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Journal Homepage



# The Role of Plyometric Training in Improving Explosive Power in Sprinters: A Qualitative Analysis

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#### 1. Round 1

#### 1.1 Reviewer 1

Reviewer:

"The objective of this study was to explore the role of plyometric training in enhancing explosive power among sprinters." Comment: Clearly define "explosive power." Is it measured by vertical jump height, sprint time, or another metric? This precision will help readers understand the study's focus.

Literature Review Depth (Introduction, paragraph 2, sentence 1):

"The interviews were conducted in a quiet private setting either in person or via video conferencing depending on the participants' availability and preference."

Comment: Provide details on the distribution of interview methods (e.g., how many were conducted in person vs. via video conferencing). This will help assess potential biases in data collection.

"Enhanced Muscle Strength was frequently mentioned with sprinters reporting increased leg strength improved core stability and greater muscle endurance."

Comment: Integrate direct quotes from participants to support these claims. This will add authenticity to the findings and illustrate the themes more vividly.

"Increased Speed emerged as a significant benefit with faster sprint times better acceleration and improved reaction time being common themes."

Comment: If quantitative data is available, correlate these themes with specific improvements in sprint times or other performance metrics to strengthen the findings.

"Increased Confidence was a recurrent theme with sprinters reporting greater self-assurance a positive self-image and improved mental toughness."

Comment: Provide examples or anecdotes from the interviews that illustrate how plyometric training contributed to increased confidence and mental toughness.

"Participants also reported improvements in their overall training experience."

Comment: Specify what aspects of the training experience improved (e.g., specific exercises, training routines, coach-athlete interactions) to provide clearer insights.

Author revised the manuscript and uploaded the updated document.

### 1.2 Reviewer 2

Reviewer:

"Plyometric training has been shown to improve various aspects of this system including muscle strength power and the rate of force development."

Comment: Expand this section to include more recent studies, specifically those published in the last five years, to provide a comprehensive overview of the current state of research in this field.

"The sample consisted of 17 sprinters both male and female aged between 18 and 30 years who had been actively involved in competitive sprinting for at least three years."

Comment: Justify the sample size used. Explain why 17 participants were deemed sufficient to reach theoretical saturation and if there were any considerations for ensuring sample diversity.

"Data analysis was conducted using thematic analysis a method suitable for identifying analyzing and reporting patterns within qualitative data."

Comment: Offer a more detailed explanation of the thematic analysis process, including the software used (if any) and how intercoder reliability was ensured.

"The participants were recruited from various local athletic clubs and universities ensuring a diverse representation of different competitive levels and backgrounds."

Comment: Provide a breakdown of the participants' demographics, including the number of participants from each club/university, and their competitive levels (e.g., regional, national).

"Improved Competition Results was a major theme with higher race placements more personal bests and greater success in competitions being reported."

Comment: Quantify the performance outcomes. For instance, indicate the number of participants who reported personal bests or improved race placements and by what margin.

"The findings of this study demonstrate that plyometric training significantly enhances explosive power in sprinters."

Comment: Ensure that all the findings discussed in this section are directly tied to the data presented in the results. Avoid introducing new information not previously covered.

Author revised the manuscript and uploaded the updated document.

## 2. Revised

Editor's decision after revisions: Accepted. Editor in Chief's decision: Accepted.

