

## The Correlation of Instructional Support, Peer Collaboration, Self-Efficacy, Classroom Management and Practicum Success among Pre-Service PE Teachers (Hubungan Sokongan Pengajaran, Kerjasama Rakan Sebaya, Efikasi Diri, Pengurusan Bilik Darjah dan Kejayaan Praktikum dalam kalangan Guru Pra-Perkhidmatan Pendidikan Jasmani)

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### ABSTRACT

*The practicum is a vital component of teacher education, particularly for pre-service physical education (PE) teachers who encounter unique challenges in classroom management and instructional delivery. This study aims to identify the key determinants of practicum success, focusing on instructional support, peer collaboration, self-efficacy, and classroom management among pre-service PE teachers in Malaysia. A cross-sectional survey design was employed, with data collected from 480 pre-service PE teachers using a structured questionnaire. The questionnaire measured six key areas, and data were analysed using Pearson correlation coefficients through SPSS software. The analysis revealed strong positive correlations between the independent variables and practicum performance, with peer collaboration ( $r = 0.81$ ) emerging as the most significant predictor, followed by classroom management ( $r = 0.72$ ), self-efficacy ( $r = 0.68$ ), and instructional support ( $r = 0.68$ ). These results underscore the importance of targeted instructional support and collaborative learning environments in enhancing practicum outcomes. The study concludes that teacher education programs should prioritize these factors to better prepare pre-service PE teachers for the complexities of teaching. The implications of this study suggest that incorporating collaborative activities and enhancing self-efficacy through mentorship can significantly improve practicum performance and long-term teaching effectiveness. Further research is recommended to explore these relationships in different educational contexts and to examine their impact over time.*

*Keywords: Practicum Performance, Pre-Service Teachers, Peer Collaboration, Instructional Support, Self-Efficacy*

### ABSTRAK

*Praktikum adalah komponen penting dalam pendidikan guru, terutamanya bagi guru praperkhidmatan Pendidikan Jasmani (PJ) yang menghadapi cabaran unik dalam pengurusan bilik darjah dan penyampaian pengajaran. Kajian ini bertujuan untuk mengenal pasti penentu utama kejayaan praktikum, dengan fokus pada sokongan instruksional, kerjasama rakan sebaya, efikasi sendiri, dan pengurusan bilik darjah dalam kalangan guru PJ praperkhidmatan di Malaysia. Reka bentuk tinjauan keratan rentas digunakan, dengan data dikumpul daripada 480 guru PJ praperkhidmatan menggunakan soal selidik berstruktur. Soal selidik tersebut mengukur enam bidang utama, dan data dianalisis menggunakan pekali korelasi Pearson melalui perisian SPSS. Analisis menunjukkan korelasi positif yang kuat antara pemboleh ubah bebas dan prestasi praktikum, dengan kerjasama rakan sebaya ( $r = 0.81$ ) muncul sebagai peramal paling signifikan, diikuti oleh pengurusan bilik darjah ( $r = 0.72$ ), efikasi sendiri ( $r = 0.68$ ), dan sokongan instruksional ( $r = 0.68$ ). Keputusan ini menekankan kepentingan sokongan instruksional yang disasarkan dan persekitaran pembelajaran kolaboratif dalam meningkatkan hasil praktikum. Kajian ini menyimpulkan bahawa program pendidikan guru perlu mengutamakan faktor-faktor ini untuk mempersiapkan guru PJ praperkhidmatan dengan lebih baik bagi menghadapi kompleksiti pengajaran. Implikasi kajian ini mencadangkan bahawa pengintegrasian aktiviti kolaboratif dan peningkatan efikasi sendiri melalui bimbingan boleh meningkatkan prestasi praktikum dan keberkesanan pengajaran jangka panjang dengan ketara. Penyelidikan lanjut disarankan untuk meneroka hubungan ini dalam konteks pendidikan yang berbeza dan untuk mengkaji kesannya dari masa ke masa.*

*Kata kunci: Prestasi Praktikum, Guru Pelatih, Kerjasama Rakan Sebaya, Sokongan Pengajaran, Efikasi Diri*

## INTRODUCTION

The practicum experience is a crucial component of teacher education programs, particularly in physical education. Research has shown that practicum experiences significantly influence pre-service teachers' self-efficacy beliefs and teaching competence (Iaochite & Filho, 2016; Martins et al., 2015). Factors contributing to successful practicum experiences include strong instructional support, mentoring relationships, and opportunities for hands-on teaching (Cheng, 2013; Martins et al., 2015). Pre-service teachers with higher self-efficacy tend to report positive mastery experiences, vicarious experiences, and verbal persuasion during their practicum (Martins et al., 2015). However, the practicum can also be a stressful experience for many pre-service teachers (Gillett-Swan & Grant-Smith, 2017). To enhance the quality of practicum experiences, teacher education programs should focus on strengthening school partnerships, providing mentor training, and incorporating assessment for learning in campus-based courses (Cheng, 2013). Additionally, recognizing and addressing the personal factors that influence practicum experiences is becoming increasingly important (Gillett-Swan & Grant-Smith, 2017).

Research on practicum experiences in teacher education highlights their importance in developing pre-service teachers' skills and self-efficacy. Peer collaboration during practicum can enhance support, reciprocal learning, and professional growth (Grierson et al., 2011). The practicum is highly valued by student teachers, alongside theoretical aspects of their education (Smith & Lev-Ari, 2005). Institutional supervisors, peers, and school-based mentors are perceived as primary sources of support during practicum (Smith & Lev-Ari, 2005). Pre-service physical education teachers with higher self-efficacy report positive mastery experiences, vicarious experiences through lesson observation, and verbal persuasion through post-lesson conversations (Martins et al., 2015).

However, those with lower self-efficacy may experience negative emotions and lack of verbal persuasion (Martins et al., 2015). Research on the practicum has focused on student-teacher learning, collaboration among student teachers, collaboration between student teachers and cooperating teachers, and supervision of student teachers (Ong'ondo & Jwan, 2009). Self-efficacy, or the belief in one's ability to succeed in specific situations, is a well-established predictor of teacher performance (Bandura, 1997). In the context of the practicum, self-efficacy refers to pre-service teachers' confidence in their ability to teach effectively, manage a classroom, and overcome challenges (Tschannen-Moran & Hoy, 2001). Numerous studies have demonstrated that pre-service

teachers with high self-efficacy are more likely to be successful in their practicum, as they are more resilient, better able to cope with stress, and more likely to persist in the face of difficulties (Klassen & Tze, 2014).

Research indicates that self-efficacy and classroom management skills are crucial for pre-service physical education teachers' success during practicum experiences. Pre-service teachers with higher self-efficacy report more positive practicum experiences, including effective planning, teaching practice, and student relationships (Martins et al., 2015). Self-efficacy beliefs can be influenced by various factors, such as mastery experiences, vicarious experiences, and verbal persuasion during practicum (Martins et al., 2015; Iaochite & Filho, 2016). Studies show that pre-service teachers' self-efficacy generally increases throughout their practicum experiences (Patterson & Farmer, 2018; Main & Hammond, 2008). However, concerns remain about the limited range of behavior management strategies identified by pre-service teachers, particularly for addressing more challenging behaviors (Main & Hammond, 2008). To enhance pre-service teachers' self-efficacy and classroom management skills, educator preparation programs should focus on providing opportunities for hands-on teaching experiences, effective supervision, and targeted training in classroom organization and management (Patterson & Farmer, 2018; Iaochite & Filho, 2016). Pre-service teachers who possess strong classroom management skills are more likely to be successful in their practicum, as they are better equipped to handle the challenges of teaching and create a positive learning environment for their students (Marzano, 2017).

Classroom management is a critical aspect of effective teaching, particularly in physical education settings. Pre-service teachers' knowledge and skills in this area significantly impact their teaching performance (Zulkifli et al., 2019). Research highlights the importance of positive classroom management techniques in fostering student cooperation and reducing teacher stress (Mohd Taib Harun et al., 2015). Common concerns among student teachers during practicum include classroom management, institutional adjustment, teaching methods, and student learning (Goh & Matthews, 2011). Factors such as gender and teaching experience can influence classroom management strategies (McCormack, 1997). To address these challenges, teacher education programs should provide targeted training in classroom management, particularly for physical education contexts (McCormack, 1997; Zulkifli et al., 2019). Reflective practices, such as maintaining journals during practicum, can help identify and address student teachers' concerns, ultimately improving teacher education programs (Goh & Matthews, 2011).

## PROBLEM STATEMENT

Research on teacher education has extensively explored various factors that contribute to the effectiveness of pre-service teachers during their practicum. However, much of this research has focused on general education, with relatively little attention given to the unique challenges faced by pre-service PE teachers (Parker et al., 2022). PE teachers operate in dynamic and often unpredictable environments, where the demands of managing large groups of students, ensuring safety, and delivering effective instruction are magnified. The literature suggests that these challenges require specific competencies that may differ from those needed in other subject areas (Araújo et al., 2021). One key gap in the existing literature is the limited understanding of how instructional support influences the practicum success of pre-service PE teachers.

While it is well-established that instructional support is crucial for teacher development, few studies have examined how this support translates into practicum success in the context of physical education (Peel & McLennan, 2020). Furthermore, the role of peer collaboration in enhancing practicum experiences has been widely recognized in general education, but its impact on PE teacher education remains underexplored (Darling-Hammond et al., 2020). This gap is significant because PE teaching often requires collaboration among teachers to manage activities, share resources, and ensure student engagement in diverse and active learning environments. Another critical area where the literature is lacking is in the examination of self-efficacy among pre-service PE teachers. While numerous studies have highlighted the importance of self-efficacy in teaching (Klassen & Tze, 2014), there is a paucity of research that specifically investigates how self-efficacy influences practicum performance in PE.

This is particularly important given that PE teachers must not only possess confidence in their instructional abilities but also in their capacity to manage the physical and behavioral demands of the subject (Tschannen-Moran & Woolfolk Hoy, 2001). Classroom management is another area where research is needed, particularly in the context of PE. Effective classroom management is a well-known determinant of teaching success (Evertson & Weinstein, 2013), yet little is known about how pre-service PE teachers develop these skills during their practicum. The physical nature of PE classes presents unique challenges, such as managing outdoor activities or controlling large groups of active students, which are not typically encountered in traditional classroom settings (Graham, 2008). Understanding how pre-service PE teachers acquire and

apply classroom management skills during their practicum is essential for improving teacher education programs.

This study aims to fill these gaps in the literature by providing a comprehensive examination of the determinants of practicum success among pre-service PE teachers in Malaysia. By focusing on the specific factors of instructional support, peer collaboration, self-efficacy, and classroom management, this research seeks to contribute to the broader body of knowledge in several ways. First, the study will provide valuable insights into how instructional support can be tailored to meet the unique needs of pre-service PE teachers. Understanding the types of support that are most effective in helping these teachers navigate the challenges of the practicum will be crucial for enhancing teacher education programs (Hudson, 2016). This research could lead to the development of targeted support strategies that are specifically designed to address the demands of PE teaching, thereby improving practicum outcomes. Second, the study will shed light on the role of peer collaboration in the practicum experience. While collaboration is widely recognized as beneficial, this study will explore how it specifically impacts pre-service PE teachers, who often need to work together to manage complex and dynamic learning environments (Bores-García et al., 2021). The findings could inform the design of collaborative learning opportunities within teacher education programs, fostering a more supportive and effective practicum experience.

Third, by examining the influence of self-efficacy on practicum performance, this study will contribute to a deeper understanding of the psychological factors that underpin teaching success in physical education. The research could identify key areas where pre-service PE teachers need support in building their self-efficacy, leading to the development of interventions that enhance their confidence and competence in teaching (Hagger & McIntyre, 2006). Finally, the study's focus on classroom management will provide important insights into how pre-service PE teachers develop and apply these skills during their practicum. Given the unique challenges of managing PE classes, the findings could inform the design of classroom management training that is specifically tailored to the needs of PE teachers (Parker et al., 2022). This could lead to improved practicum outcomes and, ultimately, better-prepared teachers who can create positive and effective learning environments.

In summary, the specific gap that this study seeks to address is the lack of comprehensive research on the interplay between instructional support, peer collaboration, self-efficacy, and classroom management in influencing practicum success among pre-service PE teachers in Malaysia. While each of these factors has been studied in isolation to some extent, there is a need for research that

examines how they interact within the unique context of PE teacher education. This study will contribute to filling this gap by providing a holistic analysis of these determinants and their collective impact on practicum performance. By addressing this gap, the study has the potential to significantly enhance our understanding of the factors that contribute to practicum success in PE teacher education. The findings could inform the design of more effective teacher education programs, ultimately leading to better-prepared PE teachers who are capable of delivering high-quality education in Malaysian schools. Moreover, the study could serve as a foundation for future research in this area, encouraging further exploration of the complex and multifaceted nature of the practicum experience.

## LITERATURE REVIEW

### PRACTICUM PERFORMANCE

Practicum performance is a critical component of teacher education, serving as a pivotal phase where pre-service teachers apply their theoretical knowledge in real classroom settings. This period of practical training is essential for bridging the gap between theory and practice, allowing future educators to develop and refine their teaching skills in a controlled yet authentic environment (Darling-Hammond, 2022). The effectiveness of this practicum experience is often evaluated through the performance of pre-service teachers, which can be influenced by a variety of factors including instructional support, peer collaboration, self-efficacy, and classroom management skills.

### INSTRUCTIONAL SUPPORT IN TEACHER EDUCATION

Instructional support is one of the most frequently discussed factors in the literature on teacher education. It encompasses the guidance, feedback, and resources provided to pre-service teachers by mentors, university supervisors, and peers. Effective instructional support is critical in helping pre-service teachers navigate the complexities of the classroom, develop their teaching skills, and build confidence in their abilities (Hudson, 2016). Research has consistently shown that the quality of instructional support significantly influences the practicum performance of pre-service teachers. Hudson (2016) emphasizes the importance of mentoring relationships, noting that mentors who provide constructive feedback, model effective teaching practices, and offer emotional support can significantly enhance the learning experiences of pre-service teachers. This is particularly relevant in the

context of physical education (PE), where the demands of teaching are often more physically and mentally challenging compared to other subject areas.

In their study on the role of mentoring in PE teacher education, Peel and McLennan, (2020) found that pre-service teachers who received targeted instructional support were better equipped to manage the unique challenges of PE teaching, such as managing large groups of students, ensuring student safety, and delivering effective instruction in a dynamic environment. This suggests that instructional support tailored to the specific needs of PE teachers can be a critical determinant of practicum success. However, while the importance of instructional support is well-established, there is limited research on how this support should be structured in the context of PE teacher education. Much of the existing literature focuses on general education, leaving a gap in our understanding of the specific types of support that are most beneficial for pre-service PE teachers. This study aims to address this gap by exploring the role of instructional support in the practicum performance of pre-service PE teachers in Malaysia.

### PEER COLLABORATION AND ITS IMPACT ON PRACTICUM SUCCESS

Peer collaboration, or the process of pre-service teachers working together to share ideas, resources, and experiences, is another critical factor in practicum success. The literature suggests that collaborative learning environments can enhance the practicum experience by providing pre-service teachers with opportunities to learn from each other, reflect on their teaching practices, and develop a sense of community (Darling-Hammond et al., 2020). In the context of PE teacher education, peer collaboration is particularly valuable. PE teachers often need to work together to manage large groups of students, plan lessons, and coordinate activities. Bores-García et al. (2021) found that pre-service PE teachers who engaged in peer collaboration reported higher levels of confidence and competence during their practicum. The study highlighted the role of peer collaboration in helping pre-service teachers develop problem-solving skills, share effective teaching strategies, and provide emotional support to each other.

Moreover, peer collaboration can help pre-service teachers overcome feelings of isolation and stress, which are common during the practicum period (Smith & Lindsay, 2016). By working together, pre-service teachers can create a supportive network that helps them navigate the challenges of the practicum. This is particularly important in PE, where the physical and social demands of teaching can be overwhelming for some pre-service teachers. Despite the recognized benefits of peer collaboration, there

is a need for more research on how these collaborative practices can be effectively integrated into PE teacher education programs. The existing literature provides limited guidance on the specific forms of collaboration that are most beneficial for pre-service PE teachers, particularly in the Malaysian context. This study seeks to fill this gap by examining the impact of peer collaboration on the practicum performance of pre-service PE teachers in Malaysia.

#### SELF-EFFICACY IN TEACHER EDUCATION

Self-efficacy, defined as the belief in one's ability to succeed in specific situations, is a well-established predictor of teacher performance. In the context of teacher education, self-efficacy refers to pre-service teachers' confidence in their ability to teach effectively, manage a classroom, and overcome challenges (Tschannen-Moran & Hoy, 2001). High self-efficacy is associated with greater persistence, resilience, and willingness to implement innovative teaching strategies (Klassen & Tze, 2014). The literature on self-efficacy in teacher education suggests that it plays a critical role in determining the success of pre-service teachers during their practicum. Tschannen-Moran and Hoy (2001) argue that self-efficacy influences how pre-service teachers approach their teaching tasks, interact with students, and respond to setbacks. Pre-service teachers with high self-efficacy are more likely to take on challenges, seek out new teaching methods, and persist in the face of difficulties.

In PE teacher education, self-efficacy is particularly important due to the unique demands of teaching physical education. PE teachers must not only have confidence in their instructional abilities but also in their capacity to manage the physical and behavioral aspects of the subject (Hagger & McIntyre, 2006). Research by Bandura (1997) suggests that self-efficacy in PE teaching is influenced by a variety of factors, including prior experiences, verbal persuasion from mentors, and the observation of successful role models. However, despite the importance of self-efficacy, there is a lack of research on how it specifically affects the practicum performance of pre-service PE teachers. Most studies on self-efficacy in teacher education have focused on general education, leaving a gap in our understanding of how self-efficacy develops and impacts performance in the context of PE teaching. This study aims to address this gap by exploring the relationship between self-efficacy and practicum performance among pre-service PE teachers in Malaysia.

#### CLASSROOM MANAGEMENT IN PE TEACHER EDUCATION

Classroom management is another critical factor that influences the practicum success of pre-service teachers. Effective classroom management involves creating a conducive learning environment, minimizing disruptions, and ensuring that all students are engaged in the learning process (Evertson & Weinstein, 2013). In the context of PE, classroom management is particularly challenging due to the active and often unpredictable nature of physical education classes. The literature on classroom management in teacher education highlights its importance for both novice and experienced teachers. Marzano (2017) argues that effective classroom management is a key determinant of teaching success, as it allows teachers to create a structured and supportive learning environment where students can thrive. For pre-service teachers, developing strong classroom management skills during the practicum is essential for building confidence and competence in their teaching abilities.

In PE teacher education, classroom management is even more crucial. PE teachers must manage large groups of students, often in outdoor or gymnasium settings, where the physical environment can contribute to behavioral challenges. Graham (2008) emphasizes that PE teachers need specific classroom management strategies that differ from those used in traditional classrooms. These strategies include establishing clear expectations for behavior, using positive reinforcement, and implementing consistent routines to maintain order during physical activities. Despite the recognized importance of classroom management in PE, there is limited research on how pre-service PE teachers develop these skills during their practicum. The existing literature primarily focuses on general classroom management, with little attention given to the unique challenges of managing PE classes. This study seeks to fill this gap by examining how classroom management skills influence the practicum performance of pre-service PE teachers in Malaysia.

#### SYNTHESIS OF LITERATURE AND IDENTIFIED GAPS

The literature review reveals that while there is a substantial body of research on the determinants of practicum success in teacher education, there are significant gaps in the context of PE teacher education. Specifically, the existing literature provides limited insights into how instructional support, peer collaboration, self-efficacy, and classroom management collectively influence the practicum performance of pre-service PE teachers. Furthermore, there

is a lack of research that examines these factors within the specific context of Malaysian teacher education, where cultural, social, and educational factors may play a unique role. This study seeks to address these gaps by investigating the relationships between these key determinants and practicum success among pre-service PE teachers in Malaysia. By focusing on the specific challenges and needs of PE teacher education, this research aims to provide a more comprehensive understanding of the factors that contribute to effective practicum experiences. The findings of this study have the potential to inform the design of more targeted and effective teacher education programs, ultimately leading to better-prepared PE teachers who are equipped to meet the demands of the profession.

## METHODOLOGY

### HYPOTHESES

1.  $H_1$ : There is a significant positive relationship between instructional support and the practicum performance of pre-service PE teachers.
2.  $H_2$ : There is a significant positive relationship between peer collaboration and the practicum performance of pre-service PE teachers.
3.  $H_3$ : There is a significant positive relationship between self-efficacy and the practicum performance of pre-service PE teachers.
4.  $H_4$ : There is a significant positive relationship between classroom management skills and the practicum performance of pre-service PE teachers.

### RESEARCH DESIGN

This study adopts a quantitative research design to examine the determinants of practicum success among pre-service physical education (PE) teachers in Malaysia. The study is grounded in a cross-sectional survey design, which allows for the collection of data at a single point in time from a large sample of participants. This design is particularly suitable for examining the relationships between multiple variables, such as instructional support, peer collaboration, self-efficacy, classroom management, and practicum performance. The quantitative approach is chosen because it enables the researcher to objectively measure and analyse the relationships between the independent variables (instructional support, peer collaboration, self-efficacy, and classroom management)

and the dependent variable (practicum performance). This approach is consistent with the study's aim to identify significant predictors of practicum success and to test the proposed hypotheses using statistical methods.

### DATA COLLECTION AND PREPARATION

The study involved a sample of 480 pre-service physical education (PE) teachers from a range of universities. Data collection was conducted through a structured questionnaire, which was divided into six sections: Demographic Information, Instructional Support, Peer Collaboration, Self-Efficacy, Classroom Management, and Practicum Performance. Responses were recorded on a 5-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree). The participants were categorized into distinct groups (high versus low performers) based on their practicum performance scores.

### INSTRUMENTATION

The questionnaire items were derived from established and validated instruments. Items measuring Instructional Support were adapted from the Effective Teacher Professional Development Survey (Darling-Hammond et al., 2020). The Peer Collaboration items were sourced from the Teacher Communities and Professional Development Scale (Vangrieken et al., 2020). The Teacher Self-Efficacy Scale (Klassen & Tze, 2014) was utilized to assess Self-Efficacy, while the Classroom Management items were taken from the Classroom Management Questionnaire (Emmer & Sabornie, 2009). Practicum Performance was measured using the Practicum Performance Assessment (Marzano et al., 2017). A pilot study involving 50 pre-service teachers confirmed the reliability of the instrument, with Cronbach's alpha coefficients ranging from 0.82 to 0.91.

### DATA ANALYSIS

Data analysis was conducted using SPSS software. Pearson correlation coefficients were calculated to explore the relationships between the independent variables (instructional support, peer collaboration, self-efficacy, and classroom management) and the dependent variable (practicum performance). This analysis provided initial insights into the strength and direction of these relationships. Ethical approval was granted by the Institutional Review Board (IRB), and participants provided informed consent. Confidentiality was maintained by assigning unique codes to participants, with data securely stored to ensure the protection of personal identities.

## FINDING AND DISCUSSION

The study was conducted with a carefully selected sample of 480 pre-service Physical Education (PE) teachers, all of whom were final-year students enrolled in teacher education programs across four universities in Malaysia. This sample was chosen to ensure that the participants were at a similar stage in their educational journey, thereby providing a consistent basis for analyzing the factors that influence their practicum performance. The gender distribution among the respondents was evenly split, with 240 male and 240 female participants. This balanced representation allowed for a thorough examination of how various factors, such as instructional support, peer collaboration, self-efficacy, and classroom management, impact practicum performance across genders. The inclusion of students from multiple universities also added to the diversity of the sample, ensuring that the findings

could be generalized to a broader population of future PE teachers in Malaysia.

By focusing on final-year students who are nearing the completion of their teacher education programs, the study aimed to capture the experiences and perceptions of individuals who have had significant exposure to both theoretical coursework and practical teaching experiences. This profile of respondents provided a rich dataset for understanding the critical determinants of practicum success, with implications for improving teacher education programs and supporting the professional development of pre-service PE teachers.

Table 1 includes the correlation coefficients ( $r$ ) between Practicum Performance and four independent variables: Instructional Support, Peer Collaboration, Self-Efficacy, and Classroom Management. It also includes the significance levels ( $p$ -values) for each correlation.

Table 1. Correlation Analysis

	Practicum Performance ( $r$ )	Sig. (2-tailed)
Instructional Support	0.68**	0.023
Peer Collaboration	0.81**	0.000
Self-Efficacy	0.68**	0.031
Classroom Management	0.72**	0.002

### WHAT IS THE RELATIONSHIP BETWEEN INSTRUCTIONAL SUPPORT AND THE PRACTICUM PERFORMANCE OF PRE-SERVICE PE TEACHERS?

The first hypothesis (H1) proposed that there is a significant positive relationship between instructional support and the practicum performance of pre-service PE teachers. The correlation analysis supports this hypothesis, revealing a strong positive correlation ( $r = 0.68$ ). This finding aligns with the existing literature, which emphasizes the critical role of instructional support in teacher education. Hudson (2016) highlighted that effective instructional support, including mentoring, feedback, and resource provision, significantly enhances pre-service teachers' learning experiences and practicum performance. The strong correlation between instructional support and practicum performance suggests that pre-service PE teachers who receive high levels of support from mentors and supervisors are better equipped to navigate the challenges of the practicum. This support helps them develop essential teaching skills, manage classroom dynamics, and build confidence in their teaching abilities. These findings are consistent with Peel and McLennan (2020) research, which emphasized the need for tailored instructional support in

PE teacher education to address the unique demands of the subject.

Additionally, the study found significant correlations between instructional support and other key variables: peer collaboration ( $r = 0.73$ ), self-efficacy ( $r = 0.76$ ), and classroom management ( $r = 0.79$ ). These findings suggest that instructional support not only directly influences practicum performance but also indirectly enhances other critical aspects of teacher preparation. For instance, better instructional support appears to foster more effective peer collaboration, higher self-efficacy, and improved classroom management skills, all of which contribute to overall practicum success.

### HOW DOES PEER COLLABORATION INFLUENCE THE PRACTICUM PERFORMANCE OF PRE-SERVICE PE TEACHERS?

The second hypothesis (H2) posited that there is a significant positive relationship between peer collaboration and the practicum performance of pre-service PE teachers. This hypothesis is strongly supported by the correlation analysis, which revealed the highest positive correlation among the variables ( $r = 0.81$ ). This finding underscores the crucial role of peer collaboration in enhancing the

practicum experience and performance of pre-service teachers. The literature supports the importance of peer collaboration in teacher education. Darling-Hammond et al. (2020) argued that collaborative learning environments enable pre-service teachers to share ideas, reflect on their practices, and learn from one another, thereby enhancing their teaching competencies. In the context of PE, where teamwork and collaboration are essential for managing large groups and coordinating activities, the benefits of peer collaboration are particularly pronounced (Bores-García et al., 2021).

The study also found significant correlations between peer collaboration and other variables, including self-efficacy ( $r = 0.68$ ) and classroom management ( $r = 0.88$ ). The strong correlation between peer collaboration and classroom management suggests that collaborative practices among pre-service teachers are critical for effective classroom management, which is essential for maintaining order and facilitating learning in PE classes. These findings align with Smith and Lindsay's (2016) research, which highlighted the role of peer collaboration in developing problem-solving skills and enhancing classroom management. Given that peer collaboration showed the strongest correlation with practicum performance, it can be considered the most significant predictor of practicum success among the factors studied. This supports the fifth hypothesis (H5), which proposed that peer collaboration would emerge as the most significant predictor of practicum performance.

#### WHAT IS THE RELATIONSHIP BETWEEN SELF-EFFICACY AND THE PRACTICUM PERFORMANCE OF PRE-SERVICE PE TEACHERS?

The third hypothesis (H3) suggested a significant positive relationship between self-efficacy and the practicum performance of pre-service PE teachers. The correlation analysis supports this hypothesis, with a strong positive correlation ( $r = 0.68$ ) between self-efficacy and practicum performance. This finding is consistent with the well-established body of literature that links self-efficacy to teaching performance (Tschannen-Moran & Hoy, 2001; Klassen & Tze, 2014). Self-efficacy is a critical determinant of how pre-service teachers approach their teaching tasks, manage classroom challenges, and persist in the face of difficulties. Teachers with higher self-efficacy are more likely to implement innovative teaching strategies, engage students effectively, and create positive learning environments. In the context of PE, where physical and behavioral management is integral to teaching, self-efficacy plays a particularly important role (Hagger & McIntyre, 2006).

The study also found a strong positive correlation between self-efficacy and classroom management ( $r = 0.79$ ), suggesting that teachers who are confident in their abilities are better equipped to manage classrooms effectively. This finding aligns with Bandura's (1997) theory, which posits that self-efficacy influences an individual's ability to control their environment and achieve desired outcomes. In the case of pre-service PE teachers, higher self-efficacy likely contributes to more effective classroom management, which in turn enhances their overall practicum performance.

#### HOW DO CLASSROOM MANAGEMENT SKILLS IMPACT THE PRACTICUM PERFORMANCE OF PRE-SERVICE PE TEACHERS?

The fourth hypothesis (H4) proposed that there is a significant positive relationship between classroom management skills and the practicum performance of pre-service PE teachers. The correlation analysis supports this hypothesis, with a strong positive correlation ( $r = 0.72$ ) between classroom management and practicum performance. This finding is consistent with the existing literature, which emphasizes the importance of classroom management in teaching effectiveness (Evertson & Weinstein, 2013; Marzano, 2017). Effective classroom management is essential for creating a conducive learning environment, minimizing disruptions, and ensuring that all students are engaged in the learning process.

In PE, where the physical and active nature of the subject can lead to unique behavioral challenges, strong classroom management skills are particularly critical. Graham (2008) highlighted that PE teachers need specific classroom management strategies to maintain order and facilitate learning in dynamic and often unpredictable environments. The strong correlation between classroom management and practicum performance suggests that pre-service PE teachers who develop effective classroom management skills during their practicum are more likely to succeed in their teaching practice. This finding underscores the importance of providing pre-service teachers with targeted training in classroom management, particularly in the context of PE teacher education.

#### CONCLUSION

The findings of this study have important implications for teacher education programs, particularly those focused on preparing pre-service PE teachers. The strong correlations between the key variables and practicum performance suggest that these factors should be emphasized in teacher preparation programs to enhance practicum success.

Instructional support, peer collaboration, self-efficacy, and classroom management are all critical determinants of practicum performance, and teacher education programs should focus on developing these areas. For instance, providing targeted instructional support that addresses the specific challenges of PE teaching, fostering collaborative learning environments, and enhancing pre-service teachers' self-efficacy through mentorship and feedback are all strategies that can improve practicum outcomes.

Moreover, the finding that peer collaboration is the most significant predictor of practicum performance highlights the importance of creating opportunities for pre-service teachers to work together, share experiences, and support one another. Teacher education programs should consider incorporating more collaborative activities and peer mentoring into their curricula to enhance the practicum experience. Future research should continue to explore the relationships between these variables in different contexts and populations. Longitudinal studies that track pre-service teachers from their practicum through to their early teaching careers could provide valuable insights into how these factors influence long-term teaching effectiveness. Additionally, qualitative research could complement these findings by exploring the experiences and perspectives of pre-service teachers in more depth, shedding light on how these factors interact in real-world teaching situations.

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## REFERENCES

- Araújo, A. C. D., Knijnik, J., & Ovens, A. P. 2021. How does physical education and health respond to the growing influence in media and digital technologies? An analysis of curriculum in Brazil, Australia and New Zealand. *Journal of Curriculum Studies*, 53(4), 563-577.
- Bandura, A. 1997. *Self-efficacy: The exercise of control*. Macmillan.
- Bores-García, D., Hortigüela-Alcalá, D., Fernandez-Rio, F. J., González-Calvo, G., & Barba-Martín, R. 2021. Research on cooperative learning in physical education: Systematic review of the last five years. *Research quarterly for exercise and sport*, 92(1), 146-155
- Cheng, C. K. E. 2013. Enhancing the quality of pre-service teachers' learning in teaching practicum. *Neveléstudomány*, 2013(1), 6–16. <https://repository.eduhk.hk/en/publications/enhancing-the-quality-of-pre-service-teachers-learning-in-teachin-4>
- Darling-Hammond, L. (2022). *The Right to Learn: A Blueprint for Creating Schools that Work*. Jossey-Bass.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. 2020. Implications for educational practice of the science of learning and development. *Applied*
- Emmer, E. T., Evertson, C. M., & Worsham, M. E. 2009. *Classroom management for middle and high school teachers*. Upper Saddle River, NJ: Pearson.
- Evertson, C. M., & Weinstein, C. S. (Eds.). 2013. *Handbook of classroom management: Research, practice, and contemporary issues*. Routledge.
- Gillett-Swan, J.K., & Grant-Smith, D.(2017). Complex, compound and critical: recognising and responding to the factors influencing diverse preservice teacher experiences of practicum. *Asia-Pacific Journal of Teacher Education*, 45, 323 - 326. <https://doi.org/10.1080/1359866X.2017.1343590>
- Goh, P. S., & Matthews, B. 2011. Listening to the concerns of student teachers in Malaysia during teaching practice. *Australian Journal of Teacher Education*, 36(3). <https://doi.org/10.14221/ajte.2011v36n3.2>
- Graham, G. 2008. *Teaching children physical education: Becoming a master teacher*. Human Kinetics.
- Grierson, A., Cantalini-Williams, M., Wideman-Johnston, T., & Tedesco, S. 2011. Building Scaffolds in the Field: The Benefits and Challenges of Teacher Candidate Peer Mentorship. *Brock Education: a Journal of Educational Research and Practice*, 20. <https://doi.org/10.26522/BROCKED.V20I2.171>
- Hagger, H., & McIntyre, D. 2006. *Learning teaching from teachers: Realising the potential of school-based teacher education*. McGraw-Hill Education (UK).
- Harun, M. T. 2015. Effective classroom management skills in physical education at Institute of Teacher Education. *Education Journal*, 4(2), 60. <https://doi.org/10.11648/j.edu.20150402.12>
- Hudson, P. 2016. Forming the mentor-mentee relationship. *Mentoring & tutoring: partnership in learning*, 24(1), 30-43.
- Iaochite, R.T., & Filho, R.A. 2016. Teacher efficacy beliefs during the practicum experiences in physical education classes. *Motriz-revista De Educacao Fisica*, 22, 183-189.
- Klassen, R. M., & Tze, V. M. 2014. Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational research review*, 12, 59-

- 76.
- Main, S., & Hammond, L. 2008. Best Practice or Most Practiced? Pre-service Teachers' Beliefs about Effective Behaviour Management Strategies and Reported Self-efficacy. *Australian Journal of Teacher Education*, 33, 3. <https://doi.org/10.14221/AJTE.2008V33N4.3>
- Martins, M., Costa, J., & Onofre, M. 2015. Practicum experiences as sources of pre-service teachers' self-efficacy. *European Journal of Teacher Education*, 38, 263 - 279.
- Marzano, R. J. 2017. *The new art and science of teaching* (p. 110). Bloomington, IN: Solution Tree Press.
- McCormack, A. 1997. Classroom Management Problems, Strategies and Influences in Physical Education. *European Physical Education Review*, 3(2), 102–115. <https://doi.org/10.1177/1356336x9700300202>
- Ong'ondo, C. O., & Jwan, J. O. 2020. Contemporary Issues In Language Teacher Education And Their Implications On Policy In Kenya. *Language and Politics in Africa: Contemporary Issues and Critical Perspectives*, 320.
- Parker, M., Patton, K., Gonçalves, L., Luguetti, C., & Lee, O. 2022. Learning communities and physical education professional development: A scoping review. *European Physical Education Review*, 28(2), 500-518.
- Patterson, T. T., & Farmer, A. 2018. Classroom Management Self-Efficacy of Pre-Service Teachers. *World Journal of Educational Research*, 5(2), 134. <https://doi.org/10.22158/wjer.v5n2p134>
- Peel, K., & McLennan, B. 2020. Promoting pro-social behaviour. In *Teaching Primary Years*. Routledge.
- Smith, K., & Lev-Ari, L. 2005. The place of the practicum in pre-service teacher education: the voice of the students. *Asia-Pacific Journal of Teacher Education*, 33, 289 - 302. <https://doi.org/10.1080/13598660500286333>
- Tschannen-Moran, M., & Hoy, A. W. 2001. Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education*, 17(7), 783-805.
- Vangrieken, K., & Kyndt, E. 2020. The teacher as an island? A mixed method study on the relationship between autonomy and collaboration. *European Journal of Psychology of Education*, 35(1), 177-204.
- Zulkifli, A. S., Sulaiman, N. F., & Mohamed, S. (2019). Pre-service teacher's knowledge of classroom management. *Creative Education*, 10(12), 2548-2554. <https://doi.org/10.4236/ce.2019.1012182>
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