

# The Influence of Principal's Distributive Leadership on Teaching Effectiveness in Malaysian Sports Schools

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## Abstract

This study aims to examine the influence of the principal's distributive leadership on the effectiveness of teaching in Malaysian Sports Schools based on teachers' perceptions. This study uses a quantitative survey design involving a total of 187 teachers as respondents. Data were collected using questionnaires and analyzed through descriptive statistics and inferential analysis that included Pearson's correlation and multiple regression. The findings of the study show that the principal's level of distributive leadership practices and teaching effectiveness are at a high level. Correlation analysis found that there is a significant and moderate positive relationship between the principal's distributive leadership and teaching effectiveness. Multiple regression analysis showed that teacher capacity development and collaborative communication were significant predictors of teaching effectiveness, while distribution of decision-making power and vision sharing did not show significant influence when other variables were controlled. The implications of this study assert that distributive leadership practices that focus on professional and collaborative development can improve teaching effectiveness in a high-intensity school context. Further studies are suggested to explore the role of mediating variables as well as use a mixed methods approach to gain a deeper understanding.

**Keywords:** Distributive Leadership, Teaching Effectiveness, Malaysian Sports Schools, Educational Leadership

## Introduction

The principal's leadership is a strategic element that affects the effectiveness of the school organization, especially in ensuring the quality of teaching and student achievement. In the complex contemporary educational landscape, the principal's role is no longer limited to purely administrative functions, but instead includes efforts to build a professional culture, empower teachers' expertise, and encourage effective pedagogical collaboration (Leithwood, Harris & Hopkins, 2020). The traditional leadership model that is centered on the individual is increasingly less responsive to the needs of modern schools that demand shared

responsibility and the ability to adapt to contextual challenges. Accordingly, distributive leadership appears as an alternative approach that emphasizes the distribution of power, teacher involvement, and professional collaboration in supporting teaching effectiveness (Harris & Jones, 2019; Spillane, 2018).

Distributive leadership is defined as a practice centered on the interaction between leaders, teachers, and the organizational situation, i.e., professional expertise is strategically distributed across formal and informal roles in the school (Spillane, 2018). Senior assistants, middle leaders, committee heads, and academic teachers function as leadership agents who contribute directly to the improvement of teaching. Literature highlights show that distributive leadership practices strengthen teachers' professional autonomy, increase pedagogical collaboration, and build a conducive professional learning community, further supporting teaching effectiveness and school achievement (Bush, 2021; Harris, 2020; Tian, Risku & Collin, 2021).

In the context of Malaysian Sports Schools (SSM), distributive leadership becomes relevant because these schools demand a balance between academic excellence and the development of high-performance sports. Teachers not only have to implement effective teaching but also adapt pedagogical strategies to the intensive sports training schedule and the holistic needs of student-athletes. The distributive approach provides room for teacher involvement in teaching planning, curriculum coordination, and professional support in a collaborative manner, further increasing the effectiveness of teaching in special education environments such as SSM (Rosmin, Alias & Nordin, 2025; Smith & Brown, 2023).

Previous studies show a positive relationship between distributive leadership and teaching effectiveness, teacher motivation, and school achievement (Leithwood et al., 2020; Ng, 2019). However, most studies focus on mainstream schools and Western educational contexts, while specific empirical studies on Malaysian Sports Schools are still limited. In addition, previous findings show that the effect of distributive leadership depends on school culture, the level of administrative support, and organizational context, thus emphasizing the need for more contextual studies (Tian et al., 2021; Tao, Suhaida Abdul Kadir & Nurzatulshima Bte Kamarudin, 2025).

Based on this gap, this article examines the influence of the principal's distributive leadership on the effectiveness of teaching in Malaysian Sports Schools. This article presents literature highlights, followed by empirical analysis to identify the contribution of distributive leadership in the context of sports schools and discusses practical implications for leadership strategies and teacher professional development. This study contributes to the development of distributive leadership theory by providing empirical evidence in the context of SSM, strengthening the understanding of the role of distributive leadership as a catalyst for teaching effectiveness, and identifying the most significant dimensions affecting teaching effectiveness.

The results of this study can be used by principals, policymakers, and education management in an effort to improve the quality of teaching and the professional development of teachers. The findings of the study are expected to provide practical guidance to principals and

policymakers in designing a more collaborative and systematic leadership approach (Ahmad, Hamid & Rahman, 2024; Jamil et al., 2024).

### **Objectives of the Study**

This study aims to evaluate the influence of the principal's distributive leadership on the effectiveness of teaching in Malaysian Sports Schools.

#### *Context and Analysis Unit of the Study*

The study was conducted in five SSM institutions, namely Bukit Jalil Sports School, Pahang Sports School, Terengganu Sports School, Sabah Sports School, and Tunku Mahkota Ismail Sports School (SSTMI), Johor, with teachers who are directly involved in teaching being the unit of analysis. This article explores the role of distributive leadership in the context of sports schools through literature highlights, conceptual frameworks, methodologies, empirical findings, and discussion of implications for teacher professional development.

This study contributes to the development of educational leadership theory by providing contextual empirical evidence on the dimensions of distributive leadership that are most influential on teaching effectiveness. In practical terms, the results of the study can be used as a reference by principals and policymakers to design a more collaborative and systematic leadership strategy that focuses on increasing the effectiveness of teaching and the professional development of teachers in Malaysian Sports Schools.

### **Literature Review**

The principal's distributive leadership refers to a leadership approach that emphasizes the sharing of power, responsibility, and leadership roles among school members to realize collective educational goals (Leithwood, Harris & Hopkins, 2020). In this framework, the principal no longer acts as a single leader who makes centralized decisions but instead acts as a facilitator that allows teachers to be actively involved in the decision-making process, teaching planning, and the implementation of pedagogical innovations. Spillane (2018) asserts that distributive leadership needs to be understood as a social process that develops through continuous interaction between principals, teachers, and the school's organizational context.

Current literature highlights a significant shift from the traditional hierarchical leadership model to a more collaborative and inclusive distributive leadership approach. According to Harris and Jones (2019), the principal's distributive leadership practices are able to increase teachers' involvement in school governance and strengthen their professional commitment to student achievement. Along with those findings, Bush (2021) and Harris (2020) argue that the influence of the principal's distributive leadership is able to form a collaborative work culture, promote teachers' professional autonomy, and strengthen the school's organizational capacity continuously.

#### *Teaching Effectiveness in the School Context*

The effectiveness of teaching is an important element in evaluating the quality of the education system, which includes aspects of organized teaching planning, the implementation of pedagogical strategies that are in line with the needs of students, and comprehensive and holistic learning assessment (Danielson, 2013; Norashikin &

Kamarulzaman, 2021). Although the individual competence of the teacher plays a major role, the effectiveness of teaching is also significantly influenced by the support of school leadership that provides a conducive working environment, sufficient resources, and continuous professional development opportunities.

In this regard, the principal's distributive leadership is seen as a catalyst for increasing teaching effectiveness. Muniandy and Ah Sam (2021) stated that the strategic implementation of distributive leadership can stimulate the formation of an active Professional Learning Community (PLC). Through PLC, teachers have the opportunity to share best practices, carry out collaborative pedagogical reflection, and further improve the quality of teaching continuously.

#### *The Effect of Principal's Distributive Leadership on Teaching Effectiveness*

Previous empirical studies have shown that principals' distributive leadership has a significant influence on teaching effectiveness, although the effects are often indirect. Leithwood et al. (2020) explained that the influence is channeled through increasing teacher self-efficacy, strengthening professional commitment, and active involvement of teachers in the school development process. Harris (2020) also asserted that the systematic distribution of leadership roles by principals encourages teachers to take on greater pedagogical responsibilities and implement innovations in teaching.

Internationally, Bush and Glover (2019) report that schools that practice distributive leadership record a high level of pedagogical innovation and teacher collaboration ( $mean = 4.18, SD = 0.41$ ). A study in Australia by Timperley and Robinson (2021) found that the effect of the principal's distributive leadership on teaching effectiveness was at a moderate level ( $mean = 3.62, SD = 0.50$ ), which was influenced by the factors of teacher workload and organizational support. Meanwhile, MacBeath and Dempster (2018) found that the influence of distributive leadership becomes more significant when the practice is implemented consistently in a school environment that has a strong collaborative culture. In the Malaysian context, several studies show a significant relationship between the principal's distributive leadership and teaching effectiveness. Wong and Musa (2025), Mayan and Mansor (2021), and Tukiman and Md Noor (2022) found that the principal's distributive leadership practice contributes to increasing teacher autonomy and their involvement in pedagogical decisions, which in turn has a positive effect on the quality of teaching.

#### *The Influence of Principals' Distributive Leadership and Teaching Effectiveness in Malaysian Sports Schools*

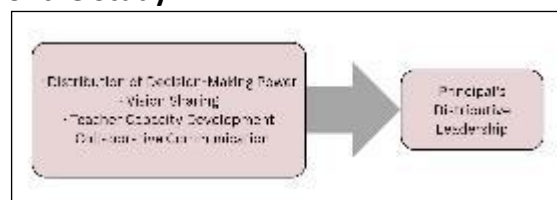
Although many studies confirm the positive relationship between principals' distributive leadership and teaching effectiveness, studies focusing on the sports school context are still limited. The Malaysian Sports School has its own organizational structure and work culture because principals and teachers have to balance the academic demands of students with the needs of developing high-performance sports. Ahmad and Majid (2022) asserted that sports school principals need to play the role of coordinator and catalyst to ensure the integration of academics and sports is carried out in a balanced manner.

A study by Rosmin, Alias, and Nordin (2025) shows that the distributive leadership of principals in Malaysian Sports Schools increases teacher involvement in lesson planning,

curriculum coordination, and professional development. This situation indirectly contributes to the improvement of teaching effectiveness and student academic performance. The findings show that distributive leadership is a leadership approach that has great potential to be applied effectively in the context of sports schools.

Overall, the literature shows that the principal's distributive leadership has a significant influence on teaching effectiveness through strengthening teacher autonomy, building a collaborative culture, and increasing school organizational capacity. However, empirical studies that specifically examine the influence of principals' distributive leadership on teaching effectiveness in Malaysian Sports Schools are still limited. Therefore, this research gap justifies the need to conduct a more systematic and contextual study to understand the relationship between the two variables in a sports school environment that has unique professional characteristics and demands.

### Conceptual Framework of the Study



Source: Spillane, 2018; Harris, (2020)

Figure 1: Conceptual Framework

The conceptual framework of this study was developed based on distributive leadership theory, which emphasizes the collective distribution of responsibilities, roles, and power of leadership in school organizations (Spillane, 2018; Harris, 2020). In this study, the principal's distributive leadership is used as an independent variable, while teaching effectiveness acts as a dependent variable. Distributive leadership is operationalized through four main dimensions that are expected to have an impact on teaching effectiveness.

The power-sharing and decision-making dimension refers to the extent to which principals provide opportunities for teachers to be actively involved in academic decision-making, pedagogical strategies, and classroom management. This practice not only increases the professional autonomy of teachers but also encourages collective involvement in planning and implementing teaching programs that are appropriate to the school context (Leithwood et al., 2020). The sharing of vision emphasizes the coordination of educational goals and aspirations among school members. Principals act as facilitators in building a shared understanding of the balance of academic achievement and the development of high-performance sports, as well as fostering collective commitment and providing clear guidance to teachers (Bush, 2021).

The dimension of teacher capacity development focuses on improving teacher competence and efficiency through professional training, guidance, and sharing of best pedagogical practices. This strategy supports the improvement of self-efficacy and teaching skills that can strengthen the effectiveness of teaching continuously (Azlin et al., 2023). Collaborative communication refers to continuous interaction, exchange of ideas, and reflective discussions

between teachers and principals that strengthen knowledge sharing, pedagogical innovation, and more effective teaching coordination (Harris, 2020).

Teaching effectiveness is measured through systematic teaching planning, the implementation of effective pedagogical strategies, and continuous and holistic learning assessment. Previous studies show that distributive leadership that integrates these four dimensions is able to significantly improve teaching effectiveness (Leithwood et al., 2020; Azlin et al., 2023).

The distributive leadership model is a contemporary approach that emphasizes the collective division of leadership responsibilities among school members, especially teachers and support staff, to improve the effectiveness of educational organizations (Harris & Jones, 2019). In the context of Malaysian Sports Schools, this model is very relevant because the culture of sports schools demands cooperation from various parties to support academic achievement and the development of the character of student-athletes. Principals as instructional leaders need to create a work environment that supports collaboration, trust, and active involvement of teachers in teaching matters (Leithwood et al., 2020). Overall, this conceptual framework allows the researcher to empirically evaluate how the principal's distributive leadership practices affect teaching dimensions such as lesson planning, classroom management, student-athlete involvement, and academic achievement, in line with the objective of the study, which aims to examine the influence of distributive leadership on teaching effectiveness.

### **Research Methodology**

This study uses a survey design with a descriptive and correlational quantitative approach to assess the level and relationship between principals' distributive leadership practices and teacher teaching effectiveness. The quantitative approach was chosen because it allows extensive data collection and statistical analysis to be carried out objectively, thereby allowing inferences to be made to the target population (Sekaran & Bougie, 2019). The study was conducted in five Malaysian Sports Schools, namely Bukit Jalil Sports School, Pahang Sports School, Terengganu Sports School, Sabah Sports School, and Tunku Mahkota Ismail Sports School (SSTMI), Johor. The selection of schools is based on unique organizational characteristics where the principal plays a key role in coordinating academic achievement and sports performance simultaneously.

The study population consisted of 290 teachers who served in the participating schools and had at least one year of teaching experience. Simple random sampling was used to ensure that every member of the population had an equal chance to be selected and to reduce selection bias (Chua, 2011). Based on the Krejcie and Morgan Table (1970), the minimum sample size required is 165 people, but this study involved 187 respondents to increase the accuracy of the analysis and statistical power.

The research instrument was a structured questionnaire using a four-point Likert scale (1 = strongly disagree to 4 = strongly agree). The questionnaire includes three parts: Part A (demographic information), Part B (principal distributive leadership), and Part C (teacher teaching effectiveness). The items in Sections B and C were adapted from the Distributed

Leadership Inventory (Hulpia et al., 2009) and adapted to the context of sports schools in Malaysia.

Data were analyzed using SPSS version 25.0. Reliability tests showed Cronbach's Alpha values above 0.80 for all constructs, indicating a high level of internal consistency (Hair et al., 2019). Descriptive analysis was used to describe the level of study variables, while Pearson Product-Moment (r) correlation analysis was used to determine the strength and direction of the relationship between the principal's distributive leadership and the teacher's teaching effectiveness at a significant level of  $p = 0.05$ , with interpretation based on Cohen (1988).

#### RESEARCH FINDING

##### *Respondent Demographic Profile*

Table 1 shows that a total of 187 Malaysian Sports School teachers were involved in the analysis of this study. Female teachers are the majority of respondents, 130 (69.5%), while male teachers are 57 (30.5%). Demographic analysis shows that the majority of respondents are 46 years old and above, which is 73 (39.0%), followed by the age category of 36 to 45 years, which is 72 (38.5%), which shows that the respondents of this study are dominated by teachers in the middle to the end of their careers. In terms of academic qualifications, a total of 177 respondents (94.7%) have a Bachelor's Degree, while 10 (5.3%) have a Master's Degree. In terms of teaching experience, the majority of respondents have more than 15 years of experience (52.9%), followed by 11 to 15 years of experience (24.6%), 6 to 10 years of experience (11.8%), and less than five years of experience (10.7%).

Table 1

##### *Demographic Distribution of Respondents*

Demographic Information	Category	Frequency	(%)
Gender	Male	57	30.5
	Female	130	69.5
Age	25 years and below	3	1.6
	26 – 35 years	39	20.9
	36 – 45 years	72	38.5
	46 years and above	73	39.0
Highest Educational Level	Bachelor's Degree	177	94.7
	Master's Degree	10	5.3
Teaching Experience	Less than 5 years	20	10.7
	6 – 10 years	22	11.8
	11 – 15 years	46	24.6
	More than 15 years	99	52.9
Professional Qualification	Postgraduate Diploma in Education (DPLI)	25	13.4
	Postgraduate Teacher Training Program (KPLI)	26	13.9
	Bachelor of Education	135	72.2
	Others	1	0.5
Teaching Level	Lower Secondary (KSSM)	50	26.7
	Upper Secondary (KSSM)	124	66.3
	Pre-University	13	7.0

*Influence of Principal's Distributive Leadership on Teaching Effectiveness in Malaysian Sports Schools*

This study uses regression analysis to determine the extent of the influence of the principal's distributive leadership, i.e., the distribution of decision-making power, vision sharing, teacher capacity development, and collaborative communication, on the effectiveness of teaching in Malaysian Sports Schools. The regression model shows that 58% of the variation in teaching effectiveness can be explained by the combination of the principal's distributive leadership constructs. A significant F value ( $p < 0.001$ ) indicates that the model is suitable for prediction.

Table 2 shows that teacher capacity development has the strongest influence on teaching effectiveness with ( $\beta = 0.454$ ,  $p < 0.001$ ). This shows that teachers who receive professional development support from the principal demonstrate a higher level of teaching effectiveness. The collaborative communication construct also has a positive and significant effect ( $\beta = 0.322$ ,  $p < 0.001$ ), showing that open and collaborative communication practices between principals and teachers contribute to increased teaching effectiveness.

In addition, the findings also show that the distribution of decision-making power and the sharing of a clear vision with teachers do not show a significant effect ( $p > 0.05$ ), indicating that the influence of these two constructs on teaching effectiveness is less significant in this study compared to teacher capacity development and collaborative communication. All VIF values are  $< 5$  and tolerance  $> 0.3$ , indicating no multicollinearity problem between the independent variables. Overall, the findings show that teacher capacity development and collaborative communication are the most dominant predictors in improving teaching effectiveness in Malaysian Sports Schools. Although the distribution of decision-making power and the sharing of a clear vision with teachers are important aspects of distributive leadership, in the context of this study, their effect on teaching effectiveness is not significant when other constructs are controlled.

Table 2  
*Multiple Regression Coefficients*

Independent Variable	Beta (unstandardized)	Beta (standardized)	t	Significance
Distribution of Decision-Making Power	-.004	-.006	-.088	.930
Vision Sharing	0.039	.055	.708	.480
Teacher Capacity Development	0.371	.454	5.330	.000
Collaborative Communication	0.272	.322	4.438	.000

Dependent Variable: Teaching Effectiveness

**Discussions**

The results of the study are explained and linked to previous studies to support the findings of this study. In this regard, the explanation is also supported by the basic theory of the study,

which is leadership theory, and facts that are relevant to the findings of the study. In particular, the aspects described are related to the relationship and predictors of the principal's distributive leadership on the effectiveness of teaching in Malaysian Sports Schools from the teachers' perceptions. Also explained are the limitations and suggestions for improvement of this study in the field of education for the future. In line with the views of Harris (2020) and Leithwood, Harris and Hopkins (2020), who assert that distributive leadership does not work linearly or uniformly, but instead depends on how certain leadership constructs are translated into actual teaching practice.

#### *Influence of Principal's Distributive Leadership on Teaching Effectiveness in Malaysian Sports Schools*

The results of the study show that there is a significant relationship between the principal's distributive leadership and teaching effectiveness, thus supporting the Research Hypothesis (H1) that there is a significant relationship between the principal's distributive leadership and the effectiveness of teaching and learning in Malaysian Sports Schools. However, the results of multiple regression analysis show that not all principals' distributive leadership constructs have the same influence on teaching effectiveness in Malaysian Sports Schools. The findings of the study found that teacher capacity development and collaborative communication are significant predictors of teaching effectiveness, while the distribution of decision-making power and vision sharing do not show a significant influence. This confirms that the influence of distributive leadership on teaching is selective and depends on the practical function of each construct in the leadership.

In terms of theory, this finding supports Vygotsky's social learning theory (1978), which emphasizes that individual cognitive and professional development occurs through meaningful social interaction and support from more experienced individuals. In the context of school leadership, teacher capacity development through teaching guidance, continuous professional training, and best practice sharing creates a Zone of Proximal Development (ZPD) space among teachers, further improving the quality and effectiveness of teaching. Collaborative communication also functions as a medium of professional interaction that allows teachers to build mutual understanding, solve teaching problems, and adapt teaching strategies to the needs of student-athletes.

As for the non-significant constructs, namely the distribution of decision-making power and the sharing of a clear vision, this suggests that structural and conceptual elements of leadership are not necessarily directly translated into classroom teaching. This finding shows that although vision sharing and delegation of authority are important features of distributive leadership, their effectiveness depends on the extent to which these elements are operationalized in the form of tangible teaching support for teachers. Without support in the form of professional development and continuous collaborative communication, vision sharing risks remaining organizational rhetoric that cannot have a direct impact on teaching practice.

This finding is in line with the study by Leithwood et al. (2020), who found that teacher professional development is the main mechanism in school leadership in influencing teaching effectiveness, while the effects of strategic leadership such as organizational vision and structure are indirect and mediated by teacher practice. A study by Darling-Hammond et al.

(2020) also emphasized that the effectiveness of teaching is highly dependent on the teacher's ability to adapt teaching to the student's context, which can only be achieved through consistent and collaborative professional support.

Overall, the findings of this study suggest that the influence of the principal's distributive leadership on the effectiveness of teaching in Malaysian Sports Schools is more effective when the leadership focuses on constructs that support the professional development of teachers and encourage collaborative interaction. The implications of this study emphasize the need for principals to strategically structure distributive leadership practices by giving priority to teaching support based on the real needs of teachers, in line with a learning-oriented instructional leadership approach.

### **Research Implications**

The findings of the study show that the principal's distributive leadership practices have a significant relationship with teaching effectiveness in Malaysian Sports Schools. The implications of this study include several key aspects, namely teachers, education policy, school management practices, as well as training and professional development, particularly in the context of high-intensity schools that demand flexibility and high pedagogical expertise (Yusuf & Mohd Noor, 2024; Rosmin et al., 2025).

#### *Teacher*

From the teacher's perspective, distributive leadership is able to increase professional autonomy and strengthen pedagogical skills through active involvement in the decision-making process (Mayan & Mansor, 2021). Collaborative practices and shared responsibilities give teachers the opportunity to be more reflective and innovative in teaching. In the context of Malaysian Sports Schools, this autonomy is critical as teachers need to adapt teaching strategies to the unique needs of student-athletes who face busy training schedules and competing academic commitments. Continuous professional support allows teachers to implement teaching more flexibly and effectively and to improve student learning achievement (Masyany & Jamil, 2023).

#### *Education Policy*

From the point of view of educational policy, the findings support the implementation of distributive leadership as outlined in the Malaysian Education Quality Standard Wave 2 (SKPMg2) and the National Professional Qualification for Educational Leaders (NPQEL) (Lei & Chuah, 2025). The effectiveness of distributive leadership depends on the school context and the specific needs of the teacher. Therefore, policymakers are advised to provide more flexible guidelines and support, including training modules and policies that enable principals and teachers to implement collaborative leadership effectively, in line with the aspirations of high-performing schools (Tao, Suhaida & Kamarudin, 2025).

#### *School Management Practices*

In terms of school management, principals need to strengthen their role as instructional leaders through structured and continuous teacher guidance (Wong & Khalip, 2025). The construction of a collaborative culture such as the implementation of a Professional Learning Community (PLC) and the sharing of pedagogical practices across committees is proven to support consistent and quality teaching. This culture builds a learning ecosystem that allows

teachers to exchange strategies and adapt teaching approaches according to the needs of different students, especially student-athletes with high-intensity schedules (Rosmin et al., 2025; Masyany & Jamil, 2023).

#### *Training and Professional Development*

The implications of the study on training and professional development emphasize that leadership development programs and teacher training need to focus on instructional guidance skills, collaborative communication, flexible pedagogy, and differentiated learning (Lei & Chuah, 2025; Tao, Suhaida & Kamarudin, 2025). Continuous professional development allows teachers to gain support and up-to-date knowledge in pedagogical practice, improving teaching effectiveness through distributive leadership. Appropriate training allows teachers to adjust teaching in a responsive and proactive manner to the individual needs of students and the challenges of sports school management.

Overall, the findings confirm that distributive leadership is not just a division of power or vision but a strategic mechanism to support teachers professionally and collaboratively. The application of this practice in Malaysian Sports Schools is able to produce more effective teaching, more reflective teachers, and more effective student-athlete learning. This implication emphasizes the need for principals to strategically structure distributive leadership practices, giving priority to teaching support based on teachers' actual needs, in line with the learning-oriented instructional leadership approach (Yusuf & Mohd Noor, 2024; Mayan & Mansor, 2021).

#### **Research Limitations**

This study is limited to a quantitative approach only and depends entirely on the teacher's perception, which has the potential to cause bias by the respondents. In addition, the focus of the study is only on Malaysian Sports Schools (SSM), limiting the generalization of the findings to other types of schools.

#### *Recommendations for Improvement*

Based on the limitations of this study, several suggestions for improvement can be presented for future studies. First, future studies are recommended to use a mixed-method approach that combines quantitative and qualitative methods. This approach allows for more in-depth and holistic data collection, further providing a more comprehensive understanding of distributive leadership mechanisms in influencing teaching effectiveness (Tao, Suhaida & Kamarudin, 2025; Mayan & Mansor, 2021).

Finally, future researchers are encouraged to expand the study population to involve different types of schools, including day schools, cluster schools, and international schools. This approach enables the generalization of findings more widely and strengthens the reliability and validity of the study, in line with the development of distributive leadership practices in various school contexts (Wong & Khalip, 2025; Masyany & Jamil, 2023). With these recommendations in mind, future research has the potential to make a more holistic and high-impact contribution to school management, education policy, and teacher professional development, particularly in the context of high-performing schools.

## Conclusion

All things considered, this study has successfully determined the influence of the principal's distributive leadership on the effectiveness of teaching in Malaysian Sports Schools from the teacher's perspective. The findings of the study show that distributive leadership that focuses on teacher capacity development and collaborative communication has a significant impact on teaching effectiveness, while constructs such as the distribution of decision-making power and vision sharing do not have a significant direct influence without professional support and a robust collaborative culture (Yusuf & Mohd Noor, 2024; Mayan & Mansor, 2021).

This study also demonstrates success in strengthening the understanding of distributive leadership mechanisms, including how it is translated into actual teaching practice, further having a positive impact on teachers' professional autonomy, pedagogical flexibility, and the effectiveness of student learning (Rosmin et al., 2025; Tao, Suhaida & Kamarudin, 2025). This finding is in line with Vygotsky's Constructivist Social Theory (1978), which emphasizes that professional development occurs through meaningful social interaction, as well as instructional leadership theory, which emphasizes the role of professional support in improving teaching (Masyany & Jamil, 2023; Lei & Chuah, 2025).

In addition, this study successfully confirmed the research hypothesis (H1) that there is a significant relationship between the principal's distributive leadership and teaching effectiveness. This study also opens up room for future improvement, including the use of a mixed-method approach and mediator variables such as school culture, teacher self-efficacy, and organizational support to strengthen the generalization and depth of findings (Wong & Khalip, 2025; Ahmad & Majid, 2022).

Overall, this study proves that distributive leadership focused on teacher professional development and collaborative interaction is able to improve teaching effectiveness in Malaysian Sports Schools. The outcomes of this study not only contribute to the academic literature on distributive leadership but also provide practical implications for principals, teachers, policymakers, and school management in their efforts to improve the quality of teaching and learning in the context of high-performing schools.

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