

STRESS IN PROFESSIONAL FOOTBALL PLAYERS



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE
(CLINICAL PSYCHOLOGY)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2004**

**ISBN 974-04-4722-8
COPYRIGHT OF MAHIDOL UNIVERSITY**

Copyright by Mahidol University

Thesis
Entitled

STRESS IN PROFESSIONAL FOOTBALL PLAYERS


.....

Mr. Rattanasak Santitadakul
Candidate


.....

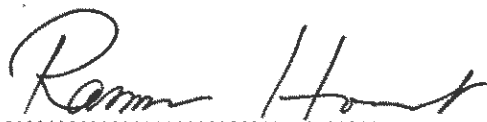
Asst. Prof. Panom Ketumarn,
M.D., Dip Thai Board of Psychiatry
Dip Thai Board of Child and Adolescent
Psychiatry, Dip of Child and Adolescent
Psychiatry (London)
Major-Advisor


.....

Asst. Prof. M.L. Sangchandra Vuthiganond,
M.D., Dip Thai Board of Psychiatry
Co-Advisor


.....

Clin. Prof. Teerawat Kulthanan,
B.Sc., M.D., Dip Thai Board of Orthopedics
Surgery, Cert Orthopedics Surgery (Essen)
Co-Advisor


.....

Assoc. Prof. Rassmidara Hoonsawat,
Ph.D.
Dean
Faculty of Graduate Studies


.....

Assoc. Prof. Kanokrat Sukhatunga,
M.Ed., M.Sc.
Chair
Master of Science Programme in
Clinical Psychology
Faculty of Medicine, Siriraj Hospital.

Thesis
Entitled

STRESS IN PROFESSIONAL FOOTBALL PLAYERS

Was submitted to the Faculty of Graduate Studies, Mahidol University
For the degree of Master of Science (Clinical Psychology)

on
February 5, 2004

Rattanasak Santitadukul

Mr. Rattanasak Santitadukul
Candidate

Panom Ketumarn

Asst. Prof. Panom Ketumarn,
M.D., Dip Thai Board of Psychiatry
Dip Thai Board of Child and Adolescent
Psychiatry, Dip of Child and Adolescent
Psychiatry (London)
Chair

Sekha Vuthiganond

Asst. Prof. M.L. Sangchandra Vuthiganond,
M.D., Dip Thai Board of Psychiatry
Member

Varin Tansuphasiri

Prof. Varin Tansuphasiri,
M.D., Dip Thai Board of General Surgery,
Dip International Federation of Sport
Medicine
Member

Teerawat Kulthanan

Clin. Prof. Teerawat Kulthanan,
B.Sc., M.D., Dip Thai Board of Orthopedics
Surgery, Cert Orthopedics Surgery (Essen)
Member

Rassmidara Hoonsawat

Assoc. Prof. Rassmidara Hoonsawat,
Ph.D.
Dean
Faculty of Graduate Studies
Mahidol University

P. Sakolsatayadorn

Clin. Prof. Piyasakol Sakolsatayadorn,
M.D., FRCST
Dean
Faculty of Medicine, Siriraj Hospital.
Mahidol University

ACKNOWLEDGEMENT

The success of this thesis can be attributed to the extensive support and assistance from Assist. Prof. Panom Ketumarn, major advisor, Assist. Prof. M.L. Sangchandra Vuthiganond and Clin. Prof Teerawat Kulthanan, co-advisors including Prof. Varin Tansupasiri, my external examiner. I would like to thank them for their valuable advice and correction in this research.

I would like to give my special thanks to Assoc. Prof. Sucheera Phattharayuttawat for statistical guidance in this research and Prof. Silpachai Suwannthada and Mr. Chanwit Phalajivin for validating the research instrument created by the researcher.

I would like to thank the staff and the secretary of the Football Association of Thailand including staff coaches and football players participating in the 7th competition of Thailand Football League 2002 for giving permission and supporting in data collection.

In addition, I would like to thank all of my friends, the clinical psychology students 15, especially Miss Vasinee Siripoon for language edition of this research. Finally, I would like to thank my parents, supervisors, lecturers, colleagues, and those not mentioned for their support and encouragement to finish this research.

Rattanasak Santitadakul

STRESS IN PROFESSIONAL FOOTBALL PLAYERS

RATTANASAK SANTITADAKUL 4236331 SICP/M

M.Sc. (CLINICAL PSYCHOLOGY)

THESIS ADVISORS : PANOM KETUMARN,M.D.,DIP(Psychiatry),
SANGCHANDRA VUTHIGANOND,M.D.,DIP(Psychiatry),TEERAWAT
KULTHANAN,M.D.,DIP(Orthopedics Surgery)

ABSTRACT

This research was a survey research on stress levels and causes of stress among professional football players. The population of this study consisted of 203 registered professional players from 10 clubs all of which are members of the Football Association of Thailand(FAT).The research questionnaires were administered to the subjects during November 2002 to January 2003. Chi-square (χ^2 - test) was used to test the correlation of stressor levels and stress levels of football players.

Results showed that most players experienced mild stress (53.7%). Personal factors did not produce statistically significant difference in the severity of stress among players ($p<.05$). Sources of moderate stress consisted of 3 factors: The condition of training and competition, roles and duties in the team, and the accomplishment and the occasion of career advancement. Sources of mild stress consisted of 5 factors: Other people and relationships, club structure and climate, physical and psychological readiness, expectations of match result and competition pressures, and low self-esteem. The statistically significant relationship between sources of stress and stress levels consisted of 2 factors: Expectations of match result and competition pressures, and low self-esteem ($p<.05$).

The findings suggest that stress of the footballers can be reduced by psychological skill training such as stress relaxation training, self-esteem promotion activities, and the provision of psychological knowledge to the persons in question. In addition, the professional mental health staff such as psychiatrists and psychologists should be considered as a part of the football team to enhance the professional performance of the players.

KEY WORDS : STRESS, PROFESSIONAL FOOTBALL, CLINICAL PSYCHOLOGY

109 pp. ISBN 974-04-4722-8

ความเครียดในนักกีฬาฟุตบอลอาชีพ(STRESS IN PROFESSIONAL FOOTBALL PLAYERS)

รัตนศักดิ์ สันติธาดากุล 4236331 SICP/M

วท.ม.(จิตวิทยาคลินิก)

คณะกรรมการควบคุมวิทยานิพนธ์: พนม เกตุมาน, M.D.,DIP(Psychiatry),

แสงจันทร์ วุฒิกานนท์, M.D.,DIP(Psychiatry),ธีรวัฒน์ กุลทนันทน์, M.D.,DIP(Orthopedics Surgery)

บทคัดย่อ

การศึกษาครั้งนี้เป็นการวิจัยเชิงสำรวจ เพื่อศึกษาภาวะความเครียดและปัจจัยที่เป็นสาเหตุของความเครียดของนักกีฬาฟุตบอล กลุ่มที่ประชากรเป็นนักกีฬาฟุตบอลที่ขึ้นทะเบียนเป็นสมาชิกสังกัดสโมสรฟุตบอลซึ่งเป็นสมาชิกของสมาคมฟุตบอลแห่งประเทศไทย จำนวน 10 สโมสร รวมนักกีฬาฟุตบอล จำนวน 203 คน เก็บข้อมูลโดยให้นักกีฬาตอบแบบสอบถามในระหว่างเดือนพฤศจิกายน พ.ศ. 2545-มกราคม พ.ศ. 2546 วิเคราะห์ข้อมูลโดยใช้สถิติการทดสอบไคสแควร์

ผลการศึกษาพบว่า นักกีฬาฟุตบอลส่วนใหญ่มีภาวะความเครียดเล็กน้อยมากที่สุด ร้อยละ 53.7 ไม่มีปัจจัยส่วนบุคคลตัวแปรใดมีภาวะความเครียดแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ $P < 0.05$ มีปัจจัยที่เป็นสาเหตุความเครียดพบว่าอยู่ในระดับปานกลาง 3 ด้าน ได้แก่ ด้านสภาพการฝึกซ้อมและการแข่งขัน ด้านบทบาทหน้าที่ และด้านความสำเร็จและโอกาสพัฒนาความก้าวหน้าในอาชีพ ปัจจัยที่เป็นสาเหตุความเครียดพบว่าอยู่ในระดับน้อย 5 ด้าน ได้แก่ ด้านสาเหตุจากบุคคลอื่นและสัมพันธภาพ ด้านโครงสร้างและบรรยากาศของสโมสร ด้านความพร้อมทางสมรรถภาพร่างกายและจิตใจ ด้านความคาดหวังผลจากสถานะการณ์/ความกดดันจากการแข่งขัน และด้านความรู้สึกมีคุณค่าในตนเองต่ำ ส่วนสาเหตุความเครียดที่มีความสัมพันธ์กับภาวะความเครียดทั่วไปอย่างมีนัยสำคัญทางสถิติที่ $P < 0.05$ มี 2 สาเหตุ ได้แก่ ด้านความคาดหวังจากผลการแข่งขัน สถานะการณ์/ความกดดันจากการแข่งขัน และด้านความรู้สึกมีคุณค่าในตนเองต่ำ

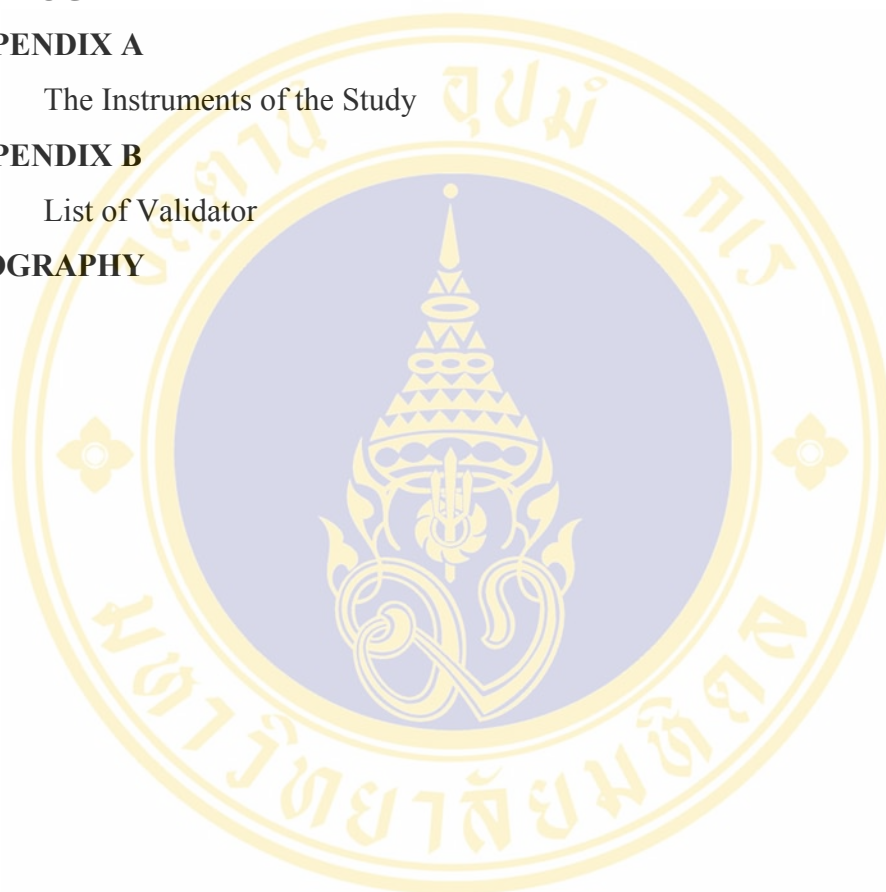
จากการวิจัยในครั้งนี้มีข้อเสนอแนะว่า การช่วยเหลือนักฟุตบอลที่มีภาวะความเครียดสามารถเริ่มที่ตัวนักกีฬาฟุตบอลเอง โดยการฝึกทักษะทางจิตวิทยา เช่น การฝึกผ่อนคลายความเครียด การจัดกิจกรรมสร้างความรู้สึกมีคุณค่าในตนเอง และพัฒนาความรู้ทางจิตวิทยาแก่ผู้ที่เกี่ยวข้อง ตลอดจนส่งเสริมให้มีบุคลากรวิชาชีพด้านสุขภาพจิต เช่น จิตแพทย์ นักจิตวิทยา เป็นส่วนหนึ่งของทีม เพื่อให้กีฬาฟุตบอลเข้าสู่การเป็นกีฬาอาชีพได้สมบูรณ์ยิ่งขึ้น

CONTENTS

	Page
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
LIST OF TABLES	viii
CHAPTER	
I INTRODUCTION	1
Background and Significance of the Study	1
Purposes of the Study	5
Hypotheses of the Study	5
Benefits of the Study	5
Limitation of the Research	6
Definition of Terms	6
II LITERATURE REVIEW	9
Professional football competition in Thailand	9
The concept of stress	13
Stress factors in working and in athletes	22
Research and variables related to stress in working and in athletes	34
Conceptual Framework	51
III METHODOLOGY	52
Population	52
Instruments	53
Data Collection	58
Data Analysis	58
IV RESULTS	59
V DISCUSSION AND RECOMMENDATIONS	74
Discussion	74
Conclusion	84
Recommendations of the Study	86

CONTENTS (CONT.)

	Page
Recommendations for Further Study	87
BIBLIOGRAPHY	89
APPENDIX A	97
The Instruments of the Study	98
APPENDIX B	107
List of Validator	108
BIOGRAPHY	109



LIST OF TABLES

Table	Page
1. The frequency distribution of demographic data of professional football players	59
2. The differences of stress condition among professional football players classified by demographic data.	61
3. The relationship between the levels of stress factors and stress condition in professional football players.	63
3.1 The frequency distribution of the levels of stress factors in professional football players.	63
3.1.1 The condition of training and competition	64
3.1.2 Roles and duties	64
3.1.3 The accomplishment and career progression	65
3.1.4 Other people and relationships	66
3.1.5 The club structure and climate	67
3.1.6 Physical and psychological readiness	68
3.1.7 The expectation, situation and pressure of the competition	69
3.1.8 Low self-esteem	70
3.2 Test the correlation of stressor levels and stress condition of football players	71

CHAPTER I

INTRODUCTION

Background and Significance of the Study

The experts in studying stress such as Hans Selye described stress as the “psycho-physiological responses of the individual to any influence which disturbs his inner-balance”. The severe and prolonged stress can cause illnesses for the individual. Stress can occur to everybody. The different reaction of individuals to experienced stress depended on personality, individual perception of the situation, and other influential factors (Kovitpong, P., 1999: 1). Stress can be classified into 2 divisions: Eustress and Distress. When an individual experienced eustress, which is a pleasant event or situation and beneficial to that individual, it may cause happiness due to receiving desirable outcomes such as achieving academic examination, having a good work, being married, and getting promotion. On the other hand, when an individual experienced distress, which is an unpleasant event or existed sadness, anxiety and frustration, typically over stress that caused inability to appropriately adapt to the situations developed emotional disturbance, confusion, fear, and anxiety that affected physical condition such as hypertension, peptic ulcer, cardiac disease, and asthma (Zimbardo, 1980: 358). So stress influenced both body and mind of the individual. When stress occurred, the individuals would try to resolve the situation for maintaining the homeostasis by destroying and defending themselves against that disturbance. If it could be defended and resolved, there would be a tranquil life, but if it could not, there would be an accumulated anxiety and stress that caused psychophysiological disorders.

Because of the present social situation, which emphasized the importance of career success and work performance, people were faced with high stress.

Occupational stress was a very important event because it always occurred in everyday life (HutaKul, L., 1979: 1) and working was a very important factor for living. Stressful tasks or career involved high competition and responsibility or repetition and boredom that easily caused stress (Sorensen & Luckman, 1979: 69). Especially for professional athletes, in addition to the same stress as other careers, they had stress from practice using physical and psychological energy, for example, the development of physical potential, the training for improving sports skills. The athletes had to spend a lot of time and tolerate heavy and long practice that sometimes caused discouragement and boredom. In addition, they had stress from competition and preparation that may be caused by the expectations of coach, team mates and relatives (Matin, 1995: 12).

Football is a very widespread and popular sport of the world. Currently there are many levels of league including youth league, national league, and international league such as the World Cup or the Olympic Games. As the football is a popular sport of several countries, it is developed in many areas for standardization including management and commercial privilege resulting in professional playing. Football in Thailand is also popular like other countries. People pay attention and widely play football in many communities. The survey report of exercise participation, sports playing and watching of Thailand in 1999 showed that people throughout the country, which aged 6 years and above played sports, played football for 32.6% and watched football for 46.8% (Sports Authority of Thailand, 1999: 16). For developing football to the same quality as other countries, the sports were planned and developed systematically according to the National Sports Development Plan volume 1 (1988-1996) with the purpose of developing professional sports. The Football Association cooperating with the private organization produced the first professional football competition in Thailand in 1996 (The Football Association of Thailand, 1996: 2).

Working in an occupation had its stress factors, and professional football players needed to be the winner or the greatest in the competition that depended on many related factors. The players had to practice to form the physical strength and completeness, and develop their skills with intention, and also the related officials such as team manager, coach and medical team had to manage their own responsibilities for the best to prepare the players for possible readiness with the

purpose of the success or the winning. Because each competition would be presented through several media such as television, radio and newspaper, so the winning team and the good performing players would be famous in the society and received the increased compensation and other welfare. The sports competition had the winner and the loser; therefore, each competition caused stress whether the players wanted to win or feared to lose. In addition to the mentioned stress, the football was a sport that needed tolerance and long time in the competition and caused tiredness and exhaustion. Moreover, football was classified in the attack sports. The injuries may occur in the training and the competition resulting in physiological stress (Krabuanrat, J., 1987: 8) including decreased efficiency and competence of motor activity. The professional football competition held by the study of professional football in Thailand (Ratanarasi, S., 1997:1) showed several problems such as the procedure of competition holding, field and tools, training, team officials, budget and welfare support. In addition, Permpol, S. (1988: 6-7) described the professional football players that “the important thing for professional football was being a short term and dangerous career; therefore, being a professional football player had to be qualified because after he quit playing, he had to continuously take care of his family that was different from other careers”. Moreover, he mentioned about the disadvantage of professional football that the professional football players were like goldfish in a basin because they always had to be the special guest in several fair and places and it seemed that they had decreased private time. Because football was a short term and uncertain career, the most players did not prepare to face the situation when they had to quit the professional football. The injuries, which certainly happened, decreased the life of being professional football players and sometimes caused a rest from playing for life. This stressful source was consistent with Cooper and Marshall findings that sources of stress at work included factors intrinsic to the job itself, the managerial role, career and achievement, organisational structure and climate, and relationships with other people. The professional football players who trained and competed as working for living as well as others also experienced these stress.

As mentioned that stress greatly related to professional football, the main tasks of the professional players were training and competing football. Having the highest competence in the competition consisted of 3 preparations: football skills,

physical efficiency and psychological efficiency (Suwanthada, S., 1992: 1). The psychological efficiency was an important part that helps players ready for training or competing with full ability. The successful players experienced little or proper stress or anxiety and had intention of achievement (Kanjakit, S., 1991: 3) because the body was related to the mind reciprocally. The study of stress showed that appropriate stress or anxiety would help develop players' ability limit. If any player had high stress level and could not cope with that stress appropriately, that player could have a psychiatric condition. For example, when a player had high stress or anxiety, he may express in over training, or some players had a good training but were nervous in the time of competition then avoided playing by hurting themselves. In addition, the existed stress decreased sports competence – the more anxiety the more bad concentration – in the time of competition, they may express in a sweat, exhaustion or diarrhea (Bunsiri, P., 1988: 111).

From the importance of mentioned problem, the researcher was interested in studying stress of professional football in Thailand that was established for 7 years assuming that it was new and football players were more likely to play as a profession. The researcher realized that stress in professional football players had interesting aspects and differed from stress in other careers and football players or other sports players who did not play as a profession that were studied by many researchers. However, the study of stress in professional football players was not directly studied in both domestic and foreign research. Review of the literature included the studies of occupational stress in different careers and stress or anxiety in athletes who were amateur and it was short term competition in different types of sports. In addition, the used instrument was only primary questionnaire and could not significantly classify between normal person and psychiatric patient. The study of stress in professional football would be beneficial to the acknowledge of basic data about stress, stress factors, the application of information to improving and resolving problems in holding sports competition and preparing football team in Thailand, and the mental health promotion and prevention of psychiatric condition in football players who participated in the competition.

Purposes of the Study

1. To study the stress condition of professional football players.
2. To investigate the stress factors in professional football players.

Hypotheses of the Study

1. The professional football players having different personal factors have different levels of stress.
2. The levels of the causes of stress correlate with the levels of stress in professional football players.

Benefits of the Study

1. The results of this study would be beneficial to the coaches and the staff coaches in relation to mental health promotion and mental health problem prevention for the football athletes.
2. The results of this study would be a guide for suggesting to the football association and the staff relating to the Thailand Football League holding in relation to improving the competition holding procedure and team preparing of professional football in Thailand.
3. The results of this study would be a guide for suggesting to the executive of the Football Association of Thailand and the executive of each football club in relation to the importance of increasing the support, the promotion, the budget including the knowledge of sports psychology and mental health.

Limitation of the Research

1. Limitation of the population

The population of this research was selected specifically consisting of football players who registered as members of the football clubs belonging to the Football Association of Thailand. All 10 selected football clubs were eligible for the competition of “Thailand Football League 2002”. The 250 subjects consisted of 25 players in each team.

2. Limitation of the study

2.1 Independent variables

2.1.1 Demographic data of professional football players consisted of marital status, club classification, education, economic status, age, experience of playing professional football (years), and playing position.

2.1.2 The causes of stress in professional football players consisted of characteristics of training and competition, roles and duties, accomplishment and occasions of career progression, other people and working relationships with others, club structures and atmospheres, physical and psychological readiness, expectations and pressures of competition, and low self-esteem.

2.2 Dependent variables

2.2.1 The stress levels that was measurable by using Thai Stress Test developed by Assoc.Prof. Sucheera Phattharayuttawat and Collenge

Definition of Terms

Professional football players mean the players who played football for living directly and indirectly, and registered as members of the football clubs belonging to the Football Association of Thailand. The 10 football clubs had to be eligible for the competition of “Thailand Football League 2002”. The 250 subjects consisted of 25 players in each team.

Professional football in Thailand means the football competition organized according to the National Sports Development Plan volume 3 (2002-2006) strategy 4: sports development for profession under the responsibility of the Sports Authority of Thailand (SAT). It is in developmental stage and still is non-professional system, and the football players have regular duties (Ratanarasi, S., 1997). There are 2 leagues organized according to the National Sports Development Plan: Thai League and Thailand Provincial Football League.

Stress means the physical and psychological state that responded to both intrinsic and extrinsic threat causing negative feelings such as anxiety, boredom, agitation, discouragement etc. and positive feelings such as self confidence, and satisfaction Level assessed by Thai Stress Test developed by Assoc.Prof. Sucheera Phattharayuttawat (2000).

Physical competence means physical ability in performing several activities consisting of strength, tolerance, speed, body flexibility, and nervous-muscular coordination (Sports Authority of Thailand, Website 2004). The physical fitness test of sports science is used in the clubs of Thai League competition but it is different in details.

Causes of stress in professional football players mean factors or causes of stress that derived from the review of literature and related research and the experts' suggestions, consisting of the following 8 areas:

1. The condition of training and competition included the overload competition and training period, a lack of security of health and life, the insufficient and non-standard tools for training and field state for competition, a lack of systematic planning for training and competition, and the insufficient allowance and welfare of the players.

2. The roles and the duties included other burden such as the family, the education obstructive to being a professional football player, the contradictory and obscure distribution of tasks and responsibilities of the staff and the players, the unclear guideline of the club obligation, the players' conflict with the staff coaches' orders, and the confusion of training and competition without an instruction.

3. The accomplishment and the occasions of career progression included the chance of training or international competition unsupported by the executive, the staff

coaches' lack of the application of recent technique and training pattern, the unequal career progression for professional football and other careers, a lack of examination and development of physical competence limit, and the underestimate of abilities.

4. Other people and relationships included a fear of the competition that did not come up to expectations of the coach, the spectators and the cheering section, the uncertain feeling about the team mates' abilities, the hardening that occurred in the competition when seeing the reaction of the coach or the spectators, and the transfer of players and staff causing the adaptation to the new co-workers.

5. The club structure and climate included the executive's lack of attention and financial support for the team administration, the encouragement and atmosphere in the clubs, poor training and competition, inappropriate environment, and hiding place for training and competition such as light, temperature, airflow, cleanliness and proportion, the executive's unclear and improper policy on club management, and the difficulties in communication and cooperation within the clubs.

6. Physical and psychological readiness included the health problems, the physical incompleteness, the unfit practice, a lack of confidence and the hardening occurred while training and competing, a lack of concentration for training and competition, a lack of cheering up from the coach, the team mates and oneself before and after the competition, a lack of confidence because of no observation of the opponents' abilities and planning together before and after the competition.

7. The expectations and the pressures of competition included a fear of losing because of several causes such as the unfit practice, the competition with a stronger opponent, the anxiety about the game result, the competition holding, the unfair judgment of the referee, the team mates who broke the rules, the setting of player positions that was not appropriate to a person's ability.

8. Low self-esteem included the feeling of incapacity to solve problems, over anxiety that seemed absurd, the feeling of being an unimportant and not dependable person, being nervous from practice and competition, the feeling of incompetence and lack of ability to be a professional football player.

CHAPTER II

LITERATURE REVIEW

In this research, the researcher searched and reviewed related documents and research that consisted of the following parts.

1. Professional football competition in Thailand
2. The concept of stress
3. Stress factors in working and in athletes
4. Research and variables related to stress in working and in athletes

1. Professional Football Competition in Thailand

The First National Sports Development Plan (FNSDP; 1988-1996) created by Sports Authority of Thailand and related division was intended for developing sports of Thailand with a major development segment - the professional development plan. From that plan, the Football Association of Thailand (FAT) developed the domestic league competition to become a professional sport. It was the work or career production called professional footballers in order to increase the standard of playing. In 1991, it was the important step that the Football Association of Thailand (FAT) tried to hold the first professional football competition called “Thailand Semipro League”. In the first, this league was “semiprofessional” style for using as a guideline in developing professional football in the future. This league was held again in 1992 but it did not succeed because people did not pay attention. Until 1996, the Football Association of Thailand (FAT) and private section held the first professional football competition called “Thailand Football League 1996”. The competition has proceeded until in the present it was so improved and developed that interest people. In 2001, this competition was called “GSM Thai League” that was the sixth year of professional football competition from the first competition in 1996.

1.1 The rules of the competition

The competition system adheres to the league competition. Each club shall play 2 league matches against each other club each season, being the home club in respect of one such league match and the visiting club in respect of the other. There are 12 clubs participated in the competition with 6 months duration. The number of matches for a season consisted of 132 matches. The results of league matches shall be recorded. The winner of a league match shall score three points. Each Club participating in a league match which is drawn shall score one point. The loser of a league match shall not score. In addition, some competition rules included more professional football system organization such as the players have to register with the club which is the member of the Football Association and make a contract with the club according to the order about a “player register”. The players will be allowed to transfer or can be borrowed to play for other clubs and foreign footballers can participate in a team according to the competition rules of the Federation Internationale de Football Association (FIFA). In addition, there is the systemic income management or many privileges of professional sports organization as well as the competition in other countries. The Football Association of Thailand (FAT) provided 200,000 baht supportive money for each team and many types of equipment for practice. The earnings from entrance fee will be distributed to competitive teams with 30% each place, 10% will be given to the Welfare Fund for the footballers and 30% will be the competition expense. The competition reward will be divided into 2 types: 1) In each match, the winner will receive 15,000 baht prize money, each team will receive 5,000 baht in a drawn match, and no prize money for the loser, 2) The prize money for 4 teams with the highest scores at the end of the season. It will be 1,500,000 baht first place, 500,000 baht second place, 300,000 baht third place and 200,000 baht fourth place. In addition, these teams will have the right to participate in the international football competition of the Asian Football Confederation (AFC) and the Federation Internationale de Football Association (FIFA) (The Football Association of Thailand, 2001: 1-27).

1.2 The functioning of the football players

The football players’ responsibilities consisted of practice and competition. The competitive condition was to participate in football competition hold by the

Football Association of Thailand. The important competition included the Thailand Football League that there was a match every week through 6 months. In addition, there were other leagues such as F.A. CUP competition or international competition that some clubs participated as a representative of Thailand.

The practice process was different as to the club administration. The practice of some clubs may be set in the morning and the evening with one day vacation weekly or only in the evening from 4.00 pm. – 8.00 pm. everyday. The players may be kept in the practice camp in case that it was closed to an important match. For the players who were single or had no convenient residence, the club provided places at the practice camp.

In the practice time, team staff who will support football practice of the players included team managers, coaches and assistant coaches, team leaders, and team committees such as doctors and nurses, physiotherapists, treasurers, receptionists, public relations, and welfare.

1.3 Incomes, welfare and privileges of football players

The main incomes of football players included as follows:

1. A salary and allowance: The football players in each team may receive these payments differently. A salary varied with the contract the player made with that club. It depended on experience and ability such as competition experience in many leagues, champion experience, being an athlete of educational institution or a football player of the province or being selected to be a national football player. An allowance will be paid according to the number of practice days or to be named in competition list in each match. The amount of this money varied with the administration policy of the club.
2. Special bonus money: The football players will receive this money when the team won in the competition and received prize money from the Football Association of Thailand. This money included a part of entrance fee in each match or being chosen as the Most Valuable Player or top scorer.
3. Other incomes: Famous football players may receive money from being invited for many occasions such as a product presenter in advertising, a guest of the game show, etc.

4. Welfare: In addition to the welfare received as well as other employees of the club, the football players had the Welfare Fund for the football players hold by the Football Association of Thailand.

As mentioned, the Football Association of Thailand and football clubs intended to bring the football competition in Thailand to be more professional in order to increase the standard of domestic football. However, the organization of the competition and team preparation for participating in the competition had problems and obstructions. The researcher summarized the study of professional football in Thailand by Rattanasak, S. (1997) and problems of team preparation for participating in the fifth Thailand Football League by Sukonpanich, A. (2001). The method of these studies was questioning the opinions of the competition committees, team managers, team staff, coaches, and football players and problems were presented as follows:

1.4 Problems about the management and the process of Thailand Football League competition

1. Problems of the competition management: There were serious problems of the competition management in relation to a few spectators, the arrangement of the competition program, the duration of the competition, public relations, and the management of the referees.

2. Problems of the field, equipments, and facilities in the competition and practice: There were serious problems about the competition field that was far and not standardized and insufficient toilets and dressing rooms. In addition, a lack of motivation in practice such as teaching media was the second serious problem.

3. Problems of staff: There was little problem in this factor. The most serious problem was the standard of judgment of the referees. The first 3 ranks of problems included the firmness and preparation to accept a mistake of the referees, the ability in decision and problem solving of the referees, and responsibilities of the football players.

4. Problems of the budget and welfare: There was serious problem in this factor. The budget was not enough for the arrangement and process of the competition, the maintenance of field, equipment and facilities in competition arrangement, and the salaries and allowances.

1.5 Problems about team preparation for participating in Thailand Football League competition

1. The practice, location and equipment: In the opinions of team staff, there were serious problems in this factor. The most serious problem was the number of equipment for practice. However, it was the problem in moderate level for the football players. In their opinion, the serious problem was to use the same practice and competition field.

2. The welfare and health and sanitary care: In the opinions of team staff, there were serious problems in this factor. The most serious problem was the welfare for medical treatment. However, it was the problem in moderate level for the football players. In their opinion, the most serious problem was also the welfare for medical treatment.

3. Team management and administration: In the opinions of both team staff and football players, this problem was in moderate level. The most serious problem was the consistent budget support for team administration. It could be concluded that there were many problems in the competition arrangement and team preparation for professional football competition in Thailand. It affected the football players directly because the competition and practice were duties and responsibilities of professional football players. These problems caused stress because they caused the difficulty in succession and stability to be a professional football player

2. The Concept of Stress

2.1 The definition of stress

For living in the changeable society, a person had to cope with several problems including family problem, economics problem, and responsibilities that caused confusion, unpleasantness and frustration. When prolonged stress was not resolved, extreme stress would occur (Zimbardo, 1980: 761). It was involved in important severe diseases such as cardiac disease, peptic ulcer, or cancer. In addition, stress could decrease efficiency or ability in working. The body adaptation in equilibrium was necessary to be able to live normally. In the studies of stress, the definitions were as follows:

Stress comes from Latin language “Strictus” or “Strict” that was defined as any stimulus that disturbs or interferes with the normal physiological equilibrium of an organism (Webster, 1976: 1801).

Selye (1976: 74) defined stress as "the state manifested by a specific syndrome which consists of all the non-specific changes within the biological system" that occur when challenged by aversive or noxious stimuli.

According to Lazarus and Folkman (1984: 21), stress was described as the psychological state that arose when there was a personally significant imbalance or lack of fit between the person's perceptions of the demands on them and their perceived ability to cope with those demands. This state was a particular relationship between the person and the environment that was appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being.

Luckman and Sorensen (1987: 31) defined stress as the reaction that arose when a person's balance was disturbed by the environment.

Campbell (1981: 602) defined stress as anything that disturbed function of an organism. The effect will be more obvious when there was a stress stimulus that caused psychological reaction. The feeling of pressure may occur immediately when faced with cognitive and behavioral conflict state.

Suwannacheep, S. (1988: 95) described that stress was a psychological state that aroused the coping with an unpleasant situation or pressure. The experience of stress was defined by the person's realization that they were having difficulty coping with demands and threats to their well-being.

Boonthong, T. (1990: 211) described stress as a state that affected physical, psychological, emotional and social aspects when there was a disturbance that may be caused by intrinsic or extrinsic factors. Therefore, the stress state was harmful to the body and was the cause of unhappy feeling. The body had to produce the response process for correcting that state to the equilibrium.

Nivatpan, R. (1995: 5) defined stress as a feeling that the body or the mind was threatened and many kinds of reaction appeared. If it cannot be resolved, stress will arise in physical, emotional and behavioral effect.

From these definitions of stress, the researcher defined stress as the process that a person responded to stimulus as the emotional or psychological and physical

change to maintain the balance. The stimuli may come from extrinsic or intrinsic cause and when stress occurred, it will appear in physical and psychological symptoms such as stomachache, headache, poor appetite, being worried, anxious and upset that varied with the degree of stress and personality of each person.

2.2 The causes of stress

The person can experience stress from several factors. Friedman & Dimatteo (1989: 158) described that the cause of stress was event and environment that depended on physical and psychological state whether it caused stress. Burgess (1990: 876) defined the stressor as the person's intrinsic and extrinsic demand involving physical, psychological, social, cultural or environmental aspects that the person had to respond or adapt oneself to that demand. There were many different stress factors as the following studies.

Luckman and Sorensen (1974: 52-60) described several causes of stress that included as follows: 1) Genetic factor that may result from the body system dysfunction, 2) Physic and chemical factor that may be extrinsic such as heat and cool, and intrinsic such as lipid deposits within artery plaques, and lack of needs, 3) Microbes and parasites such as virus and ailment, 4) Psychological factor such as development, 5) Cultural or traditional factor 6) The confrontation with decision making situation, 7) Immigration including work place and home, 8) Economic factor such as poor economic status, 9) Occupation that was an important cause for living such as the work with high responsibility, competition or repetition, 10) Technological and environmental factor such as the industry that caused pollution and health problem.

Wallace (1978: 457-458) divided causes of stress into 2 types.

1. External stressor was the person's extrinsic cause mostly involving the interpersonal relationship problem such as family relationship between spouse or parents and children, relationship in the work place between employers and employees, colleagues, work progression, encouragement or connection with other people such as a conflict of opinions and interests, etc.

2. Internal stressor was the person's intrinsic cause involving pain, sickness, cognition, guilt, dream, expectation, ambition and self concept.

Lazarus and Cohen (1977, cited by Charles & Sally, 1992: 149-150) classified the stressors as follows:

1. Stress from natural disaster that occurred to many people or in the community simultaneously and unexpectedly. There were a lot of effects and it needed a great effort in coping.
2. Personal stress such as exam failure, unemployment and divorce etc. that may be predictable or unpredictable but there were a lot of effects and it needed a great effort in coping. The personal stressor sometimes was difficult in coping more than the stressor from natural disaster because of no support.
3. Stress from the background was minor event but caused annoyance and suffering all the time. If it failed in choosing supporters or helping in problem solving, it may be the cause of destruction more than the stressor from natural disaster or personal stressor.

Panpreecha, C. (1991: 486) classified the stressors as follows:

1. Internal cause was the stressors that came from inside the person including 2 categories. The first was physical factor such as physical conditions that produced stress. Because the body and mind cannot be separated, when the body was stressful, so did the mind. These conditions included a lack of relaxation, physical illness, and alcohol or drug dependence. The other cause was psychological factor involving some mental conditions that produced stress such as negative emotion, anger, fear, frustration, impulsiveness and dependent need etc.

2. External cause was the stressor that came from outside the person including as follows:

2.1 Loss of beloved person, property, work, being dismissed, reduced or transferred position, and bankruptcy.

2.2 Life change or the turning point of life resulted in psychological imbalance. It included first time working, marriage, having first child, experiencing the menopause, changing environment that needed adaptation, and sudden change without expectation and preparation such as work or home moving.

2.3 Several dangers that threatened lives and properties included the living in the place with a lot of thieves, being threatened, flooding and fire. These states produced severe mental pressure that can result in extreme stress.

2.4 Stressful working included a lack of security in working, risky job, unsatisfactory job and considering it unimportant.

2.5 Low economic status included being poor or in debt resulting in incomplete growth, nutrition deficiency, and living in crowded community without security resulting in anxiety, fear, pressure and stress.

2.6 Social status included the people's moving into the urban, the crowd, competition, inconvenient traveling because of the traffic, not warm family, and lack of fresh air.

The Department of Mental Health (1996: 3) classified the causes of stress into 3 aspects.

1. The mental status included the anxiety of being unexpected or not succeeded, the worry about works or conditions, and the feeling of inability to do something.
2. The life change included period changing, wedding, work changing, retirement, home movement, and loss of beloved person, etc.
3. The physical illness included the sickness from minor through severe and chronic stage such as diabetes, cancer and hypertension, etc.

From the mentioned causes of stress, the researcher concluded as follows:

1. Intrinsic causes included life experience, personality, attitude, and perception of an individual's specific characteristic.
2. Extrinsic causes included problems about interpersonal relationship, occupation, economics and society, and environment.

2.3 The Levels of stress

Although the individuals experienced stress from the same cause but the level of severity may be different. It depended on the person's acceptance and adaptation ability and other factors such as temperament, social and cultural status, and situation in that moment. Janis L. (1952: 13) classified stress into 3 levels.

1. Mild stress was the stress that occurred and disappeared shortly only in minutes or hours. This level of stress related to the minor cause or situation in everyday life such as traveling, traffic jam, missing some appointments.
2. Moderate stress was more stress that occurred in hours or days such as minor illness, over working, conflict with colleagues, etc.

3. Severe stress was extreme stress that occurred in weeks, months or years. It was caused by serious factors or many co-factors such as loss of beloved person or closed relatives, severe illness, and loss of important organ.

In addition, Panpreecha, C. (1991: 482-495) also classified stress into 3 levels. The first level was mental status with mild stress that was considered as normal state and can occur in everyday life. The second level was mental status with moderate stress that the body and the mind resisted that appeared stress. There were physiological, cognitive, emotional and behavioral changes. The last level was mental status with severe or extreme stress that the body and the mind cannot resist that stress. There were obvious physical and psychological changes and it resulted in physical pathology or illness state.

According to The Department of Mental Health (1996: 3-4), stress was classified into 4 levels.

1. Low level of stress will improve the person's working that included not being lazy or inactive.
2. Moderate level of stress may affect the person's action such as over eating, insomnia, and alcohol and drug dependence.
3. Severe level of stress may produce aggressive behavior, depression or anxiety, and loss of control.
4. Prolonged stress may produce physical illness such as cardiac disease, peptic ulcer and other diseases, fast getting old and short living.

In addition, Selye (1987: 18) classified stress into 2 groups. Eustress was the stress that occurred from coping with obstructions. The consequence of this kind of stress involved succession and benefit such as overcoming an obstacle. The other group was Distress that occurred from the loss of control, frustration, insecurity, and sensitivity of failure. If this kind of stress was not in control or diminished, the severe problems of physical and psychological health may occur.

2.4 The effect of stress and stress factors

When stress occurred, there was the person's reaction to that stress. Farmer et al. (1984: 4) described that the effect of stress involved feeling or emotion such as depression, anxiety, irritability, and anger including physiological effect such as headache, and stomachache. The effect of stress was the physical reaction to the

stressors in many situations. Murray (1975, cited by Udomkij, J., 1996: 32) classified the reaction of stress into 2 types: physical reaction and psychological reaction.

1. Physical reaction of stress may produce hypertension, heavy functioning of heart and abnormal heartbeat, low blood level in peripheral organs such as pale and cold hands/feet, increased breathing rate for increasing oxygen, increased metabolism that caused higher temperature and dehydration. If the metabolism rate was high in the long time, it will produce insomnia and exhaustion, higher sugar level in the blood from lower insulin, more fatty acid, more muscle functioning that may caused tremors, grimacing, clumsiness or body exhaustion, more muscle tension, a weakening of the immune system because thymus gland and lymphoid tissue was abortive, lymphocytes were destroyed, permeability decreased in the inflammatory area, and every part of the body aroused because the sympathetic nerve was stimulated.

2. Psychological reaction of stress may produce changed behavior or personality such as aggression, isolation, emotional disturbance, inappropriate emotional reaction including easily being irritated or angry, crying or laughing with no reason, poor consciousness, memory, concentration and interest, disturbed thinking process that may cause illusion and hallucination, loss of interest in connection with others but being sensitive to the environment, changed speech such as perseveration, loosening of association, rhythm and speed. In addition, it included defense mechanism such as regression, rationalization, denial, projection that may lead to the change of self image such as childish behaving, isolation, inappropriate decision, low self-esteem, and over attention demand.

The effect of stress was the reaction that the person tried to adapt oneself to the stressful situation or tried to get rid of stress. If the person used the appropriate mechanism, the adaptation will be normal. If the person cannot adapt or get rid of stress, the mentioned effect will appeared. The severity of the effect depended on many factors described by Galand and Bush (1982, cited by Veerapong, A., 1998:13).

1. Severity: The person with severe illness, handicap, or a lot of image change will perceive problems of severe illness and the result of that stress will be more severe than the person with mild illness or image change.

2. Onset: Initially, the patient who had an accident leading to a loss of some organs may be not able to adapt or accept the loss state. When the time passed,

the person will be able to adapt gradually because it caused the learning of appropriate stress coping.

3. Unexpectation: The suffering from an accident affected mental state more than gradual sickness.

4. Age: The age related to past experience that can affect the response of stress.

5. Physical and psychological status, ability and encouragement: The person who was healthy and optimistic will have better ability in stress management than the person who was sick, weak or discouraged.

6. Economic status: It was an important factor for living in everyday life. The person who had good economic status can better adapt to stress than the person in need or having poor economic status.

7. Education: Jalowise and Power (1981) said that the good education helped the person to better realize the factors relating to that problems because of using the past learning and behavior of stress management.

8. Family or social support: Especially, family relationship was an important factor in encouragement and support. The good interpersonal relationship and support can relieve stress.

9. Experience in problem solving: The person who experienced problem solving in both easy and complicated situation can better understand and resolve problems than the person who had no experience.

10. Belief: It influenced stress adaptation that involved the ability in controlling or overcoming the threats such as the belief in God or sacred thing.

11. Culture and tradition: In some culture, there was the support and activity that reduce the severity of stress but some culture may increase stress.

These factors were the components that can increase or decrease the level and effect of stress. They helped in self-adaptation of each person for the balance state.

2.5 Stress and anxiety

Stress state was sometimes used in the alternated meaning with anxiety because they produced similar response process including the central nervous system arousal. It affected limbic system, hypothalamus connecting to sympathetic nervous system and pituitary gland that produced higher level of epinephrine, norepinephrine,

and glucocorticoid in the blood. Consequently, it affected physiological reactions such as increased heart rate, blood pressure and muscle potential and behavioural changes including decreased perceptual ability, poor concentration in problem solving, being excited, nervous and talkative, and repeated and fast speaking.

When stress state and anxiety occurred simultaneously or there was high emotional arousal, the experts or psychologists often used these words alternatively. The assessment of anxious behaviours can be used as a substitute for stress state especially in the stress assessment that focused on emotional reaction in the initial stage or while coping with the threats. This stress assessment involving anxious behaviour assessment can be assessed from the patient's self report or observation of changed behaviours. Therefore, the anxiety was always used as an indicator of psychological stress state.

From Spielberger's study (1973: 37), anxiety can be divided into 2 types.

1. State anxiety or A-State is defined as transient emotional states in face of threatening demands or dangers which vary in intensity and fluctuate over time and sometimes called situational anxiety or immediate anxiety.
2. Trait anxiety or A-Trait reflects the existence of stable individual differences in the tendency to respond with state anxiety in the anticipation of threatening situations.

Levitt (1967: 13-15, 154-156) divided stress into 2 types.

1. State anxiety, situation anxiety, or acute anxiety refers to situational feelings such as apprehension, tension, nervousness and worry. This type of stress consists of high intensity but when it occurred, it will stay in a short time.
2. Trait anxiety, anxiety-proneness, anxiety predisposition, or chronic anxiety refers to general feelings that occur in general situations in low level but in a continuous and long time. It becomes one's trait or a part of personality.

However, the level of state anxiety also depended on trait anxiety. The person who experienced high and consistent trait anxiety tended to experience high state anxiety.

3. Stress Factors in Working and in Athletes

3.1 The causes of stress in working

Some experts suggested that job stress was a part of organization psychology. General stress consisted of 2 components including non-job stress and job stress.

Occupational stress of a person may be caused by some factors or co-factors in that job that interfered in physical and psychological balance. Cooper et al. (1988: 1-3) described that occupational stress was unavoidable in everyday working. The characteristic of occupational stress was negative perception caused by inappropriate problem solving that led to physical and psychological illness. The indicators of occupational stress included quitting or leaving job, sickness rate and accident that not only affected working but also increased expense (Morgolis & Kroes, 1974: 15).

Albercht (1979: 147-149) identified 3 occupational stressors.

1. Physical factor referred to inappropriate environment for working such as temperature, light, noise, smell, and pollution.
2. Social factor referred to relationship problems with the administrators or colleagues, and a lack of security.
3. Emotional factor referred to negative feelings such as unexpectation, dissatisfaction of income, conflict, and responsibility of job at risk.

Cranwell-Ward (1987: 47-61) identified that occupational stressors included as follows:

1. The organization of supervisor with delayed process including governmental system, organizational change such as administrator or working direction change, using high technology, and service.
2. The job including overload task, decision making of the fear of a mistake, working in limited time, and responsibility of others.
3. The career that was not appropriate to the person, and a lack of clear target in working.
4. The relationship with colleagues, family and relatives.
5. The imbalance between home and workplace life.

6. The inner pressure, over self-expectation, pessimism, the need of acceptance, position, power, and the inability in self-management.

Taylor (1986: 171-172) described 5 occupational stress factors.

1. Factors intrinsic to the job included work overload, work underload, time pressures and deadlines, long working hours, travel, new technology, staff shortages and turnover rates, managing people, too much or too little responsibility, poor working conditions, and poor decision making.

2. Role in the organization included role ambiguity, and role conflict.

3. Career development included under or over promotion, rate of pay, and thwarted ambition.

4. Relationships at work included relationships with supervisors or colleagues. Good relationship can reduce work stress and bad relationship will lead to role conflict and tension that caused job dissatisfaction.

5. Organizational structure and climate included office politics, lack of power and influence, little or no participation in decision making, lack of consultation and communication, and lack of control in the work environment.

Cooper (1979: 183-202) described that occupational stress factors consisted as follows:

1. Role in the organization included role ambiguity, and role conflict, high responsibility, no participation, command and policy.

2. Factors intrinsic to the job included work overload, time deadlines.

3. Career development included position promotion, job security, coordination, and consultation.

4. Factors extrinsic to the organization included problems of coordination.

In addition, some working environment may cause stress as Macmillan and Duane (1982: 444-446) described as follows:

1. Work overload or over working caused stress and stress related illness.

2. Quality included too difficult work, rules and criteria in working.

3. Changes in the organization included new supervisor, new working method, organizational policy, and environment in working.

4. Working evaluation caused a feeling of the risk, insecurity and competition.

5. Role in the organization included role ambiguity, and role conflict.
6. Career development included no promotion or over promotion.

Cooper and Davidson (1987: 99-100) described that there were many stressors of working environment such as years of working, position, assignment, income and compensation, relationships with supervisors and colleagues, quality of instruments, and risky working condition. It was consistent with 4 factors of stress that Caplan et al. (1975, cited by Hamel and Bracken, 1986: 779-782) defined as follows: 1) Workload involving inappropriate quantity to time and ability of the worker, 2) Role conflict involving position and role misfit, 3) Role ambiguity involving unclear roles or duties, 4) Utilization of skills involving the ability not associated with assigned job. From above mention, occupational stress can be caused by interaction between the person and environment that varied with personality of each person and environment.

3.2 The causes of stress in athletes

The term stress can be considered neutral with the words “distress” and “eustress” used for designating bad and good effects (Selye, 1975, cited by Morris, 1993: 23). Positive stress involved the winning in the competition for playing in the play-off that caused excitement and stress. Negative stress involved the miss of penalty kick that will help the team win the competition.

The important consideration of stress was that stress will affect playing and feeling of sport players or it depended on the players' situational evaluation (Scanlan, 1984, cited by Wongjaturapat, N., 1994: 29). The self evaluation of ability was the comparison between one's ability and the activity or sport. If the players perceived that their abilities were higher than that activity, they will play without anxiety or stress. If the players perceived that the activity was too difficult or beyond their ability such as difficult technique playing or playing with the players of rank or much higher ability, stress will occur. In addition, the persons may evaluate the same situation differently. For example, if the players perceived that the playing with the players having higher ability was a challenge, that stress will be different to the situational perception of losing tendency or being blamed by coaches or trainers. This feeling caused stress and affected playing and acting of lower sport ability.

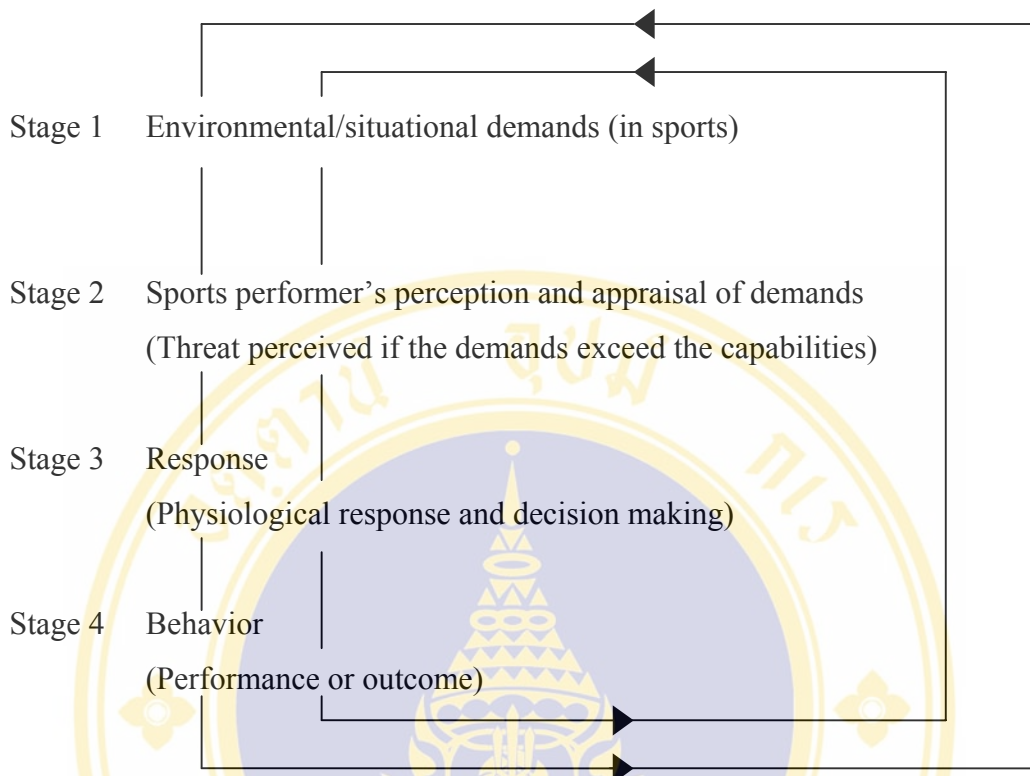


Chart 1 A process model of stress adapted from McGrath's Stress Model (1970, cited by Could and Krane, 1992: 123)

McGrath (1970: 123) described the stress process in sport players as 4 stages.

Stage 1 Sport situation in practice or competition: Each player perceived the situation in different ways such as a player may need to play with a more experienced opponent whereas another player did not need.

Stage 2 Sports performer's appraisal or comparison between a situation or opponent and one's or team's capability: If the players perceived that a situation was difficult beyond their abilities, there will be an imbalance between the demands and personal resources. A player may perceive that situation as a challenge whereas another player perceived it as a threat.

Stage 3 Sports performer's response to the appraisal: There were different responses in physiological reaction such as heartbeat, and hand sweating and in stress level.

Stage 4 Stress consequences to sports performer's behavior: It caused performance failure, high negative stress and may lead to the losing.

In addition, Scanlan (cited by Wongjaturapat, N., 1994: 31) suggested 2 facts related to competitive stress among youth sport participants.

1. Sports performer's inappropriate or inaccurate evaluation: Stress occurred because of the overestimation of a situation and over consideration of its importance.

2. Stress can occur throughout the competition because the sports performer perceived an imbalance between one's capability and the level of competition.

Before the competition: Sports performers expected poor performance.

During the competition: Sports performers felt that they were playing poorly or may be defeated.

After the competition: Sports performers evaluated that they played poorly or it exceeded their abilities.

In addition to the mentioned causes, stress may occur from an imbalance between the capabilities and the level of competition with outside team. According to Scanlan, three stress factors of sports performers were described as follows:

1. Intrapersonal factors: There were many intrapersonal factors that caused different levels of stress such as competitive trait anxiety, and self-esteem. The players with high competitive trait anxiety will perform lower sports ability than the players with low competitive trait anxiety. In addition, the players with low self-esteem and low expectation of the competition will be more anxious before the competition than the players with high self-esteem and expectation. The feeling of enjoyment in the competition also was a factor that directly affected the players' stress. The players who much enjoyed the activity will have lower or less stress than the players who less enjoyed the activity.

2. Situation: In the situation of sports competition, the players experienced different levels of stress. The causes may come from types of sports, playing position, and the importance of team players. The players in the individual sports competition tended to express stress higher than team players. Because the individual sports competition allowed the obvious comparison and the responsibility of losing belonged

to that player directly. For team playing, the competition result was the responsibility of all players in the team.

However, the stress in team sports competition can occur in low level and different within the team. The players in important positions with high responsibility such as team stars, captains, and goalkeepers were responsible in leading the team higher than the rest players that caused more sports stress.

3. Significant others: Sports players' families, team-mates, coaches, and the fan were the factors of stress level such as the expectation of good playing or being a champion.

Significant others' expectation and pressure toward the players can be known not only from telling, blaming, or punishing, but also from some expressions such as being bored, waving heads, and showing dissatisfaction to the players' playing. No speaking can cause stress as Cratty (1983, cited by Veerapong, A. (1998: 21) suggested that the stress factors in sports players were as follows:

1. The importance of competition and obstacles of practice
2. Social expectation and need toward sports players such as coaches, friends, and supporters
3. Financial and occupational problems
4. An acceptance from others
5. A difficulty of determined goal

In addition, Saetong, S. (1994: 218) suggested that sports players experienced stress from the following causes.

1. Heavy practice before the competition produced muscle exhaustion and joint pain, or being often injured from practice.
2. The anxiety of competition result involved the more expectation of victory, the more anxiety because of unexpectation fear.
3. The fear of opponent and unfamiliar competitive place, especially aboard competition, caused no confidence and much adaptation.
4. Practice keeping before the competition caused leaving families and getting acquainted with friends or team-mates. The difficulty in getting acquainted with others will produce stress because each player came from different places and

had different personalities. In addition, area limitation may produce uncomfortable feeling, confusion, and conflict between fight and flight.

Anxiety problems in athletes were very interesting in sports psychology field and very important to sports achievement. The athletes who were much anxious or worried may express in over training. Some athletes practiced well but were aroused in competitive time. In addition, anxiety also reduced sports ability including poor concentration in playing. Overexcited reactions may express in sweating, fast breathing, being tired and exhausted easily, and having body ache. Some players had diarrhea that caused decreased sports ability (Peerapong, 1988: 111).

Kroll (1977, cited by Birds and Cripe, 1986: 147) suggested that athletes' anxiety before the competition was caused by 5 important factors.

1. Somatic complaint: Many physical abnormalities affected anxiety because that feeling will produce physiological changes. Physical abnormalities in athletes included neck spasm, turbulent stomach, irritability, rapid and hard heartbeat, often urinating, voice hearing, being sleepy, sweating, and muscle ache, etc.

2. Guilt: The feeling of fear or being ashamed of immoral behaviors produced anxiety due to being afraid that the opponent or spectators will be not satisfied. These feelings included being afraid to hurt or embarrass the opponent, express something immorally, lose emotional control and be labeled as no team spirit, be yelled, and lose image in the sight of opposite sex.

3. Loss of control: Feeling of inability to control environmental occurrence caused anxiety and paranoid such as spectators' behavior, broken or not standard competitive devices, opponent's expression, unfair judgment, questioning, dissatisfying field state, and accidents.

4. Feeling of inadequacy: Feeling of unprepared condition, incompleteness, and inadequacy such as unprepared physical status, lack of motivation and good devices, unprepared psychological status, over or under practice, bad environment, and lack of encouragement from friends and spectators.

5. Fear of failure: This feeling involved the fear of unexpectation, losing, and not reaching succession or letting down significant others such as a fear of doing a mistake, no concentration, breaking rules, criticizing from others, and pressure from opponent.

Jones and Hardy (1990: 75) suggested pre-anxiety factors including the readiness in competitive preparation, coaches' influence, external environment, and attitude to testing or competing outcome.

Singer (1986, cited by Veerapong, A., 1998: 22) suggested that anxiety factors in sports competition consisted as follows:

1. Outcome uncertainty
2. Meaningfulness of event
3. Fear of failures
4. Fear of letting down significant others
5. Fear of danger
6. Fear of success
7. Intimidation by opponent

Suwannathada, S. (Cited by Kanjanakit, S., 1998: 81-82) concluded that causes of anxiety in athletes may come from the following.

1. Lack of confidence in personal capability: Actually, competitive situation may not cause anxiety but the thinking of low ability and losing. Negative thinking about personal capability will distort that situation.

2. Anxiety belief: Thinking about anxiety was another cause of no enthusiasm and competitive preparation unless there was a perception of physical and psychological anxiety.

3. Ability expression in the past competition under self-standard: This feeling involved the anxiety that this kind of situation will happen in the next competition. If athletes recalled the past disappointment or losing and were anxious about that situation, that athletes will be more anxious.

4. Belief that self value depends on competition: This thought produced high anxiety. The importance of competitive situation may reduce or destroy others' acceptance. The important competition such as international competition, athletes will experience high physical and psychological anxiety and express lower ability than expected.

5. Physical preparation: Low physical competence, incompleteness, weakness, chronic injury affected sports playing and caused anxiety.

6. Environment: Environment anxiety included spectators, too good field state, insecurity in playing or devices, and unfamiliar competition that affected the competition.

3.3 The assessment of stress and anxiety

Stress cannot be touched or measured directly but can be evaluated or measured from stress level of physical and psychological reactions. Stress assessment can be considered in the following.

1. Observation: Behavior observation included negative change or physical reaction such as rapid breathing, sweating, headache, uncomfortable stomach, and emotional reaction such as crying, being irritated, depressed, isolated, introjected, projected, anxious, and low self-esteem, and behavioral reaction such as being inactive, bored and frequently sick, absenteeism, decreased working ability, wrong decision making, and lack of creativity.

2. Physical change: Anxiety can be measured by using EMG biofeedback, and Electromyogram, etc.

3. Self-report: It included inventories, tests, and questionnaires about physical and psychological stress.

Job-Related Tension created by Kaln, Wolfe Quinn and Snock in 1964 measured causes and results of occupational stress consisting of 15 items involving role ambiguity and conflict, workload, expectation from others, power and progression in working, job satisfaction, ability, and decision.

Anxiety-Stress Questionnaire created by House and Rizzo in 1972 consisted of 17 items that measured 3 factors including job stress, stress from physical dysfunction, and stress from exhaustion and anxiety.

SCL-90 (Symptom Distress Check List 90) created by Derogatis, Covi and Lipman consisted of 90 items that measured 9 Primary Symptom Dimensions including Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, depression, anxiety, hostility, Phobic Anxiety, Paranoid Ideation, Psychoticism.

HOS (Health Opinion Survey) created by Macmillian in 1957 consisted of 1 health question and 19 physical and psychological reaction of stress.

Stress Questionnaire created by Gardner and Beatty in 1985 measured 4 stress factors including psychological symptoms, physical symptoms, interpersonal relationship, and job stress.

JSQ (Job Stress Questionnaire) created by Caplan et al. in 1975 consisted of 13 items of four under-scales: Extra work, Conflicts of roles, Ambiguity of roles, and Underutilization of the abilities.

OSI (Occupational Stress Indicator) created by Cooper et al. in 1988 incorporates four key elements: the source of job pressure (job strains), the characteristics of the individual (personality), coping strategies, and the effects of stress on the individual and the organization. These elements are measured by the seven component scales of: Sources of pressure, Type A Behavior and Locus of Control, Coping, Mental Health, Physical Health, and Job Satisfaction.

SCAT (Sport Competition Anxiety Test) created by Dr. Martens Rainers measured competitive trait anxiety consisting of 15 questions. The answer referred to the frequency of anxiety symptoms with the range from 10 to 30 – the high score referred to high anxiety. The 3 levels of interpretation included low anxiety – hard excited, moderate anxiety, and high anxiety – easily excited.

CSAI-2 (Competitive State Anxiety Inventory-2) also created by Dr. Martens Rainers measured anxiety in competitive situations that can measure the person's self confidence in the situation. The CSAI-2 comprises of three subscales including 27 items of somatic anxiety, cognitive anxiety, and self confidence. The answer involved agreement or disagreement with that question. Each sub - scale has a range from 9 to 36. Higher scores on cognitive and somatic anxiety indicate higher levels of anxiety whereas higher scores on self – confidence sub – scale correspond to higher levels of self-confidence.

The studies of stress in Thailand adapted the mentioned tests and used as a guideline for developing stress questionnaire in one's research. That questionnaire was appropriate only for the sample or population of that research. From that problem, there were some researchers developing stress questionnaire or assessment for Thai population.

Self Assessment and Analysis of Stress created by the Department of Mental Health, Ministry of Public Health in 1998 consisted of 20 questions for

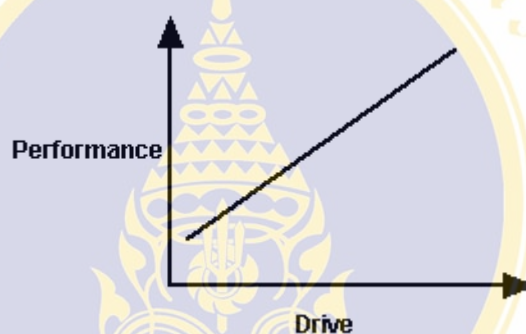
screening stress person. Stress-related personality tendency included 3 types: Anxiety personality tendency, depressive personality tendency, and psychosomatic tendency.

Stress Test for Thai created by Sucheera Phattharayuttawat et al. in 2000 consisted of 12 negative feeling questions and 12 positive feeling questions. This test dividing stress into 4 levels was the instrument for stress measurement in this study.

3.4 The relationship between stress, anxiety, and ability in playing sports

There were 3 theories of the relationship between stress, anxiety and sports ability (Kanjanaakit, S., 1998: 75-80).

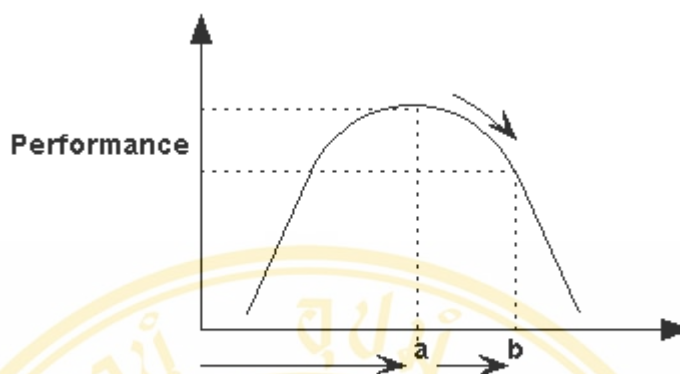
3.4.1 Drive Theory



This suggests that motor performance is positively related to drive (or arousal/physiological activation). So, as drive or arousal increases performance on a motor (movement) task improves. However, it is suggested that increased arousal increases the likelihood that the individual will perform a dominant response. This theory is used for describing in sports that need strength or high energy. An implication is that the dominant response might be an incorrect, or incomplete one. For example, in the early stages of learning a skill - high arousal might promote mistakes in performance/poor performance. It might also be the case that a response might be incorrectly learned and this is then reflected in poorer performance. If a skill is practiced correctly, and learned well, then higher arousal should lead to better performance.

These are criticisms, however, because Drive Theory only appears valid for some relatively easy movement tasks and does not hold for more complex motor tasks.

3.4.2 Inverted-U Theory



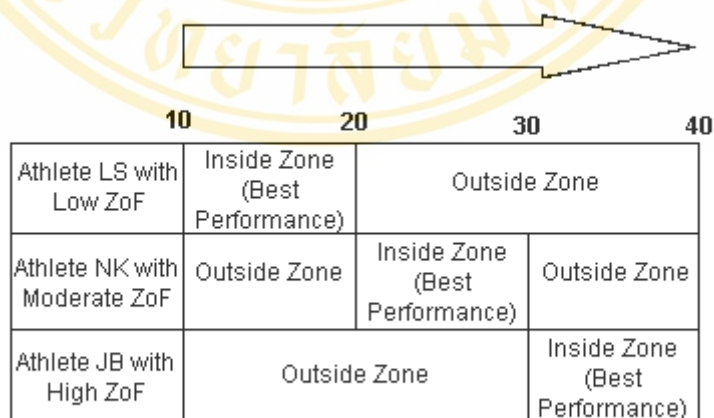
Physiological Arousal

This theory suggests that there is an inverted U relationship between physiological arousal and performance. Over or under stress decrease ability but appropriate stress level will increase ability. This theory is widely accepted and can be described in playing almost kinds of sport.

3.4.3 Hanin's Zone of Optimal Functioning: ZOF

Hanin proposed a theory that suggested that each performer has her/his optimal pre-performance arousal or anxiety zone within which performance will be optimal.

State Anxiety Level



Conversely, if the performer's anxiety level lies outside this zone, then performance will be impaired.

Individual differences in optimal anxiety levels cannot be predicted from task characteristics or the performer's level of experience. Rather, ZOFs can be

determined either by direct repeated measurement of anxiety and subsequent performance, or by retrospective recall of anxiety levels prior to performances.

ZOFs have been shown to reliably predict performance. However, Hanin's model has been criticised for being based on an unidimensional view of anxiety and that it is an individual difference theory without any individual difference variables. That is, no attempt has been made to identify factors that determine differences in ZOFs between sports performers, or to explain how ZOFs affect performance.

4. Research and Variables Related to Stress in Working and in Athletes

From the review of literature on stress in professional football players, the researcher did not find the research related to this area directly in both Thailand and other countries. However, the research about occupational stress in several careers and stress or anxiety in athletes that mostly studied in amateur athletes was widely studied in both Thailand and other countries in the field of industrial and organizational psychology and sports psychology respectively.

The researcher summarized the reviewed research by dividing into 2 parts: The part of occupational stress in different careers, and the part of stress and anxiety in athletes.

Research on Occupational Stress

Cooper, et al. (1989: Abstract) studied mental health, job satisfaction, and job stress among general practitioners. Results showed that female doctors were satisfied in working and expressed good mental health when compared with other normal groups. It contrasted with male doctors who had significantly higher anxiety score than normal group. From multivariate analysis of variance, it was found that the four most important predictors of job stress were: work-home interface, demands of the job, patients' expectations and practice administration.

McGrath (1989: Abstract) studied stress and burnout of teachers in emotions and working behaviors. Results showed that working experience, personal income, administrators' support, and equal support affected stress.

Lawrence and Lawrence (1987: Abstract)'s study of job related stress of nurses showed that job stress factors included environment, emotional problems of patients and family, patients' and supervisors' demand, working conditions, interpersonal relationships and colleagues, and encouragement.

Ben-Bakr, Al-Shammari and Jefri (1995:Abstract) studied occupational stress in different organizations in Saudi Arabia. Reports on a study which utilized responses from 442 employees working in 23 different Saudi organizations to assess stress levels and their differences with respect to nationality (Saudis, Arabs, Asians and Westerners), age, tenure, type of organization (public, semi-private, private), and organizational size (small, medium, large). The findings suggested that the main source of stress for employees working in private organizations was the lack of knowledge about their performance evaluation results, while this was not the case for employees working in public organizations; Saudi employees had the highest levels of stress, with Arabs second, Asians third, while Westerners (Europeans and North Americans) registered the lowest levels of stress; employees who were less than 30 years old experienced the highest levels of stress; employees with six-to-ten years of experience showed the highest levels of stress; and there was a significant inverse relationship between educational level and stress level.

Kumpeerakupt, T. (1992:Abstract) studied the relationship between working problems of probation officers and effect of different personal factors to stress and coping using SCL-90 (Symptom Checklist-90). The results showed moderate level of stress (T-Score 40-60) and the officers with different jobs had different levels of general stress with statistical significance. In addition, working problems including job characteristics, job condition, and job interest were positively related to general stress of the officers. For personal factors, different sex did not cause different stress level with statistical significance. However, different family responsibilities affected different stress in interpersonal sensitivity and psychoticism with statistical significance.

Meksriarun, R. (1993:Abstract) studied the causes of occupational stress of librarians in the governmental university libraries. The 168 subjects were measured stress using the stress questionnaire for the librarians created by the researcher. Results showed moderate stress in each cause of occupational stress including stress from

working, no progression of working, stress from co-workers, supervisors and environment, respectively. The librarians in different divisions had different environmental stress. In addition, the librarians who worked in big libraries had higher stress in working, supervisors and co-workers than the librarians in small libraries.

Chatpiyanont, C. (1995:Abstract) studied the relationship between some factors and stress of school teachers and examined the important factors that affected stress of the sample. The instruments were stress questionnaire and stress factor questionnaire created by the researcher. Results showed that some factors including introvert personality, relationship in the work place, economic status, and job characteristics were significantly related to stress of the sample. The important factors affecting stress significantly included introvert personality, and job characteristics. Relationship in the work place and economic status did not affect stress. The factor analysis showed that introvert personality directly affected stress but did not affect job characteristics. Relationship in the work place and economic status did not directly affect stress but indirectly affected stress through job characteristics that were caused by economic status and relationship in the work place.

Suppradit, S. (1996:Abstract) studied stress-related factors of the government officials with job transition and stress level using the questionnaire about working, family and personal life. The interesting factors consisted of age, working experience, sex, marital status, educational degree, family responsibility, position level, organization, and the number of job transitions. It was found that the most of the government officials of the Customs Department had moderate stress in different factors divided into 3 areas: working area, family area, and personal area.

Jaratsuriyong, A. (1996:Abstract) studied the relationship between personality and stress and personal factors affecting stress level. The questionnaires consisted of personal factor questionnaire, personality test, and SCL-90 (Symptom Checklist-90). Results showed that the most subjects had moderate stress (T-Score 40-60) that was considered in normal criteria. Factors affecting stress included sex, personality, educational level, income sufficiency, personal problems, experience (working age), age, marital status, and family responsibility. In addition, the relationship between personality and stress was negative.

Udomkij, J. (1996:Abstract) studied stress factors in working of computer personnel in Bangkok. The questionnaire consisted of 3 parts: personal factors, general stress, and stress caused by working factors adapted by Cary L. Cooper's Occupational Stress Indicator (OSI). Results showed that computer personnel in Bangkok had moderate level of stress. The different sex, marital status, and types of organization caused different occupational stress with the .05 significance level and occupational stress positively related to general stress.

Pratippichai, N. (1997:Abstract) studied the variables of work-related stress in educational supervisors in educational area 5 using the questionnaire about the variables of work-related stress of educational supervisors. Results showed that working attitude and A type personality related to occupational stress of educational supervisors with statistical significance and could predict occupational stress of educational supervisors. These 2 factors could explain the variance of occupational stress with 34%. The other variables including sex, age, and working experience related to occupational stress of educational supervisors without statistical significance.

Leelaampornsin, W. (1998:Abstract) studied stress factors of telephone counselors in the organizations of the Department of Mental Health, Ministry of Public Health. It was found that intrinsic factors including health state, feeling, cognition, and emotion affected stress in low level. Extrinsic factors divided into physical factors – environment in telephone counseling room, facilities, time and distance from home to office – and organizational factors – working unit, supervisors, job characteristics, and co-workers affected stress in moderate level.

Wongsureerat, M. (1998:Abstract) studied stress factors of air hostess/steward of Thai Airways International. The variables consisted of personal factors including sex, age, marital status, education, income and personality, and external factors including job characteristics, occupational progression and relationship with co-workers. The instrument was the questionnaire created by the researcher. Results showed that the subjects had moderate level of stress. The employees with different income had different stress with the statistical significance. But the employees with different sex, age, marital status, education and personality had different stress without the statistical significance. In addition, job characteristics,

occupational progression and relationship with co-workers could predict stress with 19.27% with the statistical significance and job characteristics could best predict stress.

Siriprapawan, N. (1999:Abstract) studied occupational stress factors and the relationship between case quantity and occupational stress of the judges in Bangkok. The questionnaires consisted of personal information, general stress and occupational stress. Results showed that there was low level of general stress and occupational stress in the sample. Personal factors including sex, marital status and economic status did not affected occupational stress. Age and working age inversely related to occupational stress. However, case quantity assigned per month and case quantity finished per month did not relate to occupational stress.

Five areas of occupational stress directly related to general stress of the judges. The descending relationships were career success and progression, relationship with others in working, roles and duties, organizational structure and climate, and job itself, respectively.

Leangraksa, N. (1999: Abstract) studied stress in the directors of vocational private school in Bangkok. The instrument was the questionnaire created by the researcher. Results showed that the sample had low level of stress. Emotional stress was in moderate level and stress in physical, cognitive and intelligent, and interpersonal relationship areas were in low level. In addition, it was found that female had more stress than male. The subjects who were less than 40 years old had more stress than the subjects who were more than 40 years old. The subjects in small schools had more stress than the subjects in big schools. When compared stress symptoms and all of the variables, there was no statistically significant difference.

Prasongjanya, P. (1999:Abstract) studied stress levels, the comparison of stress levels and occupational stress factors in service managers on the flight and heads of air hostess/steward of Thai Airways International. The instrument was the questionnaire created by the researcher. Results showed that the subjects had low level of occupational stress. Stress factors included job characteristics, relationships with supervisors/co-workers, income and compensation for working. The subjects with different educational degree had different occupational stress with the statistical significance. The other variables including different sex, age, marital status, position,

working duration and flight route did not cause different occupational stress significantly. In addition, educational degree, income and relationships with co-workers could predict the variance of stress with 8.11% with the statistical significance.

Chaopolong, P. (2000:Abstract) studied stress-related variables and methods of occupational stress coping in traffic police officers. The 360 warrant officers in the Traffic Police Division were measured using the questionnaire about occupational stress variables. Results showed that occupational stress of the sample was in moderate level except the subjects who had income less than 5,000 baht and the subjects who had B type personality that showed high level of occupational stress.

The variables including age, marital status, experience in traffic working and residence related to occupational stress with the statistical significance. Age, married and single status, residence (rental house) positively related to occupational stress without the statistical significance. In addition, divorced and separated status, income (5,001-15,000), governmental residence, own house, relatives' house and experience in traffic working negatively related to occupational stress without the statistical significance.

Santimitr, R. (2000:Abstract) studied occupational stress of the psychologists in the Sanitary Bureau, Bangkok. The 32 subjects consisted of 13 psychologists who worked in the area of mental health and AIDS, and the others worked in the area of prevention and drug dependence treatment and addicted drug. The differences of stress level classified by age group, working duration and job characteristics were compared using the questionnaire created by the researcher. Results showed that the sample had moderate level of occupational stress. Age, working duration, job characteristics, marital status, educational degree, and studied field of the psychologists did not relate to stress level.

Research on Stress and Anxiety in Athletes

Thompson (1989: Abstract) studied the role psychological factors in the risk of injury among high school football players. Psychological measures were obtained and subsequent injury reports were collected for one season on two hundred and forty high school football players from the Columbus, Georgia area. The results

demonstrated that stress, anger, and attention as well as position played, each made independent contributions to determining the risk of injury with attentional measures contributing most strongly.

Petrie (1991: Abstract) investigated the effects of life stress and social support on injury frequency and academic performance in 98 NCAA Division 1 football players and sought to determine the relative validity of two life stress measures, Life Events Survey for Collegiate Athletes (LESCA) and Social and Athletic Readjustment Rating Scale (SARRS). The findings of this study indicate that (a) starting players who experienced higher levels of life stress were more likely to suffer a severe injury, miss day of practice, miss games due to injury, and less likely to be successful academically, (b) life stress and social support were predictive of the number of games missed, the total number of day absent, and the number of severe injuries, accounting for 19 to 23% of the injury variance, (c) social support moderated the stress-injury relationship such that athletes in the low support condition were most at-risk to injury, and (d) the LESCA was a more valid measure of life stress for collegiate football players.

Man, Stuchlikova and Kindmann (1995:Abstract) studied trait - state anxiety, worry, emotionality, and self-confidence in top-level soccer players. Measurement of A-trait (low vs. high) as a between – subjects factor, measurement of stress level (low vs. high) as a within-subjects factor, and measurements of state anxiety, cognitive anxiety, somatic anxiety, self-confidence, and cognitive interference as dependent variables were made on 45 top-level soccer players. Statistical analysis revealed a significant person-situation interaction only in self-confidence. A subsequent multiple regression analysis showed that task irrelevant cognitions are correlated only with cognitive anxiety and not with either self-confidence or somatic anxiety.

Hassmen and Blomstrand (1995:Abstract) studied mood state relationships and soccer team performance. Morgan's well-known iceberg profile, characterized by Profile of Mood States (POMS) score above the population norm on vigor and below the norm on tension, depression, anger, fatigue, and confusion, is said to indicate a successful athlete. Nine female soccer players from the same team participated in the study. The players completed the POMS before, immediately after, and 2 hours after

each game during a season. The outcome of the games greatly affected the players' mood state. Tension, depression, anger, and confusion score were lower ($p < .01$), and vigor was higher ($p < .01$) when the team won.

Maynard, Hemmings and Warwick-Evans (1995:Abstract) studied the effects of a somatic intervention strategy on competitive state anxiety and performance in semiprofessional soccer players. Subjects ($N=17$) completed a modified version of the Competitive State Anxiety Inventory 2 (CSAI-2), which assessed both intensity and direction (debilitative-facilitative) of state anxiety within one hour of a soccer league match. During the match, player performances were evaluated using intraindividual criteria. Subjects were then allocated to control ($N=8$) and experimental ($N=9$) groups on the basis of their somatic anxiety intensity and direction scores. Following an 8-week intervention, subjects were again assessed during a second soccer match. A series of two-way analyses of variance with one repeated measure revealed significant interaction for cognitive anxiety intensity, somatic anxiety intensity, and somatic anxiety direction.

Stewart and Ellery (1998:Abstract) studied sources and magnitude of perceived psychological stress in high school volleyball officials. Research had indicated that sporting officials experience perceived psychological stress from a variety of sources. The reported magnitude of that stress had been mixed depending on the sport. The present study examined the sources and magnitude of perceived psychological stress among 353 American high school volleyball officials in a midwestern state. Principal component analysis with varimax rotation identified four factors: fear of failure, time pressure, interpersonal conflict, and fear of physical harm. 57% of the officials reported "none" or "very little" stress associated with volleyball officiating.

Pensgaard and Ursin (1998:Abstract) studied stress, control, and coping in elite athletes. The main object of this study was to explore different dimensions of the stress experience and the following coping efforts among elite athletes. Sixty-nine Norwegian Winter Olympic athletes, competing in the Lille-hammer Games in 1994 participated in the study. The stress was mainly experienced during the time period prior to the competition. External distractions and expectations were the most frequently reported stress experiences. The coach was viewed as a major source of

stress by some athletes, with a subsequent lack of control and low satisfaction with performance. Type of stress more than the time of the experience seemed to have a detrimental effect on performance. Problem-focused coping strategies were employed at all times, while cognitive defense strategies were employed more days before and after the competition.

Rainey and Hardy (1999:Abstract) studied sources of stress, burnout and intention to terminate among rugby union referees. Questionnaires were returned by 682 of 1175 referees (58%) from Wales, Scotland and England. Exploratory and confirmatory factor analyses revealed four correlated sources of stress factors (performance concerns, time pressure, interpersonal conflict and fear of physical harm), which accounted for 49.6% of the variance. Referees believed the first three factors to be mildly related to their stress. They believed fear of physical harm to be unrelated to their stress. A structural model hypothesizing that time pressure and interpersonal conflict predict burnout, and that age and burnout predict intention to terminate refereeing, fit the observed data. The goodness-of-fit index for this model was 0.96. The results and those of other studies indicated that interpersonal conflict and time pressure were common sources of stress for sport officials and were frequently related to their burnout experiences. Also, age and burnout were frequently, although only marginally, related to intention to terminate.

Ford, Eklund, and Gordon (2000:Abstract) examined psychosocial variables moderating the relationship between life stress and injury time-loss among athletes of a high standard. Based on Williams and Andersen's model of stress and athletic injury, six psychosocial variables were assessed as possible moderators of the relationship between life stress and injury among 121 athletes (65 males, 56 females) competing in a variety of sports at state, national or international level. No significant effects of the sex of the participants were evident. Correlational analyses revealed moderator effects of several variables. Specifically, dispositional optimism and hardiness were related to decreased injury time-loss in athletes when positive life change increased, and global self-esteem was associated with decreased injury time-loss when both negative life change and total life change increased. The results indicated that athletes with more optimism, hardiness or global self-esteem may cope more effectively with life change stress, resulting in reduced injury vulnerability and recovery rates.

Holt and Hogg (2002:Abstract) studied perceptions of stress and coping during preparations for the 1999 women's soccer world cup finals. Semi-Structured Interview with 7 female football players during preparations for 3 weeks before the competition involved in causes of stress and coping. The results indicated that 4 main sources of stress were coaches' interaction styles, demands of International Soccer, competitive anxiety, and distractions. The coping responses employed by the sample were reappraisal such as positive self-talk, problem solving, use of social resources such as family support, encouragement from co-players, performance behaviors such as communication in competitive field, good start, and blocking such as ignorance to coaches and other disturbances.

Noblett and Gifford (2002:Abstract) studied stress comes from the total sporting experience, not just competitions. In-depth interviews were conducted with professional Australian football (N=32) from two clubs. Sources of stress beyond those associated with competition (e.g., poor performances) were revealed. Major stresses were a lack of feedback, difficulty balancing football and study commitments, and job insecurity. More specific stresses included performance related pressures, injury, relationship with coaches and teammates, communication system in the sporting experience, and the interface between football and non football commitments. This indicates the necessity to consider the total sporting experience spanning general and situation-specific situation, rather than only competitions, when discerning causes of stress and developing stress-coping strategies.

Sukdee, T. (1990: Abstract) studied the anxiety of athletes in individual, group and self-defense types. The 758 subjects consisting of 158 male individual athletes, 422 team athletes, and 178 self-defense athletes were assessed anxiety using Spielberger's State-Trait Anxiety Inventory and the Competitive State Anxiety Inventory developed by Martens. Results showed that there was a difference of general anxiety between individual and team athletes before the competition with the .05 significance level. There was no difference of anxiety about general state among individual, group and self-defense athletes before the competition. In addition, there was no difference of competitive anxiety in sport among individual, group and self-defense athletes before the competition and the final round.

Tipmonthon, P. (1995: 46) studied the stress of Thai athletes in the 18th Sea Games, Thailand using the GHQ (General Health Questionnaire). The sample was Thai athletes in different types of sports who received medical service at Sport Clinic, Nakhon Ping Hospital, Chiang Mai. Results showed that 35.7% of athletes had stress and 64.3% had no stress. Coaches and general people had stress with 26.7% and 8.8%, respectively. There was a difference of stress among 3 groups with the statistical significance. In addition, the difference of mean score of thought tested by using the least significant difference showed that athletes and coaches had more stress than general people with the statistical significance.

Veerapong, A. (1998: Abstract) studied stress level and coping and the comparison of stress level classified by sports types in youth athletes of Chiang Mai. The instrument was the questionnaire about athletes' stress and personal information created by the researcher. Results showed moderate level of stress in general population. The athletes who had high stress were Thai boxers and who had low stress were sepaktakraw players.

Pattaminthorn, I. et al. (1999: 47-53) examined stress conditions, causes of stress, stress coping, and social support of Thai national athletes in the 13th Asian Games. The sample was 120 subjects in the first data collection using the instrument developed by the researcher including the Self Assessment Stress Test of Mental Health Department. For the second period of data collection, 67 subjects were assessed after the competition. Results showed that the most subjects (65%) had normal stress in pre-season practice period. In addition, there was a relationship of stress in athletes with different sex and sports associations and the most causes of stress included the coaches or team directors, the opponents, and the practice.

1. Causes of Stress in Professional Football Players

The reviewed literature and research on stress related to occupational stress factors, stress factors in athletes, and stress factors from Cooper's Occupational Stress Indicator adapted by Jiraporn Udomkij (1996) and stress questionnaire in athletes, which was developed from Scanlan's concept of stress in athletes, created by Anusorn Veerapong. It could be concluded as the following stress factors in professional football players.

1.1 The condition of training and competition

- 1.2 The roles and the duties of professional football players
- 1.3 The accomplishment and the occasions of career progression
- 1.4 The significant others and interpersonal relationships
- 1.5 The club structure and climate
- 1.6 Physical and psychological readiness
- 1.7 The expectations and situations/the competitive pressures
- 1.8 Low self-esteem

2. Variables Related to Stress in Professional Athletes

2.1 Age: Age related to the past experience that could affect the response of existing stress (Galand & Bush, 1982). Maslash (1986) suggested that the younger person would experience higher stress than the older person because the increasing ages collected working experience, maturity, prudence, and better adjustment corresponding with the real situation. It was consistent with Ben-Bakr et al. (1995) study of occupational stress in different organizations in Saudi Arabia. It was found that employees who were less than 30 years old experienced the highest levels of stress. In addition, Leangraksa, N. (1999) study of stress in the directors of vocational private school in Bangkok showed that subjects who were less than 40 years old experienced higher stress than subjects who were 40 years old and above. It was consistent with Suchart, T. (1987) study of stress-related factors of social workers and Tanchaisawat, S. (1992) study of the relationship between factors and stress of professional nurses. Siriprapawan, N. (1999) studied occupational stress factors of judges in Bangkok. Results showed that age was negatively related to stress. However, Wright (1977) found that the age group with the highest risk was the age range of 35-50 because the physical status began to deteriorate but there were challenges of status and career that needed to reach the goal. In addition, Burirat, P. (1992) found that mid-life adults were likely to experience stress more than other ages because of not receiving expected things, lack of money, low honor, unluckiness, etc. However, many studies, which included Prateepchai, N. (1997) study of the variables of work-related stress in educational supervisors, Santimitr, R. (2000) study of occupational stress of psychologists in Bangkok, and Prasongjanya, P. (1999) study of stress in service managers on the flight and heads of air hostess/steward of Thai Airways International,

showed that age was not related to stress level and there was no difference between age groups.

2.2 Type of organization (club): Udomkij, J. (1996) study of stress factors in working of computer personnel in Bangkok showed that organizational variable dividing into governmental and private organizations caused different stress at the .05 significance level.

2.3 Educational level: Good educational level would help a person better realize the factors relating to existing problems because of using the past learning and behaviors used in stress adaptation in the present (Jalowise & Power, 1981: 10). It was consistent with Ben-Bakr, Al-Shammari and Jefri (1995) study that showed a significant inverse relationship between educational level and stress level. However, Udomkij, J. found that computer personnel with different educational levels had not different occupational stress. It was consistent with many studies, which included Wongsureerat, M. (1998) study of stress of air hostess/steward of Thai Airways International, and Santimitr, R. (2000) study of occupational stress of psychologists in Bangkok, showing no difference and relationship between stress and educational level. In addition, Chintong, T. (1999) study of occupational stress of chief employees of BankThai Public Company Limited. was found that different educational level did not show different stress level.

2.4 Marital status: Although the marriage for being husband and wife was common but it was another important stress-related variable. Because it was a change of life from a single to a couple with more responsibility, independence, and maturity (Bunsong, S. 1980: 200). From the study of occupational stress factors of the metropolitan police, Petchkul, C. (1996) found that a police who was single had more stress than a police who was married. It was consistent with Udomkij, J. (1996)'s study that found a significant difference of stress between the singles and the couples in computer personnel. In addition, Chaopolong, P. found that marital status of traffic police officers related to occupational stress with the .01 significance level. Atenta, S. (1999) studied stress perception of the employees of Siam Commercial Bank – Main Office. It was found that different marital status showed different occupational stress and general stress with statistical significance. However, it contrasted with many studies such as Wongsureerat, M. (1998) study of stress of air hostess/steward of Thai

Airways International, Prasongjanya, P. (1999) study of stress in service managers on the flight and heads of air hostess/steward of Thai Airways International, Siriprapawan, N. (1999) study of occupational stress factors of judges in Bangkok, and Chintong, T. (1999) study of occupational stress of chief employees of BankThai Public Company Limited. These 4 studies were found that different marital status did not show different stress level.

2.5 Economic status: Because it was an important factor for living, a person with good economic status could cope with stress better than a person with poor status. Suwantao, P. (1988: 75) suggested that stress often came from work, finance, family, and social environment. For financial area, it involved in insufficient earning, being unable to manage income/expenses, and more responsibility. It was consistent with Kanthamala, S. (1993: 68) who suggested that Thai society that was proceeding to a new industrial country affected more necessary expenses for living, struggle for survival, selfishness, and competition as Farmer et al. (1984: 44) said that economic problems caused stress. It was consistent with Dubrin (1990: 177) who said that if a person could not have money for basic factor of life, it would cause stress and anxiety. Chatpiyanont, C. (1995) found that economic state related to stress of school teachers with the .01 significance level. In addition, Chaopolong, P. found that income (lower than 5,000) and personality had linear relationship with occupational stress with the .01 significance level and could predict 5% occupational stress. However, Meehsan, N. (1999) found that the income of employees in customer service line of a private company in Bangkok related to occupational stress without statistical significance. In addition, Wongsureerat, M. (1998) study of stress factors of air hostess/steward of Thai Airways International showed that employees with different income had different stress with the .05 significance level. Prasongjanya, P. (1999) study of stress in service managers on the flight and heads of air hostess/steward of Thai Airways International showed that educational degree, income, and relationship with co-workers could predict 8.11% variance of stress with the .05 significance level. The mentioned studies contrasted with Siriprapawan, N. (1999) study of occupational stress factors of judges in Bangkok. It showed that economic status did not affect occupational stress. For Chintong, T. (1999) study of occupational stress of chief

employees of BankThai Public Company Limited, it was found that different family tasks did not cause different occupational stress.

2.6 Playing position: In football competition, the duties of players were divided as different positions. In each position, the player had to have specific ability that was appropriate to that position. The Federation International de Football Association (FIFA) divided duties in playing football into 4 positions.

1. Goalkeepers are responsible for preventing shots from getting into the net by using every part of the body. The players have to be high, agile, have good ankle spring, and be able to jump high.

2. Fullbacks/Defenders are responsible for preventing the opponents from advancing the ball towards the net. The players have to be huge because they are assigned to mark the different forwards from the other team but they have to be swift, fast, smart, and be able to use heads well.

3. Midfielders are responsible for attacking and defending game support. They link together the offensive and defensive functions of a team. The players have to be strong, have big lung and high agility. They are not necessary to be big or high because it will cause slow movement.

4. Forwards are responsible for shooting the ball into the opponent's net for a goal. The players have to be big and high for attacking the defenders, have high speed, be able to shoot every moment, be skillful to use both feet, and be able to use heads well.

Physical competencies and skills appropriate to competitive position are needed for the football players because a football match will be settled on 90 minutes play. An attack can always happen during the competition and may lead to the injury that the players may not be able to continue the game. The injury may be so severe that the players have to stop the competition for long-term period or terminate the future in playing football. It affects the players' daily living and causes stress to the players who experience the mentioned situations according to the severity. Suhongsa, C. (1995) studied the injury of student football players who were not more than 14 years old of the Physical Education Department in 1993. The different occurrence of injury in different positions was as follows: 11% for the goalkeepers, 45.4% for the defenders, 21.1% for the midfielders, and 22.2% for the forwards. This study showed

that different playing positions should affect stress because several injuries could cause stress that was the physiological result. However, Erskine and Parkinson (2001) studied the relationship between playing positions (goalkeepers, defenders, midfielders, and forwards), the importance of the competition, and the interpretation of anxiety response before the competition which extended the study of Sewell and Edmonson (1996) in football and hockey players. Results showed that the goalkeepers had more intensity of cognitive anxiety before the competition significantly than the players in other positions and had more physical anxiety and less self-confidence than the defenders.

The anxiety of 44 male and 44 female football and hockey players was examined using the questionnaire developed from the Competitive State Anxiety Inventory 2 in 30 minutes before the competition. The result of this study contrasted with Sewell and Edmonson's study. The analysis of multiple variables of the data intensity showed that there was no significant effect to playing position, cognitive anxiety ($F_{3,88} = 0.75$, $P = 0.527$) or physical anxiety ($F_{3,88} = 0.58$, $P = 0.633$). This study was repeated by adding the importance of the competition as a covariate factor. In addition, the analysis of multiple variables of the carried out variables to direction anxiety data showed that the goalkeepers interpreted their intensity of cognitive anxiety ($F_{3,88} = 2.8$, $P = 0.045$) in negative manner more than the forwards. The goalkeepers also interpreted the intensity of physical anxiety ($F_{3,88} = 2.7$, $P = 0.049$) with less significance value (2.0 ± 5.9) than the forwards (10.0 ± 6.2).

From the above studies, the different playing positions of the football players were likely to cause different stress levels.

2.7 Experience of being a professional football player:
Wonganutararoad, P. (1992: 67) found that a pressure from experience affected perception and belief and could be used as a criteria for determining many situations. A person with working experience would have skills and be attached to occupation and organization. It was consistent with Bowman (1986) concept that working duration related to job satisfaction, frustration, and job stress.

Siriprapawan, N. (1999) found that governmental age of the judges in Bangkok had inverse relationship with job stress. It was consistent with Chaopolong,

P. (2000) who found that working experience of traffic related to job stress with the .01 significance level. In addition, Jaratsuriyawong, A. (1996) study of personal factors affecting stress level of personnel in governmental unit, state enterprise, and private section showed that persons with different working age or working experience would have different stress levels. Because persons with different working experience had different levels of organizational adaptation, the pressure affecting stress level was different. In contrast, many studies, which included Prasongjanya, P. (1999) study of stress in service managers on the flight and heads of air hostess/steward of Thai Airways International, Prateepchai, N. (1997) study of the variables of work-related stress in educational supervisors, and Udomkij, J. (1996) study of stress factors in working of computer personnel in Bangkok, found that persons with different working experience had not different job stress level and working experience did not relate to stress level.

Conceptual Framework of the Study

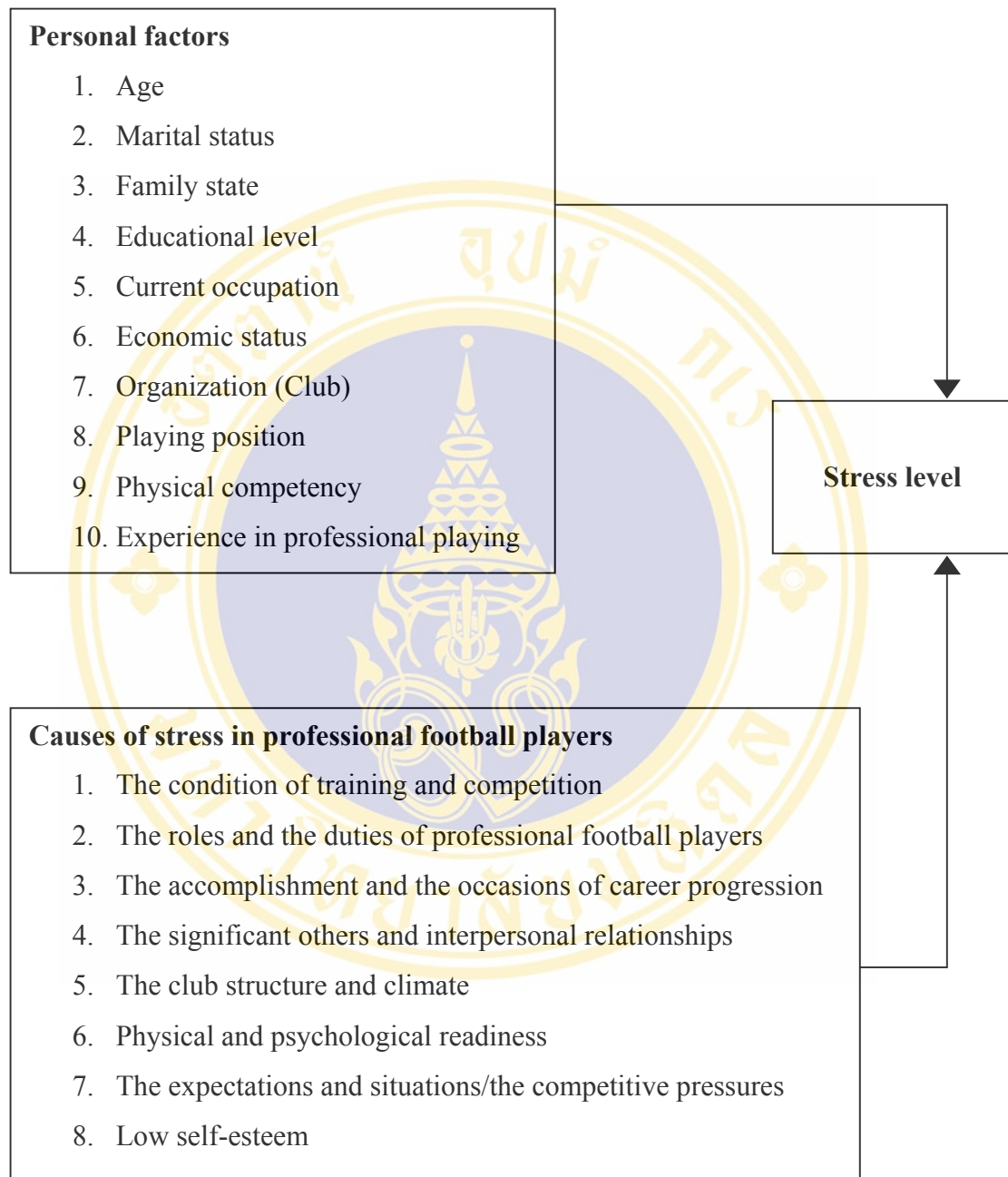


Figure 1: Conceptual framework of the study

CHAPTER III

METHODOLOGY

This research is survey research studying stress levels and causes of stress of professional football players.

Population

The specifically selected population of this study was the registered football players of the football clubs belonging to the Football Association of Thailand. All 10 selected football clubs were eligible for the competition of “Thailand Football League 2002”. The 250 subjects consisted of 25 players in the following teams;

The governmental and state enterprise organization

1. Port Authority of Thailand Football Club	25
2. Telephone Organization of Thailand Football Club	25
3. Thailand Tobacco Monopoly Football Club	25
4. Royal Thai Air Force Football Club	25
5. Krung Thai Bank Football Club	25

The private organization

6. Sinthana Football Club	25
7. Bangkok Christian college Football Club	25
8. Osotsapa Football Club	25
9. BEC Tero-Sassana Football Club	25
10. Bangkok Bank Football Club	25

Total	250 (100%)
-------	------------

Instruments

The instruments of this study were questionnaires dividing into 3 parts;

1. The questionnaire about personal information of subjects included age, registered team (types of organization), education, economic status, current occupation, marital status, family status, playing position, physical efficiency, and playing experience.

The example of the questionnaire about personal information

Direction Please check X in the ☐ in front of the sentence or complete the sentence

1. Age.....
2. Education level
 - ☐ Lower than Bachelor degree
 - ☐ Bachelor degree
 - ☐ Higher than Bachelor degree
3. Marital status
 - ☐ Single
 - ☐ Married
 - ☐ Others

2. Thai Stress Test developed by Assoc.Prof. Sucheera Phattharayuttawat et al., Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University was created for measuring stress of Thai people. It consisted of 24 items dividing into 2 factors including negative scales (item 1-12) and positive scales (item 13-24). The alpha coefficient validity of the entire questionnaire was 0.84 with the validity of positive and negative scales of 0.83 and 0.86 respectively. Split-Half validity of the entire questionnaire was 0.88 with validity of positive and negative scales of 0.82 and 0.94 respectively. Discriminating power between normal people and people with psychiatric problems was at the .001 significance level. Its feature was closed-end questionnaire with 3 levels of answer.

Never	=	score 0
Sometimes	=	score 1
Frequently	=	score 3

Each scale score could be from 0 to 36. Total score of positive and negative scales were classified according to grouping table for finding scoring group dividing into 4 levels of stress.

Level 1	Excellent mental health
Level 2	Normal mental health
Level 3	Mild stress
Level 4	Stressful

Example of questions in stress test

Direction The following questions are about feelings you may have in your everyday life that is different in each person. Please choose the answer that match your current feelings by mark X in a selected block.

Item	Frequently	Sometimes	Never
1. You feel lonely			
2. You feel unhappy			
▼			
24. You feel that your mind is normal			

Assoc.Prof. Sucheera Phattharayuttawat et al., Department of Psychiatry, Faculty of Medicine Siriraj Hospital

3. The questionnaire about causes of stress in professional football players the researcher adapted from Occupational Stress Indicator was created by Cooper et al. It was used by many researchers in Thailand. The questionnaire about stress in athletes created by Anusorn Veerapong (1998), based on Scanlan, T.K. conceptual framework

of stress, was used in this study with the review of related literature into causes of stress in different occupations and in athletes, and roles and duties of professional football players. The questions were designed to cover and direct the purposes of this study.

Validity and Reliability

1. Content validity was conducted by examining the completeness and accuracy of content by major advisor and 2 co-advisors for adapting questions. The adapted questionnaire then was examined face validity and content validity by 3 experts in clinical psychology, sports psychology and football training. The questions were corrected in wording and language for accuracy and clearness by 2 of 3 experts accepted and agreed from assessing IC value (Sucheera, P., 2002:84) of each item that was not below 0.66

2. The adapted questionnaire was tried out for 35 professional football players of Division 1 level. The scoring was done according to the determined criteria. The reliability was examined by using Cronbach's Alpha Coefficients that was 0.92.

The entire questionnaire consisted of 42 items with answer levels of causes of stress. Each area consisted of following numbers of item;

The condition of training and competition	= 5 items
Roles and duties	= 5 items
The accomplishment and career progression	= 5 items
Other people and relationships	= 5 items
The club structure and climate	= 5 items
Physical and psychological readiness	= 7 items
The expectation, situation and pressure of the competition	= 5 items
Low self-esteem	= 5 items

Criteria of Scoring and Interpretation

The questionnaire was characterized by rating scale dividing into 5 levels of interval scale.

5 = Extremely high level of stress

4 = High level of stress

3 = Moderate level of stress

2 = Low level of stress

1 = Extremely low level of stress

The interpretation was based on the 8 variables criteria dividing into 5 levels by depending on Best's group scoring criteria (Best, 1977: 174). The minimum score subtracted from the maximum score and then divided with group numbers or needed levels of assessment.

The maximum score – The minimum score / Number of score intervals

The maximum score is the highest score level x Number of items

The minimum score is the lowest score level x Number of items

For factor 1-5 and 7-8, the criteria of levels of stress factors in professional football players could be divided into 5 following levels;

1. The extremely high level of stress consisted of scores from 21.1 to 25
2. The high level of stress consisted of scores from 17.1 to 21
3. The moderate level of stress consisted of scores from 13.1 to 17
4. The low level of stress consisted of scores from 9.1 to 13
5. The extremely low level of stress consisted of scores from 5 to 9

For factor 6, the criteria of levels of stress factors in professional football players could be divided into 5 following levels;

1. The extremely high level of stress consisted of scores from 29.5 to 35
2. The high level of stress consisted of scores from 23.9 to 29.4
3. The moderate level of stress consisted of scores from 18.3 to 23.8
4. The low level of stress consisted of scores from 12.7 to 18.2
5. The extremely low level of stress consisted of scores from 7 to 12.6

For item analysis in each factor, the criteria of levels of stress factors in professional football players could be divided into 5 following levels;

1. The extremely high level of stress consisted of scores from 4.6 to 5
2. The high level of stress consisted of scores from 3.6 to 4.5
3. The moderate level of stress consisted of scores from 2.6 to 3.5
4. The low level of stress consisted of scores from 1.6 to 2.5
5. The extremely low level of stress consisted of scores from 1 to 1.5

Example of causes of stress questionnaire in professional football players

Direction Please check X in the block that is true or most concordant with your feelings

5 = Extremely high level of stress
 4 = High level of stress
 3 = Moderate level of stress
 2 = Low level of stress
 1 = Extremely low level of stress

Stressful situations	Level of stress				
	Extremely high	High	Moderate	Low	Extremely low
1. Training and competition					
1.1 Competition holding pattern, over training and competition period					
1.2					
2. Roles and duties					
2.1 Other tasks and education obstructive to competition and training					
↓					
8. Low self-esteem					
8.1 Lack of attempt to resolve problems					

Data Collection

1. The researcher contacted with the Football Association of Thailand and team manager of each club for asking the permission to collect data.
2. The researcher appointed the coach to find out the players' leisure and information then asked players to complete self-questionnaires. The researcher collected data in the initial season of the matches for preventing the intervening variables on match results and score order.
3. The questionnaires were returned and examined for their completeness and accuracy after immediately completed by the subjects.

Data Analysis

Data analysis was divided into 2 following parts;

1. Descriptive statistics

- 1.1 Study the frequency distribution (number and percentage) of demographic data of football players.
- 1.2 Study the frequency distribution (number and percentage) of stress levels classified by demographic data of football players.
- 1.3 Study the frequency distribution (number and percentage) of stressor levels in each area of football players.

2. Inferential statistics

- 2.1 Test the proportion of football players having difference stress levels classified by demographic data using chi-square (χ^2 - test).
- 2.2 Test the correlation of stressor levels and stress levels of football players using chi-square (χ^2 - test).

CHAPTER IV

RESULTS

This research presented the results of data analysis dividing into 3 following parts.

Part 1

Table 1 The frequency distribution of demographic data of professional football players (N = 203).

<i>Demographic data</i>	<i>Number</i>	<i>Percentage</i>
Age		
Less than 21 years	35	17.2
21-39 years	165	81.2
More than 40 years	3	1.5
Types of organization (Club)		
Private	121	59.6
Government/State enterprise	82	40.4
Marital status		
Single	170	83.7
Married	29	14.3
Widow/Divorced/Separated/Others	4	2.0
Education		
Below Bachelor degree	129	63.5
Bachelor degree	66	32.5
Above Bachelor degree	8	3.9
Occupation		
Students	101	49.8
Other occupations	89	43.8
Only football players	13	6.4

Table 1 (Continued) The frequency distribution of demographic data of professional football players (N = 203).

<i>Demographic data</i>	<i>Number</i>	<i>Percentage</i>
Family status		
Living with family	94	46.3
Not living with family	103	53.7
Economic status		
Having spare money	32	15.8
Having income enough for the expense	146	71.9
Being in debt	25	12.3
Physical competency		
Pass the criteria of physical examination	186	91.6
Not pass the criteria of physical examination	17	8.4
Playing position		
Goalkeepers	25	12.3
Defenders	76	37.4
Midfielders	55	27.1
Forwards	47	23.2
Experience in professional football playing		
1 year	43	21.2
2 years	29	14.3
3 years	17	8.4
4 years	20	9.9
5 years	24	11.8
6 years	21	10.3
7 years	49	24.1

From Table 1, the most of football players were aged between 21-49 years (81.2%). The players with less than 21 years were 17.2% and more than 40 years were only 1.5%. The minimum age was 14 years and the maximum age was 47 years ($\bar{X}$ = 25.1; S.D. = 4.93). The most players played in private clubs (59.6%) and the other

players played in government or state enterprise clubs (40.4%). The most players were single (83.7%), graduated in Below Bachelor degree (63.5%), and were students (49.8%). There was (43.8%) of all players had other occupations and only (6.4%) was only football players. For family status, (46.3%) lived with families and (53.7%) did not live with families. The most players had income enough for the expense (71.9%), past the criteria of physical examination (91.6%) and only (8.4%) did not past the criteria of physical examination. For playing position, the most players were defenders (37.4%), the others were midfielders, forwards and goalkeepers (27.1%, 23.2% and 12.3 respectively).

In addition, the most players had 7 years experience in professional football playing (24.1%) and the next was 1 year experience (21.2%).

Part 2

Table 2 The differences of stress condition among professional football players classified by demographic data.

<i>Demographic data</i>	<i>Stress condition</i>	<i>Stress n(%)</i>	<i>Normal n(%)</i>	χ^2	<i>P-value</i>
Age				2.636	0.268(ns)
Less than 21 years		18(8.9)	17(8.4)		
21-49 years		91(44.8)	74(36.5)		
More than 40 years		3(1.5)	0(0.0)		
Types of organization (Club)				2.273	0.132(ns)
Private		72(35.5)	49(24.1)		
Government/State enterprise		40(19.7)	42(20.7)		
Marital status				0.852	0.653(ns)
Single		92(45.3)	78(38.4)		
Married		17(8.4)	12(5.9)		
Widow/Divorced/Separated/Others		3(1.5)	1(0.5)		
Education				4.855	0.88(ns)
Below Bachelor degree		71(35.0)	57(28.7)		
Bachelor degree		33(16.3)	33(16.3)		
Above Bachelor degree		8(3.9)	1(0.5)		

Table 2 (Continued) The differences of stress condition among professional football players classified by demographic data.

<i>Demographic data</i>	<i>Stress condition</i>	<i>Stress n(%)</i>	<i>Normal n(%)</i>	χ^2	<i>P-value</i>
Occupation				4.445	0.108(ns)
Students		61(30.0)	40(19.7)		
Other occupations		47(23.2)	42(20.7)		
Only football players		4(2.0)	9(4.4)		
Family status				0.60	0.807(ns)
Living with family		51(25.1)	43(21.2)		
Not living with family		61(30.0)	48(23.6)		
Economic status				5.253	0.72(ns)
Having spare money		18(8.9)	14(6.9)		
Having income enough for the expense		75(36.9)	71(35)		
Being in debt		13(9.4)	6(3.0)		
Physical competency				0.682	0.409(ns)
Pass the criteria of physical examination		101(49.8)	85(41.9)		
Not pass the criteria of physical examination		11(5.4)	6(3.0)		
Playing position				4.703	0.195(ns)
Goalkeepers		16(7.9)	9(4.4)		
Defenders		46(22.7)	30(14.8)		
Midfielders		30(14.8)	25(12.3)		
Forwards		20(9.9)	27(13.3)		
Experience in professional football playing				6.970	0.324(ns)
1 year		20(9.9)	23(11.3)		
2 years		20(9.9)	9(4.4)		
3 years		7(3.4)	10(4.9)		
4 years		13(6.4)	7(3.4)		
5 years		11(5.4)	13(6.4)		
6 years		13(6.4)	8(3.9)		
7 years		28(13.8)	21(10.3)		

ns = not significant (p<0.05)

The proportion testing of stress condition and personal information in football players did not show statistically significant difference in all variables.

Part 3 The relationship between the levels of stress factors and stress condition in professional football players.

Table 3.1 The frequency distribution of the levels of stress factors in professional football players.

<i>Stress factors</i>	<i>Stress levels</i>				
	<i>Extremely low</i> n(%)	<i>Low</i> n(%)	<i>Moderate</i> n(%)	<i>High</i> n(%)	<i>Extremely high</i> n(%)
1. The condition of training and competition	8(3.9)	58(28.6)	94(46.3)	35(17.2)	8(3.9)
2. Roles and duties	17(8.4)	77(37.9)	78(38.4)	28(13.8)	3(1.5)
3. The accomplishment and career progression	22(10.8)	67(33.0)	84(41.4)	27(13.3)	3(1.5)
4. Other people and relationships	28(13.8)	86(42.4)	69(34.0)	17(8.4)	3(1.5)
5. The club structure and climate	29(14.3)	94(46.3)	58(28.6)	19(9.4)	3(1.5)
6. Physical and psychological readiness	23(11.3)	99(48.8)	62(30.5)	16(7.9)	3(1.5)
7. The expectation, situation and pressure of the competition	26(12.8)	91(44.8)	63(31.0)	23(11.3)	0(0.0)
8. Low self-esteem	44(21.7)	88(43.3)	56(27.6)	14(6.9)	1(0.5)

From Table 3.1, the most players had moderate stress in 3 factors: 1) The condition of training and competition, 2) Roles and duties, and 3) The accomplishment and career progression. The other 5 factors caused mild stress: 4) Other people and relationships, 5) The club structure and climate, 6) Physical and psychological readiness, 7) The expectation, situation and pressure of the competition, and 8) Low self-esteem.

The result of item analysis in each factor appeared as follows.

Table 3.1.1 The condition of training and competition

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
1.1	Too long duration of competition and practice	3.3054	.7993	Moderate
1.2	Lack of the security of health and life while practicing and competing	2.9458	.9760	Moderate
1.3	Insufficient and not standard equipments for practice and state of competitive field	2.7783	1.0413	Moderate
1.4	Lack of practice planning and systematic competition	2.7635	1.0546	Moderate
1.5	Insufficient income, allowance, welfare and special bonus	3.0985	1.0148	Moderate

From Table 3.1.1, the condition of training and competition caused moderate stress in all items.

Table 3.1.2 Roles and duties

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
2.1	Other responsibilities such as education that disturb being a professional football player	3.3498	1.1261	Moderate
2.2	The opposed and unclear responsibilities of club staff and football players	2.7389	.9880	Moderate
2.3	The unclear rules and regulations of the club	2.7586	.9043	Moderate
2.4	The opposition to orders of the trainers	2.4335	.9540	Low
2.5	The confusion in practice and competition without any advise	2.6946	.8874	Moderate

From Table 3.1.2, roles and duties caused moderate stress in almost all items except the opposition to orders of the trainers that caused mild stress.

Table 3.1.3 The accomplishment and career progression

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
3.1	Lack of support in training opportunities or international competition by the administrators	2.5862	.9730	Low
3.2	Lack of applying the update technique and training pattern by the trainers	2.6502	.9855	Moderate
3.3	The progression of the footballer profession not equivalent to other occupations	3.0788	.9666	Moderate
3.4	Lack of the opportunity to receive the examination and develop physical competence	2.8128	.9144	Moderate
3.5	Being underestimated the ability	2.9163	.9840	Moderate

From Table 3.1.3, the accomplishment and career progression caused moderate stress in almost all items except a lack of support in training opportunities or international competition by the administrators that caused mild stress.

Table 3.1.4 Other people and relationships

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
4.1	Being afraid of playing not good as the trainers, the spectators and the cheerers expected	3.1773	1.0379	Moderate
4.2	Being not confident of the team-mates' ability before competing	2.5714	.9003	Moderate
4.3	The muscle contraction occurred when seeing the action of trainers or spectators	2.7241	1.0063	Moderate
4.4	Having relationship problems with trainers, team-mates and staff of the club	2.2808	1.0317	Low
4.5	The team-mates and staff of the club are changed or transferred that needed the adaptation	2.4187	.9785	Low

From Table 3.1.4, other people and relationships caused moderate stress in almost all items except having relationship problems with trainers, team-mates and staff of the club, and the team-mates and staff of the club are changed or transferred that needed the adaptation that caused mild stress.

Table 3.1.5 The club structure and climate

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
5.1	The administrators lack attention and support for the team administration budget	2.6995	1.0499	Moderate
5.2	Discouragement and bad climate in the club, practice and competition	2.6305	.9629	Moderate
5.3	Inappropriate environment of practice and competition place such as light, temperature, air flow, cleanness and proportion, etc.	2.4680	.9401	Low
5.4	Unclear and inappropriate policy on the club administration of the administrators	2.6404	.9819	Moderate
5.5	Problems in communication and contact inside the club	2.5025	.9301	Low

From Table 3.1.5, the club structure and climate caused moderate stress in almost all items except inappropriate environment of practice and competition place such as light, temperature, air flow, cleanness and proportion, etc., and problems in communication and contact inside the club that caused mild stress.

Table 3.1.6 Physical and psychological readiness

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
6.1	Having health problems, incomplete physical status because of unfit practice	2.6700	1.0457	Moderate
6.2	Lack of confidence and muscle contraction occurred while practicing and competing	2.4483	.9856	Low
6.3	Lack of concentration in practicing and competing	2.4778	1.0163	Low
6.4	Lack of the encouragement from trainers, team-mates and oneself before and after the competition	2.7044	.9551	Moderate
6.5	Lack of confidence because of no observation of the competitive team's ability and planning before and after the competition	2.7044	.8907	Moderate
6.6	Having chronic pain from the past disturb the ability in practicing and competing	2.8571	1.0965	Moderate
6.7	Being worried about the examination of stimulants in competing	1.8227	.9000	Low

From Table 3.1.6, physical and psychological readiness caused moderate stress in 4 items except a lack of confidence and muscle contraction occurred while practicing and competing, a lack of concentration in practicing and competing, and being worried about the examination of stimulants in competing that caused mild stress.

Table 3.1.7 The expectation, situation and pressure of the competition

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
7.1	Being afraid of losing because of many causes such as unfit practice and competing against stronger opponents	2.6010	.9917	Moderate
7.2	Being worried about the game result whether lost or won	2.6995	.9192	Moderate
7.3	Being worried or afraid of the match organization and the referee's unfair judgment	2.8177	.9857	Moderate
7.4	Being worried or afraid of the team-mates who break the rules in the game	2.3892	.9551	Low
7.5	Setting a player's position inappropriate to skill and ability of that person	2.5961	.9922	Low

From Table 3.1.7, the expectation, situation and pressure of the competition caused moderate stress in almost all items except being worried or afraid of the team-mates who break the rules in the game, and setting a player's position inappropriate to skill and ability of that person that caused mild stress.

Table 3.1.8 Low self-esteem

	<i>Item</i>	$\bar{X}$	<i>S.D.</i>	<i>Stress level</i>
8.1	Feeling of a lack of an effort to solve existing problems	2.5665	.9116	Low
8.2	Being worried about something too much although it is a nonsense	2.5468	.9958	Low
8.3	Feeling of being an unimportant person and not dependable for the team-mates	2.3941	.9132	Low
8.4	Being frustrated from practicing and competing	2.4236	.9989	Low
8.5	Feeling of being not good and lack of the ability in being a professional football player	2.3153	.9276	Low

From Table 3.1.8, Low self-esteem caused mild stress in all items.

Table 3.2 Test the correlation of stressor levels and stress condition of football players

<i>Stress condition</i>	<i>Stress n(%)</i>	<i>Normal n(%)</i>	<i>Total n(%)</i>	χ^2	<i>P-value</i>
<i>Stressor levels</i>					
1. The condition of training and competition				2.040	.728(ns)
Extremely low	4(2.0)	4(2.0)	8(4.0)		
Low	32(15.8)	26(12.8)	58(28.6)		
Moderate	49(24.1)	45(22.2)	94(46.3)		
High	21(10.3)	14(6.9)	35(17.2)		
Extremely high	6(3.0)	2(1.0)	8(4.0)		
2. Roles and duties				7.987	.092(ns)
Extremely low	7(3.4)	10(4.9)	17(8.4)		
Low	46(22.7)	31(15.3)	77(37.9)		
Moderate	40(19.7)	38(18.7)	78(38.4)		
High	19(9.4)	9(4.4)	28(13.8)		
Extremely high	0(0.0)	3(1.5)	3(1.5)		
3. The accomplishment and career progression				1.133	.889(ns)
Extremely low	11(5.4)	11(5.4)	22(10.8)		
Low	38(18.7)	29(14.3)	67(33.0)		
Moderate	48(23.6)	36(17.7)	84(41.4)		
High	13(6.4)	14(6.9)	27(13.3)		
Extremely high	2(1.0)	1(0.5)	3(1.5)		
4. Other people and relationships				2.049	.727(ns)
Extremely low	13(6.4)	15(7.4)	28(13.8)		
Low	47(23.2)	39(19.2)	86(42.4)		
Moderate	41(20.2)	28(13.8)	69(34.0)		
High	10(4.9)	7(3.4)	17(8.4)		
Extremely high	1(0.5)	2(1.0)	3(1.5)		

ns = not significant

Table 3.2 (Continued) Test the correlation of stressor levels and stress condition of football players

<i>Stressor levels</i>	<i>Stress condition</i>	<i>Stress n(%)</i>	<i>Normal n(%)</i>	<i>Total n(%)</i>	χ^2	<i>P-value</i>
5. The club structure and climate					4.823	.306(ns)
	Extremely low	11(5.4)	18(8.9)	29(14.3)		
	Low	55(27.1)	39(19.2)	94(46.3)		
	Moderate	34(16.7)	24(11.8)	58(28.6)		
	High	11(5.4)	8(3.9)	19(9.4)		
	Extremely high	1(0.5)	2(1.0)	3(1.5)		
6. Physical and psychological readiness					7.363	.118(ns)
	Extremely low	7(3.4)	16(7.9)	23(11.3)		
	Low	55(27.1)	44(21.7)	99(48.8)		
	Moderate	39(19.2)	23(11.3)	62(30.5)		
	High	9(4.4)	7(3.4)	16(7.9)		
	Extremely high	2(1.0)	1(0.5)	3(1.5)		
7. The expectation, situation and pressure of the competition					8.779	0.032
	Extremely low	8(3.9)	18(8.9)	26(12.8)		
	Low	50(24.6)	41(20.2)	91(44.8)		
	Moderate	41(20.2)	22(10.8)	63(31.0)		
	High	13(6.4)	10(4.9)	23(11.3)		
	Extremely high	0(0.0)	0(0.0)	0(0.0)		
8. Low self-esteem					15.526	.004
	Extremely low	14(6.9)	30(14.8)	44(21.7)		
	Low	55(27.1)	33(16.3)	88(43.3)		
	Moderate	31(15.3)	25(12.3)	56(27.6)		
	High	11(5.4)	3(1.5)	14(6.9)		
	Extremely high	1(0.5)	0(0.0)	1(0.5)		

ns = not significant

* p<0.05

From Table 3.2, the correlation testing of stressor levels and stress condition showed that the stressors relating to stress condition with statistical significance ($p < 0.05$) consisted of 2 areas: The expectation, situation and pressure of the competition, and low self-esteem.



CHAPTER V

DISCUSSION AND RECOMMENDATIONS

This research is survey research on stress levels and causes of stress of professional football players.

The specifically selected population of this study was the registered football players of the football clubs belonging to the Football Association of Thailand. All 10 selected football clubs consisting of 203 players were eligible for the competition of “Thailand Football League 2002”.

Discussion

According to the objectives of this study, the discussion of stress in professional football players was presented as follows;

Part 1 Stress state of professional football players classified by demographic data

Part 2 Stress factors of professional football players and the correlation with general stress of professional football players

Stress state of professional football players

This study showed that the most football players experienced mild stress (53.7%). The others showed good mental health (41.4%), very good mental health (3.4%), and high stress (1.5%). It was consistent with the studies of Tipmonthon, P. (1995: 46) and Veerapong, A. (1998: Abstract) that showed moderate or normal stress in athletes. According to Pattaminthorn, I. et al. (1999: 47-53), mild or moderate stress was appropriate level that will produce better competition result or working. It was consistent with anxiety theory involving the importance of stress, anxiety, and sport competency. It was that too low or high stress of athletes will produce low sport competency but appropriate level of stress (Zone of Optimal Functioning) will produce higher sport competency (Kanjanaakit, S., 1999: 60-65). This result may be

caused by the management of professional football competition in Thailand including support system that football athletes can play professionally, the improvement of team management system and competition management system that decreased competitive duration, systematic competition rules involving incomes and welfares. Therefore, football players had confidence and decreased stress in the competition.

However, there were 3 football players that experienced high stress. They may have no problems or specific stress factors but have problems from other complicated factors that should receive support from mental health staff.

The proportion testing of stress state and personal information in football players divided into the players with stress state and the players with normal mental health. Personal variables included age, marital status, family status, types of organization, education, current occupation, economic status, playing position, physical efficiency, and professional playing experience. There was no statistically significant difference in all variables that may be caused by similar everyday life pattern and football career performance of the sample including practice responsibility, the competition in Thailand Football League. In addition, the most football players in Thailand had other responsibilities such as studying or working in other occupations and also lived in the same society and culture that caused similar living problems. As well as the previous study in the most population, stress level was not different although there was difference of personal variables.

1. There was no statistically significant difference of stress state among athletes in different ages. Because the most football athletes in this study were adult who aged between 21-39 years so they were healthy, emotionally mature and mentally stable for adapting in living and playing professional football. However, football players who aged more than 40 years tended to experience stress higher than other groups. This study was consistent with the studies in several occupations such as Pratippichai, N. (1997: Abstract) study of the variables of work-related stress in educational supervisors. In addition, the study of Santimitr, R. (2000: Abstract) on occupational stress of the psychologists in the Sanitary Bureau, Bangkok and the study of Prasongjanya, P. (1999) on stress levels, the comparison of stress levels and occupational stress factors in service managers on the flight and heads of air

hostess/steward of Thai Airways International showed that age did not relate to stress level and there was no different stress among age groups.

2. There was no statistically significant difference of stress state among football athletes in different registered organizations. It did not associate with occupational stressors identified by Cranwell-Ward (1987: 47-61) including organizational characteristics and working process such as delayed governmental system and working direction change. It may be caused by similar team process of governmental and state enterprise section and private section. The management administration of each club was independent and separated from registered company or organization. The main administrator was team manager who followed the policy of registered organization and received yearly budget by reaching the determined target. However, football players in private section tended to experience stress higher than football players in governmental or state enterprise section.

3. There was no statistically significant difference of stress state among football athletes in different marital status. Because the most football athletes in this study were adult who aged between 21-39 years so they were mature in coping problems. In addition, the most athletes were single (83.7%) without a lot of family responsibility. When there was a problem in football career performance, they can talk to team-mates, friends and school-mates, coaches, and team managers. These staff not only was responsible for practice but also concerned about athletes' psychological state. The result of this study was consistent with the studies in several occupations such as Wongsureerat, M. (1998:Abstract)'s study on stress factors of air hostess/steward of Thai Airways International, Prasongjanya, P. (1999: Abstract)'s study on stress of service managers on the flight and heads of air hostess/steward of Thai Airways International, Siriprapawan, N. (1999: Abstract)'s study on occupational stress of the judges in Bangkok, and Chintong, T. (1999)'s study on occupational stress of chief employees of BankThai Public Company Limited. These 4 studies did not show different stress level among different marital status groups.

4. There was no statistically significant difference of stress state among football athletes in different educational level. It may be caused by there was no need of high educational ability for professional footballers. Because education did not affect occupation performance as much as physical competency, skill and experience

in competition. In addition, the most players were studying in higher education that there was no much difference among players who graduated in Bachelor degree. This study was consistent with Wongsureerat, M. (1998: Abstract)'s study on stress factors of air hostess/steward of Thai Airways International and Santimitr, R. (2000: Abstract)'s study on occupational stress of the psychologists in the Sanitary Bureau, Bangkok that did not show the difference and the relationship between stress and educational level. As well as Chintong, T. (1999)'s study on occupational stress of chief employees of BankThai Public Company Limited, it was found that the different educational levels did not produce different stress state.

5. There was no statistically significant difference of stress state among football athletes in different other responsibilities or occupations. Being a professional footballer was not a burden for living but there were more opportunities in success because of additional welfare of competition. In addition, the educational institution or the work place will support for professional football competition such as class attendance, and support for practice time because it was a fame of that institution.

6. There was no statistically significant difference of stress state among football athletes in different family status. In contrast, Norbeck (1985: 225-230) found that social support from family and relatives will help an individual to cope with stress and prevent severe stress. Because the most football players in this study were single so not living with family did not affect loneliness and were in enjoyable age and attached friends. Therefore, social support from friends, coaches, and team-mates more affected stress. In addition, the communication technology in the present was more convenient that the fast contact can reduce loneliness.

7. There was no statistically significant difference of stress state among football athletes in different economic status. It may be caused by the most football players in this study were single and studying, not much responsible for family task, received income enough for the expenses or had a little or not urgent debt. From the interview with players and controllers, the least income of football athletes was ranged from 7,000 to 10,000 baht per month with other welfares and also income from other occupations and from parents for a student footballer. As mentioned, the income of professional footballers was quite much when compared with the income of the governmental officers in the level of initial Bachelor degree. However, the footballers

who were in debt tended to experience stress higher than the footballers who had spare money and had income enough for the expense. It was consistent with Siriprapawan, N. (1999: Abstract)'s study on occupational stress of the judges in Bangkok that economic status did not affect occupational stress. In addition, Chintong, T. (1999)'s study on occupational stress of chief employees of BankThai Public Company Limited showed that different family responsibility also did not produce different occupational stress.

8. There was no statistically significant difference of stress state among football athletes in different physical competency. However, the literature review showed that physical competency was a very important factor in football career performance. Low physical competency such as incompleteness, weakness, and chronic injuries much affected athletes' mind and emotion because injuries can cease athlete lives, incomes, fames and honors all the time. So it was a serious factor for athletes especially in the players who succeeded and received benefits from sport playing – the more benefits from being an athlete, the more affect of injuries. Injuries from sport playing affected thinking, feeling and emotion, produced stress and finally reduced sport playing performance (Wongjaturapat, N., 2001: 20). However, there was no difference of stress among footballers in this study because the subjects who did not pass the criteria of physical examination had a little injury, can practice and were ready for increasing physical competency and had an opportunity to play in the competition recently. For the subjects who did not pass the criteria of physical examination and had too much severe injury to practice, stopped practicing or competing in a long time, their information cannot be collected that was the limitation of this study so it may cause no difference of stress.

9. There was no statistically significant difference of stress state among football athletes in different playing positions. Because each team that participated in the competition can set the positions appropriate to the player's skill so there was no severe injury that was an important stressor for sport competition. Although some studies showed that there was a difference of anxiety in each position (Sewell & Edmonson, 1996) but it was an anxiety only in the competition period that did not identify stress as a psychiatric problem.

10. There was no statistically significant difference of stress state among football athletes in different experience in professional playing. Because the attempt to arrange the professional football competition started only for 7 years, management conditions and competition rules were adapted almost every year. In addition, skills and abilities in playing football that started from basic football training should affect stress state but it was not studied in this study. So there was no different stress among football players with different professional playing experience. It was consistent with the studies in other occupations including Prasongjanya, P. (1999: Abstract)'s study on stress of service managers on the flight and heads of air hostess/steward, Pratippichai, N. (1997: Abstract)'s study on the variables of work-related stress in educational supervisors, and Udomkij, J. (1996)'s study on stress factors in working of computer personnel in Bangkok. Results showed that different working experience did not cause different level of occupational stress and working experience did not relate to stress level.

Causes of stress in professional football players and the relationship with general stress of professional football players

This study showed that there were 3 factors of moderate stress and 5 factors of mild stress that can be described as follows;

1. The condition of training and competition: The most footballers experienced moderate stress in this study. Item analysis showed moderate stress for all items that too long duration of competition and practice was the item of the highest mean score. It was consistent with the study of professional football in Thailand by Rattanasree, S. (1997) that showed high level of problem for competitive duration because the current football competition in Thailand was not a professional competition as well as other countries. The most footballers still had responsibilities in regular occupations. When it was the time of competition and practice, the footballers may easily feel exhausted because the competition in other tournaments spent for 1-2 months but Thailand Football League competition spent 6 months. In general, each team will play in a match per week and also there was a practice in the evening everyday after finished a regular responsibility and on the weekend. Each practice and competition needed physical and psychological energy completely throughout the

season. So the footballers can experience stress from the duration of this competition and practice.

2. Roles and duties: The most footballers experienced moderate stress in this study. Item analysis showed moderate stress for all items except the opposition to orders of the trainers. Other responsibilities that disturb being a professional football player, which was the item of the highest mean score, showed that there were several occupational stressors such as colleagues, organizations, competitive works according to expectations and needs of success (Cranwell-Ward, 1987: 47-61). For more responsibilities of being a footballer, although there were more benefits and compensations, the stress on responsibilities increased consequently.

3. The accomplishment and career progression: The most footballers experienced moderate stress in this study. Item analysis showed moderate stress for all items except a lack of support in training opportunities or international competition by the administrators that showed mild stress. The progression of the footballer profession not equivalent to other occupations was the item of the highest mean score because career progression, no appropriate promotion or no acknowledge of career progression (Taylor, 1986: 171-172) was the occupational stressor. For professional football players in Thailand, the opportunity of progression was a transfer of playing in the team with better welfare and income. This opportunity depended on the competition with good result in the initial rank, having fame of being a national player, and being able to play for international club with higher compensation. For the opportunity in achieving these goals, there were a few football players who succeeded in the mentioned occasions. So it produced the feelings of occupational uncertainty and psychological insecurity.

4. Other people and relationships: The most footballers experienced mild stress in this study. Item analysis showed that there were 3 of 5 items produced moderate stress and 2 items produced mild stress. The afraid of playing not good as the expectation of others was the item of the highest mean score because the factor of other people including family, team-mates, trainers, and supporters was the important component to athletes' stress (Scanlan, 1984, cited by Narupan, N., 1994: 31). For the Thailand Football League competition, there were more interests and broadcasting so each match result much affected fame and compensation of players, trainers, and team

administrators. The more expectation in victory caused more anxiety because of the fear of disappointment.

5. The club structure and climate: The most footballers experienced mild stress in this study. Item analysis showed that there were 3 of 5 items produced moderate stress and 2 items produced mild stress. The administrators lacked attention and continuous support for the team administration budget was the item of the highest mean score. It was consistent with Sukonpanich, A. (2001: 43)'s study on the problems in the fifth Thailand Football League arrangement. The greatest problem was a lack of continuous support for the team administration budget. The progression of a team or club was partly caused by the ability in budget providing enough for several expenses. The most footballers felt insecure in being footballers of their club or organization because after the season ended, there was no other additional competition that produced incomes continuously as well as the season period. In the 6 months of the off-season, the footballers had to go back for regular work in order to earn income for living.

6. Physical and psychological readiness: The most footballers experienced mild stress in this study. Item analysis showed that there were 4 of 7 items produced moderate stress and 3 items produced mild stress. Having chronic pain from the past that disturbed the ability in practice and competition was the item of the highest mean score. The greatest obstruction of showing athletes' ability was the injury (Heil, 1993 cited by Narupan, 2001: 18) that can happen everyday and was difficult to control. There were many athletes who cannot play and had to quit playing definitely because of injuries from sport playing. It affected athletes' feelings such as degradation, discouragement, hopelessness, depression and introversion that caused stress consequently. It was consistent with Thomson and Nancy's study (1989: Abstract) showing that stress, anger, and attention can predict danger from injuries as well as the assessment of playing positions. It suggested that athletes should be trained in visual tracking ability and stress relaxation training for preventing injuries.

7. The expectation, situation and pressure of the competition: The most footballers experienced mild stress in this study. Item analysis showed that there were 3 of 5 items produced moderate stress and 2 items produced mild stress. The worry or afraid of the match organization and the referee's unfair judgment was the item of the

highest mean score. It was consistent with Rattanasak, S. (1997: Abstract)'s study on problems of the Thailand Football League management and organization. The great problem was the referee's judgment standard because this anxiety may come from athletes' evaluation of breaking the rules of a game that may be considered as a team foul instead of a personal foul.

8. **Low self-esteem:** The most footballers experienced mild stress in this study. Item analysis showed mild stress in all items. The feeling about a lack of an effort to solve existing problems was the item of the highest mean score. It showed the athletes' low motivation of living that produced a lack of energy, enthusiasm, self-confidence (Boonveerabut, S., 1998: 52-53). These may result from stress or anxiety in life events or cause stress or anxiety of the footballers.

For the relationship between causes of stress and general stress in professional football players, the expectation, situation and pressure of the competition and low self-esteem related to stress state with statistical significance ($p < 0.05$). Other unrelated stressors may be specific causes in this study. Another observation was that the 6 unrelated stressors were influenced by external factors. The 2 related stressors were mostly influenced by psychological state that was the anxiety of appeared situations. Especially, low self-esteem was the important psychological factor that affected feelings and emotions such as anxiety, pleasure, happiness, and shyness (Boonveerabut, S., 1998: 63). It also was the important stressor in this study that can identify psychological pathology or psychiatric problem. This result showed that the stress of football players resulted from psychological factor. The research of sports psychology focused on psychological state such as vigor, tension, depression, anger, fatigue, and confusion indicating athletes' success (Hassman and Blomstrad, 1995: 297). Therefore, these problems can be solved by psychological skill training such as stress and anxiety management, muscle relaxation method, goal setting, self-thought and self-talk, and thought stopping. In addition, psychological process in developing self-esteem also can be used such as motivation and arousal training, and group counseling or occupational therapy. The psychological principles in developing self-esteem (Coopersmith, 1981) included the acceptance of real feelings such as negative feelings, and interpersonal differences. The efficient model for coping supported the athletes to use their potentials in problem solving with confidence, and develop

creative coping method. The athletes will understand their conflicts and be aware of their feelings that caused more pride. In addition, it included social support such as comforting, giving confidence, giving appraisal of work and effort, and giving suggestion about instruments or skills of sport playing from related person (Hardy and Crtase, 1993 cited by Wongjaturapat, N., 2001: 26). This psychological process was examined about strategies for coping with stress and anxiety in semi-professional football players. It was a compatible method and was accepted in high efficiency of reducing stress and anxiety (Maynard et al., 1995: 51). The other 6 stress factors that did not relate to stress with statistical significance should not be ignored to resolve or reduce these causes of stress by means of different and appropriate methods. As the sources of stress experienced by professional Australian footballers (Noblett and Gifford, 2002: Abstract), sources of stress beyond those associated with competition should be considered and situation-specific stresses needed different coping strategies based on related causes and factors.

Conclusions and Recommendations

This research is survey research studying stress levels and causes of stress of professional football players.

The specifically selected population of this study was the registered football players of the football clubs belonging to the Football Association of Thailand. All 10 selected football clubs consisting of 203 players were eligible for the competition of “Thailand Football League 2002”

The instruments of this study included the questionnaire about personal information of subjects included age, registered team (types of organization), education, economic status, current occupation, marital status, family status, playing position, physical efficiency, and playing experience.

Thai Stress Test developed by Assoc.Prof. Sucheera Phattharayuttawat and Colleague., Department of Psychiatry, Faculty of Medicine Siriraj Hospital, Mahidol University was created for measuring stress of Thai people. It consisted of 24 items and the alpha coefficient validity of the entire questionnaire was 0.84 with the validity of positive and negative scales of 0.83 and 0.86 respectively. Split-Half validity of the entire questionnaire was 0.88 with validity of positive and negative scales of 0.82 and

0.94 respectively. Discriminating power between normal people and people with psychiatric problems was at the .001 significance level.

The questionnaire about causes of stress in professional football players was adapted from research and literature. The adapted questionnaire then was examined content completion by 3 thesis advisors and face validity by 3 experts for assessing IOC value. The 42 items that valued not less than 0.66 were examined reliability by using Cronbach's Alpha Coefficients. The questionnaire that was tried out for 35 non-samples had 0.92 reliability value.

For data collection, the researcher contacted with the Football Association of Thailand and team manager of each club for asking the permission to collect data and appointed the coach to find out the players' leisure and information then asked players to complete self-questionnaires. Finally, the questionnaires were returned and examined for their completeness and accuracy after immediately completed by the subjects.

Data analysis was divided into 2 following parts;

1. Descriptive statistics

- 1.1 Study the frequency distribution (number and percentage) of demographic data of football players.
- 1.2 Study the frequency distribution (number and percentage) of stress levels classified by demographic data of football players.
- 1.3 Study the frequency distribution (number and percentage) of stressor levels in each area of football players.

2. Inferential statistics

- 2.1 Test the proportion of football players having difference stress levels classified by demographic data using chi-square (χ^2 - test).
- 2.2 Test the correlation of stressor levels and stress levels of football players using chi-square (χ^2 - test).

Conclusions

Part 1 Percentage and frequency distribution of demographic data of professional football players presented as follows;

The most of football players were aged between 21-39 years (81.2%). The players with less than 21 years were 17.2% and more than 40 years were only 1.5%. The minimum age was 14 years and the maximum age was 47 years ($\bar{X} = 25.1$; S.D. = 4.93). The most players played in private clubs (59.6%) and the other players played in government or state enterprise clubs (40.4%). The most players were single (83.7%), undergraduate (63.5%), and were students (49.8%). There was 43.8% of all players had other occupations and only 6.4% was only football players. For family status, 46.3% lived with families and 53.7% did not live with families. The most players had income enough for the expense (71.9%), past the criteria of physical examination (91.6%) and only 8.4% did not past the criteria of physical examination. For playing position, the most players were defenders (37.4%), the others were midfielders, forwards and goalkeepers (27.1%, 23.2% and 12.3 respectively).

In addition, the most players had 7 years experience in professional football playing (24.1%) and the next was 1 year experience (21.2%).

Part 2 The differences of stress state among professional football players classified by demographic data.

The proportion testing of stress state and personal information in football players did not show statistically significant difference in all variables.

Part 3 The relationship between the levels of stress factors and stress state in professional football players.

3.1 The frequency distribution of the levels of stress factors showed that the most players had moderate stress in 3 factors: 1) The condition of training and competition, 2) Roles and duties, and 3) The accomplishment and career progression. The other 5 factors caused mild stress: 4) Other people and relationships, 5) The club structure and climate, 6) Physical and psychological readiness, 7) The expectation, situation and pressure of the competition, and 8) Low self-esteem.

3.1.1 The condition of training and competition caused moderate stress in all items.

3.1.2 Roles and duties caused moderate stress in almost all items except the opposition to orders of the trainers that caused mild stress.

3.1.3 The accomplishment and career progression caused moderate stress in almost all items except a lack of support in training opportunities or international competition by the administrators that caused mild stress.

3.1.4 Other people and relationships caused moderate stress in almost all items except having relationship problems with trainers, team-mates and staff of the club, and the team-mates and staff of the club are changed or transferred that needed the adaptation that caused mild stress.

3.1.5 The club structure and climate caused moderate stress in almost all items except inappropriate environment of practice and competition place such as light, temperature, air flow, cleanness and proportion, etc., and problems in communication and contact inside the club that caused mild stress.

3.1.6 Physical and psychological readiness caused moderate stress in 4 items except a lack of confidence and muscle contraction occurred while practicing and competing, a lack of concentration in practicing and competing, and being worried about the examination of stimulants in competing that caused mild stress.

3.1.7 The expectation, situation and pressure of the competition caused moderate stress in almost all items except being worried or afraid of the team-mates who break the rules in the game, and setting a player's position inappropriate to skill and ability of that person that caused mild stress.

3.1.8 Low self-esteem caused mild stress in all items.

3.2 The correlation testing of stressor levels and stress condition showed that the stressors relating to stress condition with statistical significance ($p < 0.05$) consisted of 2 areas: The expectation, situation and pressure of the competition, and low self-esteem.

Recommendations of this study

1. This study showed that the most football players experienced mild stress (53.7%) that was the advantageous level for doing several activities. However, there should be the support for good mental health and the prevention of increasing stress that can be mental health problems.

2. This study showed that there were 3 moderate stressors of football players including the condition of training and competition, roles and duties, and the opportunity of accomplishment and career advancement. Therefore, the organization relating to the arrangement for professional football competition should adapt the management of practice and competition, inform appropriate roles and duties, and promote and assure the players of football career performance.

3. Stress-related factors including the expectation, situation and pressure of the competition, and low self-esteem resulted from psychological state. It indicated that helping the football players who experienced stress can start from the players themselves by psychological skill training, relaxation, self-esteem promotion or other psychological process that was beneficial for the prevention of mental health problems.

4. There should be the development of psychological knowledge for related persons such as trainer staff, and club administrators. The mental health personnel such as psychiatrists, sport psychologists should participate in mental health promotion for athletes. This was a part of the development of football to enhance the professional performance of the players.

5. For collecting data, the physical competence testing of football players in each club mostly was field testing and there was no standard of testing. Although the evaluators or the testers were sports scientists, but the differences in details of the tests were found or there were a few clubs that sent the footballers to be tested by the Division of Physical Fitness Testing, Sports Authority of Thailand (SAT). It should provide standardized testing under the supervision of the sports science institute such as the Sports Authority of Thailand, academic institutions or universities with the staff in sports science.

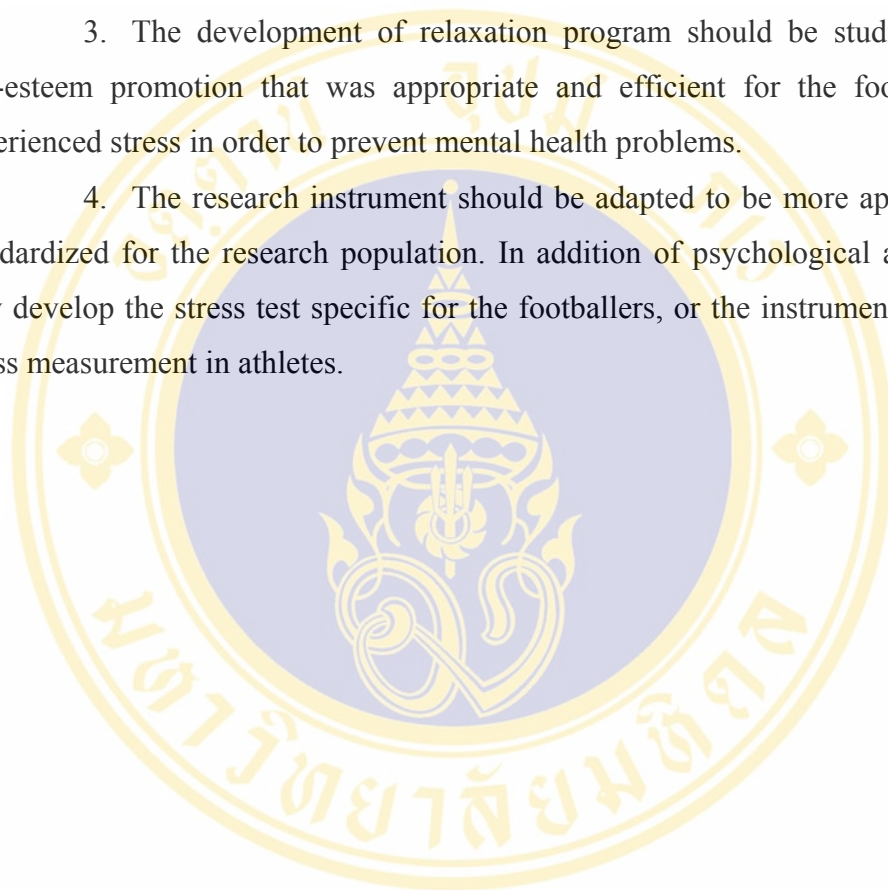
Recommendations for further study

1. The stress in the population relating to the management of Thailand Football League competition such as team controllers, team managers, referees, and competition board should be studied for mental health promotion and personnel development in the management of professional football competition in Thailand.

2. The qualitative analysis or the focus on the footballers who tended to experience psychological problems should be considered for the further study. It included the footballers who did not pass the criteria of physical examination, had severe or chronic injuries that cannot participate in practice and competition. This study cannot follow these footballers so it was the limitation of this study.

3. The development of relaxation program should be studied including self-esteem promotion that was appropriate and efficient for the footballers who experienced stress in order to prevent mental health problems.

4. The research instrument should be adapted to be more appropriate and standardized for the research population. In addition of psychological assessment, it may develop the stress test specific for the footballers, or the instrument for physical stress measurement in athletes.



BIBLIOGRAPHY

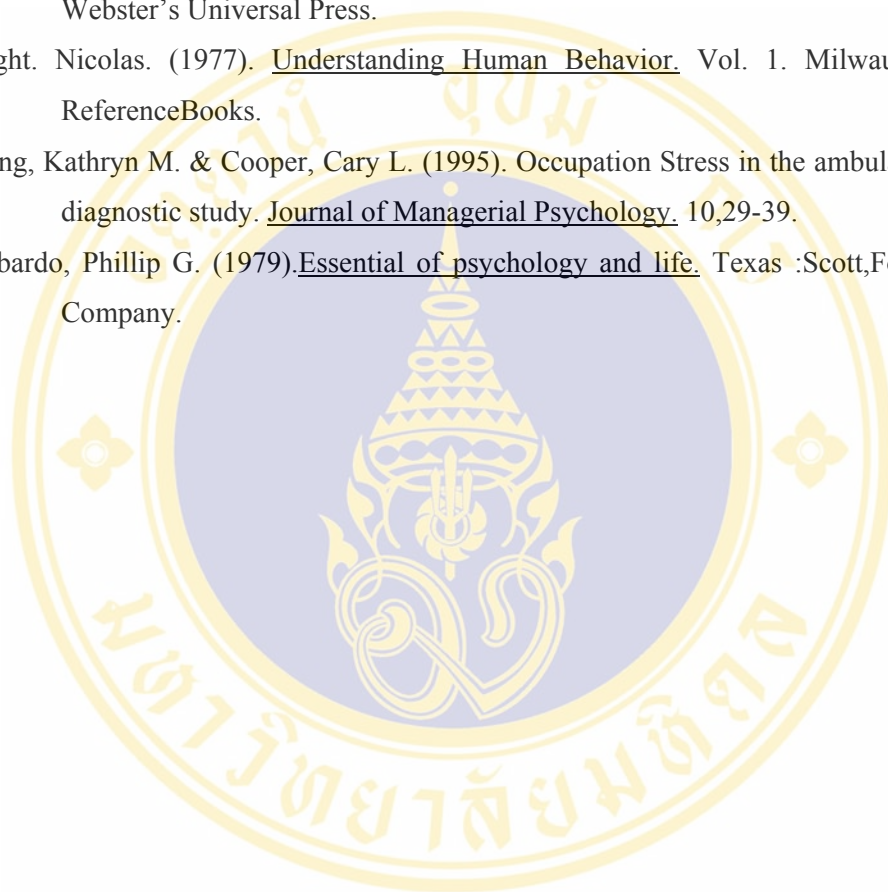
English

- Albercht, K.G. (1979). Stress and The Manager. Englewood Cliffs, New jersey : Prentice-hall.
- Anshel MH. & Wells B. (2000). Personal and situational variables that describe coping with acute stress in competitive sport. Journal of Social Psychology. 140(4),434-450.
- Ben-Bakr, Khaled A., Ai- Shammari, Id S., & Feri, Omar A. Occupational Stress in different organization : a Saudi Arabian survey. Journal of Managerial Psychology. 10, 24-28
- Best, John W. (1977). Reserch in Education 3rd ed. Engle Wood Clift, NJ.Prkntice Hall
- Bird, Anne Marie & Bernette K. Cripe,(1986). Psychology and sport behavior. Photography by Ann stutts & Judith Brane St :louis :Times Mirror/Mos by College Pub.
- Cary L. Cooper. (1979).Behavioral Problem in Organization. University of Manchester Institute of Science and Technology : Prentice Hall Englewood Cliffs New Jersey.
- Charles, L. & Sally, A. (1992). Health Psychology Challenging the Biochemical Model. Singapore : John Wiley & son
- Cooper,C.L. & Davidson,M. (1987). Source of Stress at work and their relation to Stressor in non-working environment. In R. Kalimo, A. Mostafa, EL-Batawi & C.L.
- Cooper (Eds.), Psychological At Work (pp. 15). Geneve:Work Health Organization
- Cooper, Cary L., Slon, Stephen J. & Williams, Stephen. (1988). Occupational Stress Indicator : ManagementGuide. Great Britain : NFER Nelson Publishing Company Limited.
- Coopersmith,S.(1987) The Antecedant of self esteem.Palo Alto, California:Consutling Psychologists Press,Inc.,
- Could, D & Krance, V. (1992). The Arousal-Athletic Performance Relationship.: current status and future direction In 1, Horn(Ed.), Advances in sport psychogy. Ghampaign, Human Kinetics.
- Cran well-Ward, J. (1987). Managing Stress. Aldershot, Hants : Grawer.
- Dubrin, Andrew J.(1990). Effective Business Psychology. 3rded. EnglewoodCliffs,N.J.: Prentice-Hall
- Farmer, Richard E. Monahan Lynn & Reinhold. (1984). Stress Management for HumanServices. Michigan :Sage Publication Inc.

- Ford IW., Eklund RC & Gordon S.(2000). An examination of psychosocial variables moderating the relationship between life stress and injury time-loss among athletes of a high standard. Journal of Sport Science.18(5),301-312.
- Frantisek,Man.,Iva ,Stuchlikova.,& Pavel, Kindmann.(1995).Trait-State Anxiety,Worry,Emotionality,and Self-Confidence in Top-Level Soccer Players. The Sport Psychologist(9),212-224.
- Hamilton,D.J.,(1991).Factors contributing to sport stress among african-american football players. At the pensylvania state university. (PH.D)Thesis,Dissertation Abstracts Interantional,The Pennsylvania State University USA
- Hassmen,Peter.,& Blomstrand,Eva.(1995).Mood State Relationships and Soccer Team Performance.The Sport Psychologist(9),297-308
- Hardy, Lew.(1990). Stress and performance in sport. Edited by J.Graham Jones, Chichester : J. wiley
- Hamel, K. & Braken, D. (1986). Factor structure of the Stress Questionnaire (JSQ) in three occupational groups. Educational and Psychological Measurement, 46. 777-786.
- Holt, N.L. & Hogg, J.M.(2001). Perceptions of Stress and Coping During Preparationsfor the 1999 Women's Soccer World Cup Finals:NASPSPA Abstracts. Journal of sport exercise psycholgy.23,S29.
- Janis Il. Psychological Stress. (1952). New York : John Wiley & Sons.
- Karen Sorensen & Joan Luckman,(1979) Basic nursing : A Psychological Approach. Phkladelphia : WB. Saunders Co.
- Koester,E.,& Heil, J.(1986).Athete and artist : Search for commonground. In L.E. Unesthal (Ed),Sport Psychology:In theory to practice(pp. 190-195)Orebo,Sweden:Veje
- Lawrence, R.M.& Lawrence, S.A. (1987). The nurse and job related stress : responses, Rx, and self-dependency. Nursing Foruj, 23 (88), 45-51
- Lazarus, R.S., & Folkman.(1984). Stress Appraisal and Coping. New york : Springer Publishing
- Luckman J & Sorensen, KC. (1974). Medical-Surgical Nursing : A Psychological Approach. Philadelphia : W.B. Saunder.
- Margoris & Kroes. (1974). Occupational Stress and Strain. Illinoise : Charlis C. ThomasPublisher.
- Martin, C. (1995) In T.Morris and J Summers (Eds.) Spot Psychology : Theory,application andissues. Brisbane : John Wiley & Sons.
- Maslach, C.(1986). Burnout : The cost of Caring. 2nded. New Jersey : Prentice – Hall.

- Maynard, I.W., Hemmings, B., & Warwick-Evans, L. The Effects of a Somatic Intervention Strategy on Competitive State Anxiety and Performance in Semiprofessional Soccer Players. The Sport Psychologist (9), 51-64
- McGrath. (Ed.). (1970). Social and Psychology Factors in Stress. New York.
- McGrath, Mary Collette Zabolio. Job Stress and Burout among Teachers of Emotionally and Behaviorally Kisturbed. Dissertation Abstracts International. 10(109), 2800-A; April.
- Mcmillan P. & Doane P. Schulty. (1982). Psychology and Industry To day : Introduction Industrial and Organization. Newyork : Macmilan.
- Noblett, A.J., & Gifford, S.M. (2002). The sources of stress experienced by professional Australian footballers. Journal of Applied Sport Psychology (14). 1-32
- Norbeck, J.s. (1985) Type and Source of Social support for Managing Job Stress in Critcal Care Nursing Nursing Research. 34, 4(July-August), 225-253
- Pensgaard AM. & Ursin H. (1998). Stress, control and coping in elite athletes. Scandinavian Journal of Medicine & Science in Sports. 8(3), 183-189.
- Petrie, T.A. (1991). The effects of life stress and social support on injury, illness and academic success in collegiat football players. (PH.D) Thesis, Dissertation Abstracts Interantional, The Ohio University USA
- Quick. James Cambell., Murphy, Lawrence R., & Hurvell, Joseph J.Jr. (1993). Stress & well-being at work. American Psychological Association.
- Rainey DW. & Hardy L. (1999). Sources of stress. Burnout and intention to terminate among ruby union referees. Journal of Sport Sciences. 17(10), 797-806. Oct.
- Rees, David W. (1995). Work-related stress in health service employees. Journal of Managerial Psychogy. 10.4-11.
- Robert Jean Camball. (1981). Psychiatric Dictionary. 5th Edition. New York : Oxford University Press.
- Schwartzberh, N.S. & Dytell, R.S. (1996). Dualearner families : The importance of work stress and family stress for psychology well-being. Journal of Occupational Health Psychology. 1. 212-223.
- Selye, Hans. (1956). The Stress of life. New york : McGraw – Hill Book co.,.
- Speiberger, C.D. (1973). Preliminary Test Manual for the State trait Anxiety Inventory for children. Atto, CA, Consulting : Psychologists Press.
- Stewart MJ. & Ellery PJ. (1998). Sour and magnitude of perceived psychological stress in high school volleyball officials. Perceptual & Motor Skills. 87(3 Pt), 1275-1282.
- Taylor, S.E. (1986). Health Psychology. New York : Random House.

- Thompson, N.J., (1989). The role of psychological factors in the risk of injury among high school football players. (PH.D) Thesis, Dissertation Abstracts International, The Georgia State University USA.
- Wallace, J. Macdonald. (1978). Living With Stress. Nursing Time. 74. 457-458.
- Webster's New Universal Dictionary of The English Language. (1976). New York : Webster's Universal Press.
- Wright, Nicolas. (1977). Understanding Human Behavior. Vol. 1. Milwaukee : purnell Reference Books.
- Young, Kathryn M. & Cooper, Cary L. (1995). Occupation Stress in the ambulance service: a diagnostic study. Journal of Managerial Psychology. 10, 29-39.
- Zimbardo, Phillip G. (1979). Essential of psychology and life. Texas : Scott, Fomresman and Company.



Thai

- กรมสุขภาพจิต. (2539). คู่มือคลายเครียดด้วยตนเอง. กรุงเทพฯ : กระทรวงสาธารณสุข
- การกีฬาแห่งประเทศไทย.(2542).รายงานผลสำรวจการเข้าร่วมเล่นกีฬา การออกกำลังกายและการดูแลสุขภาพของประเทศไทย. กรุงเทพฯ:สำนักนายกรัฐมนตรี
- จิระพร อุดมกิจ. (2539). ปัจจัยที่มีผลต่อความเครียดในการทำงานของบุคลากรคอมพิวเตอร์ในเขตกรุงเทพมหานคร. วิทยานิพนธ์มหาบัณฑิต คณะศิลปศาสตร์ มหาวิทยาลัยธรรมศาสตร์.
- จิราภรณ์ ไหมสิตโชติ, ร.ต.ท.หญิง. (2543). การศึกษาปัจจัยบางประการที่ส่งผลต่อความเครียดของข้าราชการตำรวจที่ปฏิบัติงานในเขตกรุงเทพมหานคร. วิทยานิพนธ์การศึกษาศาสตรมหาบัณฑิต, สาขาวิชาเอก การวัดผลการศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัย ศรีนครินทรวิโรฒประสานมิตร
- เจริญ กระบวนรัตน์.(2530). จิตวิทยาการฝึก. วารสารการกีฬา.12(9),8.
- ชาญณรงค์ สุขงษา.(2538). การศึกษาการบาดเจ็บของนักกีฬาฟุตบอลนักเรียน อายุไม่เกิน 14 ปี ของกรมพลศึกษา พุทธศักราช 2536. วิทยานิพนธ์การศึกษาศาสตรมหาบัณฑิต, สาขาวิชาเอกพลศึกษา มหาวิทยาลัย ศรีนครินทรวิโรฒประสานมิตร
- ชุมพรศรี ฉัตรปยานนท์. (2538). การศึกษาความสัมพันธ์ระหว่างปัจจัยบางประการกับความเครียดของครูในโรงเรียนมัธยมศึกษา. วิทยานิพนธ์. การศึกษาศาสตรมหาบัณฑิต, สาขาวิชาเอก การวัดผลการศึกษา.มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร
- ชูติชัย ปานปรีชา. (2534). จิตวิทยาทั่วไป. นนทบุรี : มหาวิทยาลัยสุโขทัยธรรมมาธิราช
- ทรงศักดิ์ สร้อยแสงทอง. (2534). ความวิตกกังวลในการแข่งขันกีฬานักกีฬาที่เข้าร่วมแข่งขันกีฬามหาวิทยาลัยพลศึกษาแห่งประเทศไทย ครั้งที่ 16.วิทยานิพนธ์การศึกษาศาสตรมหาบัณฑิต สาขาเอกพลศึกษา มหาวิทยาลัยศรีนครินทรวิโรฒประสานมิตร
- เทพวัลย์ สุชาติ.(2530). ปัจจัยที่สัมพันธ์กับความเครียดของนักสังคมสงเคราะห์ทางการแพทย์. วิทยานิพนธ์ปริญญาสังคมศาสตรมหาบัณฑิต, สาขาการแพทย์และสาธารณสุข บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล
- โทนี่ มอริส. (2536). การจัดการความเครียด, เอกสารประกอบการบรรยายการประชุมสัมมนาการจิตวิทยาการกีฬา. กรุงเทพฯ : จุฬาลงกรณ์มหาวิทยาลัย
- ทัศนา บุญทอง. (2533). การพยาบาลกับการพัฒนาบุคลิกภาพ, เอกสารการสอบชุดวิชาประสบการณ์วิชาชีพพยาบาล หน่วยที่ 1- 8. กรุงเทพฯ : มหาวิทยาลัยสุโขทัยธรรมมาธิราช.

- ธงชัย สุขดี. (2533). ความวิตกกังวลของนักกีฬาประเภทบุคคล ประเภททีม และประเภทการต่อสู้ป้องกันตัว. ปรินญาการศึกษาสาส์ตรมหาบัณฑิต วิชาเอกพลศึกษา มหาวิทยาลัยศรีนครินทรวิโรฒประสานมิตร
- ธารีกุล คัมภีร์คุปต์. (2535) ความเครียดของพนักงานคุมประพฤติ : กรณีศึกษากรณีคุมประพฤติกระทรวงยุติธรรม. วิทยานิพนธ์มหาบัณฑิต คณะสังคมสงเคราะห์ มหาวิทยาลัยธรรมศาสตร์.
- นฤพนธ์ วงศ์จตุรภัทร.(2544) การเยียวยาทางใจในนักกีฬาที่บาดเจ็บ.วารสารจิตวิทยาการศึกษา
ประยุกต์.1(1),18-31
- นฤพนธ์ วงศ์จตุรภัทร. (ม.ป.ป.) เอกสารประกอบการประชุมเชิงปฏิบัติการจิตวิทยาการศึกษาสำหรับผู้สอนพลศึกษา : สถาบันราชภัฏมหาสารคาม
- นฤมล(เลิศบุญ) เลี้ยงรักษา. (2542). การศึกษาความเครียดของผู้จัดการโรงเรียนเอกชนอาชีวศึกษาในเขตกรุงเทพมหานคร. วิทยานิพนธ์ครุศาสตรบัณฑิตสาขามหาบัณฑิต สาขาวิชา การบริหารอาชีวศึกษา, บัณฑิตวิทยาลัย สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง
- นุชรรัตน์ สิริประภาวรรณ. (2542). ปัจจัยที่มีผลต่อความเครียดในการทำงานของผู้พิพากษาในเขตกรุงเทพมหานคร. วิทยานิพนธ์ศิลปศาสตรมหาบัณฑิต สาขาวิชา จิตวิทยาอุตสาหกรรมและองค์การ, มหาวิทยาลัยธรรมศาสตร์.
- นิกุล ประทีปพิชัย. (2540). ตัวแปรที่เกี่ยวข้องกับความเครียดในการปฏิบัติงานของศึกษานิเทศก์เขตการศึกษา 5. ปรินญาณิพนธ์การศึกษาสาส์ตรมหาบัณฑิต. วิชาเอกจิตวิทยาการศึกษา, มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร
- ปิยรัตน์ โกวิทพงศ์.(2542).เอกสารการสอนวิชาสรีระวิทยาและการทำงานของระบบประสาท. อัดสำเนา.
- ประพาฬรัตน์ บุรีรัตน์.(2535).สิ่งที่ทุกคนควรรู้เกี่ยวกับความเครียด.วารสารแนะแนว.26(139),68-72
- ประไพรัตน์ ทิพยมณฑล. (2538). ความเครียดของนักกีฬาไทยในการแข่งขันซีเกมส์ครั้งที่ 18. วารสารพยาบาลศาสตร์. 7(2),46-51.
- ประณิดา ประสงค์จรรยา. (2542). ความเครียดในการปฏิบัติงานของผู้จัดการบริการบนเที่ยวบินและหัวหน้าพนักงานต้อนรับบนเครื่องบิน บริษัท การบินไทย จำกัด(มหาชน). วิทยานิพนธ์ศิลปศาสตรมหาบัณฑิต, สาขา รัฐศาสตร์ บัณฑิตวิทยาลัย มหาวิทยาลัยเกษตรศาสตร์.

- ปรียาพร วงศ์อนุตรโรจน์.(2535). ความผูกพันต่อสถาบันของบุคลากรในสาขาครุศาสตร์อุตสาหกรรม สถาบันเทคโนโลยีพระจอมเกล้า. ปรินซ์นิพนธ์การศึกษาศาสตรดุษฎีบัณฑิต มหาวิทยาลัยศรีนครินทรวิโรฒประสานมิตร
- ปาลชาติ ชาวโพธิ์หลวง. (2543). ตัวแปรที่เกี่ยวข้องกับความเครียด และวิธีเผชิญความเครียดในการปฏิบัติงาน ของเจ้าหน้าที่ตำรวจจราจรชั้นประทวน กองบังคับการตำรวจจราจร. ปรินซ์นิพนธ์การศึกษามหาบัณฑิต, สาขาวิชาเอก จิตวิทยาการแนะแนว มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร
- พีระพงศ์ บุญศิริ. (2531). ทฤษฎีเกี่ยวกับความเครียดของ Selye : บก. สรีรวิทยาของการออกกำลังกาย(วิทยาศาสตร์การกีฬา).(พิมพ์ครั้งที่ 3). กรุงเทพฯ : โอ เอส พริ้นติ้งเฮาส์
- รติดา สันติมิตร. (2543). ความเครียดจากปฏิบัติงานของนักจิตวิทยา สังกัด กรุงเทพมหานคร. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต, สาขาวิชา จิตวิทยาคลินิก บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล.
- รพาทิมพ์ เมฆศรีอรุณ.(2536). สาเหตุความเครียดในการปฏิบัติงานของบรรณารักษ์ห้องสมุดมหาวิทยาลัยของรัฐ. ปรินซ์นิพนธ์การศึกษามหาบัณฑิต, สาขาวิชาเอกบรรณารักษศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒประสานมิตร.
- รวีวรรณ นิเวศพนธ์.(23 กุมภาพันธ์ 2538). พบคนไทยเครียดจากสิ่งแวดล้อมเป็นพิษ.ไทยรัฐ,หน้า 5
- ละออ หุตางกูร.(2532). ธรรมชาติมนุษย์ : หลักร่วมสมัยในการพยาบาล.กรุงเทพฯ : คณะพยาบาลศาสตร์ มหาวิทยาลัยมหิดล
- ละอองจันทร์ ทรัพย์เจริญ, จริญญาศรี เดือนฉาย และอัญชลี กลิ่นพันธ์. (2541) การศึกษาระดับความเครียดของประชาชนในกลุ่มอาชีพต่างๆ ในจังหวัดสระแก้ว ปีงบประมาณ2541. สำนักงานสาธารณสุข จังหวัดสระแก้ว
- ลือศักดิ์ กุลน้อย.(2538) การสร้างแบบทดสอบทักษะเฉพาะตำแหน่งสำหรับนักฟุตบอลชาย.ปรินซ์นิพนธ์การศึกษาศาสตรมหาบัณฑิต, สาขาวิชาเอกพลศึกษา มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร
- วรรณณา ลีลาอัมพรสิน. (2541). ปัจจัยที่ก่อให้เกิดความเครียดของผู้ให้บริการปรึกษาทางโทรศัพท์ ในหน่วยงานสังกัด กรมสุขภาพ กระทรวงสาธารณสุข. วิทยานิพนธ์มหาบัณฑิต, คณะสังคมศาสตร์ มหาวิทยาลัย ธรรมศาสตร์
- มานพ วงษ์สุริย์รัตน์. (2541). ปัจจัยที่มีอิทธิพลต่อความเครียดพนักงานต้อนรับบนเครื่องบินของบริษัท การบินไทยจำกัด (มหาชน). วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต (จิตวิทยาอุตสาหกรรม), มหาวิทยาลัยเกษตรศาสตร์.

- สมบัติ กาญจกิจ. (2542). จิตวิทยาการกีฬา : จากแนวคิดสู่การปฏิบัติ. กรุงเทพฯ : สวพรรณ ทรัพย์ประดิษฐ์. (2539). ปัจจัยที่มีผลต่อความเครียดด้านการย้ายงานของข้าราชการกรมศุลกากร. วิทยานิพนธ์มหาบัณฑิต, คณะศิลปศาสตร์ มหาวิทยาลัยธรรมศาสตร์
- สมาคมฟุตบอลแห่งประเทศไทย. (2539)เอกสารการสัมมนา การจัดการแข่งขันฟุตบอลฟุตบอลอาชีพในประเทศไทย. อุดลำนนา
- สมาคมฟุตบอลแห่งประเทศไทย. (2544).แนวคิดในการจัดทำระเบียบการแข่งขันฟุตบอลไทยแลนด์ลีก ประจำปี 2544. อุดลำนนา
- สุจริต สุวรรณชีพ. (2531). ความเครียด. วารสารจิตวิทยาคลินิก. 19(2), 95.
- สุชีรา ภัทรายุทธวรรณ์ (2545). คู่มือการวัดทางจิตวิทยา. กรุงเทพฯ : เมดิคัล มีเดีย
- สุชีรา ภัทรายุทธวรรณ์และคณะ. (2543). การพัฒนาแบบวัดความเครียดในคนไทย. วารสารสมาคมจิตแพทย์แห่งประเทศไทย, 45(3), 238-249.
- สุพล บุญทรง. (2523). จิตวิทยาพัฒนาการ. กรุงเทพฯ : ไทยวัฒนาพานิช.
- สุวรรณ แซ่ตั้ง. (2533). ปัญหาจิตเวชในนักกีฬา. กีฬาเวชศาสตร์ทั่วไป. กรุงเทพฯ : โอเดียนสโตร์
- สุพล เพิ่มผล. (2531). ฟุตบอล. (พิมพ์ครั้งที่ 1). กรุงเทพฯ : โอเดียนสโตร์
- สิทธิ รัตนราษฎร์. (2540) การศึกษาฟุตบอลอาชีพในประเทศไทย. วิทยานิพนธ์ปริญญาครุศาสตรมหาบัณฑิต (ครุศาสตร์), สาขาวิชาเอกพลศึกษา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย
- สืบสาย บุญวีรบุตร. (2541). จิตวิทยาการกีฬา. วิทยาลัยพลศึกษาจังหวัดชลบุรี : ชลบุรีการพิมพ์
- อรัญญา จรัสสุริยงค์. (2539). ความสัมพันธ์ระหว่างบุคลิกภาพกับความเครียด. วิทยานิพนธ์มหาบัณฑิต, คณะศิลปศาสตร์ มหาวิทยาลัยธรรมศาสตร์
- อนุโพธิ์ สุกนพานิช. (2544). ปัญหาการเตรียมทีมเพื่อเข้าร่วมการแข่งขันฟุตบอลไทยแลนด์ลีก ครั้งที่ 5. ปริญญาการศึกษาศาสตรมหาบัณฑิต, วิชาเอกพลศึกษา มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร.
- อนุสรณ์ วีระพงษ์. (2541). ความเครียดของนักกีฬาเยาวชนในจังหวัดเชียงใหม่. วิทยานิพนธ์ศึกษาศาสตรมหาบัณฑิต สาขาวิชา ส่งเสริมสุขภาพ บัณฑิตวิทยาลัย มหาวิทยาลัยเชียงใหม่
- อินทรา ปัทมินทร. (2542). ความเครียดของนักกีฬาทีมชาติไทยในการแข่งขันกีฬาเอเชียนเกมส์ ครั้งที่ 13. วารสารจิตวิทยาคลินิก. 30(1), 47-53.



เรื่อง ขอความร่วมมือในการตอบแบบสอบถาม

สวัสดิ์นักกีฬาฟุตบอลทุกท่าน

เนื่องด้วยข้าพเจ้า นายรัตนศักดิ์ สันติธาดากุล นักศึกษา ปริญญาโท สาขา จิตวิทยาคลินิก คณะ แพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล กำลังอยู่ในระหว่างการทำวิทยานิพนธ์ เรื่อง ความเครียดในนักกีฬาฟุตบอลอาชีพ มีความประสงค์จะขอความร่วมมือจากนักกีฬาฟุตบอลทุกท่าน ในการตอบแบบสอบถามชุดนี้ ซึ่งประกอบด้วย

แบบสอบถามข้อมูลส่วนบุคคล แบบสอบถามสาเหตุความเครียด และแบบวัดความเครียด โดยใช้เวลาประมาณ 30 นาที ซึ่งข้อมูลที่ได้จากท่านนั้นมีความสำคัญยิ่ง สำหรับงานวิจัยครั้งนี้ จึงขอความกรุณาให้ท่านช่วยตอบแบบสอบถาม ตามความเป็นจริง และด้วยความจริงใจ ผลการวิจัยที่ได้จะเป็นประโยชน์ในการเป็นแนวทางส่งเสริมสุขภาพจิตของนักกีฬาฟุตบอลอาชีพต่อไป หากท่านใดมีความลำบากใจ หรือไม่สะดวกใจที่จะให้ข้อมูลท่านมีสิทธิ์ที่จะไม่ตอบแบบสอบถามชุดนี้ และผู้วิจัยขอยืนยันว่าจะนำเสนอผลงานวิจัยในภาพรวมและจะไม่มีผลกระทบใดๆต่อท่านทั้งสิ้น

ขอขอบคุณในความร่วมมือของท่าน

นาย รัตนศักดิ์ สันติธาดากุล

ผู้วิจัย

แบบสอบถามข้อมูลส่วนบุคคล

คำชี้แจง โปรดทำเครื่องหมาย **X** ลงใน ☐ หน้าข้อความหรือเติมข้อความลงในช่องว่างตามความเป็นจริงในปัจจุบันให้ครบถ้วน

1. ปัจจุบันท่านอายุ.....ปี

2. ตั้งกัศโสมสร.....

3. สถานภาพสมรส

☐ โสด

☐ สมรส

☐ หม้าย, หย่า, อื่นๆ

4. ระดับการศึกษา

☐ ต่ำกว่าปริญญาตรี

☐ ปริญญาตรี

☐ สูงกว่าปริญญาตรี

5. อาชีพปัจจุบัน

☐ นักศึกษา

☐ ประกอบอาชีพอื่นๆคือ.....

6. สถานะครอบครัว

☐ อยู่กับครอบครัว

☐ ไม่ได้อยู่กับครอบครัว

7. สถานะทางเศรษฐกิจ

☐ มีเงินเหลือเก็บ

☐ มีรายได้ออกกับรายจ่าย

☐ มีหนี้สิน

8. สมรรถภาพทางกาย (ความฟิต)

☐ ผ่านเกณฑ์การตรวจเช็คสมรรถภาพ☐ ไม่ผ่านเกณฑ์การตรวจเช็คสมรรถภาพ

9. ตำแหน่งการเล่นในทีม

☐ ผู้รักษาประตู☐ ผู้เล่นกองหลัง☐ ผู้เล่นกองกลาง☐ ผู้เล่นกองหน้า

10. ประสบการณ์ในการเล่นฟุตบอลอาชีพ.....ปี

แบบสอบถามสาเหตุความเครียด

คำชี้แจง โปรดตอบคำถามโดยใส่เครื่องหมาย X ในช่องคำตอบที่ตรงกับความเป็นจริงหรือ

สอดคล้องกับความรู้สึกของท่านมากที่สุด

สถานการณ์ที่ก่อให้เกิดความเครียด	ระดับของความรู้สึกเครียด				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
ด้านสภาพการฝึกซ้อมและการแข่งขัน					
1.1 ระยะเวลาแข่งขันและระยะเวลาในการฝึกซ้อมที่มากเกินไป					
1.2 การขาดความปลอดภัยต่อสุขภาพและชีวิตขณะฝึกซ้อมและแข่งขัน					
1.3 จำนวนของอุปกรณ์ในการฝึกซ้อมและสภาพสนามในการแข่งขันไม่เพียงพอและไม่ได้มาตรฐาน					
1.4 การขาดการวางแผนการฝึกซ้อมและการแข่งขันอย่างเป็นระบบ					
1.5 รายได้ เบี้ยเลี้ยง สวัสดิการ และรางวัลโบนัสพิเศษของนักฟุตบอลในการฝึกซ้อมและการแข่งขันยังไม่เพียงพอ					
2. ด้านบทบาทหน้าที่					
2.1 ภาระในหน้าที่อื่น เช่น การศึกษาซึ่งเป็นอุปสรรคในการเป็นนักฟุตบอลอาชีพ					
2.2 การแบ่งอำนาจหน้าที่ความรับผิดชอบของเจ้าหน้าที่ของสโมสร และนักฟุตบอลที่ร่วมมีความขัดแย้งและไม่ชัดเจน					
2.3 กฎเกณฑ์ข้อบังคับ ในเรื่องต่างๆในสโมสรมีแนวทางที่ไม่ชัดเจน					
2.4 เกิดความขัดแย้งต่อคำสั่งที่ได้รับจากทีมผู้ฝึกสอน					

สถานการณ์ที่ก่อให้เกิดความเครียด	ระดับความรู้สึกเครียด				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
2.5 เกิดความสับสนเมื่อต้องฝึกซ้อมและแข่งขัน โดยขาดการแนะนำวิธีการในการปฏิบัติ					
3. ด้านความสำเร็จและโอกาสพัฒนาความก้าวหน้าในอาชีพ					
3.1 ผู้บริหารไม่สนับสนุนโอกาสได้รับการฝึกอบรม หรือแข่งขันในระดับนานาชาติ					
3.2 ทีมผู้ฝึกสอนขาดการนำเทคนิค และแบบการฝึกที่ทันสมัยมาฝึกก่อนการแข่งขัน					
3.3 อาชีพนักฟุตบอลมีความก้าวหน้าไม่ทัดเทียมอาชีพอื่นๆ					
3.4 ขาดโอกาสได้รับการตรวจเช็ค และพัฒนาขีดความสามารถสมรรถภาพทางกาย					
3.5 การถูกประเมินความสามารถที่ต่ำกว่าความเป็นจริง					
4. ด้านสาเหตุจากบุคคลอื่นและสัมพันธภาพ					
4.1 กลัวแข่งขันได้ไม่ดีตามที่ ผู้ฝึกสอน ผู้ชม และกองเชียร์คาดหวังไว้					
4.2 เกิดความไม่มั่นใจในความสามารถของผู้เล่นร่วมทีมก่อนการแข่งขัน					
4.3 เกิดอาการเกร็งขณะแข่งขัน เมื่อเห็นกริยาท่าทางของผู้ฝึกสอน หรือผู้ชมที่แสดงออก					
4.4 มีปัญหาสัมพันธภาพกับทีมผู้ฝึกสอนเพื่อนร่วมทีม และเจ้าหน้าที่อื่น ๆ ในสโมสร					
4.5 ผู้ร่วมทีม และเจ้าหน้าที่ในสโมสรมีการเปลี่ยนแปลง โอนย้าย ทำให้ต้องมีการปรับตัวกับผู้ร่วมงาน					

สถานการณ์ที่ก่อให้เกิดความเครียด	ระดับความรู้สึกเครียด				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
5. ด้านโครงสร้างและบรรยากาศของสโมสร					
5.1 ผู้บริหารขาดการเอาใจใส่ดูแลและสนับสนุนงบประมาณในการบริหารทีมอย่างต่อเนื่อง					
5.2 ขวัญ กำลังใจและบรรยากาศในสโมสร,ในการฝึกซ้อมและการแข่งขันไม่ดี					
5.3 สภาพแวดล้อมในสถานที่เก็บตัวฝึกซ้อมและแข่งขันไม่เหมาะสม เช่น แสงสว่าง อุณหภูมิ การถ่ายเทอากาศ ความสะอาด ความเป็นสัดส่วน ฯลฯ					
5.4 ผู้บริหารมีนโยบายในการบริหารสโมสรที่ยังไม่ชัดเจนหรือไม่เหมาะสม					
5.5 เกิดปัญหาการสื่อสาร การติดต่อประสานงานภายในสโมสร					
6. ด้านความพร้อมทางด้านสมรรถภาพด้านร่างกายและจิตใจ					
6.1 มีปัญหาด้านสุขภาพ ร่างกายไม่สมบูรณ์ เพราะฟิตซ้อมไม่เต็มที่					
6.2 ขาดความมั่นใจ และเกิดอาการเกร็งในขณะฝึกซ้อมและแข่งขัน					
6.3 ไม่ค่อยมีสมาธิในการฝึกซ้อมและการแข่งขัน					
6.4 ขาดโอกาสในการปลุกกระตุ้นให้กำลังใจจาก ผู้ฝึกสอน เพื่อนร่วมทีม และตนเองทั้งก่อนและหลังการแข่งขัน					

สถานการณ์ที่ก่อให้เกิดความเครียด	ระดับความรู้สึกเครียด				
	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
6.5 ขาดความมั่นใจ เพราะไม่ได้สังเกตการณ์ ความสามารถของกลุ่มแข่งขัน และร่วมกัน วางแผนกันก่อนและหลังการแข่งขัน					
6.6 มีอาการบาดเจ็บเรื้อรังในอดีตรบกวนความ สามารถในการฝึกซ้อมและแข่งขัน					
6.7 มีความกังวลเกี่ยวกับการตรวจสอบการใช้สาร กระตุ้นในการแข่งขัน					
7. ด้านความคาดหวังจากผลการแข่งขัน และ สภาวะการณ์ความกดดันจากการแข่งขัน					
7.1 กลัวความพ่ายแพ้ เพราะสาเหตุต่างๆ เช่น ฝึกซ้อมไม่เต็มที่, การแข่งขันกับคู่ต่อสู้ที่ แข็งแกร่งกว่า					
7.2 ความวิตกกังวลต่อผลของการแข่งขัน ที่เกิดขึ้น ตามมาไม่ว่าจะแพ้หรือชนะ					
7.3 กังวลใจ หรือกลัวในเรื่องของการจัดการ แข่งขัน และการตัดสินใจของกรรมการ ที่ไม่เป็นธรรม					
7.4 กังวลใจหรือกลัวเกี่ยวกับผู้เล่นร่วมทีมที่ผิดกฎ ระเบียบของแต่ยังทำการลงแข่งขัน					
7.5 การจัดสรรผู้เล่นในแต่ละตำแหน่งไม่เหมาะสม กับความถนัดและความสามารถของบุคคลนั้น					
8. ด้านความรู้สึกมีคุณค่าในตนเองต่ำ					
8.1 รู้สึกว่าตนเองขาดความพยายามที่จะแก้ไข ปัญหาต่างๆ ที่เกิดขึ้น					
8.2 มีความกังวลบางสิ่งมากเกินไป ทั้งที่ไม่มีสาระ					
8.3 รู้สึกว่าตนเองไม่มีความสำคัญ และไม่สามารถ เป็นที่พึ่งพาของเพื่อนร่วมทีม					
8.4 มีอารมณ์หงุดหงิดจากการฝึกซ้อม, การแข่งขัน					

8.5 รู้สึกว่าตนเองไม่เก่ง ขาดความสามารถในการเป็นนักฟุตบอลอาชีพ					
--	-------	-------	-------	-------	-------

แบบวัดความเครียดในคนไทย(Thai Stress test)

คำชี้แจง คำถามต่อไปนี้เป็นความรู้สึกที่ท่านอาจมีในชีวิตประจำวัน ซึ่งแต่ละท่านจะมีความรู้สึกที่แตกต่างกันขอให้ท่านเลือกข้อที่ตรงกับความรู้สึกของท่านที่เป็นอยู่ในขณะนี้ โดยกาเครื่องหมาย X ในแต่ละช่องที่ต้องการ

ข้อความ	รู้สึก บ่อยๆ	รู้สึกเป็น ครั้งคราว	ไม่เคยรู้สึก เลย
1. ท่านรู้สึกเหงาและว้าเหว่			
2. ท่านรู้สึกไม่มีความสุขเลย			
3. ท่านมีความรู้สึกเบื่อหน่าย ท้อแท้ ไม่อยากทำอะไรเลย			
4. ท่านรู้สึกกระวนกระวายเกือบตลอดเวลา			
5. ท่านรู้สึกกังวลเกือบตลอดเวลา			
6. ท่านรู้สึกไม่สบายใจโดยหาสาเหตุไม่ได้			
7. ท่านรู้สึกไม่ค่อยมีสมาธิในการกระทำสิ่งต่างๆ			
8. ท่านรู้สึกไม่อยากทำในสิ่งที่เคยสนใจทำเป็นประจำ			
9. ท่านรู้สึกอยากจะถอยหนี ไม่อยากพบปะพูดคุยกับคนอื่น			
10. ท่านรู้สึกหมดกำลังใจ			
11. ท่านรู้สึกสิ้นหวัง			
12. ท่านรู้สึกว่าตนเองไม่มีคุณค่า			
13. ท่านรู้สึกภาคภูมิใจว่า ท่านเป็นคนเก่ง			
14. ท่านรู้สึกภาคภูมิใจว่า ท่านเป็นคนที่มีความสามารถ			
15. ท่านรู้สึกภาคภูมิใจว่าท่านไม่ได้ด้อยไปกว่าใคร			
16. ท่านรู้สึกพอใจกับชีวิตความเป็นอยู่ในขณะนี้			
17. ท่านรู้สึกว่าสิ่งต่าง ๆ รอบตัวท่าน ยังมีอะไรบางอย่างที่ทำให้ท่านมีความสนใจเป็นพิเศษอยู่			

18. ท่านรู้สึกยินดีและพึงพอใจกับการที่ตนเองได้รับความสำเร็จในบางสิ่งบางอย่าง			
19. ท่านรู้สึกกระตือรือร้นในการกระทำสิ่งต่าง ๆ ในชีวิตประจำวัน			
20. ท่านยังรู้สึกสนุกสนานกับการพบปะพูดคุยกับคนอื่นที่อยู่รอบตัวท่าน			
21. การคิดและการตัดสินใจของท่านยังเป็นปกติเหมือนก่อน			
22. ท่านรู้สึกว่าชีวิตนี้ยังมีหวัง			
23. ท่านรู้สึกมีกำลังใจที่จะปรับปรุงเปลี่ยนแปลงตนเองในทางที่ดี หรือก้าวหน้าขึ้น			
24. ท่านรู้สึกว่าจิตใจของท่านเป็นปกติ			

รวมคะแนนข้อ 1 – 12 ☐รวมคะแนนข้อ 13 – 24 ☐ได้คะแนนอยู่ในระดับ ☐

การแปลผลอยู่ในระดับ.....

พัฒนาโดย ร.ศ.ดร. สุชีรา ภัทรายุทธวรรณ์ และคณะ ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์
ศิริราชพยาบาล มหาวิทยาลัยมหิดล

สงวนสิทธิ์ตาม พ.ร.บ. ลิขสิทธิ์ 2543 ผู้ที่ต้องการขอใช้แบบสำรวจนี้ในงานวิจัย โปรดติดต่อขอ
อนุญาตการใช้ได้จากผู้วิจัยที่ภาควิชาจิตเวชศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล โทร.02- 411- 3430

©สงวนสิทธิ์ตาม พ.ร.บ.ลิขสิทธิ์ 2543©



List of Validator

1. Assoc. Prof. Sucheera Phattharayuttawat.
Psychologist. Siriraj Hospital.
2. Assis. Prof. Dr. Silpachai Suwanthada
Sport Psychologist.
Consultant to the Dean
School of Sports Science ,Chulalongkorn University
3. Mr. Chanwit Phalajivin
Academic Expert in sport development 8v.
Director of Sport for Excellence Academy
Ministry of Tourism and Sports

BIOGRAPHY

NAME	Mr. Rattanasak Santitadakul
DATE OF BIRTH	4 September 1975
PLACE OF BIRTH	Udonthani, Thailand
INSTITUTIONS ATTENDED	Chiangmai University, 1993-1996 : Bachelor of Arts (Philosophy) Mahidol University, 1999-2004 : Master of Science (Clinical Psychology)
POSITION&OFFICE	Mental Health Center 13 Department of Mental Health, Ministry of Public Health, Thailand Position : Psychologist Tel. 02-590-8040 E-mail: Santitadakul@chaiyo.com