The Effect of Interval Sprint Training on 100-Meter Sprint Performance Among Physical Education Students

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PowerPoint Outline

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1. Introduction

Background

- 100-meter sprint performance depends on speed, acceleration, and explosive power.
- Interval sprint training is considered an effective method to improve sprint performance.
- Physical Education students need good sprint ability as future teachers and coaches.

Problem

- Previous studies mainly involved trained athletes.
- Research on the effect of interval sprint training among Physical Education students is still limited.

1. Introduction

Research Objective

- To examine the effect of interval sprint training on improving 100-meter sprint performance among Physical Education students.

Hypothesis

- Interval sprint training significantly reduces 100-meter sprint time.

2. Methods

Research Design

- Quantitative
- One-group pretest–posttest design

Participants

- Physical Education students
- Purposive sampling

Instrument

- 100-meter sprint test
- Stopwatch, measuring tape, and cones

Procedure

- Pretest & Posttest
- 6 weeks of interval sprint training (3 sessions/week)

Data Analysis

- Descriptive statistics
- Normality test
- Paired-sample t-test ($p < 0.05$)

3. Result & Discussion (Findings)

Main Findings

- **Pretest: 14.82 ± 0.76 s**
- **Posttest: 13.95 ± 0.68 s**
- **Improvement: 0.87 seconds (5.9%)**
- **Significant difference ($p < 0.05$)**

Interpretation

- **Interval sprint training effectively improves 100-meter sprint performance.**

3. Result & Discussion (Discusions)

Results & Discussion (Discussion)

- Why did performance improve?
- Better neuromuscular adaptation.
- Improved fast-twitch muscle fiber recruitment.
- Increased acceleration ability.
- Enhanced anaerobic endurance.

Limitations

- No control group.
- Small sample.
- Only six weeks of training.

Future Research

- Include a control group.
- Larger sample size.
- Longer intervention period.

4. Conclusion

- Interval sprint training significantly improves 100-meter sprint performance.
- It is an effective and practical training method for Physical Education students and beginner athletes.
- Future studies should use stronger research designs to confirm these findings.

5. References

- Haugen et al. (2019)
- Ross et al. (2001)
- Rumpf et al. (2016)
- Sugiyono (2011)

Thank You