## **EFFECTS OF PHYSICAL FITNESS ON** SWEATING IN PREPUBERTAL BOYS

ามยนต

90

#### SIRIJIT CHORSUWAN

2/07/03/0

# HARAN **MASTER OF SCIENCE**

IN PHYSIOLOGY

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ **Copyright<sup>©</sup>** by Chiang Mai University All rig graduate school erved CHIANG MAI UNIVERSITY **APRIL 2014** 

## EFFECTS OF PHYSICAL FITNESS ON SWEATING IN PREPUBERTAL BOYS



ab.

2/07/03/4

A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN PHYSIOLOGY

**ลิขสิทธิ์มหาวิทยาลัยเชียงใหม** Copyright<sup>©</sup> by Chiang Mai University All rights reserved

#### GRADUATE SCHOOL, CHIANG MAI UNIVERSITY APRIL 2014

### EFFECTS OF PHYSICAL FITNESS ON SWEATING IN PREPUBERTAL BOYS

#### SIRIJIT CHORSUWAN

ามยนต์

THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN PHYSIOLOGY

Advisory Committee:

amsale Nen

(Dr. Salin Mingmalairak)

(Asst. Prof. Dr. Apisate Pleumsamran, M.D.)

Salin Mingmalairak Co-advisor

eserved

Advisor

Examination Committee:

C. Propotita ..... Chairman

(Asst. Prof. Dr. Chucheep Praputpittaya.)

Member

(Dr. Alfredo Villarroel)

AMP OTMOL

(Dr. Sumittra Gomonchareonsiri)

าวิทยาลัยเชียงไหม

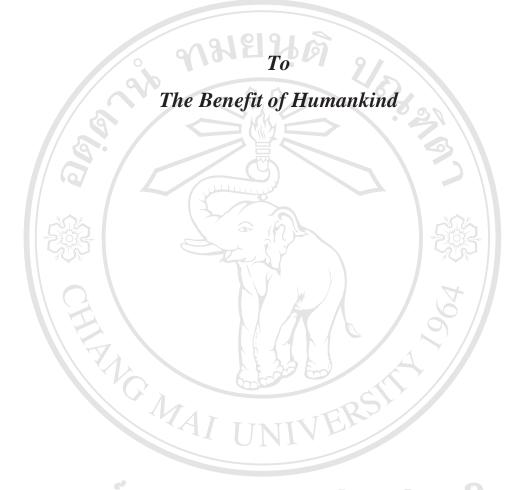
(Asst. Prof. Dr. Apisate Pleumsamran, M.D.) Mang Mai University

Mingmalairah Member Jalin

(Dr. Salin Mingmalairak)

11 April 2014

Copyright © by Chiang Mai University



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright<sup>©</sup> by Chiang Mai University All rights reserved

#### ACKNOWLEDGEMENT

I would like to express my extreme gratitude to my advisor, Assistant Professor Dr. Apisate Pleumsamran, for his constant supervision, guidance, encouragement and opportunity. This thesis could not have been accomplished without his understanding and gracious assistance.

I wish to extend my deep appreciation and gratitude to my co-advisor, Dr. Salin Mingmalairak for her helpful advice, comments, continuous encouragement and suggestions and correction of this thesis.

Special thanks very much to Assistant Professor Dr. Chucheep Praputpittaya, Mae Fah Luang University, for giving the opportunity, constant supervision, guidance and encouragement throughout the period of my graduate study.

Sincerely thankful to Dr. Yoshimitsu Inoue, Laboratory for Human Performance Research, Osaka International University, Japan and Dr. Hiroyuki Ueda, Osaka Shin-Ai College, Japan, for teaching techniques of sweating rate measure method, data analysis, kind assistance and useful suggestions of this thesis.

I would like to thank all the subjects participated in this study, for their devote time and gracious assistance.

Finally, I especially wish to express my heartfelt thanks to my parents and family for their love, kindness, support and encouragement throughout my life.

Copyright<sup>©</sup> by Chiang Mai University All rights reserved Sirijit Chorsuwan