

The Reality of Leadership with Rational Intelligence in the Physical Education Directorate of the Education Department in Cairo Governorate

Professor Dr. Nahid Ismail Muhammad
RahimProfessor Dr. Abeer Abdel Rahman
Muhammadfaculty of physical education helwan
universityFaculty of Physical Education for Girls,
Helwan Universitynahed.ismaiel.mohamed@prf.helwan.edu.egabeer.abdelrahman@prf.helwan.edu.eg

Researcher. Manal Ashour Mukhtar Omar manalashour25@gmail.com

Abstract:

This study was conducted to identify the reality of leadership with rational intelligence in the direction of physical education in the Directorate of Education in Cairo Governorate, on a survey sample of 50 male and female teachers, a basic sample of 425 male and female physical education teachers, representing 35% of the research population In the preparatory stage schools affiliated with the Directorate of Education in Cairo Governorate, the descriptive analytical approach was used, and one of the data collection tools was the questionnaire, and one of the most important results was the degree of leadership with rational intelligence in directing physical education, which was average by physical education teachers in Cairo Governorate, and one of the most important recommendations is the application of sound foundations in selecting Leadership, so that the focus is on the levels of intelligence possessed by leaders in directing physical education.

الملخص:

أجريت هذه الدراسة للتعرف على واقع القيادة بالذكاء العقلاني لدى توجية التربية الرياضية بمديرية التربية والتعليم بمحافظة القاهرة على عينة استطلاعية قوامها 50 معلم و معلمة عينة أساسية قوامها 425 معلم مدرس ومدرسة تربية رياضية بذسبة 35% من مجتمع البحث، بمدارس المرحلة الإعدادية التابعة لمديرية التربية والتعليم بمحافظة القاهرة، واستخدم المنهج الوصفي التحليلي، ومن أدوات جمع البيانات الاستبيان، و من أهم الذتائج درجة القيادة بالذكاء العقلاني لدي توجيه التربية الرياضية جاءت متوسطة من قبل معلمي التربية الرياضية بمحافظة



القاهرة ، ومن أهم التو صيات تطبيق ا سس سليمة في اخذيار القيادات بديث يتم التركيز علي مستويات الذكاء التي يمتلكها القادة بتوجية التربية الرياضية.

The Reality of Leadership with Rational Intelligence in the Physical Education Directorate of the Education Department in Cairo Governorate

Introduction and Problem Statement=

The business environment, including educational institutions, is based on multiple competitive foundations, whether financial, marketing, or human resources, aiming to achieve advanced levels of growth and progress. Leadership is the cornerstone of the educational process; the more successful and efficient the leadership, the more successful and outstanding the institution. Leadership is considered one of the most important functions of the administrative process practiced by managers, serving as the essence of the administrative process and the key to management. Leadership encompasses all aspects of administrative operations and is relied upon for its significant role in the positive advancement of community and institutional growth, as well as for its crucial and effective role in managing institutions.

Intelligent leadership is one of the determinants that contribute to defining the nature of interactions within an institution. There must be a leader who organizes the affairs of the institution's members and coordinates their efforts within a working mechanism aimed at achieving desired goals. With the increasing technological development faced by institutions, intense competition, and rapid environmental changes, it has become essential for institutions, including educational ones, to adopt intelligent leadership patterns and the appropriate leadership style, which is considered a vital factor for superiority and success (5: 448).

Intelligent leadership styles are among the most important drivers of positive change, seeking to motivate followers by inspiring them to aspire to noble ideals and values rather than focusing on self-interest and maintaining the status quo in the institution. Intelligent leaders are primarily agents of change, possessing a compelling vision and a comprehensive image of what the institution will be like in the future or what it should be. Their vision guides their behavior and decisions and



serves as a reference framework for their activities in the institution, thus reducing the signs of organizational aging (1: 5).

The intelligent leadership model relies on system theory and systemic thinking, which is a line of thinking based on collective vision. The essence of systemic thinking is to see interrelationships rather than linear cause and effect and to view processes of change rather than snapshots. From this perspective, intelligent leadership is seen as a broad process that occurs within an institution, involving numerous variables that all influence each other through a series of interactions. From this perspective, Sydänmaanlakka (2021) views intelligent leadership as a participatory and collaborative process within the institution, practiced by both leaders and subordinates with the goal of encouraging individuals to work efficiently and collectively (9: 500).

Lappalainen (2012) believes that intelligent leadership represents a dialogue between leaders and followers, where they come together in a particular situation to achieve a shared vision and goals effectively. This process involves using a specific team and an institution that shares the same values and culture (6: 52).

Rationality is associated with setting reasonable and achievable goals and taking appropriate actions in light of the individual's goals and beliefs, adopting beliefs that align with the available evidence. This means achieving one's life goals using the best possible means. For a leader, rational intelligence is akin to the management by objectives approach, enhancing the leader's ability to create, sustain, and inspire a vision and to implement that vision in collaboration with the team (3: 17).

Organizations with a leader possessing rational intelligence are characterized by different attributes and distinctive performance compared to those with traditional performance. The distinction of the organization in its goals reflects individual performance. Moreover, rational intelligence can be acquired rather than inherited and can improve and develop according to the specific circumstances of the leader, the organization, and the surrounding environment.

Rational intelligence matures and evolves through learning experiences that a leader faces in life situations, as well as what can be gained through additional self-directed and formal learning (1: 18).



Fuad Hamoudi Al-Attar and others view rational intelligence as: "The abilities that a leader possesses and can be developed and improved through learning from situations they encounter, in addition to what is acquired through self-learning, which can be enhanced according to the specific circumstances and environment in which they operate" (2: 141).

Gage and Smith (2016) regard rational intelligence as: "The individual's ability to think critically and analyze a situation or solve a concrete problem. Leaders need a sufficient level of rational intelligence to fulfill their responsibilities and address the challenges they face. Leaders with rational intelligence are seen as those who possess distinctive analytical and conceptual thinking skills" (4: 2; 8: 26).

Ronthy (2013) argues that managers utilize rational intelligence by focusing on tasks, while leaders prioritize other forms of intelligence because rational intelligence does not align with the essence of leadership, which emphasizes the individual's spirit, encompassing their personality and vision (7: 39).

Researchers believe that intelligent leadership is fundamental to successful management in educational institutions, helping them achieve excellence and appropriate development, and equipping them to face challenges, especially in a complex and ambiguous environment filled with opportunities, threats, and modern developments. Educational institutions worldwide are increasingly confronted with various changes and challenges in terms of new services and evolving processes.

The role of Physical Education supervision in educational institutions is particularly important in influencing work performance, especially as the need to adapt to changes brought about by the spread of pandemics has significantly impacted school activities and the performance of physical education teachers and supervisors. Therefore, the leadership style has become one of the most crucial factors contributing to a qualitative shift in psychological well-being, thinking patterns, fairness, and the consideration and adherence to social and professional values while interacting with others. This demands an intelligent leader who can drive employees towards development and away from signs of organizational aging.

Hence, the current research idea emerged as an attempt to explore the reality of intelligent leadership, specifically "leadership with rational



intelligence," within the Physical Education supervision, which has become a necessary process given the rapid developments in educational institutions in our current era.

Research Objective:

The research aims to explore the reality of leadership with rational intelligence among Physical Education supervisors at the Directorate of Education in Cairo Governorate.

Research Question:

What is the reality of leadership with rational intelligence among Physical Education supervisors at the Directorate of Education in Cairo Governorate?

Research Terminology:

- Leadership with Rational Intelligence: The abilities possessed by Physical Education supervisors that can be developed and improved through learning from the situations they encounter. (Operational Definition)

Research Procedures:

- Research Methodology:

The researchers used the descriptive method with a survey and analytical approach, which is considered the most appropriate methodology for the nature of this research, its variables, and the achievement of its objectives.

- Research Population:

The research population consists of all Physical Education teachers in preparatory schools, totaling 1,194 schools under 32 educational administrations affiliated with the Directorate of Education in Cairo Governorate for the 2023/2024 academic year.

- Research Sample:

The researchers selected the main research sample using a simple random sampling method, totaling 425 Physical Education teachers, representing 35% of the research population, from preparatory schools under the Directorate of Education in Cairo Governorate, as shown in Table (1). Additionally, the researchers selected a pilot sample of 50 teachers from within the research population but outside the main sample.

Table (1)

Description of the Main Research Sample According to Job Grades



ltem	Sample Categories	Main Sample	Percentage		
1	Senior Teacher	59	13.9		
2	Expert Teacher	66	15.5		
3	First-Class Teacher A	127	29.9		
4	First-Class Teacher	96	22.6		
5	teacher	77	18.1		
	Total	425	100%		

It is clear from Table (1) that the main research sample consisted of 425 individuals, with 59 teachers holding the position of Senior Teacher, representing 13.9%; 66 individuals holding the position of Expert Teacher, representing 15.5%; 127 individuals holding the position of First-Class Teacher A, representing 29.9%; 96 individuals holding the position of First-Class Teacher, representing 22.6%; and 77 individuals holding the position of Teacher, representing 18.1%.

Tools Used in the Research:

- Records and Documents

- Questionnaire: The researchers used a questionnaire as a tool to collect research data, which was designed according to the following procedural steps:

1. Records and Documents:

The researchers analyzed documents and records related to physical education teachers and supervisors to understand their actual preparation and job grades. This analysis helped the researchers gain insights into the nature and requirements of their work at various levels.

2. Analysis of Previous Studies:

The researchers reviewed and analyzed previous studies related to smart leadership, particularly rational intelligence leadership, which were found to be relevant to the research topic. This analysis helped in identifying phrases that could be hypothesized for constructing the questionnaire.

- Questionnaire:

The researchers used a questionnaire titled "Leadership with Rational Intelligence" to collect data for the current study.

- Pilot Study:



The researchers conducted a pilot study on the data collection tools by applying them to a sample of 50 teachers, who were not part of the main sample. The purpose was to assess the suitability and relevance of the tools for the main research sample.

- Scientific Validity of the Questionnaire

The researchers calculated the scientific validity of the questionnaire as follows:

First: Validity Calculation:

(A) Content Validity through Experts:

The researchers presented the questionnaire to a group of 5 experts in the field of sports management (see Appendix 1) to assess content validity. The experts provided their opinions on the suitability of the items in the questionnaire on rational intelligence leadership, evaluating the appropriateness, formulation, and adequacy of the statements in meeting the intended objectives. Based on the experts' feedback, no items were removed, resulting in the final version of the questionnaire (see Appendix 2), which consists of 7 statements.

(b) Internal Consistency Validity:

To calculate the internal consistency validity of the questionnaire, the researchers administered it to a sample of 50 teachers from the research population who were not part of the main sample. The correlation coefficients between each statement's score and the total score of the questionnaire were calculated. Table (2) illustrates this.

Table (2)
Correlation Coefficient Between Each Statement Score and the Total Score of the
Rational Intelligence Leadership Questionnaire
(N = 50)

ltem	Statements	Correlation Coefficient	
1	Sets achievable goals.	0.846	
2	Follows policies that aim to develop and improve teachers' performance appropriately.	0.922	
3	Organizes meetings to discuss the development of teaching performance in physical education.	0.938	
4	Has the ability to identify problems related to teaching the subject correctly and provides guidance on how to solve them.	0.948	

International Journal of Sports Science and Arts



5	Works on developing physical education teaching methods	0.954
6	Evaluates the teacher's performance efficiently.	0.882
7	Monitors the results of decisions made at work.	0.858

The table value of (r) at a significance level of 0.05 = 0.281

It is evident from Table (2) that the correlation coefficients between each statement and the total score ranged from 0.846 to 0.948. Comparing the calculated (r), values with the table value of (r), it is clear that there is a statistically significant correlation between the statements and the total score of the scale. Therefore, the number of statements is 7, and the results demonstrate a high level of validity.

Second: Reliability Calculation:

To calculate the reliability of the Rational Intelligence Leadership Questionnaire, the researcher used Cronbach's Alpha coefficient by applying it to a sample of 50 teachers from the research population who were not part of the main sample. The following table illustrates this.

Table (3)

Cronbach's Alpha Coefficient Values for the Rational Intelligence Leadership Questionnaire

(N = **50**)

Dimension	Cronbach's Alpha Value			
Rational Intelligence Leadership	0.962			

It is evident from Table (3) that:

The Cronbach's Alpha coefficient for the Rational Intelligence Leadership Questionnaire was 0.962, which is statistically significant, indicating that the questionnaire has acceptable reliability.

- Main Study:

The researchers conducted the main study from October 15, 2023, to January 14, 2024. The final version of the questionnaire was prepared and administered to the main research sample of 425 physical education teachers.

A three-point Likert scale was used based on expert opinions: "Agree" (3 points), "Somewhat Agree" (2 points), and "Disagree" (1 point) for the statements, making the questionnaire suitable for application.

- Statistical Analysis:



After collecting and tabulating the data, it was processed statistically. The researcher used the following statistical methods to calculate the research results:

- Percentages
- Correlation Coefficient
- Cronbach's Alpha Coefficient
- Mean Score
- Relative Weight
- Frequencies

Presentation and Discussion of Results:

Based on the methodology used, the selected sample, data collection tools, and statistical analysis, the researchers established a relative weight of:

- 80% and above to indicate a high level of rational intelligence leadership.
- Between 60% and less than 80% to indicate a moderate level of rational intelligence leadership.
- Less than 60% to indicate a low level of rational intelligence leadership.

Presentation and Discussion of the Results on Rational Intelligence Leadership=

Table (4)

Estimated Score, Relative Weight, and Chi-Square for Responses on the "Rational Intelligence Leadership" Questionnaire

(N = 425)

ltem	Statement	Agree		Somewhat Agree		Disagree		Estimated	Relative	Chi-
		к	Χ.	к	Χ.	к	Χ.	Score	Weight	Square
As one of the physical education teachers, I see that the physical education mentor:										
1	Sets achievable goals.	129	30.4	291	68.5	5	1.2	974	76.4	290.5
2	Follows policies that aim to develop and improve teachers' performance appropriately.	111	26.1	244	57.4	70	16.5	891	69.9	116.7
3	Organizes meetings to discuss the development of	149	35.1	153	36.0	123	28.9	876	68.7	3.8



	teaching performance in physical education.									
4	Has the ability to identify problems related to teaching the subject correctly and provides guidance on how to solve them.	179	42.1	221	52.0	25	5.9	1004	78.7	150.6
5	Works on developing physical education teaching methods.	167	39.3	214	50.4	44	10.4	973	76.3	109.0
6	Evaluates the teacher's performance efficiently.	273	64.2	130	30.6	22	5.2	1101	86.4	224.5
7	Monitors the results of decisions made at work.	254	59.8	157	36.9	14	3.3	1090	85.5	206.4
	Total for Dimension							6909	77.4	

Chi-Square value at a 0.05 significance level = 5.99

It is evident from Table (4) that the relative weight of responses on "Rational Intelligence Leadership" ranged between 68.7% and 86.4%. All Chi-Square values were statistically significant at the 0.05 level for the statements in the first dimension, favoring the "Agree" responses for statements numbered 6 and 7. The Chi-Square values were statistically significant at the 0.05 level for statements numbered 1, 2, 4, and 5, while the Chi-Square value for statement 3 was not statistically significant at the 0.05 level.

"Rational Intelligence Leadership" received a relative weight of 77.4%, indicating that the level of rational intelligence leadership among physical education supervisors in Cairo was moderate according to physical education teachers.

From Table (4), statement 6, "Monitors the results of decisions made at work," ranked first with a relative weight of 86.4%. Statement 7, "Evaluates the teacher's performance efficiently," ranked second with a relative weight of 85.5%.

The researchers attribute this to the fact that rational intelligence involves focusing on tasks, such as monitoring decisions and evaluating teachers' performance, and reviewing reports. This is related to procedural actions according to organizational regulations, especially in dealing with teachers.



This finding aligns with the study by Gage and Smith (2016), which indicates that having intelligence is essential for school leaders to effectively achieve set goals. Leadership involves the brain, heart, and soul, and to be an effective leader, one needs to make decisions, manage emotions, and express desires and passions.

Guidance is an educational process that enhances and develops the educational process through good communication and cooperation between the teacher and the supervisor. When teachers benefit from the supervisor's guidance and its impact on improving their performance, their confidence in educational guidance increases.

This finding is consistent with Saja Jawad Hussein's (2016) study, which highlighted that having high intelligence levels among academic leaders contributes to transforming their institutions into smart organizations by focusing on dimensions of organizational learning.

Conclusions:

In light of the research objectives, questions, statistical analyses, and findings, the researchers concluded the following:

- 1. The level of rational intelligence leadership among physical education supervisors in Cairo was moderate according to physical education teachers.
- 2. The supervision evaluates the teacher's performance efficiently.
- 3. The supervision monitors the results of decisions made at work.

Recommendations:

- 1. Enhance Skills Development: Develop the skills of physical education supervisors and enhance their leadership capabilities by improving their rational intelligence skills through providing training programs.
- 2. Focus on Training Needs: Ensure that training programs are established based on the leadership needs of all staff members.
- 3. Promote Smart Leadership: The Ministry of Education should promote the concept of smart leadership among leaders by organizing conferences, seminars, and targeted training programs.
- 4. Implement Sound Leadership Selection Principles: Apply effective principles in selecting leaders, focusing on the levels of intelligence they possess.

References:



 Saja Jawad Hussein, (2016). "The Impact of Smart Leadership on Smart Organizations through Enhancing Organizational Learning: An Analytical Study of Opinions from Department Heads in Some Universities in the Middle Euphrates Region," (Unpublished Master's Thesis), Al-Qadisiyah University, Diwaniyah, Iraq.

- Fouad Hamoudi Al-Attar, Hazem Rabeh Najem Al-Ghanimaoui, Jassim Rahee Kazem, (2020). "Smart Leadership and Its Role in Achieving Institutional Prosperity," Wasit Journal of Human Sciences, 16(45), 133-166, Wasit, Iraq.
- Mahabat Nouri Abdullah, (2020). "The Role of Smart Leadership Dimensions in Reducing Organizational Aging: An Analytical Study of Opinions from Managers of Several Private Banks in Erbil," Zanko - Humanities, Salahaddin University, 24(3), 117-142, Erbil, Iraq.
- Gage, T., & Smith, C. (2016). "Leadership Intelligence: Unlocking the Potential for School Leadership Effectiveness," South African Journal of Education, 36(4), 1-9.
- Iannotta, M., Meret, C., & Marchetti, G. (2020). "Defining Leadership in Smart Working Contexts: A Concept Synthesis," Frontiers in Psychology, 11, 2448.
- Lappalainen, P. (2012). "Socially Competent Leadership: Predictors, Impacts, and Skilling in Engineering," (Unpublished Doctoral Thesis), Lappeenranta University of Technology, Finland.
- Ronthy, M. (2013). "'Managing with My Heart, Brain, and Soul': The Development of the Leadership Intelligence Questionnaire," Journal of Cooperative Education and Training, 47(1), 61-106.
- Stripling, J. D. (2019). "The Relationship between Emotional Intelligence and Leadership Styles in School Principals," (Doctoral Dissertation), The University of Alabama at Birmingham.
- 9. Sydanmaanlakka, K. (2021). "Does Spiritual Intelligence (SI) Exist? A Theoretical Investigation of a Tool Useful for Finding the Meaning of Life," Journal of Religion and Health.