. S., Jang, W. (Eric), & Ko, Y. J. (2022). Does causal reasoning lead to moral reasoning? Consumers' responses to scandalized athletes and endorsements. *International Journal of Sports Marketing and Sponsorship*, 23(3), 465–484. <https://doi.org/10.1108/IJSMS-09-2020-0161>
- Melnyk, N., Maksymchuk, B., Gurevych, R., Kalenskyi, A., Dovbnya, S., Groshovenko, O., & Filonenko, L. (2021). The Establishment and Development of Professional Training for Preschool Teachers in Western European Countries. *Revista Romaneasca Pentru Educatie Multidimensionala*, 13(1), 208–233. <https://doi.org/10.18662/rrem/13.1/369>
- Méndez-Dominguez, C., Nakamura, F. Y., & Travassos, B. (2022). Futsal research and challenges for sport development. In *Frontiers in psychology* (Vol. 13, p. 856563). Frontiers Media SA.
- Özcan, B., & Saraç, L. (2021). The Relationship between Physical Activity and Quality of life during the COVID-19 Pandemic: A Case of Female and Male Physical Education Teachers. *Pamukkale Journal of Sport Sciences*, 12(3), 1–20.
- Petancevski, E. L., Inns, J., Fransen, J., & Impellizzeri, F. M. (2022). The effect of augmented feedback on the performance and learning of gross motor and sport-specific skills: A systematic review. *Psychology of Sport and Exercise*, 63, 102277.
- Qutaiba, A. (2021). The reduction in the practical permanent level has affected agility and explosive power of legs in primary school students. In *Annals of R.S.C.B* (Vol. 25). <http://annalsofrscb.ro>
- Salimi, N., Gere, B., Talley, W., & Iriogbe, B. (2023). College Students Mental Health Challenges: Concerns and Considerations in the COVID-19 Pandemic. *Journal of College Student Psychotherapy*, 37(1), 39–51. <https://doi.org/10.1080/87568225.2021.1890298>
- Sapozhenkova, E. V., Kolpakov, V. V., & Tomilova, E. A. (2024). Advanced methodologies in the establishment of physiological norms and their significance in evaluating human health. *Human Sport Medicine*, 24(2), 13–22. <https://doi.org/10.14529/hsm240202>
- Schindler, I. F. S. R., Pontes, S. S., Bertoni, M. B. M., Junior, G. F., Júnior, B. R. N., de Jesus, F. L. A., & Neto, M. G. (2023). A systematic review of isokinetic muscle strength in a healthy population with special reference to age and gender. *Sports Health*, 15(3), 328–332.
- Storm, L. K., Henriksen, K., Stambulova, N. B., Cartigny, E., Ryba, T. V., De Brandt, K., Ramis, Y., & Ceciř Erpič, S. (2021). Ten essential features of European dual career development environments: A multiple case study. *Psychology of Sport and Exercise*, 54, 101918. <https://doi.org/10.1016/j.psychsport.2021.101918>
- Thompson, F., Rongen, F., Cowburn, I., & Till, K. (2022). The impacts of sports schools on holistic athlete development: a mixed methods systematic review. *Sports Medicine*, 52(8), 1879–1917.
- Wei, F., Georges, D., Man, I., Baussano, I., & Clifford, G. M. (2024). Causal attribution of human papillomavirus genotypes to invasive cervical cancer worldwide: a systematic analysis of the global literature. *The Lancet*, 404(10451), 435–444. [https://doi.org/10.1016/S0140-6736\(24\)01097-3](https://doi.org/10.1016/S0140-6736(24)01097-3)

- Wulandari, I., Arnando, M., Igo Resky, A., & Jastr, R. (2021). The Effect Arm Muscle Explosive Power and Self Confidence to Speed Of Service. *Jurnal Mensana Jurnal Ilmiah Bidang Pendidikan Olahraga Edisi*, 6(2).
- Yu, S. (2021). Feedback-giving practice for L2 writing teachers: Friend or foe? *Journal of Second Language Writing*, 52, 100798.