



## Effects of Learning Management Using Simpson's Psychomotor Domain on the Basketball Playing Ability of Seventh-grade Students at Chuangyi School

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### Abstract

**Background and Aim:** The development of basketball playing ability, guided by Simpson's psychomotor domain, is crucial for systematically building physical skills through progressive, well-structured instruction. This approach ensures that players not only acquire the necessary motor skills but also refine them through practice, leading to improved performance and greater mastery of the game. This experimental research aimed to 1) compare the students' basketball playing ability before and after receiving using Simpson's psychomotor domain, 2) compare the students' basketball playing ability with the determined criterion of 70 percent, and 3) assess the student's satisfaction on using Simpson's psychomotor domain.

**Materials and Methods:** The sample of this study was a class of 30 seventh-grade students at Chuangyi School. They were derived from cluster random sampling. The research instruments were (1) Eight lesson plans using Simpson's practice skill with a very high level of appropriateness, (2) a basketball skill test, and (3) a student satisfaction questionnaire with a reliability index of 0.72. The statistics used to analyze data were mean, standard deviation, t-test for dependent samples, and t-test for one sample.

**Results:** The results revealed that 1) after using Simpson's practice skill, the students' basketball playing ability after learning through using Simpson's psychomotor domain than before at a statistically significant level of .05; 2) the students' basketball playing ability was higher than the determined criterion of 70% at a significance level of .05; and 3) the students' satisfaction after learning through using Simpson's psychomotor domain was at a higher level. ( $M=4.22$ ,  $SD=0.75$ ).

**Conclusion:** The knowledge gained from the research is that seven-step learning management using Simpson's psychomotor domain, which consists of (1) perception, (2) readiness, (3) guided Response, (4) mechanism, (5) complex overt response, (6) improvement and application, and (7) origination. The seven-step Simpson's psychomotor domain enhances basketball abilities by progressively teaching, practicing, and applying skills, leading to improved understanding, proficiency, and competitive confidence.

**Keywords:** Simpson's Psychomotor Domain; Basketball Playing Ability; Basketball

### Introduction

In today's rapidly evolving educational landscape, curriculum and learning strategies are undeniably essential (Post et al., 2018). As technological advancements and societal shifts influence teaching methodologies, educational institutions constantly seek innovative approaches to enhance student learning. Huang et al. (2023) argue that Simpson's taxonomy is gaining prominence as it applies to various learning environments, content areas, and instructional processes. Given this, education systems must adopt innovative teaching methods to address the significant changes that require curriculum adjustments at every stage. Physical education, particularly in the context of skill development, plays a vital role in nurturing essential abilities such as basketball performance. Basketball skills, for example, are considered significant in evaluating student competencies alongside other factors that contribute to overall pupil effectiveness (Simpson et al., 2022). Schools are increasingly focused on finding more effective ways to teach physical skills, making it necessary to explore the socio-physiological processes that underpin these innovative approaches (Post et al., 2018). Furthermore, government educational initiatives significantly impact policies and directives that shape modern educational innovation.





The ongoing discussion about educational reform emphasizes the need to implement innovations that improve educational quality and prepare students for future challenges (Rice et al., 2022). Integrating Simpson's psychomotor domain into curriculum and instructional strategies offers a promising way to increase learning efficacy, particularly in physical education. The foundation of any child's learning is rooted in curriculum and instruction. Even with abundant resources and various delivery methods, innovations in teaching must be contextualized to reflect course objectives, content, and relevant assessment tools (Hsia et al., 2019). Achieving this requires addressing the challenges faced by students, educators, and policymakers in adapting to changes in the education system (Ferioli et al., 2020). Simpson's taxonomy, when viewed as a distinct approach to curriculum and instructional development, represents a new phase in educational advancement. Simpson's psychomotor domain of learning objectives provides a hierarchical framework that categorizes learning from simple data memorization to the application of complex knowledge (Kang et al., 2023). Education has traditionally separated academic and physical experiences, but this has evolved into a more integrated approach (Coutinho et al., 2018).

Simpson's psychomotor domain, with its hierarchical cognitive structure, bridges the gap between cognitive learning and physical skill mastery. Offering a structured approach to educational goals creates a middle-ground paradigm for instruction (Senbel et al., 2022). In the contemporary educational setting, fragmented learning approaches are increasingly seen as inadequate. This study seeks to explore the connection between Simpson's psychomotor domain and brain functions related to motor abilities, particularly in basketball.

The study's focus on the effect of Simpson's psychomotor domain on basketball playing skills provides a micro-view of how such pedagogical approaches can contribute to a unified curriculum that meets students' diverse needs (Ferioli et al., 2020). As education evolves to address various learning objectives, new approaches like Simpson's psychomotor domain become more common. This research aims to assess the practical application of Simpson's psychomotor domain in teaching physical skills, such as basketball, and to contribute to the ongoing development of innovative instructional methods (Huang et al., 2023).

In light of these concerns, this study seeks to evaluate the effectiveness of Simpson's psychomotor domain in improving basketball skills among seventh-grade students (Gastin et al., 2015). The study aims to contribute meaningfully to educational practices by informing future pedagogical approaches and stimulating further research on innovative teaching methods. By aligning with current educational goals, this research not only prepares students for academic success but also equips them to navigate a rapidly changing world. The core problem addressed by this research is not only the need for innovation in education but also an understanding of how certain instructional innovations produce measurable results. Simpson's psychomotor domain offers a cognitive framework for analyzing skill acquisition, such as basketball playing ability. This research on seventh-grade students is crucial, as this stage of learning is critical for developing foundational skills and shaping attitudes toward learning. Understanding how Simpson's psychomotor domain impacts basketball performance at this age could have far-reaching implications for students' future development.

In conclusion, this research aims to provide a clear understanding of how Simpson's psychomotor domain impacts daily education, particularly in the context of basketball. The study not only examines the short-term effects on basketball skills but also contributes to the broader discourse on innovative teaching strategies and their implications for future educational practices.

### Research questions

1. How is the students' basketball playing ability before and after learning through Simpson's psychomotor domain?
2. How is the students' basketball playing ability compared with the determined criterion of 70 percent?
3. What is the student's satisfaction with Simpson's psychomotor domain?





## Objectives

1. To compare the students' basketball playing ability before and after using Simpson's psychomotor domain.
2. To compare the students' basketball playing ability with the determined criterion of 70 percent.
3. To assess the student's satisfaction with Simpson's psychomotor domain.

## Literature review

**Simpson's psychomotor domain:** The psychomotor domain has been a foundational element in educational theory since Simpson (1972) expanded on Bloom's taxonomy to include motor skills development. Simpson's taxonomy highlights the progression from basic observation to mastery and innovation, particularly relevant in physical education, where motor skills are essential for students' overall development. Studies by Harrow (1972) and Dave (1970) have contributed to refining the psychomotor domain, with Dave's simplified model being widely adopted in professional training environments due to its practical application.

Recent research emphasizes the importance of integrating psychomotor learning into educational curricula to enhance skill acquisition and learner engagement. For instance, Huang et al. (2023) and Kang et al. (2023) argue that applying Simpson's taxonomy to physical education, such as basketball skill development, fosters deeper learning through systematic practice. These studies demonstrate how motor skill proficiency is linked to cognitive development, highlighting the psychomotor domain's relevance in holistic education.

The significance of using Simpson's psychomotor domain in physical education is further supported by Rice et al. (2022), who stress the need for innovative instructional strategies that address both the physical and cognitive aspects of learning. This integration encourages students to apply their skills creatively in real-life contexts, leading to improved performance and adaptability.

**Basketball playing ability:** Basketball playing ability is a multidimensional skill set crucial to a player's overall development. Research by Senbel et al. (2022) emphasizes the significant interaction between sleep, training, and game performance in Division-1 women's basketball players, noting that effective performance prediction and injury prevention hinge on sufficient sleep, well-structured training programs, and recovery strategies. Senbel et al. highlight the sophisticated relationship between sleep patterns, training load, and on-court performance, calling for a comprehensive understanding of the factors influencing player skill.

Moreover, machine learning and data-centric approaches have been employed to gain deeper insights into athletes' performance patterns (McLean et al., 2010). This approach to analyzing performance emphasizes how multifaceted basketball skill development can be, involving not only physical but also cognitive and recovery dimensions. Beyond the technical aspects, Saunders et al. (2018) expand on basketball's role in fostering scientific literacy through citizen science programs. This reveals how basketball participation can extend beyond athletics into educational domains, offering players additional cognitive and social benefits.

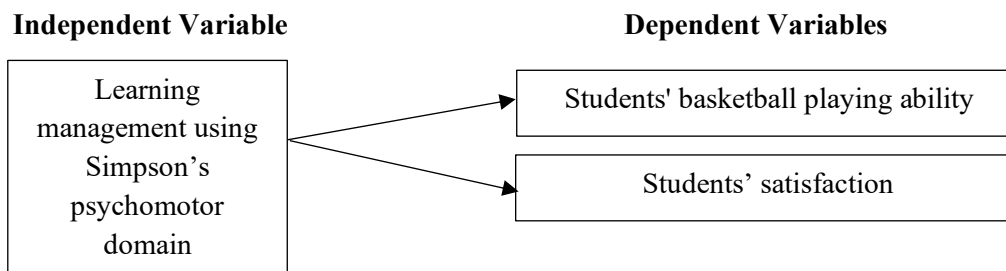
The game of basketball also requires both offensive and defensive skills to be performed with precision, as even small errors can impact the team's success. Adolescent players striving for high performance must develop fundamental skills such as dribbling, passing, and shooting, which are critical to game outcomes (Ahmed et al., 2023). Stewart (2022) further emphasizes that for beginners, mastering these basic techniques is essential to ensure rapid and accurate execution in a fast-paced environment.

## Conceptual Framework

The studies' conceptual framework found inspiration from education theories that speak to innovative pedagogies as well as in particular, the study addressed a systemic relationship between Simpson's psychomotor domain (Simpson, 1972) and basketball playing ability (Johnson, 1934; Ahmad et al., 2023; Stewart, 2022; Yeesunsong et al., 2021). The theoretical frameworks undertook analyzed the psychomotor



domain (physical skills) that sought synergies between research-based instructional strategies as well as raising skills development.



**Figure 1** Research Conceptual Framework

## Methodology

### 1. Population and sample

1.1 The population in this study was 120 students divided into 4 classrooms, 30 people in each classroom of seventh-grade students in Chuangyi School.

1.2 The sample of this study was 30 students in the seventh grade of Chuangyi School (1 class), which was derived from the cluster random sampling method.

### 2. Research instruments

Research instruments were the tools for collecting data. The research instruments which were used in this study were 2 main parts of instruments: 1. the instrument for experiment, 2. the instrument for data collection:

#### 2.1 Lesson plan

Lesson plan: There are 8 lesson plans for the basketball course, allotted with 2 hours per lesson plan, and 16 hours in total.

**Table 1** Lesson plan

Lesson	Topic	Time Duration
1	Passing Techniques	2 hours
2	Dribbling Techniques	2 hours
3	Shooting Mechanics and Defensive Skills	2 hours
4	Offensive and Defensive Tactics	2 hours
5	Applying Basketball Skills in Game Situations: Scrimmage and Team Play	2 hours
6	Review and Practice: Refining Individual and Team Skills	2 hours
7	Incorporating Fitness and Conditioning for Basketball Players	2 hours
8	Advanced Basketball Techniques: Ball Handling Drills and Game Strategies	2 hours

2.1.1 An expert group composed of five experts evaluates the evaluation form. After collecting data, analyze the collected data to determine the appropriateness and consistency of the lesson plans. If the average score of appropriateness and consistency assessed by a group of experts is higher than 3.51, it means that the components of the lesson plans have good appropriateness quality and internal consistency.



After obtaining the expert evaluation results, the developed teaching model was revised and improved according to the expert's suggestions.

2.1.2 It was found that the mean score of appropriateness was at 4.53 and the standard deviation was at 0.60 which means the lesson plans had the quality at a very high level. Therefore, the application of Simpson's Learning Methods teaching program to the teaching of basketball playing ability can improve the students' basketball playing ability.

## 2.2 Basketball Skills Test

Develop a scoring rubric based on the assessment criteria that clearly defines the different basketball playing ability levels for each criterion. The evaluation consists of three parts, consisting of the number of 30 seconds of basketball in place, the basketball passing, basketball dribble, and basketball shooting. Each module has the corresponding score and assessment standard. Scoring elements are specifically included in 3 parts:

### Basketball Passing Test

3 points: Students can accurately pass the ball to their teammates in the designated position within the specified time. The pass speed is fast, and the pass distance is moderate, with no mistakes.

2 points: The student can complete the pass within the specified time, but the pass speed is slow, or the pass distance is too close / too far, with a small number of mistakes.

1 point: The student did not complete the pass within the specified time, or made many mistakes during the pass.

### Basketball Dribble Test

3 points: within 30 seconds, students can dribble smoothly, run quickly, turn around flexibly, and pass 4 obstacles.

2 points: within 30, students dribble smoothly, running and turning movements are slightly stiff, passing 2-3 obstacles.

1 point: During the 30s, students made many mistakes in the process of dribbling, running, or turning, which affected their overall performance.

### Basketball Shooting Test

3 points: Students shall complete the prescribed 10 shots within the prescribed time, the shooting percentage is high, and the shooting posture is correct.

2 points: Students complete 10 shots within the specified time, but the shooting percentage is low, or there are some problems in the shooting posture.

1 point: the student fails to complete the required 10 shots within the specified time, or the shooting percentage rate is very low.

The draft basketball skills test was presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity, and wording of the form. After that, the draft form was revised according to the thesis advisors' suggestions. The Evaluation form of the basketball skills test was offered to the five experts for the content validity check and suggestions such as the type of questions, accuracy of the items, and wording. The quality of the evaluation form of the basketball skills test was considered from the Index of Item Objective Congruence (IOC).

The content validity of the test was considered in the Item Objective Congruence (IOC) index obtained from the basketball skills test evaluation form. If the IOC value for each product of the test is higher than 0.50, it can be used for testing. The results of the IOC index analysis showed that the IOC for each item of the knowledge test ranges from 0.80 to 1.00, and is greater than 0.50, which makes it usable for teaching and learning.

## 2.3 Satisfaction questionnaire

If the Index of Item Objective Congruence (IOC) of each item of the questionnaire is higher than 0.5 that means it can be used in the questionnaire. The result of analyzing the IOC index showed that all questionnaire items were appropriate and could be used in the test. The results of the IOC index analysis showed that the IOC for each item of the knowledge test ranges from 0.80 to 1.00, and is greater than 0.50,





which makes it usable for teaching and learning. Try out with 30 students for assessing reliability by using Cronbach's alpha coefficient 30 students were derived for assessing reliability by using Cronbach's alpha coefficient. The student's satisfaction questionnaire with a reliability of 0.72.

### 3. Data collection

The procedures of data collection were as follows:

3.1 The teacher provides using Simpson's psychomotor domain orientation for students before learning.

3.2 The sample was given the pretest by measuring basketball playing ability with a basketball skill test.

3.3 The samples were taught by using Simpson's psychomotor domain.

3.4 After finishing the instruction, the samples received the posttest by using the same instrument that was used in the pretest.

3.5 The sample was given the students' satisfaction questionnaire.

### 4. Data Analysis

In this study, data were analyzed by using the statistical program according to the research objectives.

4.1 Compare the students' basketball playing ability before and after receiving using Simpson's psychomotor domain by using a t-test for the dependent sample.

4.2 Compare the students' basketball playing ability with the determined criteria set at 70 percent by using a t-test for one sample.

4.3 Assess the student's satisfaction with using Simpson's psychomotor domain by using arithmetic mean and standard deviation.

## Results

The results were presented according to the research objectives as follows:

1. The result of Comparing the average scores of basketball skills before and after Simpson's teaching. The following table shows the descriptive statistics and t-tests analyzed by the statistical package program. This table aims to answer the purpose of the research on whether Simpson's teaching can improve basketball skills.

**Table 2** Compare comparison of basketball skills before and after Simpson's teaching.

Group	Full scores	n	Pre-test scores		Posttest scores		<i>t</i>	<i>p</i>
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Experimental group	9	30	5.70	1.236	7.67	1.184	59.00**	.001

\*\* The significance level:  $p < 0.01$ .

As presented in Table 4.1, the mean score of the pre-test of students' basketball skills was 5.70 ( $SD = 1.236$ ) and the mean score of the post-test of students' basketball skills was 7.67 ( $SD = 1.184$ ). The results in Table 4.1 show that after the implementation of basketball courses based on Simpson's teaching in the classroom, the post-test scores of students' basketball skills were greater than pre-test scores at a .001 level of statistical significance ( $t = 59.00$ ,  $p = .001$ ). When the significance level is .001, the value of p-value is Sig = .001, indicating that there was a significant correlation between pre-test scores and post-test scores, which applied to paired sample T-test for dependent samples. The average scores of the study developed increasingly higher than pre-test scores about basketball skills.





2. Average teaching basketball skills through Simpson versus 70% results. The following table shows the descriptive statistics and t-tests analyzed by the statistical package program. This table aims to answer the research objectives of whether Simpson's teaching can improve basketball skills.

**Table 3** Pass Simpson after teaching the average score of basketball skills with a 70% standard result.

Group	n	Full score	criterion score	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Experimental group	30	9	6.3	7.67	1.184	6.321**	.001

\* \*\*The significance level:  $p < 0.01$

As presented in Table 4.2, the mean scores of t students' basketball skills after learning through Simpson was 7.67 from possible full marks of 9.00 and the standard deviation was 1.184 which was statistically higher than the criterion of 70% at a .05 level of statistical significance ( $t = 6.321$   $p = .001$ ).

3. Findings to assess student satisfaction with learning through a Simpson pedagogical design.

**Table 4** Average score and satisfaction level of students' satisfaction

Items	<i>M</i>	<i>SD</i>	Satisfaction level
1. Satisfied with the teaching objectives of teachers using Simpson's psychomotor domain.	4.27	0.740	High level
2. Satisfied with the teaching content of teachers using Simpson's psychomotor domain.	4.13	0.819	High level
3. Satisfied with the teaching methods of teachers using Simpson's psychomotor domain.	4.33	0.661	High level
4. Satisfied with the time allocation of teachers using Simpson's psychomotor domain.	4.07	0.785	High level
5. Satisfied with the teaching resources of teachers using Simpson's psychomotor domain.	4.23	0.728	High level
6. Satisfied with the team and resource allocation of teachers using Simpson's psychomotor domain.	4.30	0.837	High level
7. Satisfied with the lesson plan during teachers using Simpson's psychomotor domain.	4.20	0.805	High level
8. Satisfied with the learning efficiency of teachers using Simpson's psychomotor domain.	4.27	0.785	High level
9. Satisfied with the learning achievement of teachers using Simpson's psychomotor domain.	4.13	0.776	High level
10. Satisfied with the overall status of teachers using Simpson's psychomotor domain.	4.23	0.774	High level
11. Satisfied with the interest of teachers using Simpson's psychomotor domain interest in learning increased.	4.07	0.785	High level



Items	<i>M</i>	<i>SD</i>	Satisfaction level
12. Satisfied with the practical skills of teachers using Simpson's psychomotor domain.	4.17	0.791	High level
13. Satisfied with the problem-solving skills of teachers using Simpson's psychomotor domain.	4.40	0.621	High level
14. Satisfied with the self-directed learning ability of teachers using Simpson's psychomotor domain.	4.13	0.681	High level
15. Satisfied with the Improving academic achievements of teachers using Simpson's psychomotor domain.	4.30	0.651	High level
<b>Total/Overall</b>	<b>4.22</b>	<b>0.749</b>	High level

As presented in Table 4.3, in the 15 items of the satisfaction questionnaire, the lowest mean score was 4.07 ( $SD = 0.785$ ), and the highest mean score was 4.40 ( $SD = 0.621$ ). The result of this Table showed that the students' satisfaction was High level ( $M = 4.22$ ,  $SD = 0.749$ ).

## Discussion

1. This study shows that the Simpson teaching method is an effective teaching method to improve students' Basketball skills. The mean score on the pre-test of students' Basketball skills was 5.70 ( $SD = 1.236$ ) the mean score on the post-test of students' Basketball skills was 7.67 ( $SD = 1.184$ ) and the mean scores of t students' Basketball skills after learning through Simpson teaching was 7.67 from possible full marks of 9.00 and the standard deviation was 1.184 which was statistically higher than the criterion of 70% at .001 level of statistical significance.

For this investigation, the primary research question was to ascertain the level of performance shown by students both before and after the completion of group activities, as outlined in Simpson's Practice Skills. According to the findings, the intervention led to an overall improvement in the basketball performance of the children, which was closely connected to the amount of fieldwork that was completed. Not only is this development a result of the model, but it is also the result of a distinct viewpoint on the systematic training techniques that are used inside the physical education system. As Aroka (2020) points out, the presentation of various models of teaching skills, such as Simpson's psychomotor model, has consequences for the acquisition of a wide variety of abilities that are included in the curriculum for physical education. In light of the findings of this research, it is clear that students have seen a discernible increase in their learning as a consequence of the practical training and subsequent consolidation of fundamental basketball skills. Thus, Aroka's findings focus on undergraduate students and highlight just how important psychomotor skills are in achieving motor ability, which is evident because student performance improves when students engage with Simpson's model.

2. The second focus of this study was to assess whether students' ability to play basketball reached a 70% proficiency level after training through Simpson's Practice Skill Development model (Hsia et al., 2019). According to the findings, the majority of students reached or exceeded the 70 percent ability level, highlighting the success of the teaching model in improving participants' basketball skills. Confirmed the importance of the 70% proficiency standard for educational assessment, emphasizing its applicability in measuring skill mastery. This research framework is consistent with this, setting dual proficiency standards, and teaching based on Simpson's model improves learning efficiency and outcome tracking systems, in line with educational theories that strictly define performance. The integration of the Simpson model into the teaching framework demonstrates the effectiveness of repeating specific training in basketball skill training. In addition, the findings of this study echo the position that emphasizes the centrality of goal pursuit in educational Settings. They believe that goals should be clear, specific, and





measurable, which is essential to student performance, not only as an indicator of goal achievement but also as an incentive for students to work systematically and with focus. When specifically applied within the framework of this study, the integration of the 70% proficiency standard can serve as an effective motivator. This standard helps students practice basketball to improve their physical skills through constant rehearsals.

3. The results show that the coordinated teaching model can improve student satisfaction, support FeX-PI, and students, and provide a substantial development concept for sports and other areas of education. In conclusion, the findings of this study confirm the fundamentals of a teaching model based on relevant and structured skill development practices to improve student satisfaction, providing substance to the development philosophy of physical education as well as other fields and sectors. In addition, their study of learning management supported Simpson's football practice skills by advocating an alternative approach to structured, repetitive practice (Mopim, 2021). Similar to the Mopim findings, there are indications that Simpson's practical skills principles can be transferred in different sports Settings, as evidenced by the results collected in this study. In this way, by providing a set of practice courses, students not only gain better skills in performing the task but also increase their satisfaction with the work done. The consistency of practice skills across different sports supports the validity of Simpson's practice philosophy as part of an effective pedagogy that can help improve learner engagement and performance outcomes. Student satisfaction becomes evident as a result of research describing the perceived quality and educational effectiveness of a teaching model based on Simpson's practical skills. From the results, students expressed higher satisfaction with the direction of the learning experience and the positive outcome of the skills development process.

## Conclusion

The results of the pre-test and post-test were analyzed by comparing the results of the instructional approach using Simpson Learning for seventh graders after the problem-based learning intervention. The findings were as follows:

1. The mean score on the pre-test of students' basketball skills was 5.70 ( $SD = 1.236$ ) and the mean score on the post-test of students' basketball skills was 7.67 ( $SD = 1.184$ ). After the implementation of basketball courses based on Simpson's teaching in the classroom, the post-test scores of students' basketball skills were greater than pre-test scores at a .001 level of statistical significance ( $t = 59.00, p = .001$ ). The average scores of the study developed increasingly higher than pre-test scores about Basketball ability.

2. The mean scores of students' basketball skills after learning through Simpson Teaching was 7.67 from possible full marks of 9.00 and the standard deviation was 1.184 which was statistically higher than the criterion of 70% at .001 level of statistical significance ( $t = 6.321, p = .001$ ).

3. The students were satisfied with the learning management using Simpson Teaching at a high level ( $M = 4.22, SD = .749$ ). The mean score of students' satisfaction using the satisfaction questionnaire was 4.22 and the standard deviation was 0.749.

The use of Simpson's psychomotor domain in classroom practice stimulated students' interest in learning, increased learning efficiency, and fostered greater student engagement. This, in turn, helped students to develop their ability to solve basketball-related challenges more effectively, suggesting that the method could be popular among students and beneficial for enhancing their overall learning outcomes.

Overall, the study demonstrates that Simpson's psychomotor domain is a viable instructional approach for teaching basketball to seventh graders, leading to significant improvements in skills, meeting learning standards, and achieving high student satisfaction. These findings contribute to the understanding of effective teaching strategies in physical education and highlight the potential for problem-based learning approaches to enhance both skill acquisition and student engagement.

## Recommendation

### Recommendation for implication



Based on the findings from the study, the following recommendations are made:

1. Integration of Technology: Integrate technology particularly virtual reality or simulators where students can practice actual and realistic skills in the classroom. This could offer more active learning illustrating and meeting student diversity and preferences.
2. Longitudinal Studies: Carry out: Longitudinal studies on Basketball playing abilities over a very long period. Additional testing can be made on patients within the long term which can help determine the long-term effects of the identified skill development outcomes, as well as an analysis of the effectiveness of the present instructional model in the long run.
3. Cross-Sport Applications: Simpson's practice skill model: Discussion on the transferability of the model about different sports specialization areas. Future research could compare the efficacy of its application in the promotion of skills and satisfaction of the abilities of athletes undertaking various activities apart from basketball.
4. Inclusive Educational Practices: Teach learning-friendly principles by modifying the delivery structure of the lesson to accommodate learners with learning disabilities. It could include; a change of practice sessions and ways of evaluating the learners in a manner that is fair and gives all equal chances of performing well.
5. Professional Development: Organize continuing professional learning for sports teachers to improve their teaching strategies and implement trends detected in the existing literature. Teaching aid dissemination workshops/ seminars, as well as the formation of collaborative learning teaching practices, could enhance the improvement of effective teaching strategies.
6. Parental and Community Involvement: Advise parents and community members since they can assist in supplementing structures to support students' athletes. Perhaps the families' involvement in explaining the goals and results of the instructional model could ensure children's consistent practice of these skills outside schools.
7. Evidence-Based Policy Development: Promote the need for evidence-based policy formulation in sports education that embraces and promotes successful teaching models. Engagement with policymakers and educational institutions might prove efficient for the incorporation of the best approaches into the standards and policies of the curriculum.

### Recommendation for further research

With the deepening of educational reform, the following suggestions are made for future research to further improve the teaching effectiveness of Simpson's teaching method:

1. Impact of Varied Instructional Delivery: Examine the effects of undertaking different approaches in Simpson's practice skill model, for instance, small group versus individual instruction on the extent to which enhanced skills are effective in creating the desired student satisfaction.
2. Effectiveness Across Age Groups: To identify how well the instructional model works in various age/developmental levels, carry out more research. Comparisons could reveal age-specific changes needed for the enhancement of learning effects in sport education.
3. Cultural and Contextual Adaptations: Discuss the strategy within sociocultural and socio-contextual factors from implementing Simpson's practice skill model in learning institutions. Such comparative work across different cultural settings could be helpful in culturally relevant teaching strategies CP Ritchie, M.

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