



Higher Degree by Research

Doctor of Philosophy
(course code L61.4)

Research Proposal:

How Are Sprint Running Mechanics Affected By The Intensity And Duration Of Prior, Fatiguing Running Exercise?

Edith Cowan University
School of Medical and Health Sciences
Qualification: PhD in Exercise and Sports Science

Author: Sander Jordi van Sintemaartensdijk, MSc
Student number: 10713494
ORCID: 0009-0007-4269-0440

Supervision

Principal Supervisor: Prof. Anthony Blazevich
Associate Supervisor: Dr. Kirsty McDonald

Location: Perth, WA, Australia
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Declaration Page

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Abstract

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Keywords

Keyword1; Keyword1;

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List of Abbreviations

EXAMPLE this is an example..... 1

List of Tables

List of Figures

1 Introduction

$$y = f(x) \quad (1)$$

$$= \sum_{i=1}^I x_i^2 \quad (2)$$

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1.1 test1

2 Methods

$$y = f(x) \quad (3)$$

$$= \sum_{i=1}^I x_i^2 \quad (4)$$

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2.1 test1

Test

2.1.1 test2

Test

test4 Test

3 Results

$$y = f(x) \quad (5)$$

$$= \sum_{i=1}^I x_i^2 \quad (6)$$

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3.1 test1

Test

3.1.1 test2

Test

test4 Test

4 Discussion

$$y = f(x) \quad (7)$$

$$= \sum_{i=1}^I x_i^2 \quad (8)$$

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4.1 test1

Test

4.1.1 test2

Test

test4 Test

5 Conclusions

$$y = f(x) \quad (9)$$

$$= \sum_{i=1}^I x_i^2 \quad (10)$$

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5.1 test1

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5.1.1 test2

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test4 Test

Conflict of interest statement

None of the authors had any financial or personal conflict of interest with regard to this study.

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Acknowledgment by the Candidate of co-authored work, help received, or work carried out by any other person or organisation, for example: editing services, a research assistant, web designer or technical support. Full acknowledgement of the role of any person or people who provided support needs to be attributed in the thesis.

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References

- Apte, S., Prigent, G., Stögg, T., Martínez, A., Snyder, C., Gremeaux-Bader, V., & Aminian, K. (2021). Biomechanical Response of the Lower Extremity to Running-Induced Acute Fatigue: A Systematic Review. *Frontiers in Physiology*, 12, 646042. <https://doi.org/10.3389/fphys.2021.646042>

A Appendix A

$$y = f(x) \quad (11)$$

$$= \sum_{i=1}^I x_i^2 \quad (12)$$

A.1 test1

Test

A.1.1 test2

Test

test4 Test