

# Player-Centred Sports Teaching in Enhancing Decision Making in Field Hockey

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**Abstract.** This study explores a pedagogical scheme in player-focused sports coaching that improves decision-making in Field Hockey. The study was conducted with 33 field hockey players and three coaches. Sports activities were carried out for eight weeks, in which ten sessions were carried out. Data were collected by observation, teaching, and learning components of each session focusing on decision-making. Actions are counted during a game session to identify the accompanying decision-making opportunities. Through interviews, players in their alternate roles coach their views and techniques to improve player decision-making. Data were analyzed using the Mann Whitney U-test to assess differences in outcomes between regular sessions and sessions for player-centered decision-making enhancement activities. The findings indicate that players in their alternative roles engage seriously with peers value responsibility and autonomy in the leading position during activities, and hockey teaching supports participants in strategic actions to improve decision-making. On the other hand, the results reveal the dominance of the coach, with a lot of instruction in activities, which can reduce the decision-making ability of the players.

**Keywords:** Player-centered; Sport pedagogy; Decision-making; Field hockey

## 1 Introduction

One of sports teaching and coaching roles is to enable athletes to improve their physical, technical, and strategic skills to perform optimally and compete successfully in sporting activities. As a result, the leadership style of physical education teachers and coaches in sports education is characterized as instructing players on what to do, with the athlete's responsibility to listen, absorb, and comply. According to [1], coach-centered leadership is a debilitating type of leadership that takes ownership and control of sporting activities from players. Coaches who use a more player-centered approach motivate and empower their athletes to control the coaching process [2]. Athlete autonomy emphasizes giving athletes the freedom to make decisions with the explicit aim of enabling them to make decisions, create better levels of encouragement, and learn how to come up with solutions [3]. [1] Describe how empowered players are actively encouraged to encourage and shape their sporting activities.

In sports, skilled decision-making comes before taking the necessary action. Sports technical skills are thought to be developed through repetition and practice [4]; however, there is a constant exploration of the best strategies and environments for tactical skills such as decision making. According to a systematic study of youth hockey coaching environments in

Indonesia [5]. According to [6], a coach-centered approach gives the trainer a sense of control over the session. However, this form of education risks decreased skill retention and performance under stress. As a result of players' executing skills in competitively emphasized game settings, coaches' goal to offer as little guidance as possible to enable players to do their own problem solving becomes difficult to achieve.

According to pedagogical experts, an approach that emphasizes the use of small games to develop sports motor skills can also improve tactical and strategic thinking [7]; [8]; [9]. This approach provides structure and facilitates learning by encouraging understanding and problem solving by creating a player-centered environment. It is widely recognized that a less prescriptive approach to instruction and a greater emphasis on questioning can help players learn decision-making skills through problem-solving and discovery by encouraging them to engage in higher-order thinking [10].

Athlete-centered strategies have three essential components, according to [11]. They include content development using a Teaching Games for Understanding (TGfU) approach, questioning, and creating a team culture [12]. Player autonomy and accountability are also noted by [13] and how to form teams with multiple leaders and the allocation of rotational leadership roles to players.

The player-centered coaching strategy aims to create a good atmosphere, promotion, and player feedback. At the same time, there is evidence that using a player-centered approach to coaching is highly successful [14]. This technique is known to be neither so problem-free nor straightforward to execute [3]. Despite the advantages of a player-centered approach to sports teaching and coaching, some researchers recommend a more in-depth study of the practices, discourses, concepts, and ideologies involved in their implementation. To address this issue, we examined a player-centered approach to sports teaching and learning, its improvement in player decision-making, and the possibility of creating a learning environment that explicitly enhances player decision-making.

## 2 Method

This study was conducted with 36 participants consisting of 33 field hockey players all students of Malang National High School aged between 14 and 17 years, consisting of 21 boys and 12 girls. The study involved 3 coaches currently working with a school hockey team with an average of 9.7 years of experience coaching field hockey and a certified coach. The sampling technique used is the saturated sample technique.

Aspects of learning and teaching (L&T) in student field hockey training were studied using a mixed methods comparative approach. Furthermore, a qualitative triangulation method was used along with semi-structured interviews. Coach behavior was assessed using the Coach Analysis Intervention System (CAIS) [15]. Repetition and various coaching behaviors were assessed using CAIS. The behavior of players in alternative roles of responsibility was assessed with the adapted Leadership for Sport (LSS) Scale [16]. Decision-making opportunities for players who control the ball are measured using the Movement Awareness and Technical Skill (MATS) model. The sports activities studied were carried out for 8 weeks with 10 sessions. During the study period, the players are allocated alternative roles which include acting as captain, referee, physical coach, and skills coach. To fulfill contextualization and realism, the sessions were organized into two batches of activities, each batch consisting of 5 sessions of

sports activities, dialogues, interviews and communication between subjects and researchers. The number of sessions is 10 sessions. Activity is observed and recorded with Android phone camera, Bluetooth microphone and notebook recording audio, video and text data at the same time as best as possible.

### **3 Result and Discussion**

One of the most critical aspects of Sports Education is that it allows all students to be at the center of all activities. There is ample evidence that the goal was met in this situation. Observations reveal that the players are serious about their roles and are responsible for carefully organizing and managing their training sessions. The coach stated before the season that they expected the players to develop over eight weeks. "I think teaching young people responsibility is very important." There are indications that the coach is pleased with how effectively the players can manage training. Many players design new and unique tasks that the instructor has never done before in team practice.

The coaches stated that the team spirit was positive, and there was little conflict between the players, even though the players had high expectations of each other. There is a great attitude in training, with the athletes helping each other and respecting each other. High-skilled players, in particular, help low-skilled players by offering commentary and practicing task ideas. Two teams create their own "team melodies," which they run before and during breaks. Despite the high team spirit at first, a coach noted that the team's cohesiveness improved. Another coach pointed out that the players don't complain about each other as often as they used to and believe they work together. Each player is assigned to a specific role in a rotating structure during each training session, which allows all players to test various responsibilities throughout the season. Fitness and skills coach, captain, and referee are among the alternative roles assigned to players in the second wave of activities. The players showed enthusiasm with their various responsibilities. One player noted that the captain's job seemed more stressful because they had to coordinate play. Another player thought that refereeing was difficult because making the right decisions might be difficult. However, they were serious about their alternative work, and they asked if the referees were allowed to use red, yellow, and green cards. Participants value their role position; however, others find their lack of authority difficult. A player who plays the role of a coach explained that sometimes the players' reactions do not appear because some players do not have the same respect for the coach who acts as a regular coach. On the other hand, Coaches emphasize the importance of providing positions for more reserved players. The majority of players enjoy the role of a skills coach and do not find the job strenuous or burdensome.

This study aimed to examine the improvement of player-centered learning in decision-making in a school field hockey game in Indonesia. The findings suggest that player-centered learning can be a valuable tool for increasing players' ownership and responsibility for their learning and performance, which involves decision-making. Even though this research was limited to one sport and one school team, it contributes to the growing body of evidence supporting the use of Player-centered learning as a practical example to improve game-based decision making.

Autonomy is one of the most important aspects of motivation towards physical education and physical training. As young people can make judgments and take responsibility

for their activities, they express strong opinions about their experiences during Sports Education sessions. Player-centered sports learning and teaching (L&T) shows that players are interested and successful in responsible tasks despite their young age. This positive autonomy and motivation index is consistent with the results [17] that students in Sports Education classes in physical education have more passion and pleasure. Previous research on the positive effects of perceived autonomy with support from instructors or coaches in physical education or youth sports settings is also supported by the findings [18].

Players are given a voice and made to feel significant by letting them organize and conduct their practice and, in the game, choose the role they want to play on their team. They are responsible for their respective positions and for improving team performance during match play. This conclusion supports the findings of, who showed that physical education students discussed and pondered ways to increase play effort. Our findings reveal that players value the ability to explore new things and make decisions. They also like to have other players as coaches. These findings support previous research in physical education instruction [19]. Just as this study looked at a player-centered sports teaching and learning to set, the goal was to improve decision-making abilities when a player is holding the ball. While research has shown that coaches are eager to design training conditions that encourage players to build decision-making skills. Previous studies [20] confirmed that play-form activities, which seek to provide opportunities for the development of decision-making skills, duplicate the demands of play through modified or conditioned space to encourage practical guided discovery. Since decision-making occurs within the context of the game and is influenced by specific interactions in the game environment, such as the position of other players and the situation on the field [21], using a modified game ensures that players are exposed to decision-making opportunities. Random and varied interactions in the game environment have been reported to increase learning and long-term retention [22]. While trying to recreate the game environment through modified play, coaches can package tactical, technical, psychological, and physiological skills into a cost-effective package while also providing a dynamic system that encourages contextual learning experiences for players. Researchers have asked for examples of such environments [23], and this study provides encouraging evidence of what works in coaching situations. Physical education research has shown that more training time during the Sports Education season can improve skills and match performance, often a significant focus in youth sports.

## 4 Conclusion

The most significant conclusion that can be drawn from this study is that player-centred teaching and learning has a lot of potential to enable athletes to have their participation not only in hockey but sport in general, however, further empirical research is needed. One of the advantages of the player-centred approach to Sports Education is that it allows players to control their engagement within certain parameters.

While this study has added to the hockey learning and training literature by showing how a player-centred approach can improve player game-based decision making, there are some limitations to consider. This study was limited to a small group of young hockey players who were selected to participate. Because the researcher applies a learning approach and knows the research objectives, there is a risk of bias. As a result, the findings of this study cannot be easily applied to all field sports environments.

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