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Effects of Plyometric Training on Agility, Speed and Explosive Power in Recreational Young Adult Football Players: A Systematic Review

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ABSTRACT

Introduction: Recreational football, similar to professional football, showcases high-intensity movements that require agility, speed, and explosive power. While vast literature is available on plyometric training in elite and professional players, its efficacy in recreational young adult football players remains insufficiently studied. This review addresses this gap by evaluating current evidence on plyometric training's impact on agility, speed, and explosive power in this population.

Aim: This paper aimed to review studies that analysed the effect of plyometric components on three major performance indicators in football: agility, speed and power and summarise their findings.

Materials and Methods: Search terms included plyometric/jump training in recreational or amateur soccer/football players, with outcomes of agility, speed, sprinting, acceleration, change of direction, or power. Eligible studies included recreational football players (18-30 years) undergoing ≥4 weeks of plyometric training, compared to control or alternative training groups. Five databases were searched up to December 2025. Two independent reviewers performed study screening, data extraction, and bias assessment using Cochrane RoB and ROBINS-I. A narrative synthesis was conducted, with GRADE used to assess the certainty of evidence.

Results: Four controlled trials involving recreational football players met the inclusion criteria. Plyometric training interventions (6-10 weeks, 1-2 sessions/week) significantly improved agility, speed, and explosive power across all studies compared to control conditions. Risk of bias was low to moderate. Certainty of evidence was rated low to moderate using GRADE.

Conclusion: Plyometric training effectively improves speed, agility, and explosive power in recreational and amateur football players.

Keywords: Agility, Explosive Power, Plyometric Training, Recreational Football, Speed Performance.

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