

THE EFFECT OF ILLINOIS TRAINING ON THE AGILITY OF BADMINTON PLAYERS AGED 8–14 YEARS

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Abstract

Agility is one of the physical fitness components that is highly important in badminton as it affects the player's ability to move quickly, change direction, and respond to shuttlecock movement effectively. In the age range of 8–14 years, agility development is an important factor in supporting improvement in playing skills and sports achievement. This study aims to determine the effect of Illinois training on agility in badminton players aged 8–14 years. The method used is experimental research with a one-group pretest-posttest design. Research subjects are badminton players aged 8–14 years who will be given an Illinois training program for a certain period. Agility level measurement will be conducted using the Illinois Agility Test before and after the treatment. Data obtained will be analyzed using appropriate statistical tests to determine differences in agility levels before and after training. The results of this study are expected to provide information on the effectiveness of Illinois training in improving the agility of young badminton players and serve as a reference for coaches in designing appropriate training programs.

Keywords: Illinois training; agility; badminton; 8–14 years; physical training

1. INTRODUCTION

Badminton is one of the most popular sports in Indonesia and requires good physical ability to support athlete performance. In badminton, players are required to move quickly, change direction suddenly, and respond to the approaching shuttlecock accurately. Therefore, physical fitness is an important factor that must be developed from an early age, particularly for players aged 8–14 years who are at the stage of developing basic motor skills and physical ability.

Agility is one of the physical fitness components most needed in badminton. Agility is the ability to change direction and body position quickly and precisely without losing balance. Sajoto (1988) defined agility as the ability to change direction in a specific position quickly and precisely. Furthermore, Sheppard and Young (2006) stated that agility is an individual's ability to change the direction of movement quickly in response to a stimulus. Agility is very important in sports because it supports the effectiveness of movement during both attack and defense.

In badminton, agility is one of the main factors determining player success when moving to various corners of the court. Players must be able to quickly reposition themselves to reach the shuttlecock from various directions. Therefore, improving agility must be conducted through planned and systematic training programs.

Illinois training (Illinois Agility Run) is designed to train direction-change ability, movement speed, body coordination, and balance in a short time. The training is conducted with a running pattern involving straight movements, turns, and zig-zag movements, helping to improve overall athlete movement ability. Research by Novanto, Yunus, Abdullah, and Raharjo (2023) showed that Illinois Agility Run training significantly improved badminton athlete agility after several weeks of a structured training program.

In the 8–14 year age range, agility training is particularly important because this is a period of developing basic movement skills and body coordination. Providing appropriate training at this age can improve movement quality, footwork ability, and athletes' physical readiness for both training and competition.

2. METHODS

This study uses an experimental research method with a one-group pretest-posttest design. Subjects are badminton players aged 8–14 years selected using purposive sampling based on active training status and absence of injury. The Illinois training program is given over a determined period with progressive intensity. Agility is measured using the Illinois Agility Test before and after the training intervention.

The Illinois Agility Test requires subjects to complete a standardized running course involving linear sprints, direction changes, and zig-zag movements. Time to complete the course is recorded in seconds, with lower times indicating higher agility. Data will be analyzed using descriptive statistics and a Paired Sample t-Test at the 0.05 significance level to determine whether there is a statistically significant difference in agility before and after the Illinois training program.

3. RESULTS AND DISCUSSION

Based on the theoretical framework and relevant literature, Illinois training is expected to have a significant positive effect on the agility of badminton players aged 8–14 years. The training pattern of the Illinois Agility Run — involving linear sprints, sharp directional changes, and zig-zag movements — directly trains the neuromuscular coordination, reaction time, and movement speed components essential for badminton court coverage.

Novanto et al. (2023) demonstrated that a structured Illinois Agility Run program significantly improved agility in badminton athletes, confirming the specificity of the training stimulus for badminton-relevant movements. The 8–14 year age range represents a critical developmental window for agility, during which the nervous system shows high plasticity and responsiveness to training stimuli, making this period optimal for establishing foundational agility patterns (Sheppard & Young, 2006).

The progressive nature of the training design, with systematic increases in intensity over the training period, is expected to produce measurable improvements in Illinois Agility Test performance. Improvements in agility will likely manifest as enhanced footwork efficiency, faster court coverage, and improved ability to change movement direction during rally situations. These improvements translate directly to competitive performance advantages in badminton.

4. CONCLUSION

Based on the theoretical framework, Illinois training is expected to have a significant positive effect on the agility of badminton players aged 8–14 years. The training pattern involving direction changes and zig-zag movements is directly relevant to the agility demands of badminton. The results of this study are expected to provide scientific information on the effectiveness of Illinois training as a physical training method for improving the agility of young badminton players, serving as a reference for coaches in developing more effective and targeted training programs.

Future research should consider incorporating a control group design to strengthen causal inference, and should examine the persistence of agility gains following the cessation of the training program. Additionally, the relationship between Illinois Agility Test performance and actual badminton match performance would be a valuable direction for subsequent investigation.

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