Leadership in physical education: Systematic review of the last five years

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Abstract

Leadership has been identified as an important factor that may help guide and contribute to the effective provision of physical education in several different contexts. Despite the importance attributed to physical education leadership, more empirical research evidence still needs to relate to the topic. The purpose of this review is to describe leadership research in physical education in the last five years (2018–2022). Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) were adopted for the research review, and two databases (Scopus and Web of Science) were used in article browsing. 741 articles were obtained from two databases (Scopus: 392 articles) and (WoS: 349 articles). After following the exclusion criteria, only 13 articles remained. The review succeeded in showing that Iraq publishes the most research, and quantitative, qualitative, mixed research (quantitative and qualitative) approaches, and heuristic approaches are the methods and types of research used, and then the review is divided into five research groups: (i) physical education teacher leadership, (ii) principals and departmental leadership, (iii) student leadership, (iv) school leadership, and (v) cultural leadership. Of these five groups, transformational leadership is the most frequently discussed topic. Future research can be continued with mapping analysis of research on this topic using bibliometric or scientometric studies. This literature review can also be continued by discussing the topic of leadership in sports.

Keywords: leadership, physical education, systematic review.

INTRODUCTION

In building an organization, one of the most important factors is leadership. Leadership is a broad field with a long history that includes thousands of concepts and hundreds of assumptions, models, perspectives, and methodologies (Yammarino et al., 2020). In an organization, a leader is someone who can control factors such as individual rights, working conditions, organizational policies, identity,

promotion, and responsibilities (Houshyar et al., 2020). In fact, how does a leader control these factors and motivate his followers (Reunanen & Kaitonen, 2017). Without leadership or direction, the relationship between individuals and organizational goals can be weakened or disrupted (González-Cruz et al., 2019).

Leadership style is very important in education (Houshyar et al., 2020) and greatly impacts the teaching and learning process in schools (Aldulaimi, 2018). Even indirectly, the second most significant educational leader influences student learning after classroom teaching (Cheah & Lim, 2022). There is strong evidence that certain leadership behaviours are more effective than others in promoting student learning (Bush, 2018). Furthermore, the successful achievement of school goals and indicators reflects successful leadership practices in schools (Al-Jaradat & Zaid-Alkilani, 2015). An effective leadership integration channel is to model and replicate the leadership characteristics desired by teachers (Ressler & Rodriguez, 2020).

In the context of physical education, leadership has been identified as an important factor that can support, guide and facilitate physical education (Clohessy et al., 2020; Griggs, 2012). Various stakeholders, including researchers, teachers and national sports associations, have also mentioned the potential value of leadership roles in physical education (Murphy & O'Leary, 2012). However, over the last two decades, the challenges of leadership in physical education subjects have grown significantly (Griggs, 2015; Griggs & Randall, 2019). Allami et al. (2022) found in their study that PE teachers need help choosing the most appropriate leadership style due to the many leadership styles proposed by scholars and researchers.

Previous researchers have been encouraged to conduct in-depth studies on leadership and physical education. This previous research usually discusses the leadership style of physical education teachers with learning motivation (Jiang & Jia, 2018), task-oriented leadership style and extroverted nature (Ghofrani, 2012), identification of physical education

teacher leadership style (Houshyar et al., 2020), leadership qualities of principals and physical education teachers (Tzeni et al., 2019; Tzeni et al., 2020), the leadership role of physical education teachers (Öktem & Kul, 2020), and leadership skills of physical education teachers (Katkat, 2014). However, previous researchers still minimally discussed a systematic review of leadership.

Regarding this review of the literature on leadership, several researchers who have studied it in the topic of sports are Peachey et al. (2015), who are trying to investigate advances in research on leadership in sports management, Burton (2015), investigating the representation of women in sports leadership, Álvarez et al. (2016) discuss transformational leadership in athletics, Turnnidge and Côté (2018) apply transformational leadership theory to coaching research in youth sports. Next, Evans and Pfister (2021) discuss women in sports leadership. However, to our knowledge, there are no researchers who have focused on the topic of leadership in physical education. Therefore, this review aims to describe leadership research in physical education over the past five years, provide concrete recommendations for researchers, and identify future research opportunities on the topic of leadership in physical education.

METHOD

There are different types of reviews on a topic: narrative reviews, systematic reviews, and meta-analyses. As the subject of this study is rooted in educational science, a systematic review is the method of choice (Otero-Saborido et al., 2021). The Preferred Reporting Item for Systematic Review and Meta-Analyses (PRISMA) is a published literature review standard (Shaffril et al., 2019). In addition, PRISMA is designed to encourage transparent and complete systematic review reports and helps authors better describe what has been done, what was found in terms of the review protocol, and what they plan to do (Sarkis-Onofre et al., 2021).

Search Strategy

This bibliographic database contains information on high-quality multidisciplinary research published in scholarly journals with significant global impact and allows for the integration of records to facilitate this research (Santamaria-Granados et al., 2021). The literature search was systematically restricted from 2018 to 2022 and used two electronic databases, namely Scopus and Web of Science (WoS). Both databases are considered leading indexing systems for citations (Farid et al., 2020) and are most frequently visited by previous researchers around the world (Perdima et al., 2022; Sweileh, 2020; Yang et al., 2021). The search strategy included a combination of variations of the keywords "leadership", "leadership styles", "transformational leadership", "transactional leadership", or "servant leadership" "and "physical education", or "sports education" or "sport pedagogy".

Exclusion Criteria

The exclusion criteria used are as follows: (1) Duplicated articles, (2) Articles not published in journals indexed in the Journal Citation Report (JCR) or Scimago Journal Rank (SJR), (3) Articles published under 2018, (3) Articles in languages other than English, (4) Journal articles with selected empirical data which means review articles, book series, books, chapters in book and conference proceedings are all excluded, (5) Articles that are entered only in the field of physical education, articles relating to coaches and clubs are not included.

Research Procedure

Initially, 741 articles were obtained from two databases (Scopus: 392 articles) and (WoS: 349 articles). All articles were extracted from the database and analyzed via Mendeley software to remove duplicate articles. After following the exclusion criteria, only 13 articles remained. Most of the items were discarded because the filter was applied last five years (2018-2022), only articles in English and duplicate articles.
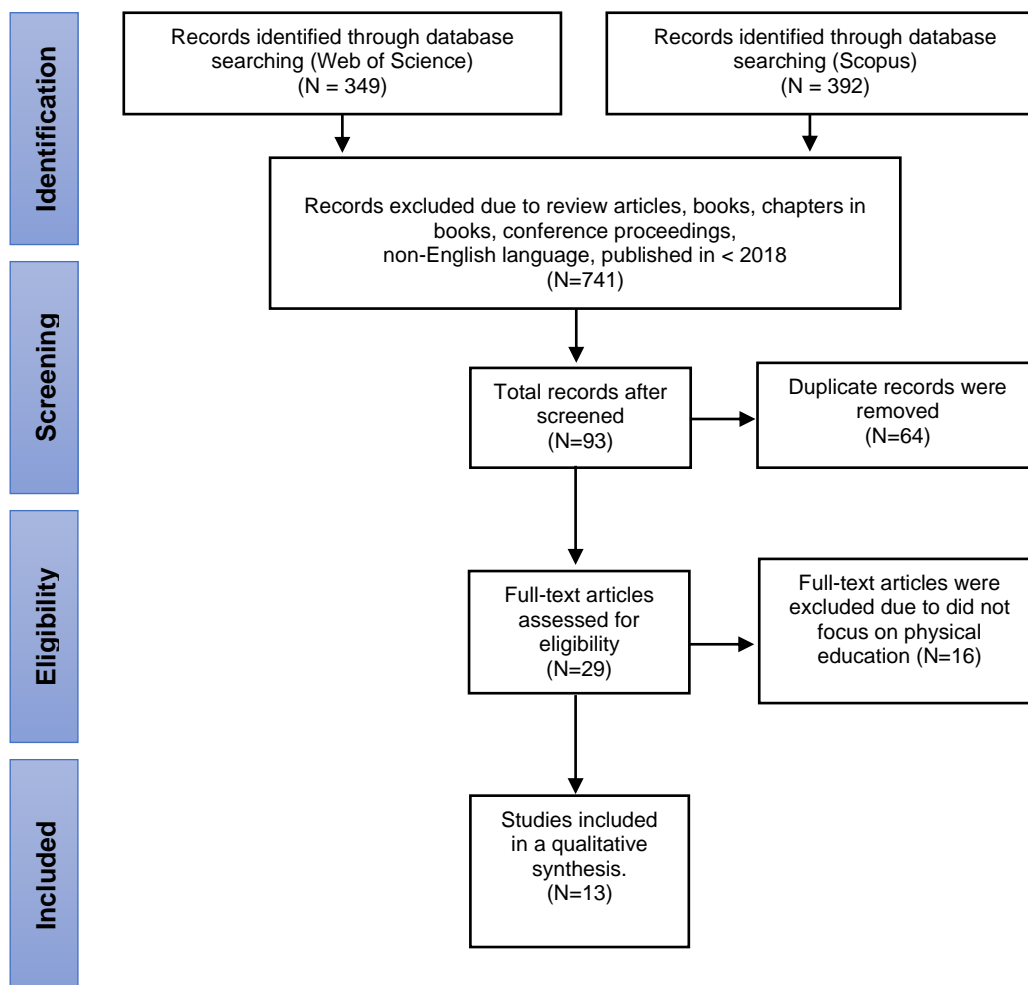
Figure 1. The flow diagram of the study (Shaffril et al., 2019)

RESULT

The six categories listed in Table 1 (except author and year) are described and discussed in 13 articles compiled between 2018 and 2022.

Table 1. Summary of articles about leadership in physical education (PE)
published between 2018 and 2022

Author and Year	Country	Type Research	Purpose	Content	Result	Sources and Databases
(Şirin et al., 2018)	Turkey	Quantitative approach, descriptive, questionnaire.	To find out the perceptions of transformational and transactional leadership and organizational cynicism of physical education and sports teachers.	Transformational-transactional leadership, organizational cynicism	Physical education teachers were found to have higher perceptions of transformational leadership when compared with transactional leadership, and they were found to have moderate levels of organizational cynicism.	Universal Journal of Educational Research/ Scopus (**Q4**)
(Jiang & Jia, 2018)	China	The quantitative approach is a questionnaire.	Discuss the effects of university physical education teachers' leadership styles and classroom climate on learning motivation for basketball courses.	Leadership styles, classroom climate, learning motivation, basketball	Physical education teachers' leadership styles of individualized leadership, charismatic leadership, and intellectual stimulation, as well as classroom climate of teacher support, affinity, and involvement, could positively affect students' autonomous motivation, while laissez-faire leadership and passive management by exception could positively affect students' non-autonomous motivation.	Eurasia Journal of Mathematics, Science and Technology Education/ Scopus (**Q2**) and WoS (**SSCI**)
(Mohammed et al., 2018)	Iraq	Quantitative approach, descriptive, survey, questionnaire.	To identify the effectiveness of and the relationship between the effectiveness of time management and the creative leadership of department heads at faculties of physical education and sports science in Iraq.	Creative leadership, time management	The philosophy of department heads and their approach to time management and creative production as important elements in the management process is weak. There is a correlation between time management and positive, creative leadership through faculty members' answers.	Journal of Global Pharma Technology/ Scopus (**Q4**)
(Podung et al., 2018)	Indonesia	The quantitative approach, survey, descriptive and associative.	To identify the influence of principal leadership behaviour and teacher's work motivation on the performance of physical education teachers of Junior High School in Manado City.	Principal leadership behaviour, work motivation, the performance of physical education teachers	(i) there is a positive correlation between principal leadership behaviour with the performance of physical education teachers; (ii) there is a positive correlation between teacher's work motivation and physical education teacher performance; (iii) there is a positive relationship between principal leadership behaviour and teacher work motivation with performance.	International Journal of Engineering and Technology (UAE) / Scopus (**Q4**)
(Tzeni et al., 2019)	Greece	The quantitative approach, survey, and questionnaire.	(i) to investigate the role of school principals based on specific performance criteria, using as effectiveness indicators the perceptions of physical education (PE) teachers and their principals of effective school administration, (ii)	School leadership, school administration, physical education teachers.	Physical education teachers were satisfied with their principal's management skills. Principals stated that they are more efficient than teachers think they are. A t-test revealed statistically significant differences in all the factors in favour of principals.	Journal of Physical Education and Sport/ Scopus (**Q2**)

			to determine whether statistically significant differences exist between PE teachers and principals regarding factors that express efficient school administration, and (iii) to determine whether statistically significant differences exist in the perceptions of PE teachers and principals of the factor "work experience.			
(Tasdugen et al., 2020)	Turkey	The quantitative approach is a questionnaire.	To investigate students' level of leadership and creativity studying at the School of Physical Education and Sports.	Leadership, creativity, studying.	Results showed that male students have a higher leadership level than female students. It is also revealed that male students are more effective in realizing and directing group goals than female students.	Cypriot Journal of Educational Sciences/ Scopus (**Q3**)
(Clohessy et al., 2020)	Ireland	A qualitative approach, interviews	To explore generalist teachers' experiences of informal physical education leadership while promoting innovation in primary physical education.	Primary school teachers, physical education leadership.	This research suggests that informal physical education leadership can play an important role in supporting innovation.	Education 3-13/ WoS (**ESCI**)
(Houshyar et al., 2020)	Iran	Quantitative approach, descriptive, correlational questionnaire.	To determine the most adequate leadership style for Iranian Physical Education teachers.	Leadership styles, sociocultural attitudes, personality dimensions, situational factors.	The final model of the appropriate leadership style with personality traits, cultural attitudes and situational factors of Physical Education teachers indicates that the most appropriate leadership styles for the Iranian Physical Education teachers were Delegating and Coaching styles, followed by Supporting and Directing styles.	Sport TK-Revista Euroamericana De Ciencias Del Deporte/ Scopus (**Q4**) and WoS (**ESCI**)
(Ressler et al., 2021)	United States	A qualitative approach, interviews	To voice perspectives of participants from multiple angles of a physical education program and detail ways in which the teaching and practice of leadership manifest in the formal physical education curriculum.	Physical education leaders, teaching and practice of leadership	Leadership practice was advanced by way of targeting students to consider (i.e. apply) to be in the Physical Education Leaders program because of their known, observed affective and social skills rather than their Physical Education Leaders status being grounded in a "sporty" disposition.	Research Quarterly for Exercise and Sport/ Scopus (**Q2**) and WoS (**SSCI**)

(Chang et al., 2021)	Taiwan	The quantitative approach, survey, and questionnaire.	To examine the relationship between a principal's transformational leadership and creative teaching behaviour of physical education teachers at junior and senior high schools in Taiwan (at the individual level) and the cross-level effect on creative teaching behaviours of physical education teachers in an innovative school climate (at the school level) and the moderator effect of an innovative school climate on the relationship between a principal's transformational leadership and creative teaching behaviours of physical education teachers.	Transformational leadership, creative teaching behaviour, school climate	A principal's transformational leadership has a positive impact on the creative teaching behaviours of physical education teachers, and at the school level, an innovative school climate has a positive impact on creative teaching behaviours (at the personal level) of physical education teachers. An innovative school climate at the school level has no moderating effects on the relationship between a principal's transformational leadership and the creative teaching behaviours of physical education teachers.	SPORT TK-Revista EuroAmericana de Ciencias del Deporte/ Scopus (**Q4**) and WoS (**ESCI**)
(Storm & Svendsen, 2021)	Denmark	Heuristic approach	To establish and illustrate the relevance of cultural leadership in physical education and youth sport.	Cultural leadership, pedagogical concept	As a cultural leaders, the coach and the teacher substantially impact the cultural values that are (re)produced in the context in which they operate.	Sport, Education and Society/ Scopus (**Q1**) and WoS (**SCIE**)
(Perez-Torralba et al., 2022)	Spain	Mixed Methods Research, questionnaire, interviews	To achieve three objectives: (i) promoting transformational leadership in the Physical Education (PE) teacher in Early Childhood Education; (ii) encouraging the active participation of students in PE in Early Childhood Education through the teacher's transformational leadership; and (iii) achieving high levels of enjoyment in students when they are in PE.	Transformational leadership, physical education teacher, early childhood education,	This didactic proposal is a useful educational tool for teachers who pretend to implement transformational leadership to enhance motor skills development and promote the comprehensive development of Early Childhood Education students.	Retos/ Scopus (**Q3**)
(Allami et al., 2022)	Iraq	The quantitative approach, survey, and questionnaire.	To identify which leadership styles are preferred by athletes and determine to what extent the leadership styles of physical education	Leadership styles, physical education teacher, athletes' satisfaction	Results show that democratic behaviour and training and instruction behaviour leadership styles positively affect athlete satisfaction, whereas autocratic leadership style negatively affects athlete	International Journal of Instruction/ Scopus (**Q2**) and WoS (**SCIE**)

teachers affect athletes' satisfaction.	satisfaction.

The search returned 741 articles. Of these, 13 articles met the above-mentioned criteria for inclusion. Thirteen articles are relevant, twelve articles are empirical studies, and one article is a theoretical study. The removed articles, including 728 articles, are beyond the scope of this review and cover a different topic. Based on the explanation in Table 1, the discussion on these six categories (except author and year).

Country

This category was included in the analysis to determine the degree of spread of leadership in physical education around the world. Based on this review, three continents published articles in the field of leadership in physical education, namely the Asian continent there are six studies (Allami et al., 2022; Chang et al., 2021; Houshyar et al., 2020; Jiang & Jia, 2018; Mohammed et al., 2018; Podung et al., 2018), Continent of Europe also six studies (Clohessy et al., 2021; Ressler et al., 2021; Şirin et al., 2018; Storm & Svendsen, 2021; Tasdugen et al., 2020; Tzeni et al., 2019), and one more study represented by the Americas (Perez-Torralba et al., 2022).

On the Asian continent, Iraq is the country with the most articles on the subject, with a total of two articles. Other countries are represented on this continent, such as China (1 article), Indonesia (1 article), Iran (1 article), and Taiwan (1 article). In Continental Europe, Turkey is the country with the most articles on the subject, with a total of two articles. Other countries are represented on this continent, such as Greece (1 article), Ireland (1 article), Denmark (1 article), and Spain (1 article). Meanwhile, the United States represents it in the Americas (1 article). The reason other continents are not represented is that many articles meet the exclusion criteria and do not focus on physical education.

Type Research

Based on a review of the method categories and types of research, nine articles exclusively use a quantitative approach (Allami et al., 2022;

Chang et al., 2021; Houshyar et al., 2020; Tasdugen et al., 2020; Tzeni et al., 2019; Jiang & Jia, 2018; Mohammed et al., 2018; Podung et al., 2018; Şirin et al., 2018). Of these nine articles, Allami et al. (2022), Chang et al. (2021), Tzeni et al. (2019), Mohammed et al. (2018), and Podung et al. (2018) used surveys in their research. Surveys are widely used in quantitative research because these surveys collect data only at one time (Fraenkel et al., 2012), it may take days or weeks or months to answer the research question (Sekaran & Bougie, 2016).

The next two articles use a qualitative approach (Ressler et al., 2021; Clohessy et al., 2020). These two articles use semi-structured individual interviews conducted at the beginning and at the end of the study. The next approach is one article using mixed research (quantitative and qualitative) (Perez-Torralba et al., 2022). This article uses questionnaires and interviews to collect research data. While the last article uses a heuristic approach (Storm & Svendsen, 2021). This heuristic approach refers to experience-based techniques for problem-solving, learning, and discovery that provide solutions that are not guaranteed to be optimal (Arthur & Robledo, 2021).

Purpose, Content and Result

Based on this review, we looked at the aims, content of the discourses and the results they developed, and we found five research groups:

Physical Education Teacher Leadership:

In this group, the first article discusses the behavioural leadership style of training and instruction of physical education teachers and aims to identify which leadership style is preferred by athletes in influencing athlete satisfaction. The results of this study indicate that democratic behaviour and leadership style of training and instruction behaviour has a positive effect on athlete satisfaction, while autocratic leadership style has a negative effect on athlete satisfaction (Allami et al., 2022).

The second article discusses the transformational leadership style of physical education teachers and aims to promote transformational leadership in physical education teachers. The results of this study

indicate that didactic proposals are very useful for teachers in implementing transformational leadership to improve motor skill development and can promote the comprehensive development of Early Childhood Education students (Perez-Torralba et al., 2022).

The third article discusses the leadership style of physical education teachers, namely delegation style, coaching style, supporting style and directing style, and aims to determine the adequate leadership style for physical education teachers. The results of this study indicate that the most appropriate leadership style for physical education teachers in Iran is the Delegation and Coaching style, followed by the Supporting and Directing style (Houshyar et al., 2020).

The fourth article discusses the leadership style of physical education teachers and aims to discuss the influence of university physical education teacher leadership styles and classroom climate on learning motivation for basketball courses. The results of this study indicate that the physical education teacher's leadership style of individual leadership, charismatic leadership, and intellectual stimulation, as well as the classroom climate of teacher support, affinity, and involvement, can positively affect students' autonomous motivation, while laissez-faire leadership and passive management with exceptions can significantly positively affect students' non-autonomous motivation (Jiang & Jia, 2018).

The fifth article discusses the transformational and transactional leadership of physical education teachers and aims to determine the perceptions of transformational and transactional leadership and the organizational cynicism of physical education and sports teachers. The results of this study indicate that physical education teachers have higher perceptions of transformational leadership when compared to transactional leadership, and they are found to have moderate levels of organizational cynicism, and there are significant differences between transformational, transactional leadership styles and gender variables (Şirin et al., 2018).

The sixth article discusses informal physical education leadership and aims to explore generalist teachers' experiences of informal physical

education leadership while promoting innovation in basic physical education. The results show that informal physical education leadership can play an important role in supporting innovation (Clohessy et al., 2020).

Principal and Department Leadership:

In this group, the first article discusses the transformational leadership style of school principals and aims to examine the relationship between principals' transformational leadership and the creative teaching behaviour of physical education teachers. The results showed that the principal's transformational leadership had a positive impact on the creative teaching behaviour of physical education teachers, and at the school level, an innovative school climate had a positive impact on the creative teaching behaviour (at the personal level) of physical education teacher (Chang et al., 2021).

The second article discusses the leadership behaviour of school principals and aims to determine the effect of principals' leadership behaviour and teacher work motivation on the performance of physical education teachers. The results showed that (i) there was a positive relationship between the leadership behaviour of school principals and the performance of physical education teachers in Manado City; (ii) there is a positive relationship between teacher work motivation and the performance of junior high school physical education teachers in Manado City; (iii) there is a positive relationship between principal leadership behaviour and teacher work motivation with the performance of junior high school physical education teachers in Manado City (Podung et al., 2018).

The third article discusses the creative leadership of the head of the department and aims to identify the effectiveness and the relationship between the effectiveness of time management and the creative leadership of the head of the department of Physical Education and Sports Science. The results showed that the philosophy of the department heads and their approach to time management and creative production as important elements in the management process was weak, and there was

a positive relationship between time management and creative leadership through the lecturers' answers (Mohammed et al., 2018).

Student Leadership:

In this group, the first article discusses student leadership in schools and aims to investigate the level of leadership and creativity of students studying in the School of Physical Education and Sports. The results showed that male students had a higher leadership level than female students. It was also revealed that male students were more effective in realizing and directing group goals than female students (Tasdugen et al., 2020).

The second article discusses the teaching and practice of student leadership and aims to voice participants' perspectives from different angles of the physical education program and how to detail in which leadership teaching and practice is embodied in the formal physical education curriculum. The results showed that leadership practices were developed by targeting students to consider (i.e. applying) to a physical education leader program because of their known and observed affective and social skills rather than their physical education leader status based on a "sporty" disposition (Ressler et al., 2021).

School Leadership:

In this group, the article discusses school administration and aims (i) to determine the role of school principals based on certain performance criteria, using indicators of the effectiveness of the perceptions of physical education teachers and their principals about effective school administration, (ii) to determine the difference between physical education and principals regarding the factors that indicate the efficiency of school administration, and (iii) to determine the difference between perceptions of physical education and principals based on work experience. The results showed that physical education teachers were satisfied with their principal's management skills. The principal stated that they were more efficient than the teachers thought (Tzeni et al., 2019).

Cultural Leadership:

In this group, the article discusses cultural leadership and aims to establish and describe the relevance of cultural leadership in physical education and youth sports. The results show that cultural leaders, coaches and teachers substantially impact the cultural values that are (re)produced in the contexts in which they operate (Storm & Svendsen, 2021).

DISCUSSION

The purpose of this article is to describe leadership research in physical education. For that purpose, only look at the research articles published in the last five years. Based on this review is divided into six categories, namely (i) Author and Year, (ii) Country, (iii) Methods and Instruments, (iv) Purpose, (v) Content, and (v) Outcomes. However, the Author and Year are excluded from this review.

In this review, leadership in physical education has spread across various countries, namely (i) Iraq, China, Indonesia, Iran, and Taiwan (Asian Continent), (ii) Turkey, Greece, Ireland, Denmark, and Spain (European Continent), (iii) United States of America (America Continent). Based on these countries, Iraq is the country that publishes the most articles on this topic (Allami et al., 2022; Mohammed et al., 2018). The methods and types of research used show diversity, consisting of quantitative, qualitative, mixed research (quantitative and qualitative), and heuristic approaches carried out on various content. Meanwhile, in this review, there are five research groups: (i) physical education teacher leadership, (ii) principal and department leadership, (iii) student leadership, (iv) school leadership, and (v) cultural leadership. Of these five research groups, transformational leadership is the most frequently discussed (Chang et al., 2021; Perez-Torralba et al., 2022; Şirin et al., 2018). This transformational leadership is highly inclusive and provides a broad basis for leadership mechanisms (Wang & Hu, 2017).

Some of the findings also show that leadership can improve the development of motor skills and comprehensive development (Perez-Torralba et al., 2022) and affect students' autonomous motivation (Jiang & Jia, 2018). Furthermore, leadership also has a positive impact on the creative teaching behaviour of physical education teachers (Chang et al., 2021), play an important role in supporting innovation (Clohessy et al., 2020), and has a positive relationship with work motivation and performance of physical education teachers (Podung et al., 2018).

CONCLUSION

This review has contributed by providing an update of the literature on leadership in physical education from 2018-2022. Initially, many studies were found, but after applying the exclusion criteria, the number was reduced to 13 articles. The final results reflect that the number of studies on leadership in physical education is very small and geographically only on the continents of Asia, Europe and America. Transformational leadership in school principals and physical education teachers is this review's most frequently discussed topic.

Some limitations inherent in the review should be noted. First, despite a thorough literature search, some published studies may need to be noticed due to possible different keywords than those currently used. Second, the database used in the search for articles is only limited to two databases, namely Scopus and WoS. As for future research, it would be interesting to discuss the topic of transformational leadership in school principals and physical education teachers, and this review could also be continued by discussing the topic of leadership in sports, especially in coaches and athletes. Further researchers can also add other databases such as ERIC, EBSCO (SPORTDiscus and Psychology & Behavioral Sciences Collection) and other databases in the article search.

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