

THE ROLE OF RELIGION ON SPORT ANXIETY AMONG
ELITE ATHLETES IN MALAYSIA: AN EXPLORATORY
STUDY

SYAZANA BINTI SHAHDAN

CENTRE FOR SPORT AND EXERCISE SCIENCES
UNIVERSITY OF MALAYA
KUALA LUMPUR

2019

**THE ROLE OF RELIGION ON SPORT ANXIETY
AMONG ELITE ATHLETES IN MALAYSIA: AN
EXPLORATORY STUDY**

SYAZANA BINTI SHAHDAN

**DISSERTATION SUBMITTED IN FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF MASTER
OF SPORT SCIENCE**

**CENTRE FOR SPORT AND EXERCISE SCIENCES
UNIVERSITY OF MALAYA
KUALA LUMPUR**

2019

UNIVERSITY OF MALAYA
ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: Syazana binti Shahdan

Matric No: VGB180004

Name of Degree: Master of Sport Science

Title of Project Paper/Research Report/Dissertation/Thesis (“this Work”): The Role of Religion on Sport Anxiety Among Elite Athletes in Malaysia: An Exploratory Study

Field of Study: Sport Psychology

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this Work;
- (2) This Work is original;
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
- (4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;
- (5) I hereby assign all and every rights in the copyright to this Work to the University of Malaya (“UM”), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
- (6) I am fully aware that if in the course of making this Work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate’s Signature

Date:

Subscribed and solemnly declared before,

Witness’s Signature

Date:

Name:

Designation:

**THE ROLE OF RELIGION ON SPORT ANXIETY AMONG ELITE
ATHLETES IN MALAYSIA: AN EXPLORATORY STUDY**

ABSTRACT

Anxiety is known to have an influence on psychological and physiological aspects of athletes especially when it becomes uncontrollable, and religion has been viewed with great potential in controlling anxiety levels. Hence, this study aimed to explore the role of religion on sport anxiety among elite athletes in Malaysia. It employed the Interpretative Phenomenological Analysis (IPA) approach in order to have a deeper understanding of the research topic. Seventeen elite athletes (10 males, 7 females, age range: 19-to-26 years old) with various sport background voluntarily participated in arranged interviews. There are four religious affiliations involved in this study: Islam, Buddhism, Christianity, and Hinduism. The study found six religious coping strategies and seven positive psychological effects of utilizing religion to cope with sport anxiety. Prayers was identified as the most popular strategy used and calmness was the most mentioned effect of religion when utilize to alleviate anxiety levels. The findings show that religion can play an important role as an effective coping strategy to deal with sport-related anxiety among athletes who believe in religion.

Keywords: sport anxiety, elite athlete, religious coping strategies, prayers, positive psychological effects

**PERANAN AGAMA TERHADAP KEBIMBANGAN DALAM SUKAN DALAM
KALANGAN ATLET ELIT DI MALAYSIA: SATU KAJIAN PENEROKAAN
ABSTRAK**

Kebimbangan sememangnya diketahui memberi kesan terhadap aspek psikologikal dan fisiologikal atlet terutamanya apabila ia menjadi tidak terkawal, dan agama telah dilihat mempunyai potensi yang besar dalam mengawal tahap kebimbangan. Oleh itu, kajian ini bertujuan untuk meneroka peranan agama terhadap kebimbangan dalam sukan dalam kalangan atlet elit di Malaysia. Kajian ini telah menggunakan pendekatan *Interpretative Phenomenological Analysis* (IPA) untuk mendapatkan pemahaman yang mendalam tentang topik penyelidikan ini. Tujuh belas atlet elit (10 lelaki, 7 perempuan, julat usia: 19 hingga 26 tahun) dengan pelbagai latar belakang sukan secara sukarela melibatkan diri dalam temubual yang diatur. Terdapat empat pegangan agama yang terlibat dalam kajian ini: Islam, Buddhisme, Kristian, dan Hinduisme. Kajian ini menemui enam strategi daya tindak keagamaan dan tujuh kesan positif psikologikal daripada penggunaan agama untuk menangani kebimbangan dalam sukan. Doa telah dikenalpasti sebagai strategi paling popular digunakan dan ketenangan adalah kesan penggunaan agama yang paling banyak disebut apabila digunakan bagi meredakan kebimbangan. Penemuan ini menunjukkan bahawa agama dapat memainkan peranan penting sebagai strategi daya tindak yang berkesan untuk menangani sebarang kebimbangan berkaitan dengan sukan dalam kalangan atlet yang beragama.

Kata kunci: kebimbangan dalam sukan, atlet elit, strategi daya tindak keagamaan, doa, kesan positif psikologikal

ACKNOWLEDGEMENTS

First and foremost, in the name of God, the Most Gracious, the Most Merciful. Thanks to Him for letting me experienced the journey as a master student at the University of Malaya, for the chance of meeting my supervisors, Dr. Youngeun Noh and Miss Yuhanis Adnan, and for the gift of health throughout the days to complete this study. My sincere thanks to Dr. Youngeun Noh who taught and guided me in every single thing, who is supportive and encouraging whenever I am low on motivation and confidence. Much gratitude to Miss Yuhanis Adnan, for her warm and patience, who has provided me with ideas and understanding to complete my study. A special thanks to all 17 elite athletes who participated in this study, they were cooperative and helpful during the interview sessions, giving their views, ideas, and perspectives in every question asked. Last but not least, thank you to my beloved family who never ceases to support and care in everything I do.

“Any who is (so) grateful does so to the profit of his own soul” (31;12)

TABLE OF CONTENTS

Abstract	iii
Abstrak	iv
Acknowledgements	v
Table of Contents	vi
List of Figures	x
List of Tables.....	xi
List of Symbols and Abbreviations.....	xii
List of Appendices	xiii
CHAPTER 1: INTRODUCTION.....	14
1.1 Research Background	14
1.2 Research Problem	17
1.3 Research Objectives.....	18
1.4 Significance of the Study.....	19
CHAPTER 2: LITERATURE REVIEW.....	20
2.1 Introduction.....	20
2.2 Stress, Arousal, and Anxiety	20
2.3 Anxiety in Sport.....	22
2.3.1 State and Trait Anxiety.....	22
2.3.2 Sources of Sport Anxiety	23
2.3.3 Implications of Anxiety.....	26
2.3.4 Theory, Hypothesis, and Model of Sport Anxiety and Performance	28
2.3.4.1 Inverted-U hypothesis	28
2.3.4.2 Multidimensional Anxiety Theory	30

2.3.4.3	Catastrophe model.....	32
2.3.4.4	Individual Zones of Optimal Functioning (IZOF)	33
2.4	Coping.....	34
2.4.1	Functions of Coping	35
2.4.2	Coping in Sport	36
2.4.3	Religious Coping.....	38
2.5	Religion.....	39
2.5.1	Religion and Spirituality	39
2.5.2	Aspects of Religion	41
2.5.3	Religion and Health.....	41
2.5.4	Religion and Sport Anxiety.....	43
CHAPTER 3: METHOD.....		47
3.1	Introduction.....	47
3.2	Research Design	47
3.2.1	Qualitative Study.....	47
3.2.1.1	Phenomenological study	47
3.3	Participants	49
3.4	Measures.....	50
3.4.1	Semi-structured Interview	50
3.5	Procedures.....	51
3.6	Data Analysis.....	52
3.7	Translation Process.....	53
CHAPTER 4: RESULTS.....		55
4.1	Introduction.....	55
4.2	Demographic.....	55

4.3	The Use of Religion for Sport Anxiety.....	56
4.3.1	Master Theme 1: Religious Coping Strategies.....	56
4.3.1.1	Superordinate theme 1: Prayers.....	58
4.3.1.2	Superordinate theme 2: Beliefs religious coping	60
4.3.1.3	Superordinate theme 3: Active religious coping	61
4.3.1.4	Superordinate theme 4: Benevolent religious coping	62
4.3.1.5	Superordinate theme 5: Religious social support.....	63
4.3.1.6	Superordinate theme 6: Wearing religious items	64
4.3.2	Master Theme 2: Positive psychological effects.....	65
4.3.2.1	Superordinate theme 1: Calmness	65
4.3.2.2	Superordinate theme 2: Sense of relief	66
4.3.2.3	Superordinate theme 3: Self-confidence	67
4.3.2.4	Superordinate theme 4: Motivation.....	68
4.3.2.5	Superordinate theme 5: Positive mindset.....	68
4.3.2.6	Superordinate theme 6: Sense of security	69
4.3.2.7	Superordinate theme 7: Patience	70
CHAPTER 5: DISCUSSION		71
5.1	Introduction.....	71
5.2	Religion of athletes	71
5.3	Religion as a Coping Strategy	72
5.4	Religious Coping Strategies and Their Implications	74
5.5	Methodological Issue.....	77
5.6	Future Research	77
CHAPTER 6: CONCLUSION.....		79
References.....		81

List of Publications and Papers Presented	92
Appendix A	93
Appendix B	94
Appendix C	97
Appendix D	100
Appendix E	102

University of Malaya

LIST OF FIGURES

Figure 2.1: The Four-Stage Stress Process	21
Figure 2.2: The Inverted-U Hypothesis by Yerkes and Dodson (1908)	29
Figure 2.3a: The Multidimensional Anxiety Theory of Anxiety and Performance Relationship	31
Figure 2.3b: The Multidimensional Anxiety Theory of Self-Confidence and Performance Relationship	31
Figure 2.4: Fazy's & Hardy's (1998) Catastrophe Model of the Relationship of Arousal, Anxiety, and Performance.....	32
Figure 2.5: Hanin's (1997) Individual Zone of Optimal Functioning (IZOF)	34

LIST OF TABLES

Table 4.1: Participants' Information	56
Table 4.2: Types of Religious Coping Strategies	57
Table 4.3: Positive Psychological Effects of Religious Coping Strategies.....	65

University of Malaya

LIST OF SYMBOLS AND ABBREVIATIONS

Brief-RCOPE	:	A brief measurement of RCOPE
JCPES	:	Johnson-Chan Prayer Effectiveness Survey
RBS	:	Religious Behavior Survey
RCOPE	:	Religious Coping
SAS	:	Sport Anxiety Scale
SIST	:	Spirituality in Sport Test

University of Malaya

LIST OF APPENDICES

Appendix A:	Approval of research ethics	93
Appendix B:	Background information form (English and Malay version)	94
Appendix C:	Interview's script and semi-structured questions (English and Malay version)	97
Appendix D:	List of translated Malay quotations	100
Appendix E:	Research plan	102

University of Malaya

CHAPTER 1: INTRODUCTION

1.1 Research Background

Anxiety is a natural human reaction among elite athletes and it involves a negative emotional state. It refers to the cognitive and physiological responses that can occur among athletes due to the various internal (e.g., uncertainty, self-confidence) and external (e.g., spectators, competitive level) stressors (Ford, Ildefonso, Jones, & Arvinen-Barrow, 2017; Gilham & Gilham, 2014). When these sources of anxiety are perceived as a threat, the body starts to react and produce a feeling of anxiousness. In addition, anxiety has also been closely linked to arousal, physiological, and psychological activation that can be influenced by emotions and thought (Weinberg & Gould, 2011). Ford et al. (2017) further explained that arousal, anxiety, and performance as variables with complex interaction. Numerous studies have been conducted and many theories have been developed to explore these relationships, such as the Inverted-U hypothesis, Multidimensional Anxiety Theory, Catastrophe model, and Individual Zone of Optimal Functioning (IZOF). Most of these theories discovered that anxiety can influence athletes' performances (Ford et al., 2017).

Furthermore, researchers have found that uncontrolled levels of anxiety influences the psychological and physiological responses associated with poor sport performance such as by disrupting thought and attention, and causing tremors and shortness of breath, respectively (Bali, 2015; McCarthy, Allen, & Jones, 2013; Weinberg & Gould, 2011). Moreover, anxiety was found to be an important predictor for athletes' self-confidence (i.e., high levels of anxiety can cause low levels of self-confidence and vice versa), which is a crucial aspect needed by athletes as it closely linked with athletic performances (Woodman & Hardy, 2003; Zeng, Leung, & Liu, 2008). Therefore, due to the detrimental effects of uncontrolled levels of anxiety, an effective coping strategy is much needed for athletes to handle their sport-related anxiety.

Coping is described as cognitive and behavioral efforts that constantly change to control stressful situations (Lazarus & Folkman, 1984). In sport psychology, various coping mechanisms such as imagery, self-talk, relaxation, and mindfulness have been introduced to athletes to manage their stress and anxiety. Another coping strategy that has been widely studied in psychology and health-related fields is religious coping (Koenig, 2012; Pargament, Smith, Koenig, & Perez, 1998). Religious coping is described as a specific mode of coping used in relation to religious or spiritual qualities to cope with life stressors (Pargament, Feuille, & Burdzy, 2011). Pargament et al. (1998) identified two types of religious coping in the measurement of religious coping called RCOPE: positive religious coping and negative religious coping. Positive religious coping is known as a constructive method that values the relationship with God and is reflected through coping activities while negative religious coping is a destructive method used due to a less secure relationship with God alongside a religious struggle such as an expression of doubt and conflict, or asking questions about God and faith.

Positive religious coping (e.g., active religious surrender, benevolent religious appraisal) has been found to be used more often and was associated with better health and well-being outcomes such as lower psychological distress while negative religious coping (e.g., demonic reappraisal, interpersonal religious discontent) has been found to be used less and is associated with negative impacts on health and well-being such as greater psychological distress (Pargament, Koenig, & Perez, 2000; Pargament et al., 1998). The finding of religious coping, which closely related to religion, showed that it is an important element with implications on individuals' health and well-being (Hill & Pargament, 2008; Koenig, 2012).

Furthermore, Koenig (2012) found that religion indirectly influences physical health through psychological pathways by boosting positive emotions in terms of it being a life-

enhancing factor and a form of coping mechanism. Other researchers have also discovered that spiritual meditation or prayers can suppress stress reactions and lower the anxiety levels (Boelens, Reeves, Replogle, & Koenig, 2009; LaBarbera & Hetzel, 2016; Masters & Spielmans, 2007; South & McDowell, 2018). Researchers have studied the implications of prayer in the human brain and they found a significant increase in alpha wave production, which is an indicator for relaxation (Arambula, Peper, Kawakami, & Gibney, 2001; Doufesh, Faisal, Lim, & Ibrahim, 2012; Doufesh, Ibrahim, Ismail, & Wan Ahmad, 2014). This finding highlights how prayer can elicit calmness, leading to relaxation, and a decrease in anxiety levels (Doufesh et al., 2014).

In addition, some sport studies have found that athletes utilize religion to enhance their coping ability in managing their athletic stressors (Czech & Bullet, 2007; Czech, Wrisberg, & Fisher, 2004; Kim & Duda, 2003; Park, 2000; Ridnour & Hammermeister, 2008; Watson & Czech, 2005). Athletes have mentioned that they feel calm, relaxed, and secured through prayers (Czech & Bullet, 2007; Park, 2000). These implications are important for athletes especially during competitions, as, for example, calmness has been found to be one of the key factors involved in fine muscular control when target-shooting (Hanton, Thomas, & Mellalieu, 2009).

Moreover, religious coping provides comfort and support to injured athletes throughout the recovery process (Wiese-Bjornstal, Wood, White, Wambach, & Rubio, 2018). The positive implications of religion are important to those injured athletes who have higher levels of anxiety due to the fear of their career-ending, frustration, or feeling lonely and sad during the rehabilitation phase (Tracey, 2003), alongside anxiety related to reinjury when they return to sport, which in turn affects the physical progress and athletic performances, respectively (Ford et al., 2017; Tripp, Stanish, Ebel-Lam, Brewer, & Birchard, 2007; Walker, Thatcher, & Lavalley, 2010). These findings show that

religion can facilitate to boost positive emotions and acts as a source of coping mechanism by positively influencing the psychological disposition of athletes.

Although religion in sport is hardly acknowledged in the literature of sport psychology, its expression is a common occurrence in sport (Mosley, Frierson, Yihan, & Aoyagi, 2015; Nesti, 2011). In fact, one study found that athletes gained greater strength from their religious beliefs when compared to non-athletes (Storch, Roberti, Bravata, & Storch, 2004). This is because athletes with strong religious beliefs may consider their faith as part of their identity and this gives meaning to every sport event that they participated in. From this perspective, it is common for them to express and utilize religion in sports which can be seen in an example from Tim Tebow, a former professional football American quarterback, and current professional baseball outfielder. He is known for his outspoken Christian faith. Due to his physical gesture of prayer by kneeling on one knee, head bowed and one arm resting on a bent knee, a term “tebowing” was formed indicating the gesture he did during games (Welch, 2017). Nevertheless, religion in sport is often overlooked and is still an underdeveloped field (Czech & Bullet, 2007; Mosley et al., 2015; Najah, Farooq, & Rejeb, 2017; Watson & Nesti, 2005), which leads to lack of understanding regarding the role of religion on sport anxiety. Therefore, in this study, I aimed to explore the role of religion on sport anxiety through a qualitative phenomenological approach.

1.2 Research Problem

In situations when athletes perceive their sources of anxiety as threats, this can lead to uncontrol levels of anxiety, which then influences their sport performances (Gilham & Gilham, 2014). Consequently, researchers have made efforts in developing the psychological skills that can be implemented by athletes to help them cope with anxiety such as imagery, relaxation technique, and self-talk. Apart from these psychological

skills, in psychology and health-related fields, religion has been found to have important implications on physical and mental health and is identified as religious coping when it is used to cope with negative life stressors such as fatal diseases and death of family members (Hill & Pargament, 2008; Koenig, 2012; Pargament et al., 1998). Many studies have been done to examine the effects of religion on various conditions such as bereavement, mental illness, psychological health, drug abuse, and others with diverse participants (Al-Omari, Hamed, & Abu Tariah, 2015; Loureiro, de Rezende Coelho, Coutinho, Borges, & Lucchetti, 2018; Lovgren et al., 2017). From this perspective, the utilization of religion might also have potential benefits in sports when it is used to deal with anxiety, especially among religious athletes.

In some sport-related studies, they also found that the athletes used religion such as by praying and turning to religion in order to cope with their athletic stressors (e.g., performance outcome, injuries) (Czech & Bullet, 2007; Czech et al., 2004; Kim & Duda, 2003; Park, 2000; Ridnour & Hammermeister, 2008; Watson & Czech, 2005; Wiese-Bjornstal et al., 2018). Nevertheless, religion in the area of sport psychology is often overlooked and still underdeveloped (Czech & Bullet, 2007; Mosley et al., 2015; Najah et al., 2017; Watson & Nesti, 2005), which led to little understanding in the role of religion on sport anxiety. Therefore, further exploration for the role of religion on sport anxiety is needed, by answering the research questions of: (1) how elite athletes utilize religion to deal with their sport anxiety? (2) How does utilization of religion influence the athletes?

1.3 Research Objectives

The study aimed:

- 1) To examine the utilization of religion among elite Malaysian athletes who have experiences in handling their sport anxiety with religion.
- 2) To explore the outcomes of religion on sport anxiety through the perspectives of elite Malaysian athletes.

1.4 Significance of the Study

The exploration of the role of religion on sport anxiety by examining the use and outcomes of religion through a qualitative phenomenological approach provides deeper insight into the phenomenon studied. Understanding the role of religion on sport anxiety might be beneficial among athletes who are religious as religion may be the best coping strategy to be used for them to cope with uncontrolled anxiety levels (Czech & Bullet, 2007). Consequently, it can positively influence the athletes psychologically which in turn helps to enhance their sport performances. Therefore, the present study can indicate the importance of understanding the role of religion has played in dealing with sport-related anxiety among religious athletes.

Moreover, this study can contribute to the field of sport psychology in a way that it acknowledged religion as one of the important elements in handling sport anxiety and enhancing sport performance. Even though the study of religion is still relatively lacking in sport, this exploratory study can build a new platform for future research that recognized the potential of religion in providing positive implications to the athletes. Further research on this topic using different approaches of study (i.e., qualitative, quantitative, or mixed-method) may lead to better findings that presenting more valid and reliable evidence. Thus, proving that religion should be recognized as a variable with important implications especially in the psychological aspect of athletes who are religious.

CHAPTER 2: LITERATURE REVIEW

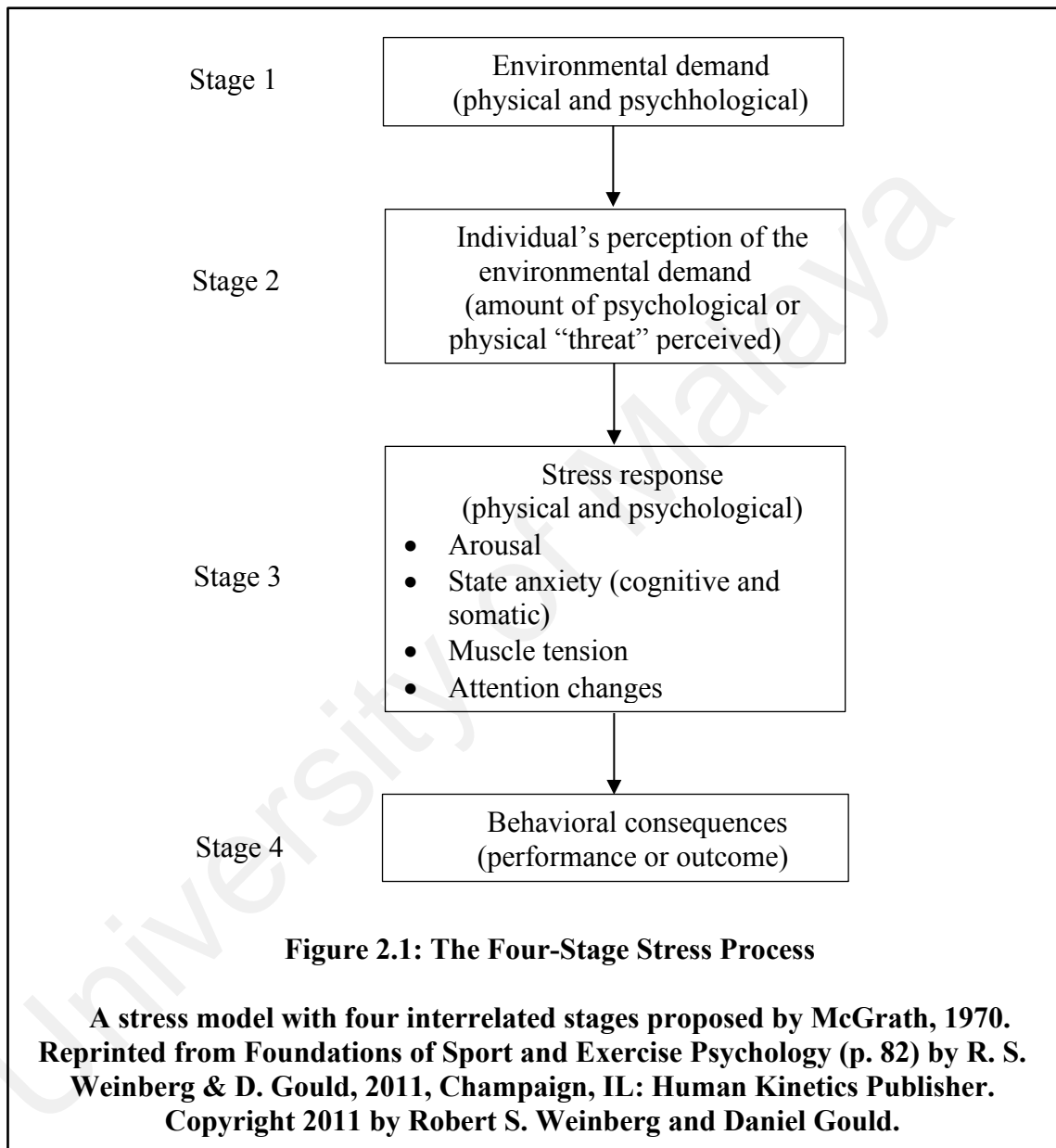
2.1 Introduction

This chapter provides an understanding of the research conducted. It comprises four major sections, which are stress, arousal, and anxiety, anxiety in sport, coping, and religion. Each main topic was first explained in general and narrowed into more specific topics. A clear definition of stress, arousal, and anxiety was first explained to clarify the distinction presents among the three terms. Then, I narrowed the topic into anxiety in sport as it is the main psychological aspect examined in this study and followed by coping which is also connected to the management of anxiety among athletes. Lastly, an extensive elaboration of religion is delivered to have more insight into the core variable of the present study.

2.2 Stress, Arousal, and Anxiety

The terms stress, arousal, and anxiety are sometimes misunderstood and are used interchangeably due to its close connection with each other. Therefore, to have a clear understanding of the research conducted, the terms need to be described and understood well. Stress is a mental or emotional strain due to the demands of various environmental factors. It is defined as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus & Folkman, 1984, p. 19). Arousal, on the other hand, is an important neuropsychological condition that regulates alertness, consciousness, and attention. It is the combination of the physiological and psychological state being activated at a particular moment (Weinberg & Gould, 2011). Lastly, anxiety is described as one of the psychological distress that closely related to emotions and thoughts of individuals which also known as a common negative emotional reaction of danger or threat (Saba, Bukhari, & Rashid, 2018). Likewise, Hardy et al. (1996) operationally

defined anxiety as individuals doubt in the ability to cope with stressful situations. The understanding of the connection of stress, arousal, and anxiety was distinctly depicted in a simple model of four-stage stress process by McGrath in 1970 (Weinberg & Gould, 2011).



As illustrated in Figure 2.1, the four-stage stress process consists of situational demand, cognitive appraisal, stress response, and behavioral consequences. Arousal and anxiety are actually the stress response resulted from the individuals' perception of situational demands. Thus, in sport, overcoming the stress response is crucial for athletes

as it will determine the behavioral consequences which are closely related to performance and outcomes.

2.3 Anxiety in Sport

Anxiety is one of the psychological factors that has been studied widely in the sport psychology field. It was recognized in two different components which are state and trait anxiety (Spielberger, 1966). Anxiety was then, established into a multidimensional concept which further classified into cognitive anxiety, which is known as a psychological expression of anxiety such as worry and negative thought, and somatic anxiety, the physiological expression of anxiety such as tremor and shortness of breath. In this context, cognitive anxiety is known as “thought component” (e.g., concern, worry) whereas somatic anxiety is the “degree of physical activation perceived” (e.g., sweating, increased heart rate) (Weinberg & Gould, 2011, p. 78).

2.3.1 State and Trait Anxiety

Anxiety can be manifested in two different ways which are state anxiety and trait anxiety. State anxiety is a temporary emotional state that occurs in a specific situation when an individual perceives it as a pressure, with an association of activation in the autonomic nervous system (Weinberg & Gould, 2011). In a sports context, researchers have also specified state anxiety as competitive state anxiety which refers to the sport-related anxiety that occurs during athletic tournaments. Competitive state anxiety has been constructed into separate components which are cognitive and somatic anxiety. Cognitive anxiety is referred to as concerns to do well during performances, and somatic anxiety is physiological response resulting from the psychological stress perceived such as tremor and shortness of breath (Hardy, 1999; Patel, Omar, & Terry, 2010).

On the other hand, trait anxiety is described as part of individuals’ personalities that can influence behavior (Pacesova, Smela, Kracek, & Plevkova, 2018; Weinberg & Gould,

2011). Similarly, trait anxiety was also constructed into cognitive and somatic anxiety (R. E. Smith, Smoll, Cumming, & Grossbard, 2006). This was depicted in measuring tool of Sport Anxiety Scale (SAS; R. E. Smith, Smoll, & Schutz, 1990), as it comprises of three components of trait anxiety, one is somatic trait anxiety (e.g., physical symptoms such as tremors and stomach tension) and two other aspects of cognitive trait anxiety which includes worry trait anxiety (e.g., degree of worries towards threats) and concentration disruption (e.g., degree of concentration disruption during competition). Therefore, based on the definition and explanation above, I defined sport anxiety in the present study as state and/or trait anxiety responses to sport-related situations that perceived with potential threats that can influence the psychological, physiological, and behavioral aspects of athletes.

2.3.2 Sources of Sport Anxiety

With diverse sports and competitive levels, sources of anxiety among athletes can be varied. The sources can be classified as internal stressors, external stressors, or even both internal and external stressors (Gilham & Gilham, 2014). Internal stressors referred to personal factors or sources of anxiety that come from within the athletes whereas external stressors stated as sources of anxiety that come from an environmental aspect.

Internal stressors or personal factors of sources of anxiety were also discovered to be the main sources of competitive anxiety among athletes (Guillen & Sanchez, 2009). Researchers have identified some common internal stressors, for example, in a qualitative study by Gilham and Gilham (2014), four themes have emerged which included *investment, uncertainty, self-confidence, and letting self or other down*. Some athletes have invested their time and dedication in order to strive more in their athletic careers, and this has eventually become one of the sources of anxiety among athletes. While others perceived the uncertainty of performance outcome as a stressor when facing with tournaments. The anxiety towards uncertainties in sport might due to the fear of failure

which also known to have a strong association with sport anxiety. The fear of failure discovered to have significant effects on concentration disruption, somatic anxiety, and worry subscales of trait anxiety (Correia & Rosado, 2018). Therefore, the need to cope with uncertainties have also been mentioned to be greater when facing with higher competitive levels (Czech & Bullet, 2007).

Athletes' self-confidence has also been discovered to be one of the sources of anxiety among athletes. Lack of self-confidence on one's ability and skill can cause an increment of anxiety levels which in turn led to a debilitating performance (Gilham & Gilham, 2014). The fear in disappointing oneself or others (e.g., teammates, coaches, family) down may also lead to anxiety and this might be due to the pressure they put on themselves so that they are giving their best to achieve meaningful performances. Apart from these four internal stressors, injury was identified to be another contributing source of anxiety (Ford et al., 2017; Guillen & Sanchez, 2009; Walker et al., 2010; Wiese-Bjornstal et al., 2018). Athletes are susceptible and have high risks to be injured during practices and events. Thus, to have fear of injury is common among athletes but when the fear becomes overpowering, it can eventually result in physiological and psychological changes that may impact their sport performances and their tendency to return to sport activities (Tripp et al., 2007; Walker et al., 2010). Injury-related anxiety may have more effect on athletes who have experienced serious injury and surgery (Najah et al., 2017; Tracey, 2003). It can occur during rehabilitation phase and during a tournament when one is to return into sport (i.e., reinjury anxiety) (Ford et al., 2017).

The external stressors are known as sources of anxiety that comes from environmental aspects such as *spectators, time, competitive level, setting, consequences, teammates, and coaches* (Gilham & Gilham, 2014; Guillen & Sanchez, 2009). For instance, the size of crowds or some important individuals among the audience such as family members plays an important role in causing athletes to be more anxious. Some athletes would think more

about their performance due to the burden they felt when someone they know is in the crowd (Gilham & Gilham, 2014). Furthermore, athletes become more anxious at certain timing such as right before and during competition, and this might be due to a few reasons such as due to the feeling of anticipation to compete right before the game or due to critical moments such as penalty kick that occur during the game (Gilham & Gilham, 2014). From this perspective, it shows that the anxiety levels are rather dynamic especially during the competition as it depends on the stressors faced by athletes.

Athletes' anxiety levels might also be affected by the levels of competition (e.g., state tournament, international tournament) (Czech & Bullet, 2007; Gilham & Gilham, 2014). The higher competitive levels, which indicate the importance of the competition to athletes especially for their athletic career in the future, can cause even greater anxiety levels among athletes. Interestingly, some athletes may consider the location of tournaments as one of the sources of anxiety (Gilham & Gilham, 2014). They preferred to perform at a place where they are familiar with, to be more comfortable and be less anxious. Besides that, the consequences of performances which described as the outcome of whether athletes performing well or not (e.g., being eliminated from the competition, changing role in a team sport) have contributed to athletes' anxiety level. Such consequences, when perceived as a threat, will eventually stimulate the anxiety levels. Another important factor that contributes to external stressors is the surrounding people that are involved in athletes' sport participation such as teammates and coaches (Gilham & Gilham, 2014; Guillen & Sanchez, 2009). For example, getting shouted at or being criticized even after trying hard by coaches during practices and lack of motivation or concentration among teammates during an important match may lead to a bad relationship and influence athletes' negative emotional state such as anxiety.

Lastly, for the categories within both stressors, it consists of *self-versus others* and *expectation* (Gilham & Gilham, 2014). Self-versus others refers to the stressor of being

an individual or a team sport. Some athletes claim to be more anxious when playing individually than in a team because they can rely and trust on each other, but others feel more anxious when they play in a team as they feel more responsible to their other teammates. Another factor that integrating both internal and external factors is an expectation from oneself and people surrounding such as coaches and teammates for winning and performing well in competitions (Guillen & Sanchez, 2009). This stressor has caused athletes to be under pressure and lead to higher anxiety levels.

From the explanation given in regard to the various sources of anxiety, it shows that different athletes have different stressors that they perceived as a threat which leads to anxiety. Therefore, understanding the athlete's stressors is important so that the anxiety levels can be controlled through psychological skills such as relaxation techniques, meditation, and mental toughness training.

2.3.3 Implications of Anxiety

The impacts of anxiety are varying according to the situation or environment faced by individuals. For example, in a study of anxiety and quality of life among breast cancer patients, researchers found a correlation of high anxiety with low quality of life (Charalambous, Kaite, Charalambous, Tistsi, & Kouta, 2017). On the other hand, in a sport setting, high anxiety can lead to a poor performance by affecting athletes' psychological (e.g., irrelevant thought, concentration disruption) and physiological (e.g., tremors, shortness of breath, stomach cramps) aspect (Oudejans, Kuijpers, Kooijman, & Bakker, 2011; Weinberg & Gould, 2011). In other words, anxiety in sport is a result of how athletes emotionally response negatively to the situation or environment surrounding them. Nevertheless, not all anxiety experienced led to catastrophic performances, it also has been stated to be facilitative when the levels of anxiety are at optimal levels, (Bali, 2015). In regard to athletes' sport anxiety, certain aspects such as the levels of trait anxiety

which has been linked to state anxiety and the ways athletes interpreted the anxiety experienced played a crucial role in affecting their sport performances.

Individuals with trait anxiety are more likely to experience anxiety and have more tendency to react and behave anxiously (Pacesova et al., 2018). Consequently, athletes with high trait anxiety may respond to stressors or threats with greater levels of state anxiety rather than low trait anxious athletes (Hanton, Mellalieu, & Hall, 2002; Zeng et al., 2008). From this perspective, trait anxiety is eventually interrelated to state anxiety and the interpretations about the situation surrounding the athletes themselves are important, as it can predict the levels of state anxiety responses, and perceive it as either facilitative or debilitating to their performances (Hanton et al., 2002).

In addition, Hanton et al. (2002) also found a significant difference in interpretation between high trait concentration disruption athletes and low trait concentration disruption athletes. Low trait concentration disruption athletes interpreted the experienced of concentration disruption with the presence of state anxiety as rather facilitative by maintaining and increasing their efforts. But high trait concentration disruption athletes were likely to increase state anxiety levels and have a hard time to focus, which led to the debilitating interpretation. Consequently, athletes with a debilitating view may have more tendency for poor performance due to the high levels of state anxiety. Likewise, McCarthy et al. (2013) also discovered that sport anxiety has a significant effect on concentration disruption even among youth sport participants.

Moreover, competitive anxiety has also been identified as an important predictor for self-confidence and performance (Zeng et al., 2008). In this context, athletes with high sport anxiety have more tendency to have low self-confidence whereas athletes who have low sport anxiety are likely to have high self-confidence which in both conditions, may have an influence on sport performances. This finding also shows that sport anxiety and

self-confidence are two psychological factors that should be viewed with great importance as both are identified to have a close association with sport performances (Woodman & Hardy, 2003).

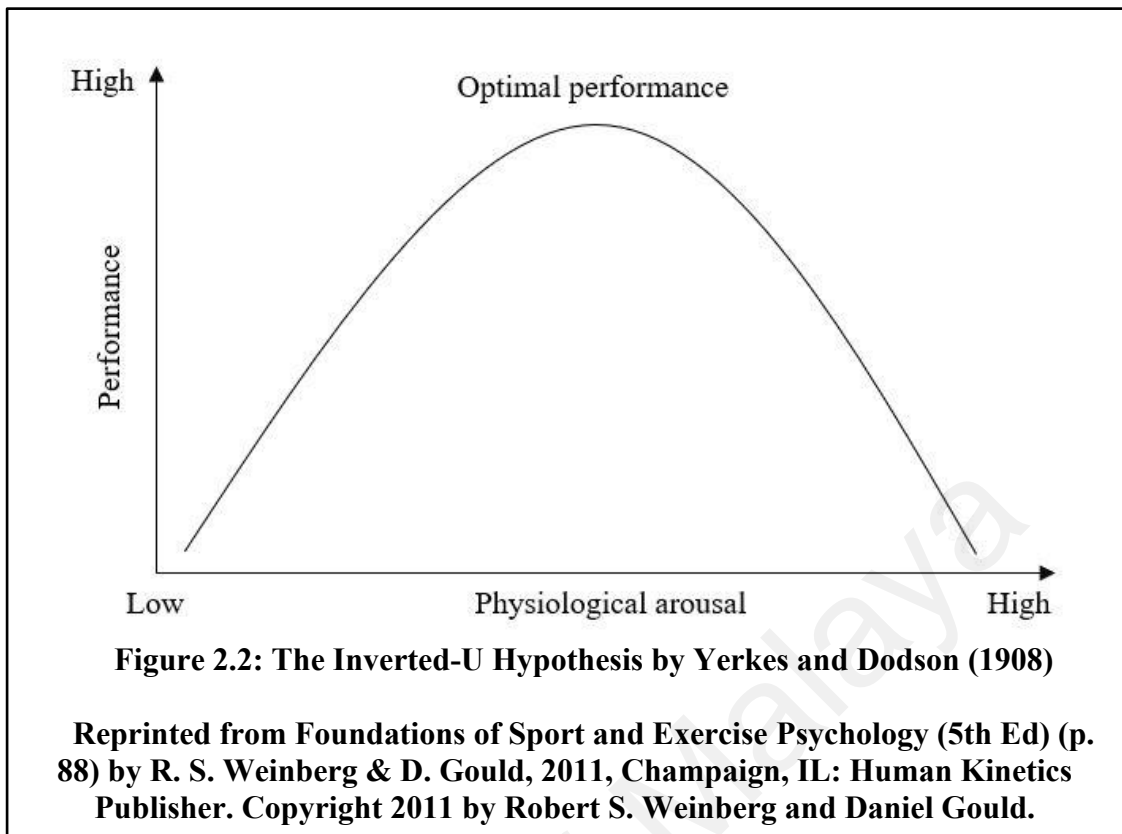
The findings from previous studies demonstrated the complex relationship between sport anxiety and performances as it was found to be facilitative at a certain point, yet debilitating at some circumstances. Therefore, in order to provide better explanation and understanding about anxiety and performances, previous researchers have taken the initiative to develop various theories, hypothesis, and model to connect the relationship between sport anxiety and performance.

2.3.4 Theory, Hypothesis, and Model of Sport Anxiety and Performance

As a result of an extensive interest in anxiety and athletic performance, there are some theories and models developed such as Inverted-U hypothesis (Yerkes & Dodson, 1908), Multidimensional Anxiety Theory (Martens, Vealey, Burton, & Martens, 1990), Catastrophe model (Hardy & Parfitt, 1991), and Individualized Zones of Optimal Functioning (IZOF; Hanin, 1997). These theories are developed and progressed to have a better explanation of the complex relationship between anxiety and sport performance. Below are some of the theories established and have been extensively used by other studies in the sport psychology field.

2.3.4.1 Inverted-U hypothesis

Inverted-U hypothesis was developed by Yerkes and Dodson (1908). The hypothesis emphasized that a moderate range of arousal levels can lead to optimal performance and, a higher or lower than moderate arousal levels can be caused a decline in performance (Arent & Landers, 2003; Raglin & Turner, 1993). Consequently, as depicted in Figure 2.2, a curvilinear relationship or inverted-U shape of arousal and performance is produced.



In addition, the hypothesis also proposes that the levels of anxiety to achieve optimal performance is depending on the task characteristics of the sport involved (Arent & Landers, 2003; Raglin & Turner, 1993). For instance, in a sport that requires gross motor skills such as shot-putting will need higher anxiety levels and get aroused to reach the optimal performance compared to sport with fine motor skill like archery, that requires lower levels of anxiety and arousal (Raglin & Turner, 1993). This suggestion is supported by Mellalieu, Hanton, and O'Brien (2004) in which the study found, rugby players interpreted an increased in cognitive anxiety response as rather facilitative than golf players. Overall, the general concept of the Inverted-U hypothesis is accepted in sport psychology but it also faces some criticisms. For example, the predicted inverted-U shape of arousal-performance has been questioned as some suggested that further increment of arousal levels may not likely lead a gradual decline of performance, but instead to drop sharply (Hardy & Parfitt, 1991). Nevertheless, Arent and Landers (2003) supported the prediction of the Inverted-U hypothesis about the relationship between arousal and performance. Although the peak point of arousal and performance relationship discovered

to be skewed to the right rather than at the midpoint, they found no sharp decline in performance when participants in their study reach the 70-90% of heart rate reserve (HRR; i.e., an indicator for arousal level). Therefore, the hypothesis is still viable to be used in an explanation about anxiety, arousal, and performance relationship.

2.3.4.2 Multidimensional Anxiety Theory

The Multidimensional Anxiety Theory has been established by Martens et al. (1990) who proposed two multidimensional relationships that comprise two subcomponents of anxiety: cognitive and somatic anxiety, self-confidence, and performance. The theory proposed a few predictions regarding the relationship among cognitive anxiety, somatic anxiety, and self-confidence with performances which has been illustrated in Figure 2.3a and Figure 2.3b. The predictions are (1) cognitive anxiety has more strong association to performance rather than somatic anxiety; (2) but cognitive anxiety shows a negative linear relationship with performance whereas somatic anxiety demonstrates an inverted-U shape with performance. Conversely, self-confidence has a positive linear relationship with performance; (3) somatic anxiety is seen to have a strong relationship with performance but depended on the duration and task complexity of the events (Burton, 1988).

Apparently, the Multidimensional Anxiety Theory is not consistently supported due to its performance predictions (Weinberg & Gould, 2011). For example, Hardy and Parfitt (1991) and Hardy (1999) argued about none prediction of interactive effect between cognitive and somatic anxiety on performance. According to Hardy (1999), the theory tried to clarify the three-dimensional relationship among cognitive anxiety, somatic anxiety, and performance but, in a separate series of two-dimensional relationships (i.e., cognitive anxiety-performance relationship and somatic anxiety-performance relationship). Therefore, he suggested that the relationship should be explained in a three-dimensional model.

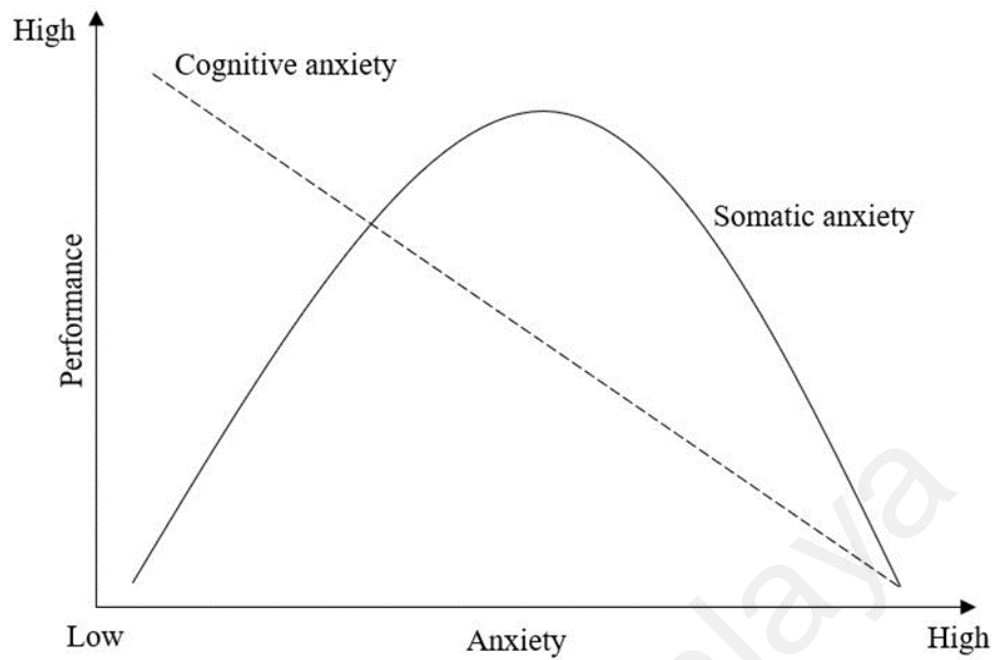


Figure 2.3a: The Multidimensional Anxiety Theory of Anxiety and Performance Relationship



Figure 2.3b: The Multidimensional Anxiety Theory of Self-Confidence and Performance Relationship

Figure 2.3a and Figure 2.3b represent the theory of the Multidimensional Anxiety Theory. Adapted from “Do Anxious Swimmers Swim Slower? Reexamining the Elusive Anxiety-Performance Relationship by D. Burton, 1988, Journal of Sport & Exercise Psychology, 10, p. 56. Copyright 1988 by the Human Kinetics Journal.

2.3.4.3 Catastrophe model

Catastrophe model in sport is a three-dimensional theory, as depicted in Figure 2.4, developed by Hardy and Parfitt, (1991) and has been suggested on interactions among cognitive anxiety, physiological arousal, and performance. The model proposed that, firstly, cognitive anxiety directly influences and is negatively correlated with performance. Secondly, cognitive anxiety levels were stated to have influence somatic anxiety response which eventually related to catastrophe effect (i.e., a sharp drop of performance that leads to extremely poor performance). Thirdly, the relationship between physiological arousal and performance is predicted to be uniform or inverted-U shape as it is not inevitably influenced on performance unless triggered by high cognitive anxiety level. Therefore, based on the three assumptions, the model suggested that low levels of cognitive anxiety with optimal somatic anxiety can eventually facilitate athletes'

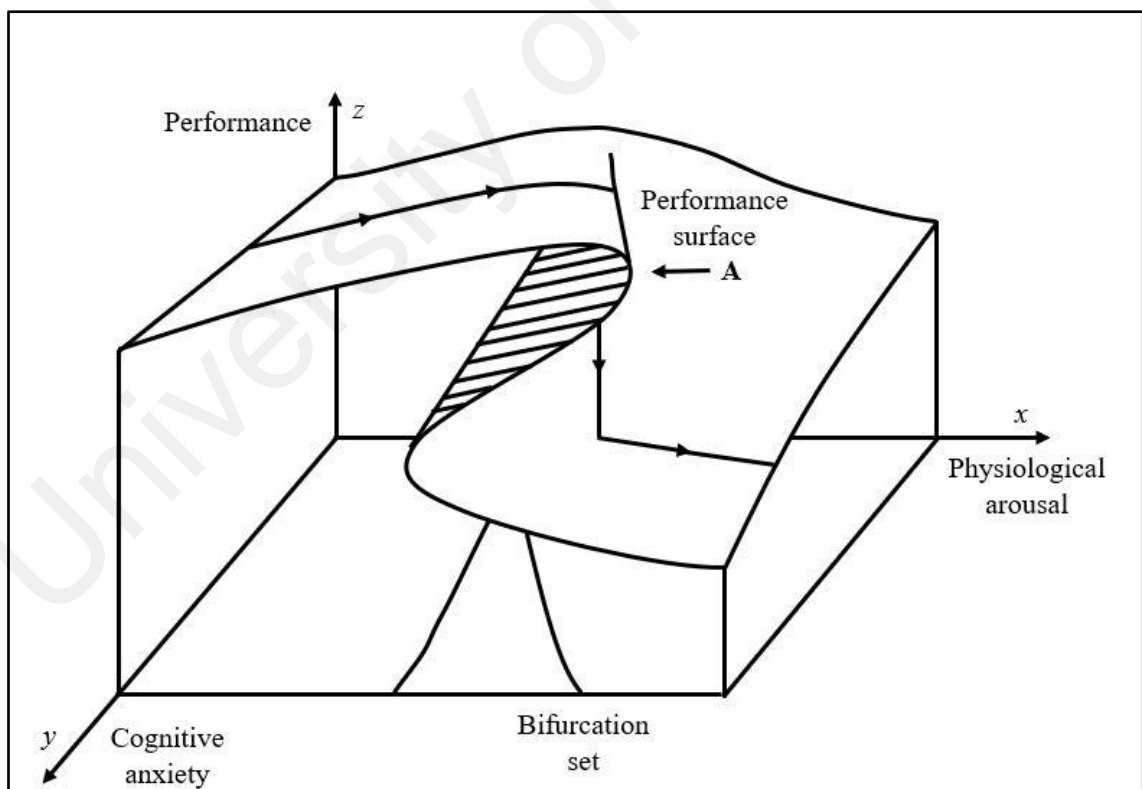


Figure 2.4: Fazez's & Hardy's (1998) Catastrophe Model of the Relationship of Arousal, Anxiety, and Performance

Adapted from "Catastrophe Model of Anxiety and Performance" by L. Hardy & G. Parfitt, 1991, *British Journal of Psychology*, 82, p. 167. Copyright 1991 by the British Psychological Society.

performances but when both anxiety components are high, this would lead to a catastrophe effect of performance (Point A in Figure 2.4). The model received some scientific support but it has been criticized for its difficulty to test scientifically due to the complexity of the model (Hardy, 1996). Thus, the evidence was still ambivalent.

2.3.4.4 Individual Zones of Optimal Functioning (IZOF)

The theory of IZOF was established by Hanin (1997). In theory of IZOF, as depicted in Figure 2.5, it emphasized on the range or zone rather than a single point of optimal state anxiety to achieve optimal performance and it also showed that the optimal state anxiety levels can be varied to reach among different athletes (i.e., different athletes require different levels of optimal state anxiety). Thus, these two features in IZOF have contradicted the theory in Inverted-U hypothesis in which it proposed a mid-single point at the peak curvilinear relationship of anxiety-arousal and optimal performance relationship (Raglin & Turner, 1993; Weinberg & Gould, 2011).

In providing an understanding of the relationship between state anxiety and performance, the theory of IZOF also included emotions as another feature that plays an important part in influencing athletes' performances. Emotions in IZOF are identified as positive (e.g., confident, motivated) and negative (e.g., nervous, worry) emotions that sometimes bring performance functionality as well as positive (e.g., calm, relax) and negative (e.g., panic, anger) emotion that lead to performance dysfunctionality (Hanin, 2002; Weinberg & Gould, 2011). From this perspective, the effects of emotions on athletes whether positive or negative, also differ from one athlete to another athlete. For instance, some athletes might experience unpleasant emotion such as worry as rather helpful for sport competition while other athletes might find worry as emotions that can hinder their performance in sport.

Athlete A (low IZOF)	In zone (Optimal performance)		Out of zone (Suboptimal/poor performance)	
Athlete B (moderate IZOF)	Out of zone (Suboptimal/ poor performance)	In zone (Optimal performance)		Out of zone (Suboptimal/ poor performance)
Athlete C (high IZOF)	Out of zone (Suboptimal/poor performance)		In zone (Optimal performances)	
<p>Figure 2.5: Hanin's (1997) Individual Zone of Optimal Functioning (IZOF)</p> <p>Reprinted from Foundations of Sport and Exercise Psychology (5th Ed) (p. 88) by R. S. Weinberg & D. Gould, 2011, Champaign, IL: Human Kinetics Publisher. Copyright 2011 by Robert S. Weinberg and Daniel Gould.</p>				

Overall, although the anxiety-performance relationship was found to be rather complex and complicated, theories developed by researchers elicited the importance of understanding the link formed between anxiety and performance. Despite having different opinions and suggestions, the message can be derived from the model and theory. Therefore, it shows the significance of considering physiological and psychological responses generated by the human body that can influence the optimal performance in sport (Weinberg & Gould, 2011). From this perspective, as anxiety has potential in causing detrimental effects and poor performances among athletes, coping has become an essential component studied in sport psychology to help athletes enhance sport performance.

2.4 Coping

Coping is a complex process that involves different appraisal among different individuals with various coping strategies. The process of coping is basically known as a course of “adaptational outcome” when one first appraised certain situations as harm, threat, or challenge to stimulate their emotional response at a time (Lazarus & Folkman,

1987, p. 146). It has been defined as cognitive and behavioral attempts to control or overcome demanding situations evaluated by individuals (Lazarus & Folkman, 1984). In the study of coping, Lazarus and Folkman (1987) proposed two main interrelated functions of coping which are problem-focused coping and emotion-focused coping. In addition, another function of coping called avoidance coping has also been suggested by Roth and Cohen (1986).

2.4.1 Functions of Coping

Problem-focused coping directly dealing with distress by addressing and reducing the stressors whereas emotion-focused coping acts by managing emotional distress (Lazarus & Folkman, 1987; Mayordomo-Rodriguez, Melendez-Moral, Viguer-Segui, & Sales-Galan, 2014; Nicholls, Polman, Levy, Taylor, & Copley, 2007). Avoidance coping, on the other hand, involves a passive form of coping that disengaging and avoiding oneself from anxiety-arousing stimuli and its consequences (Mayordomo-Rodriguez et al., 2014; Roth & Cohen, 1986).

Coping has been studied to examine its association with well-being as it is recognized as a facilitative course in managing cognitive, emotional, and behavioral aspects of individuals when faced with certain situations (Mayordomo-Rodriguez et al., 2014). Many studies were done to investigate the effectiveness and implications of coping on well-being in various contexts such as mental health, fatal diseases, and suicidality (Aarts et al., 2015; Chou, Ko, Hsiao, Cheng, & Yen, 2017; Nahlen Bose, Elfstrom, Bjorling, Persson, & Saboonchi, 2016). Among problem-focused, emotional-focused, and avoidance coping, problem-focused coping was found to be positively predicts well-being, while emotion-focused coping found to be mixed in result as it can be found to be negatively predicts well-being, but also facilitative in other studies when it was used to cope with depression and anxiety (Chou et al., 2017; Mayordomo-Rodriguez et al., 2014). Lastly, avoidance coping was discovered to cause detrimental effects as it was associated

with high depression and anxiety by several studies (Aarts et al., 2015; Chou et al., 2017; Nahlen Bose et al., 2016). Thus, these findings highlighted the importance of understanding the coping effectiveness and its implications among different individuals as it plays an important role in health and well-being.

2.4.2 Coping in Sport

Athletes are susceptible to be in situations such as uncertainty towards outcomes of performance, doubting towards their own abilities or skills, and expectation to do well. In such situations, it may cause high anxiety levels among athletes which then, influence the athletes' performances. Psychological factors play an important role in maintaining peak performances and may require psychological abilities that coping can provide to the athletes (Park, 2000). Therefore, using the core concept of coping in general, coping has been implemented into the sport and as a result, various coping strategies are introduced to the athletes so that it can be used when faced with stressors.

In implementing problem-focused coping, athletes may utilize strategies such as appropriate training, goal-setting, and increasing effort, while others might use emotion-focused coping through meditation and relaxation. Some athletes also use avoidance coping such as by ignoring the stressors or distracting oneself from stressors. Among the diverse strategies of coping, problem-solving, relaxation technique, imagery, and blocking distractions are some of the strategies that have been widely used by athletes (Gould, Eklund, & Jackson, 1993; Nicholls et al., 2007; Park, 2000). In addition, problem-focus coping has been found to be used more as a coping strategy, followed by emotion-focus and avoidance copings (Nicholls et al., 2007; Wong, Teo, & Polman, 2015). The choice of coping strategies is depending on the athletes themselves as different athletes facing a different kind of stressors and it also relates with the effectiveness of the coping strategies employed among athletes when faced with their specific stressors (Nicholls et al., 2007; Wong et al., 2015).

In terms of coping effectiveness, which is when coping strategies are working effectively to relieve stress and negative emotional response such as fear, nervousness, and anxiety, Nicholls et al. (2007) found that coping effectiveness can be influenced by gender, type of sport (i.e., individual or team sport), and athletic skill. For example, technique-oriented coping which known as one of the problem-focused coping found to be significantly effective for individual athletes than in team athletes. Behavioral avoidance, on the other hand, was more effective in team athletes than in individual athletes. Wong et al. (2015) also discovered that the effectiveness of coping was depending on situational (e.g., experiencing injury) and contextual (e.g., minor or major competition) factors. They revealed that emotion-focused coping was less effective when compared to problem-focused coping and avoidance coping, but athletes who experienced pain or injury rated emotion-focused coping to be more effective during pre-competition whereas avoidance coping is beneficial in providing temporary relief during the competition.

Interestingly, as coping effectiveness can influence the choice of coping strategy to be used, some studies have found prayers or turning to religion as another way of coping that can work effectively among athletes who are religious (Czech & Bullet, 2007; Czech et al., 2004; Gould et al., 1993; Kim & Duda, 2003; Park, 2000; Ridnour & Hammermeister, 2008). The religion-related of coping such as praying is known for its term religious coping especially in psychology and health-related field. In regard to this coping strategy, Mayodormo-Rodriguez et al. (2014) stated that religious coping might be the only way to make a person tolerate a situation when one has no or lack of control. Likewise, this perspective was supported by Kim and Duda (2003) who found that some athletes turned to religion (i.e., turning to one's religious faith) when they have no or lack of control over a situation that can cause psychological distress. In this perspective, athletes who are

religious may use religion rather than other ways of coping as it might have worked effectively on them when faced with a certain situation in sport.

2.4.3 Religious Coping

Religious coping is described as a specific mode of coping used in relation to religious or spiritual qualities to cope with life stressors (Pargament et al., 2011). Pargament et al. (1998) developed a valid and reliable measurement tool for religious coping called RCOPE, in which it has been tested on two different groups of population include college students and elderly hospital patients. This tool was used extensively by other studies especially in psychology and health-related fields. The tool developed, comprises of two types of religious coping; positive religious coping and negative religious coping.

In RCOPE, positive religious coping refers to the constructive method that values the relationship with God which reflected through the coping activities. Negative religious coping, on the other hand, is considered to be a destructive method used with religious struggle (i.e., religious expression of doubt, conflict, and questions about God and faith) and less securing relationship with God. Pargament et al. (1998) identified various methods of positive religious coping such as *active religious surrender*, *benevolent religious reappraisal*, and *collaborative religious coping* and negative religious coping like *demonic reappraisal*, *interpersonal religious discontent*, and *reappraisal of God's power*.

Furthermore, religious coping is not only express in terms of the relationship between the individuals with God/higher beings but also with surrounding people that have the same values and faith and through the belief in *sacred objects* or *matters*. Religious-related coping that involves surrounding people is also known as social religious support by some studies (Debnam, Holt, Clark, Roth, & Southward, 2012; Holt, Roth, Huang, & Clark, 2018). Pargament et al. (1998) identified three types of social religious coping in

the measurement tool of RCOPE which are seeking support from clergy or members, attempting to provide spiritual support to others, and expressing confusion and dissatisfaction with clergy or members. In regards to sacred objects, it involves faith in various objects that have spiritual meaning into it such as material items (e.g., crucifix, praying beads), cultural products (e.g., music, literature), and spaces (e.g., place of worship) (L. M. Miller, Gall, & Corbeil, 2011; Pargament & Mahoney, 2005).

Based on the findings, they show that the integration of religion as a coping strategy is rather diverse (e.g., as it also includes social support) and has been used extensively in handling stressors and adversities in life. Nevertheless, the religious coping strategy itself is rarely mentioned and utilized in sport. To have a better understanding of religious coping, the term religion is therefore, needs to be explained and clarified.

2.5 Religion

2.5.1 Religion and Spirituality

As the terms religion and spirituality have been used interchangeably in other studies, providing a definition and explanation regarding both terms are therefore required. Religion comes from Latin word *religio* which derived from *ligo* (i.e., to tie or bind). It indicates a connection of humankind to some divine or “greater-than-human power” (Hill et al., 2000, p. 56). Religion can be defined as a system or structure that comprises a specific way of beliefs and practices that directed towards the power of higher being or the divine (Argyle & Beit-Hallahmi, 2013). On the other hand, spirituality comes from a Latin word *spiritus* (i.e., breath or life) (Hill et al., 2000). The concept of spirituality was found to be wider than religion (Helminiak, 1996). It is defined as “a transcendent dimension within human experience... discovered in moments in which the individual questions the meaning of personal existence and attempts to place the self within a broader ontological context” (Shafranske & Gorsuch, 1984, p. 231).

Religion and spirituality are two terms with a similar meaning and yet different in certain contexts. For instance, religious people could declare themselves to be religious and spiritual but spiritual people describe themselves to be spiritual but not religious. Hence, the terms are used interchangeably and sometimes can be confused and misunderstood. In this context, both terms share the same concept of belief which is to believe in divine and ultimate power. Spirituality, however, is sometimes not bound to or express in any specific practices or rituals that are directed towards such power like any religion (e.g., Muslims praying five times a day, fasting, attending a place of worship, reading scripture).

The core concept of religion includes both personal beliefs towards God or higher power and official belief and practices, such as specific ways of prayers and attendance to the place of worships, while spirituality is described more in terms of personal or experiential terms such as belief in God or higher power. Due to its certain overlapping concept of belief, most religious people would describe themselves as both religious and spiritual. Zinnbauer et al. (1997) classified two groups of individuals in his study which are “spiritual and religious” group and “spiritual but not religious” group (p. 561). “Spiritual and religious” group described themselves as both religious and spiritual. This is because the terms religiousness and spirituality were associated with the belief of divine power, religious activities, and the frequency of prayer. On the other hand, “spiritual but not religious” group appears to be more individualistic and less likely to engage with religious practices and prayers. They prefer to involve spiritual growth, have had mystical experiences, and likely differentiate religiousness and spirituality as different and non-overlapping concepts (Hill et al., 2000). In understanding the existence of distinctions and similarities between religion and spirituality, I use the term religion as it is more appropriate to be used in representing the main variable of the present study.

2.5.2 Aspects of Religion

Apart from the comparison between the two terms, there are two important aspects of religion; practices and the strength of beliefs that have been stated to be diverse among different faith of traditions (e.g., Christianity, Islam, Judaism, Buddhism, and Hinduism) and can predict the religiosity and spirituality of individuals (Johnstone et al., 2012). For instance, Protestants (Cohen & Hill, 2007) and Muslims (Johnstone et al., 2012) have been found to be more religious when compared to other groups of religions such as Jews and Buddhist. This might be due to the diverse emphasis of beliefs and practices in different religions. For example, Protestants and Muslims have been highlighted on community and daily private religious activities which aim to secure the beliefs and relationship with higher being whereas Jews have been emphasized more on community religious activities but nowadays, they are likely to view their religious identity as family descent, while Buddhists, on the other hand, is more on meditation practices and values in life, and Hindus are likely to do individual rituals or meditation and religious rites (Johnstone et al., 2012; Weightman, 1997). Moreover, Malaysia is known as a multi-religious country with majorities are Muslims (61.3%), followed by Buddhists (19.8%), Christians (9.2%), Hindus (6.3%), and others (3.4%) (Department of Statistics Malaysia, 2010). Therefore, with diverse emphasis and intensity of beliefs and practices in religion, this might also influence the preferences and perspectives of religious utilization among the general population as well as in athlete's population who have religion, especially in Malaysia.

2.5.3 Religion and Health

As religion was found to be utilized in order to cope with life stressors and adversities which can lead to detrimental effects (e.g., depression, anxiety disorder) on oneself, several studies about religion have been done in psychology and health-related field especially in regards to implications of religion on mental and physical health (Abu-

Raiya, Hamama, & Fokra, 2015; Koenig, 2012). A review study by Koenig (2012), attempted to examine the relationship of religion, mental health, and physical health, as well as the clinical implications for the utilization of religion.

Koenig (2012) found about 80% of research on religion involves mental health which might be due to religious involvement that includes psychological, social, and behavioral aspects, which closely related to mental health than physical health. Majority of previous studies showed that although some studies found negative implications of religion such as obsessive practices and psychosocial strains due to expectation in living by high religious standards, religion was found to have significant positive relationship and is helpful in dealing with adversities, by providing positive emotions and reducing the risk of depression, anxiety, substance use, and psychotic disorders such as schizophrenia (Al-Omari et al., 2015; Hill & Pargament, 2008; Loureiro et al., 2018; Lovgren et al., 2017; Masters & Spielmans, 2007). Therefore, from the findings, it shows that positive association between religion and mental health may eventually lead to better physical health (Koenig, 2012).

Furthermore, religion was discovered to have an indirect influence on physical health through three basic pathways which are psychological, social, and behavioral pathways (Koenig, 2012). Basically, poor mental health was discovered to negatively influence physiological consequences that lead to poor physical health (Kubzansky & Thurston, 2007). Therefore, from a psychological perspective, the use of religion as a way of coping can eventually help to decrease the risk of mental health which in turn could positively impact individuals' physical health. Religion was also used through the social relationship among surrounding people and the good social relationship was found to have promoted health and well-being (Debnam et al., 2012; Holt et al., 2018; Umberson & Montez, 2010). In this context, by integrating positive religious values in a social relationship (e.g., seeking clergy or member's support, providing spiritual support to surrounding people),

it can lead to better mental and physical health. Furthermore, religion provides guidance to lead healthier behavior such as by promoting less alcohol consumption, drug use, smoking, and better dietary and exercise practices (Al-Omari et al., 2015; Benjamins & Buck, 2008; Holt et al., 2018; Koenig, 2012). Thus, lead to better physical health through health behavior pathway.

In regard to the implications of religion, it also depends on what kind of religious coping use, whether it is positive or negative. As mentioned earlier, positive coping has been found to be used more frequently and have an association with better health and well-being (e.g., lower psychological distress) whereas negative religious coping was used less common and has been associated with depletion of health and well-being (e.g., greater psychological distress) (Pargament et al., 1998; Pargament et al., 2000). Consequently, religion was viewed more as another coping strategy that provides advantages with positive implications on health. Therefore, as religion was found to be beneficial in psychology and health-related fields, it may also provide potential benefits in the area of sport psychology especially through the psychological aspect of religious athletes.

2.5.4 Religion and Sport Anxiety

Although religion is hardly acknowledged in the literature of sport psychology, its expression is a common occurrence in sport (Mosley et al., 2015; Nesti, 2011). Furthermore, in Storch et al. (2004), intercollegiate athletes were discovered to have stronger religious beliefs when compared with other non-athlete students. This finding can be interpreted in a way that intercollegiate athletes have to deal with their sources of anxiety in both involvements as athletes as well as academic students, in which, demanding effective coping abilities. Therefore, for athletes with strong religious beliefs, they might consider religion as an effective way to cope with stressors that can cause

detrimental effects on them such as depression and anxiety. In this respect, they have their own way of expressing their religious beliefs and thus, utilize it when participating in sport. Their faith in religion can also play an important part in their identity and thus, put meaning into their sport involvement. Mosley et al. (2015) found a mutual opinion on how some athletes put religious beliefs into meaning in sport. Some religious athletes considered their skills, abilities, and chance to participate in sport as a blessing from God and hence, use this notion as the ground principle to venture into sport.

In addition, Coakley (2017) proposed seven possible reasons in the use of religion among athletes which are: (1) to cope with uncertainties (2) to keep life without distress (3) to provide meaning in every sport involvement (4) to balance athlete's standpoint in sport (5) to create team cohesion (6) to maintain motivation and social control, (7) and to achieve athletic success. Similarly, among the possible reasons proposed, Czech and Bullet (2007) found that some athletes have used prayers as a way to cope with uncertainties such as performance outcomes or getting injured in sport participation. Athletes are susceptible to be exposed to the uncertain situations in which it has been recognized as one of the sources of anxiety (Gilham & Gilham, 2014). Thus, it can influence their competitive state anxiety levels especially during critical moments like minutes before the game ends or during match points.

Besides that, in regard to the use of prayers among athletes, Gould et al. (1993) and Park (2000) discovered that prayer has been used as thought control strategy and to seek calmness, respectively. Moreover, research about prayers in another context of studies found that prayers help in alleviating stress, anxiety, and depression by eliciting optimism and calmness (Boelens et al., 2009; LaBarbera & Hetzel, 2016; South & McDowell, 2018). Interestingly, some studies had even examined the impact of religious meditations and prayers on the brain by measuring the alpha brain activity, which is an important indicator of relaxation (Arambula et al., 2001; Doufesh et al., 2012; Doufesh et al., 2014).

Arambula et al., (2001) examined the impact of Kundalini Yoga meditation (i.e., a type of religious meditation from Hinduism) on the alpha brain activity and found a significant increase in alpha waves production. Consistent with this finding, Doufesh et al. (2012) and Doufesh et al. (2014) also discovered a significant effect of Muslim prayers in stimulating the alpha waves. Doufesh et al. (2012) suggested that the increment of alpha waves production might be due to the higher state of calmness which elicited from the prayers practiced. Similarly, in some studies in sport psychology, calmness has been mentioned as one of the effects elicited by practicing prayers during sport competition (Czech et al., 2004; Park, 2000).

The used of religion was also found to improve self-confidence (Azimirad & Jalilvand, 2012; Dodo, Lyoka, Chetty, & Goon, 2015; Narimani, Babolan, & Ariapooran, 2011), sense of security (Czech et al., 2004), and motivation (Mosley et al., 2015) in which have been associated with lower anxiety levels. Studies have shown that religion has a significant association with better self-confidence and lower levels of anxiety. Thus, they highlighted that religion plays an important role in alleviating anxiety by boosting athletes' confidence in sport participation (Azimirad & Jalilvand, 2012; Dodo et al., 2015; Narimani et al., 2011). In terms of security, which basically known as a vital psychological need when one is dealing with risks or uncertainties (Zotova & Karapetyan, 2018), it has also been linked with lower levels of anxiety (ALharbi, 2017). Therefore, some athletes especially those who have experienced many injuries, used religion by praying for protection from any injury as it helps to relieve the feeling of fear of getting hurt during competitions (i.e., reinjury anxiety) (Czech et al., 2004).

In addition, a motivation which is an important psychological aspect needed by athletes (Heper, Yolacan, & Kocaeksi, 2014) is found to significantly help in lowering anxiety levels (Menegassi et al., 2018) and discovered to be one of the positive implications of religion. Mosley et al. (2015) discovered that religion can be "a source of

rejuvenating motivation” when it was utilized by the athlete after suffering a serious injury (p. 379). Furthermore, in regard to the used of religion in dealing with sport-related injuries, Najah et al., (2017) found that religion plays a positive role in minimizing negative emotions. The use of religion was stated to have provided a source of hope for athletes to deal with adversities such as serious injury or major surgery which can affect athletes’ performances and careers. Moreover, hopeful thoughts were discovered to be facilitative in lowering fear and doubt over the healing process and ability to return into sport (Tracey, 2003). Indeed, it has potentially facilitated athletes in coping with injuries especially during the recovery process by providing comfort, support, and guidance (Wiese-Bjornstal et al., 2018).

Therefore, the findings indicate that some athletes who are religious or spiritual have used religion in order to facilitate them in dealing with various sources of anxiety so that the anxiety levels can be controlled, which in turn may enhance their sport performances. The utilization of religion on sport anxiety seems to have a positive influence on athletes and sometimes associated with optimal performance or flow experience (Dillon & Tait, 2000; Mosley et al., 2015). The use of religion has also been suggested to be beneficial to function as an effective coping strategy especially among religious athletes and should be recognized in the area of sport psychology (Azimirad & Jalilvand, 2012; Narimani et al., 2011; Ridnour & Hammermeister, 2008; Watson & Czech, 2005; Watson & Nesti, 2005). Nevertheless, from an extensive literature search done, research on religion and sport anxiety seems to be not widely explored yet. Therefore, it is needed to explore and understand the role of religion on sport anxiety through its utilization and implications for athletes.

CHAPTER 3: METHOD

3.1 Introduction

This chapter covers methods and research process of the study conducted. The research method started with the choice of research design to the last stage of completing the data analysis. It consists of six main topics that include the research design used, participants' criteria, measures, procedures, data analysis, and translation process.

3.2 Research Design

3.2.1 Qualitative Study

For this study, I employed a qualitative approach to explore the role of religion on sport anxiety. As there is little understanding about the role of religion on sport anxiety with a lack of measuring tools for religion in sport, a qualitative study was applicable in achieving the research aim. The qualitative approach allowed me to collect and generate rich data and produce an in-depth analysis of the topic studied by obtaining more information from the participants' experiences and perspectives (Malson, 2010). Among various qualitative designs, Creswell (2007) recommended five designs that are popular in social and health sciences areas which are narrative, phenomenology, case study, grounded theory, and ethnography. For the current study, I employed a phenomenological study to get rich details of participants' particular experiences in using religion for sport anxiety.

3.2.1.1 Phenomenological study

A phenomenological study is an approach that focusses on defining the meaning of a particular phenomenon from individuals' lived experiences. There are two general categories identified in a phenomenological study that includes transcendental (i.e., descriptive) phenomenology and hermeneutic (i.e., interpretive) phenomenology (R. M. Miller, Chan, & Farmer, 2018). Transcendental phenomenology focusses more on the

description of participants' experiences rather than the interpretation of researchers whereas hermeneutic phenomenology emphasizes the interpretation of the phenomenon experienced by participants. The Interpretative Phenomenological Analysis (IPA), on the other hand, is another phenomenological approach that formulates by integrating both ideas into one method (Pietkiewicz & Smith, 2014).

(a) Interpretative Phenomenological Analysis (IPA)

IPA is an approach that emphasized on the description of phenomenon described by participants (i.e., transcendental) and interpretation of both participants and researchers on particular phenomenon (i.e., double hermeneutic) (R. M. Miller et al., 2018; Pietkiewicz & Smith, 2014; A. J. Smith & Osborn, 2004). Due to the double hermeneutic or dual interpretation, IPA can help researchers in having richer and comprehensive information (Pietkiewicz & Smith, 2014). Another important characteristic of IPA is its idiographic approach (i.e., in-depth insight on individuals with personal experiences of human nature). This means IPA will explore an in-depth analysis of each individual before it is compared among participants to produce a general statement. Therefore, by utilizing IPA in this study, I have obtained rich description and interpretations of experiences in religious utilization among elite athletes in handling their sport anxiety. Consequently, IPA allowed me to understand and interpret the meaning of athletes' experiences and perspectives of using religion in sport. It also provided a specific and complete framework for researchers to conduct IPA studies from beginning to the end of studies (i.e., from formulating study's aim to the writing style of IPA) (R. M. Miller et al., 2018; A. J. Smith & Osborn, 2004). Thus, it guided me throughout the research process to answer the research questions and achieve the research aim.

3.3 Participants

The sample size in this study has been guided by the IPA sampling method. IPA uses a purposive form of sampling as the data needed to be collected from a specific population in a specific context. In addition, there are no rules set on the numbers of participants in IPA but it is usually small sample sizes, which is between one to fifteen participants, as it focusses on the depth (i.e., the rich and detail analysis from each participant's experiences and perspectives) rather than the breadth (i.e., generalizing the whole population) of the study (Pietkiewicz & Smith, 2014). To decide the number of participants, however, researchers need to decide the way they want to present the analysis, whether to give a complete and in-depth analysis on each participant's experiences or to provide general interpretation or finding in a group of a specific population (Pietkiewicz & Smith, 2014).

For example, for researchers who chose to provide an in-depth analysis of each participant's experiences, they may require one to five participants so that the analysis can be detailed from each participant. But if they decided to present the finding in general interpretation of the group population, they may need more than five participants so that the similarities and differences can be examined to produce a general explanation. Thus, for this study, I made comparisons among the participants about their experiences in using religion when dealing with sport anxiety and produce a general interpretation of the phenomenon. I also used data saturation as a benchmark to end the data collecting process. This was basically done when there was no new interpretation given by the athletes. Although data saturation is more popular in grounded theory, this approach has facilitated in deciding the number of participants as well as providing diverse descriptions and explanations of the participants' experiences in utilizing religion in sport (Creswell, 2014).

In this study, I purposely chose elite athletes as my study's participants. I defined an elite athlete as an athlete who competes or had competed as a varsity player (i.e., individual/team) at the national or international levels of competition. Moreover, this definition has been used most often by other studies that employed elite athletes as their participants (Swann, Moran, & Piggott, 2015). Elite athletes also have more potential to give rich descriptions and have recent memories of experiences using religion in sport as they have participated more in high-level sport competitions than non-elite athletes have.

To recruit the athletes, they were asked three basic questions which were: (1) Are you religious or do believe in religion? (2) Do you apply any part of your religion into the sport? (3) If yes, do you apply it to alleviate your anxiety level? They were then invited to participate in this study if they answered yes to all the questions. They were told that their participation was totally voluntary. Therefore, the criteria for this study's participants are (1) elite athletes, (2) religious or believed in religion, (3) and had experience in using religion for sport anxiety.

3.4 Measures

Each participant's background was determined (i.e., age, type of sport, levels of competition) alongside their religious background (e.g., types of religion, religious activities) using a demographic form. Then, I employed a semi-structured interview technique to collect in-depth descriptions and interpretations of the phenomenon studied from the elite athletes.

3.4.1 Semi-structured Interview

A semi-structured interview is a technique that helps in planning and covering the main questions to be asked and yet gives enough flexibility to be able to improvise with the follow-up questions based on the responses from the participants (Pietkiewicz & Smith, 2014). The interviews covered areas that were comprised of their anxiety experiences,

their faith, and the application of religion in sport, and how it influenced them. The participants were asked to recall their experiences and provided their perspectives on using religion when dealing with sport anxiety. Some of the questions prepared and asked were: (1) What makes you believe in religion? (2) Do you usually feel anxious? (3) How did you apply religion in alleviating your anxiety level? (4) How did you feel after using religion to deal with your anxiety? (5) In your opinion, does religion influence your anxiety levels?

3.5 Procedures

Upon receiving approval from the University of Malaya Research Ethics Committee (UM.TNC2/UMREC - 430), I approached the athletes and explained the purpose of this research to them. I started the data collection with two pilot or preliminary interviews with three elite athletes (i.e., one individual interview and one group interview). Pilot interviews conducted is intended as a practice for the main interviews, to test the quality of semi-structured questions, and to identify any potential biases during the interviews. The interviews were conducted either in individuals or groups of two to three participants. The combination of individual and group interviews is called data source triangulation which used so that researchers can gain multiple perspectives and data validation (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). In an individual interview, the exploration of the topic can be profoundly studied whereas in group interview there is interaction among participants which led to additional comments that are not mentioned in the individual interview. Thus, the data was not only collected in-depth but also with various descriptions and interpretations.

Furthermore, to have rich and detail information, the participants should feel at ease during the interview. Therefore, the choice of language used is important so that the participants can speak comfortably to share their experiences. Among the interviewees,

13 of them spoke in Malay and the other four athletes preferred English during the interviews. The participants were asked in which language they were comfortable with prior to their scheduled interviews. As Malay is the national language and English is the second language used in Malaysia due to the multiracial societies, some participants are more comfortable to speak in Malay whereas others preferred to speak in English. Thus, rather than deciding to use one language, having an option to talk and express with their comfortable language has led to better explanation and interpretation regarding the phenomenon of using religion in sport.

Before conducting the interviews, I followed a standard consent procedure for those who volunteered. The interviews were audio-taped and all data was kept confidential. I created a relaxed atmosphere by conducting the interviews at a place that provides privacy and by beginning the interviews with simple conversations to relief discomfort and awkwardness so that the participants are able to share their experiences and opinions. In addition, the interview took approximately around 30 to 40 minutes per interview session. The duration of interviews was depended on how the participants elaborated and expressed their personal experiences and perspectives.

3.6 Data Analysis

The data analysis was guided by IPA's analytic process which was iterative and inductive (Larkin & Thompson, 2012). The process was an iterative as it involved repeated reading and listening to the transcription and audio recordings. It was also an inductive process as the themes were developed from the raw data collected. Once the interview recordings were transcribed verbatim, I analyzed the data by using the NVivo 10 software as well as manually. The NVivo 10 was first used and it was then compared with the manual data analysis. Although the analysis process steps in using NVivo 10 are

basically the same as in the manual data analysis, I insisted on using NVivo as it made the data collection more organized so that any important finding was not omitted.

Once the transcription process completed, the analysis was basically started with multiple reading and making notes which involved repeated transcripts reading and listening to audio recordings as well as making notes from both actions. This step helped me to get immersed in the data collected and had more insight into the phenomenon investigated. Then, I proceeded the data coding process to start identifying themes. The data coding process is the method used to produce the themes and it has three generic cycles (Alase, 2017). The first cycle is to gradually code a lengthy and convoluted response by participants into a statement. Then, the second cycle should be done in order to help reduce the first generic statements into fewer words to move closer to the primary principle of what the participants were actually expressing. Finally, the category phase which is the second generic statement narrowed down into extremely few words.

As guided by IPA or phenomenological way of analysis, I have developed the first and second subordinate themes. The first and second subordinate themes were then transformed into emergent themes (i.e., superordinate themes). Lastly, according to their conceptual similarities, the themes were categorized into master themes from the superordinate themes.

3.7 Translation Process

Since some interviews were conducted in Malay, the data was first analyzed to select the key points from the verbatim transcriptions. The selected quotations were then translated into English. Some original words or phrases are not suitable to be translated as they could lead to a loss of meaning from the original source (Halai, 2007; Regmi, Naidoo, & Pilkington, 2010). Therefore, I used the original words or phrases but with explanations in parentheses so that the meaning of the translated data was corresponding

to the meaning of original data (Polkinghorne, 1989). In addition, I also cooperated with two experts who could speak in both languages to translate the data in order to have more validation on the translated quotation.

University of Malaya

CHAPTER 4: RESULTS

4.1 Introduction

In this chapter, I presented the result in two main sections: demographics and religion for sport anxiety. The religion for sport anxiety section comprises of two main sub-topics that represent the key findings of this study. I explained and interpreted the themes found in each main subtopic with quotations, as indications for every theme identified in this study.

4.2 Demographics

Seventeen elite athletes including 10 males and 7 females between the ages of 19 and 26 years old ($M = 23.18$, $SD = 2.24$) were recruited from the Centre for Sport and Exercise Sciences, at the University of Malaya. The participants comprised of three national-level athletes and 14 international-level athletes. The participants were from different sport backgrounds such as archery, athletics, badminton, diving, football, rugby, softball, and squash. Their participation in sport is either as individuals, as part of a team, or both. Among the participants, there are four religious affiliations which are Islam ($n = 13$), Buddhism ($n = 2$), Christianity ($n = 1$), and Hinduism ($n = 1$). The demographic variables of the participants are presented in Table 4.2.

A few factors might have influenced the majority of Muslim athletes ($n = 13$) in my study. Firstly, the population by religion in Malaysia that comprises of Muslims majority with 61.3%, followed by other religions which are 19.8% of Buddhists, 9.2% of Christians, and 6.3% of Hindus (Department of Statistics Malaysia, 2010). Secondly, in recruiting elite athletes, many Muslim athletes have used religion for their sport anxiety and hence, fit into the participant's criteria. But for some athletes with other religious affiliations, when asked about their utilization of religion in sport, they admitted having used religion in sport but not for sport anxiety. They stated to have utilized scientifically

and psychologically proven methods (e.g., imagery, breathing techniques) more and preferred to use religion for luck in the game and not as a part of coping strategy. Therefore, they are not suited to participate in this study. This finding might also relate to the diversity of practices and the strength of beliefs in different faith traditions (e.g., Christianity, Islam, Buddhism, and Hinduism), which has been suggested to predict the religiosity and spirituality of individuals (Johnstone et al., 2012). Thus, influence the athletes' inclination in using religion for sport anxiety.

Table 4.1: Participants' Information

Variables	<i>n</i>
Gender	
Male	10
Female	7
Levels of participation	
National	3
International	14
Type	
Individual	8
Team	4
Both	5
Religion	
Buddhism	2
Christianity	1
Hinduism	1
Islam	13
Age	
Range 19-26	<i>M (SD) = 23.18 (2.24)</i>

4.3 The Use of Religion for Sport Anxiety

From the findings, I discovered two master themes: religious coping strategies and positive psychological effects. The themes represent the personal experiences and perspectives of the participants about the phenomenon of using religion in dealing with their sport-related anxiety.

4.3.1 Master Theme 1: Religious Coping Strategies

Religious coping strategies referred to the specific religious mechanisms used by the athletes to cope with their sport anxiety. Before it could be classified as religious coping

strategies, eight first-subordinate themes using religion to deal with sport anxiety were found and they were then classified into seven second-subordinate themes. From first- and second-subordinate themes, I realized that religion was eventually used as a coping strategy to reduce their anxiety levels. Thus, the themes were further classified into six superordinate themes that were comprised of the types of religious coping strategies. I also referred and adapted some of the many methods of religious coping in Pargament et al.'s (1998) for the classification of religious coping strategies in the present study (e.g., beliefs religious coping, active religious coping, benevolent religious coping).

Table 4.2: Types of Religious Coping Strategies

First-subordinate themes	Second-subordinate themes	Superordinate themes	Master themes
Praying with own words	Personal prayer	Prayers	Religious coping strategies
Reciting religious verses			
Praying with own words together	Team prayer		
Having faith that God/higher beings as the only Helper	Trusting in God's/higher beings' support	Beliefs religious coping	
Leaving the rest to God/higher beings after working/ trying hard	Actively letting God/higher beings to ascertain everything	Active religious coping	
Describing the stressors from God/higher beings as well-meaning	Describing stressors as God's/higher beings' benevolence	Benevolent religious coping	
Religious advice/ support from parents	Social support through religion	Religious social support	
Wearing religious items in every tournament	Wearing religious items	Wearing religious items	

As depicted in Table 4.2, the six superordinate themes have been arranged according to the popularity used by participants in this study, which included prayers, beliefs religious coping, active religious coping, benevolent religious coping, religious social support, and wearing religious. In addition, the athletes in this study did not apply only

one type of religious coping method. Rather, they applied it as a combination of the six types of religious coping strategies (e.g., prayers with beliefs religious coping or active religious coping with beliefs religious coping) and some athletes have even combined the use of prayers with a breathing technique.

4.3.1.1 Superordinate theme 1: Prayers

Prayers is a mechanism that basically involves praying to God/higher beings as a strategy to cope with sport anxiety that can be classified as personal or team prayer. It is the most popular strategy used, as 16 out of 17 athletes utilized this mechanism. This is not surprising, as prayer is a common form of action that expresses human invocations and acts of faith. Two methods were identified in personal prayers: praying with one's own words and reciting religious verses. These prayers are widely used when athletes are anxious right before or during a tournament or when they are faced with injuries. In sport, the athletes come up against various sources of anxiety (e.g., uncertainties around events, the expectation of others, injury), which led to the prevalent practice of prayer (Czech et al., 2004; Park, 2000). Most of the athletes utilized prayers by speaking silently before tournaments or reciting a prayer in their heart before or during tournaments.

The prayers involving using their own words varied among the athletes depending on their previous experiences and what they felt about the particular tournament. For example, Athlete 13 who is traumatized by a previous anterior cruciate ligament injury (ACL), pray right before the tournament by asking for protection. This was depicted in his statement, "... every time before the kickoff, I pray silently by saying that 'Oh God, please protect me from any injuries'. That's my usual prayer." Athlete 13 also stated that the injury had caused him to be anxious because it might occur again during a tournament, which is also known as reinjury anxiety.

Reinjury anxiety has been associated with psychological (e.g., low levels of concentration and self-confidence) and physiological changes (e.g., increased heart rate, muscular tension) in athletes (Tripp et al., 2007; Walker et al., 2010). These changes are likely to have an influence on sport performance for those athletes who return to sport after recovering from their injury. This example implies the important role of prayer among religious athletes when coping with adversity that caused them to be anxious, as it may work effectively to deal with their sport anxiety.

Other than reinjury anxiety, the athletes also used prayer to cope with competition-related anxiety by reciting religious verses. Athlete 16 shared his way of coping with anxiety by reciting verses in the Quran and in combination with a breathing technique. He stated:

I usually only feel anxious at the starting block. Not at other times. So, my routine involves reciting *Surah al-Fatihah* (i.e., the first chapter of al-Quran) with three deep breaths. Before running, at the starting block. I recite it silently. (Athlete 16)

Although breathing techniques are found to be effective for anxiety (Jerath, Crawford, Barnes, & Harden, 2015), its impact might be maximized when used in conjunction with prayer, especially among religious athletes. Prayers using the recitation of religious verses by some athletes in this study are known to have a special spiritual meaning as the verses are highly associated with higher powers or important figures in each religion. It is also varies depending on what religion the athletes are affiliated with. Examples of religious verses used are the Quranic verses, *zikr* (i.e., an utterance of repeated short sentences that glorify God) and *salawat* (i.e., a greeting or salutation for the prophet) in Islam, the repeated utterance of “*Amitufo*” (i.e., the name of *Amitabha Buddha* in Chinese) in Buddhism, or a repeated utterance of “*Muruga*” (i.e., also known as *Murugan*, the Lord worshipped by Tamils) in Hinduism.

In addition, the athletes also utilized team prayers in which they used their own words rather than using specific religious verses. These prayers were usually made right before tournaments in which the team players were gathered and led by one person. Athlete 17 mentioned how, "... usually, we'll pray together before the game. As a team. ... we pray to prevent injuries, to win, to be calmed, and hoping that nothing unfortunate happens throughout the game." Three athletes who played team sports shared how, other than praying individually, they also prayed with their teammates. This practice had become part of their routine or "culture" every time they were in a tournament. The prayers were usually centered on protection from injury, strength, and victory. This shows the cohesiveness and compassion among team players that was depicted through the same hope and wishes they expressed in their prayers.

Other studies have also found that athletes use prayers to cope with anxiety (Czech & Bullet, 2007; Czech et al., 2004; Watson & Czech, 2005). Athletes with strong religious faith might not only perceive prayers as an important way of expressing their faith but also as a helpful mechanism to cope with the feeling of anxiousness in sport.

4.3.1.2 Superordinate theme 2: Beliefs religious coping

This strategy is referred to as a coping mechanism whereby athletes seek and rely on God/higher powers for support or help by having a strong belief in God/higher powers as the only Helper. For example, Athlete 4 expressed his belief in God's help by saying, "... if we asked for His help, we believe that He will help us back." During tournaments, the athletes in this study believed that only God could support them to overcome the fear, worries, nervousness, and even loneliness they felt in court or on the field. The belief in God/higher beings' help might also be due to athlete's own spiritual experienced as Athlete 1 shared his impression and spiritually experienced in the "presence" of supreme being by stating, "We'll feel like there is a presence of 'some' being who will help us."

In addition, from the athletes' experiences in using religion, I noticed that this strategy has also led to the utilization of other religious coping mechanisms such as prayers. According to one of the participants:

Because in our religion, we believe that, that God can help us when we're alone. So, we really have faith in it. That's why we pray to Him. So that He would help us when we really need it. ... Even if it's a team sport, every individual plays their own part. The team can really help as a whole but when we have to go for a bat, it's all up to the individual. Nobody else knows if we're scared at that time. So, at that time we're only able to, ask help from Him. (Athlete 11)

From the statement by Athlete 11, when she had nobody to rely on, she believed that only God can help her during the time of need. Her belief led her to utilize the next coping action, which is to pray directly to God and ask for His help. Moreover, athletes have been found to have greater degree of religious faith when compared to non-athletes (Storch et al., 2004), for the reason that, religious beliefs may provide athletes with a sense of security and can be used as a way to cope with uncertainties of the performance outcome (Czech & Bullet, 2007; Czech et al., 2004; Watson & Czech, 2005).

4.3.1.3 Superordinate theme 3: Active religious coping

In a study on the development and validation of RCOPE by Pargament et al. (2000), they defined active religious surrender as an active way of giving up to allow everything to be ascertained by God (e.g., I did my best and then turned the situation over to God, I did what I could and put the rest in God's hands). therefore, using that study as a reference, the meaning of active religious coping in this study is described as an act of coping by leaving everything to God after working or trying hard. The use of this coping strategy is described in a statement by Athlete 8, "... no matter what, for me, we should make efforts first, then, let the rest be ascertained by Him". Athlete 2 also shared:

So, when I run, I'll leave everything to God. Because we're already tired of training. We'd think about how tired training is from morning to evening. But when it's time to race, it's just one race. But how can we help ourselves, umm God is the only one that can help us. Winning or losing is all up to God. (Athlete 2)

Athletes in this study shared how much time they put into their training and how hard they trained for every tournament. Being highly anxious during the event might affect their psychology and this can also influence their performances (Bali, 2015; Ford et al., 2017). Thus, in order to cope with anxiety and to make the training efforts worthwhile, athlete 2 used active religious coping in combination with beliefs religious coping, as he also stated his faith in God's support. moreover, I noticed that athletes who used this strategy tended to express their faith in God's will. Athletes in Czech et al. (2004) study also believed that their performance outcome (i.e., winning or losing) depended on God's will. Therefore, instead of focusing on the outcomes of the event, which are uncertain and one of the sources of anxiety (Gilham & Gilham, 2014), they would rather work hard, compete to the best of their ability, and let the rest be ascertained by God.

4.3.1.4 Superordinate theme 4: Benevolent religious coping

Benevolent religious coping is a coping mechanism used when describing their sources of anxiety as religiously well-meaning. There are various sources of anxiety in sport. One of the sources mentioned in this study was injuries. Four athletes in this study shared their experiences when faced with serious injuries and how they had coped with them. The athletes showed a positive reaction toward the injury by defining the situation as being part of God's plan, a good reminder from God, or as a way to get closer to God. In a statement by Athlete 16, he stated that "... the injury is still there. Except it's not—I mean it's not a full recovery. Maybe the little bit of pain God gave me is to act as a reminder for myself. So, I don't forget to pray." Athlete 16 shared his experience of injury when

still not fully recovered, but he positively accepted and perceived the event as a reminder that could make him closer to God.

In addition, Athlete 4 showed his gratitude towards the incident (i.e., injury) as he believes that there is a rationale behind the event that happened. he said, “I’m always grateful. I believe it (injury) happens for a reason.” Religious coping has been viewed as facilitative during the recovery phase (Wiese-Bjornstal et al., 2018). According to Najah et al. (2017), religion is considered to be a source of hope and can beneficially affect mental health during times of hardship. When the athletes positively perceived the injury as benevolent (e.g., accepting it as God’s plan, as a lesson from God, as an important way to get closer to God), it somehow provides comfort to the athletes, and eventually leads to a better psychological effect (Wiese-Bjornstal et al., 2018).

4.3.1.5 Superordinate theme 5: Religious social support

Religious social support has been defined differently in a different context (Debnam et al., 2012). For example, some researchers have referred to it through the types of support (i.e., emotional or spiritual) and some have described it via the source of support (i.e., congregational members or clergy) (Debnam et al., 2012). In this study, I defined religious social support as a strategy that is used to seek religious support from surrounding people (i.e., individuals or groups) to cope with the anxiety, as was shared by Athlete 15, “My parents are the ones who would usually talk about religion. If anything, I’d, if I’m feeling down. Sometimes, the first thing I’d do is to ask my parents for advice.”

Athlete 15 stated that his feeling of anxiousness could happen at any time, not necessarily right before or during a tournament. Therefore, he would seek support to cope with his anxiety by consulting with his parents who gave him advice that integrated the values and elements from their religion. Social support among individuals with the same values can help individuals to cope better with stressors and positive religious coping

strategies have always been associated with psychological well-being (Holt et al., 2018). the integration of religion within social support as one coping strategy might contribute to an even better way of coping with anxiety in sport as both have been found to be beneficial. Moreover, Holt et al. (2017) also suggested that religious social support can provide greater benefits in terms of retaining the support it provides. This might be due to the involvement of both support from religion (e.g., divine power) and surrounding people with the same values.

4.3.1.6 Superordinate theme 6: Wearing religious items

Wearing religious items is a coping strategy involving wearing items that have spiritual meaning. This method was used by one athlete in this study in which she wore the item in her daily life as well as in every tournament as she felt that it could help to relieve her anxiety. These religious items are usually available at the place of worship in which every item has its own meaning (e.g., for protection, for luck). This was described in a quotation

... for me, I'm wearing this [showing her bracelet]. It's called—it is some type of marble. Something made of marble— but umm the belief is this marble, it functions because my temper gets very terrible, so I wear this just to, yeah to make myself calm. (Athlete 7)

Athlete 7 often felt her anxiousness alongside other, uncontrolled negative emotions such as being bad-tempered. Negative emotions have been linked to disruption and irrelevant thoughts that can influence the athletes' performances (McCarthy et al., 2013). Thus, she copes with it by wearing a bracelet that she has bought from a place of worship and believes that the item is an effective tool to keep her temper under control and reduce her anxiety level. Some studies have used different terms such as sacred objects or sacred matter that implies wider elements of objects or matter (e.g., thing, person, place, activity) and these objects or matter do not necessarily have to be items that can be worn such as

bracelets or necklaces (L. M. Miller et al., 2011; Pargament & Mahoney, 2005). Nevertheless, no matter what the thing or object is, as long as it is considered to have a religious meaning and is valuable to a particular person, it signifies importance in terms of the individuals' emotions and thus acts as a source of strength (Pargament & Mahoney, 2005).

4.3.2 Master Theme 2: Positive psychological effects

The athletes also shared the outcomes of using religion from their personal experiences and perspectives. as shown in table 4.3, seven superordinate themes were identified and were arranged according to the most-mentioned to the least-mentioned effects. these themes included calmness, a sense of relief, self-confidence, motivation, positive mindset, a sense of security, and patience. the impacts of religion on coping with anxiety were found to have positive effects on the psychological disposition of the athletes. therefore, all themes were then classified as the second master theme of positive psychological effects. it should be noted that some athletes expressed more than one effect of using religion.

Table 4.3: Positive Psychological Effects of Religious Coping Strategies

Subordinate themes	Superordinate themes	Master theme
Feeling calmer	Calmness	Positive psychological effects
Feeling relieve	Sense of relief	
Becoming more confident	Self-confidence	
Becoming motivated	Motivation	
Having a more positive mindset	Positive mindset	
Feeling secured	Sense of security	
Having more patient	Patience	

4.3.2.1 Superordinate theme 1: Calmness

Calmness in this study refers to a peaceful state of mind that occurs after practicing or performing the religious coping strategies to reduce anxiety levels. Seven athletes in this study expressed their feeling of calmness after utilizing some of the religious coping strategies such as prayers and beliefs religious coping. As portrayed in one statement:

We do all this to get ourselves calm. We know that everything happens by His own will, so we ask for His help. If His will is for us to win, He would help us. We will feel calm after we prayed. (Athlete 11)

Athlete 11 expressed her feeling of calmness after performing prayers. Other athletes also mentioned calmness as one of the religious coping effects by simply stating, “It makes me calm,” “I feel calmer,” or “I’ll feel calm.” Moreover, calmness is one of the common outcomes of prayers and has also been mentioned by other athletes in other studies (Czech et al., 2004; Park, 2000).

In addition, calmness is found to be one of the key factors of fine muscular control in target-shooting (Hanton et al., 2009). Some sports that need fine motor skills such as golf and archery may require lower levels of anxiety and arousal with the presence of calmness in order to reach optimal performances (Hanton et al., 2009; Mellalieu et al., 2004). Therefore, the effect of using religion produces on the mental state such as calmness may eventually influence the physiological state of some athletes, which in turn is helpful in enhancing their sport performances.

4.3.2.2 Superordinate theme 2: Sense of relief

A sense of relief indicates the alleviation or feeling of release from the anxiousness when participating in sport. Some athletes reported, “feeling better” or “psychologically it helps” in interpreting the impact of religion on alleviating their anxiety level. one athlete mentioned coping with pressure-induced anxiety when participating in sport by utilizing prayer as a coping strategy. He shared how prayer could relieve some of the pressure he put himself under. This was expressed by Athletes 8 who mentioned, “... when I started to get involved in sport, I put pressure on myself so that I could do my very best. ... So, when I do the prayer myself, it makes me feel a bit of relief from the pressure.”

Although the pressure that Athlete 8 put himself under was to make himself do his best in his sport, the pressure could generate a diversion of thoughts and create worries which could affect the athlete's performances (Oudejans et al., 2011). Therefore, relieving the pressure-induced anxiety is much needed so that it does not negatively impact athletes during tournaments.

4.3.2.3 Superordinate theme 3: Self-confidence

Self-confidence in this study refers to the assurance or trust in one's athletic skill and to the ability to take part in a tournament after utilizing the religious coping strategies when dealing with anxiety. Four athletes mentioned self-confidence as an effect of religion when it was applied right before a tournament. Athletes have expressed their feeling of confidence when using religion in sport involvement by stating, "I believe that if I prayed, I can play better" or "... it (using religion) helps me believe in myself even more" while Athlete 9 shared her opinion by saying, "I feel confident before I play. Because I believe that I've already prayed so God is behind me to support me." From the statement by Athlete 9, it can be seen that the confidence toward her own self came after she performed a prayer, believing in God's support as well as in the prayer she recited. Thus, reciting prayers as a routine before tournaments and a strong belief in God's/higher beings' support play an important role in eliciting self-confidence among religious athletes.

Religion has also been found to have a significant association with better self-confidence and lower levels of anxiety in studies by Azimirad and Jalilvand (2012), Dodo et al. (2015), and Narimani et al. (2011). In highly competitive sports, self-confidence is a crucial aspect that is needed by any athlete as it is closely related to athletic performances (Woodman & Hardy, 2003; Zeng et al., 2008). Therefore, this shows that religious coping strategies can play an important part in supplementing the athletes with positive psychological effects from self-confidence that are vital in competitive sports.

4.3.2.4 Superordinate theme 4: Motivation

Motivation signifies the inspiration and desire to perform and accomplish the goals at a time of nervousness or unease. In this study, some athletes claimed to be more motivated when using religious coping strategies. This effect is portrayed in a statement, “After reciting it umm the feeling would be more, like I said before, would be more motivated. So, it can be said that there’s nothing else in my mind at that time. I’d only think that God would help.” Athlete 2 utilized the prayers as a religious coping strategy to control his anxiety levels and felt more motivated and inspired by the prayer and the strong belief in God’s support.

In another statement by Athlete 17, he also said, “The religious values that are practiced during a match or training is umm motivation to us.” This shows that religion has positively influenced the athletes through motivation, making individuals more focus to accomplish their goals. Motivation is identified as being of great importance in sport (Heper et al., 2014). It has been found to have a significant influence on anxiety levels by controlling them to a certain degree (Menegassi et al., 2018). This means that the religious coping strategies have potential in leading to better control of anxiety by inducing the motivational effect among some of the athletes in this study.

4.3.2.5 Superordinate theme 5: Positive mindset

A positive mindset refers to the effect of religion in producing a mental attitude of hope for a favorable outcome when faced with adversities (e.g., injury). Athletes in this study shared their experiences during the injury rehabilitation phases and also divulged how they coped with the psychological disturbances such as anxiety. Athlete 17 had shared his experience of having ACL. He thought intensively about this prior to the event and emphasized it as a good reminder from God (i.e., benevolent religious coping). Besides following all the scheduled therapies, he also applied the religious coping strategies that led to a positive mindset. As stated by him, “From a medical theory,

sometimes the duration of recovery is fixed for a certain time. ... but for me, when I applied the religious values itself, I can set my mind to the fact that the injury can heal faster.”

Injury has been associated with the occurrence of anxiety among athletes (Ford et al., 2017; Walker et al., 2010). Psychological disturbances (e.g., anxiety, depression, anger) and ineffective coping strategies can influence the athletes' recovery process and return to sport (Ford et al., 2017). Therefore, the use of religion can help religious athletes to cope with adversity during recovery phases by reducing anxiety levels through a positive mindset.

4.3.2.6 Superordinate theme 6: Sense of security

A sense of security is a feeling of protection after applying the religious coping strategies to alleviate anxiety levels. Some of the athletes expressed their feelings of fear and their worries about undesirable events (e.g., making mistakes, injury, losing the games) especially right before a tournament. Hence, they stated that they felt more secure when applying religion and this was described by athlete 13 in a quotation, “When I have to go for an event, I pray, then I feel secure”. Athlete 13 felt a sense of security when he prayed. It might be due to his strong belief in the power of a higher being that provided him with the support he needed. In addition, athlete 8 portrayed the sense of security through his spiritual experienced during a tournament by saying, “... we would feel like, the presence of a guardian.”

Generally, a sense of security is one of the psychological needs when faced with certain risks and uncertainties (Zotova & Karapetyan, 2018). As the athletes are susceptible to risk (e.g., injuries) and uncertainties, a sense of security during tournaments is much needed. Moreover, psychological security has been positively correlated with low levels of negative emotions (e.g., fear, anxiety) (ALharbi, 2017). therefore, it can help in

reducing anxiety levels by eliciting a feeling of security when religious athletes utilize religious coping strategies.

4.3.2.7 Superordinate theme 7: Patience

Patience in this study means the ability to control one's temper via religion to prevent further increases in anxiety levels during sport events. Athlete 7 who felt anxious regarding her bad temper mentioned this theme. She used prayers strategy whenever she could not control her temper and this was portrayed by her statement, "And then, uttering the word *amitufo* repeatedly really make my patience level increases. ... so, when I really feel like my temper is getting worse, then I try to utter the word again."

Uncontrolled levels of anxiety with the presence of other negative emotional states (e.g., anger, doubtful, panic) might influence the athletes' performances. It can disrupt the athletes' attention and lead to irrelevant thoughts that can cause distraction (McCarthy et al., 2013). Consequently, it is vital for athletes to have control over their negative emotions. Thus, using religious coping strategies might be an effective method to promote positive emotions among religious athletes.

CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter provides an explanation and justification of key findings identified that were presented in the result sections. I discussed the main findings into three main topics: the religion of athletes, religion as a coping strategy, and religious coping strategies and its implications. The chapter also comprises of the methodological issue presented in the study as well as suggestions for future research.

5.2 Religion of athletes

As presented in the result section, the majority of my participants were Muslim athletes. In recruiting the athletes, many Muslim athletes were fit in the participants' criteria while some athletes with other religious affiliations have stated to use religion in sport but not for sport anxiety. The reason could be that diverse emphasis and intensity of beliefs and practices in different faith traditions may have influenced the athletes' preferences in utilizing religion for sport anxiety. For example, in religions such as Islam and Christianity, they highlight on community and daily private religious activities which aim to secure beliefs and relationship with God/higher beings, while others like Buddhism emphasizes meditation practices and values in life, and Hinduism is more likely to do meditation practices, individual rather than communal rituals and religious rites (Johnstone et al., 2012; Weightman, 1997). The diversity of beliefs and practices in different faith traditions have been proposed to predict the religiosity and spirituality of individuals (Johnstone et al., 2012). Consequently, it has influenced on athletes' preferences and perspectives in using religion for sport anxiety. Therefore, this shows that athletes' religious backgrounds, in terms of their intensity of religious beliefs and practices should be taken into consideration when doing research about religion is to be

examined in sport-context, as it plays a vital role in the preferences of using religion in sport.

5.3 Religion as a Coping Strategy

The phenomenon of using religion, as discovered from the lived experience of the elite athletes, showed that religion was utilized as a coping strategy to deal with the sport anxiety. I found that the athletes used religion in various ways that led to the six types of religious coping strategies. Some of the religious coping strategies are quite similar to some methods of religious coping in Pargament et al.'s (1998) study such as beliefs religious coping, active religious coping, and benevolent religious coping. Pargament et al. (1998) classified the methods of religious coping in RCOPE into two parts, which were positive and negative religious coping, and listed various different methods of religious coping when compared to the present study. In this perspective, Pargament et al. (1998) examined the used of religious coping in a wider context, which was coping with negative life stressors such as the death of family members and serious medical illness in the general population.

In our study, however, the use of religious coping strategies was for a different purpose, which was specified as sport anxiety among the athlete population. This explained the different findings and fewer numbers of religious coping strategies found from the data analysis. Thus, although RCOPE can serve as a multi-functional measuring tool and has been commonly used to measure religious coping strategy in psychology and health-related fields (Pargament et al., 2011), it might not be suitable in the sport context. Moreover, from our extensive literature search, I found no research regarding the use of religious coping strategies for sport anxiety. Therefore, it created the need for further investigation of religious coping strategies in the athlete population and the development of measuring tools for the use of religion in sport.

Furthermore, athletes in this study did not use only one type of religious coping strategy, but a combination of a few religious coping strategies. Among the six types of religious coping strategies, beliefs religious coping was found to be used most in a combination with another religious coping strategy. Some athletes mentioned that they believe God as the only Helper (i.e., beliefs religious coping) and with that belief, they prayed for help or support. Some also stated that they let everything be ascertained by God after they had tried hard (i.e., active religious coping) as they believe that only God could help them (i.e., beliefs religious coping). These examples show the interrelationship among different types of religious coping strategies in handling anxiety. It also highlights how the beliefs religious coping strategy might be an important determinant for the use of other types of religious coping strategies. Nevertheless, to the best of my knowledge, when comparing studies on religious beliefs with religious practices in sport, the literature is scarce, and still needs to be explained and explored.

The results of this study also showed that prayers as the most popular religious coping strategy in this study in which it was used to cope with anxiety in individuals or team players. Consistent with this study, prayer has been found to be a prevalent practice among athletes in other studies to enhance performance and well-being (Czech & Bullet, 2007; Czech et al., 2004). Moreover, some studies have also discovered that prayer was used as a coping mechanism to alleviate anxiety (Czech & Bullet, 2007; Czech et al., 2004; Watson & Czech, 2005). Most athletes in this study shared how they used prayers mainly before, right before, and during competitions which were the times when their anxiety was usually at a high level. Czech and Bullet (2007) also mentioned that prayer might be the best coping strategy as the athletes might feel even more anxious during critical moments in a game (e.g., penalty kick, deciding points) due to the uncertainties of the result.

Interestingly, among all types of religious coping strategies, wearing religious items for sport anxiety was rarely studied as a coping strategy. In the area of psychology of religion, the terms sacred objects or sacred matters have been used more and these objects or matters were usually infused with strong spiritual meaning (L. M. Miller et al., 2011; Pargament & Mahoney, 2005). As the objects were believed to have a close relationship with God/higher power, they have been used frequently as a way to connect with and engender the desire to pray to the divine (L. M. Miller et al., 2011). Moreover, L. M. Miller et al. (2011) discovered that the participants prayed with sacred objects as a mean of communication with the divine, especially at times when they were expressing their emotions such as anger and fear. They also found positive implications of utilizing prayer with sacred objects, as their participants shared their feelings of calmness, comfort, peace, and strength when facing negative emotions during a challenging time. Although wearing religious items is an unusual discovery when compared to other related studies, the finding from our study shows that religious items should be considered as an important practice tool among religious individuals. The reason is that religious items can be viewed as a significant method for athletes to cope with negative emotions such as anxiety, anger, and fear.

5.4 Religious Coping Strategies and Their Implications

As prayer is a common form of action in expressing individuals' faiths of religion, in a general context, prayer is known as relevant in health (i.e., mental and physical health) and has been commonly practiced for better physical and mental health in a large percentage of population (Masters & Spielmans, 2007). Many studies have discovered the positive impacts of prayers on health including anxiety, depression, well-being, healing, and stress (Boelens et al., 2009; LaBarbera & Hetzel, 2016; South & McDowell, 2018).

Moreover, some researchers have even investigated the religious meditations' or prayers' impact on human brains by using electroencephalogram (EEG), a test that tracks and records the brain-wave patterns (Arambula et al., 2001; Doufesh et al., 2012; Doufesh et al., 2014). The studies suggest that prayers can lead to calmness, which generates alpha waves (i.e., an indicator of relaxation). This shows that calmness is one of the common outcomes elicited by utilizing prayers. The athletes in this study also shared their personal experience of how prayers impact on them. Among all of the positive psychological impacts, calmness has been mentioned most as the outcome of prayer. Athletes in Czech et al.'s (2004) and Park's (2000) studies also expressed their feeling of calmness after praying.

Although in this study, calmness was interpreted as one of the outcomes of prayer, some researchers might argue that the impact of prayers should not be specifically examined by itself for the reason that, religious coping strategies are interrelated with one another. Some athletes have used it in a combination of a few religious coping strategies, while other athletes used the religious coping strategy with other general coping strategies (e.g., deep breathing). Nevertheless, the used of religious coping strategies among religious athletes might effectively work to derive positive impacts when used in combination with other strategies.

In addition, the theory of IZOF has been highlighted that pleasant emotions such as calm could also lead to dysfunctional performance for some athletes (Hanin, 2002; Weinberg & Gould, 2011). Athletes in the present study, however, interpreted a mental state of calm as rather facilitative in order to perform better. There are a few possible reasons regarding this view, firstly, the task characteristics (i.e., fine or gross motor skills) of different types of sport may play a crucial role in determining the anxiety and arousal levels needed to reach optimal performances (Mellalieu et al., 2004). As calmness has been found to be a key factor of fine muscular control in target shooting (Hanton et al.,

2009), other sports that require fine motor skills such as archery and golf may demand higher levels of calmness and lower levels of anxiety and arousal. Secondly, the trait anxiety levels should be considered as it differs among athletes. Athletes with high trait anxiety are more likely to experience anxiety with greater levels of state anxiety than low trait anxious athletes (Hanton et al., 2009; Zeng et al., 2008). Consequently, high trait anxious athletes may perceive calmness as more facilitative when dealing with sport anxiety, even though they involve in sports with gross motor skills such as rugby and football.

Furthermore, other positive psychological effects of religious coping strategies like self-confidence, a sense of security, and motivation, have found to be supported by other studies as well. Similar to the present study, religion has been found to alleviate anxiety levels by boosting athletes' self-confidence (Azimirad & Jalilvand, 2012; Dodo et al., 2015; Narimani et al., 2011). In addition, religion was reported to provide a sense of security especially for an athlete who has experienced serious injury by praying for protection from injuries before tournaments and to relieve from reinjury anxiety (Czech et al., 2004). Religion has also been mentioned by an athlete in Mosley et al. (2015) as "a source of rejuvenating motivation" when it was utilized in sport after suffering from serious injury (p.379). Therefore, religion function at the time of healing or recovering phase has been viewed as a source of hope and facilitatively helps the athletes to cope with the source of anxiety (Najah et al., 2017; Wiese-Bjornstal et al., 2018).

The findings on positive psychological outcomes identified in this study could be indicative of the benefits of utilizing religion for enhancing the athletes' performances. This shows that the use of religion can work effectively to reduce anxiety levels by stimulating positive psychological effects. Therefore, religion should be considered to play an important role in working as one of the coping strategies in sport.

5.5 Methodological Issue

This research has shown a different aspect of the sport psychology area by acknowledging the possible value of religion in the life of elite religious athletes. The qualitative approach conducted in this study has given us a deeper understanding of the meaning and phenomenon of using religion for sport anxiety, especially among elite athletes in Malaysia. Nonetheless, there is a limitation that should be considered.

In this study, I included elite athletes ranging from 19 to 26 years old, which is considered to be a rather narrow age range. According to Longo, Sifferdi, Cardey, Aquilino, and Lentini (2016), more than two-thirds of those who reach their peak performance in Olympic sports are between the ages of 20 to 30, and almost all of them are below 40 years old. A wider age range might provide richer information and perspectives from older athletes as they have even more experience in competitive sports and might deliver better interpretations of the phenomenon of using religion for sport anxiety. Therefore, a wider age range should be considered for conducting studies on religion in sport in the future.

5.6 Future Research

From an extensive literature search on this topic, I have found very few quantitative studies on religious coping strategies for sport anxiety or on religious coping tools. Nonetheless, I have discovered three measurements that were developed specifically for the athlete's population such as Spirituality in Sport Test (SIST; Dillon & Tait, 2000), Religious Behavior Survey (RBS; Czech & Bullet, 2007), and Johnson-Chan Prayer Effectiveness Survey (JCPES; Chan, 1994). Among them, SIST was validated and found to be reliable to be used in measuring religion. The tool, however, has only been utilized only for measuring the spiritual state and the flow experiences (Watson & Nesti, 2005). The JCPES was unpublished (Chan, 1994) and the RBS was not tested its validity and

reliability (Czech & Bullet, 2007). In other study contexts, the RCOPE or Brief-RCOPE (i.e., a brief measure of RCOPE) has been used most in psychological and health-related studies, and the tools have been validated and found to be reliable in measuring religious coping in the general population. Nevertheless, this tool is not suitable to assess religious coping strategies in sport-specific contexts. Therefore, the development of a valid and reliable religious coping strategies tool is required for sport.

Furthermore, there are no studies on interventions designed to examine the effectiveness of religious coping strategies for sport anxiety. Research in psychology and in health-related areas has found that religious coping can positively influence well-being (Hill & Pargament, 2008; Koenig, 2012). In the present study, the results also show that religious coping strategies are effective and provide positive psychological impacts on athletes when they are experiencing sport-related anxiety. Therefore, the effectiveness of religion should be proven in terms of the psychological disposition of the athletes.

CHAPTER 6: CONCLUSION

Even though the role of religion in dealing with sport anxiety is a topic that has seemingly received little attention in the sport psychology field, the present study has provided a deeper understanding of this phenomenon. The key finding from this study shows that religion is a common practice to cope with sport anxiety, especially among athletes who have a strong belief in religion. It should be considered that the role of religion is important in dealing with sport anxiety and it provides positive psychological effects such as calmness, a sense of relief, self-confidence, and motivation which are vital qualities in enhancing sport performances.

The application of religion in sport is not about forcing the athletes to have religious beliefs or obliging religious practices into the sport. The use of religion depends on the athletes themselves, as they have their own preferences and viewpoints. But some ways that can be done to facilitate those athletes who are likely to use religion in sport is by supporting rather than inhibiting the utilization of religion among the athletes and encouraging the assimilation of religious values with other psychological skills such as, integrating self-talk with some religious or spiritual words of reassurance or assimilating breathing techniques with recitations of short religious verses. This might be beneficial to religious athletes as it could be a facilitative mechanism for athletes to enhance their sport performances.

Therefore, religion should be considered with more interest in sport psychology field so that the role of religion as an effective coping strategy among the religious athletes can be proven, add more value to the field of sport psychology, and build a new platform for future research in regards to the utilization of religion in sport. Professionals in sport such as sport consultants, sport therapies, and coaches need to understand and acknowledge

the role of religion in the life of some athletes who are religious or spiritual, as it may effectively function as a coping strategy to enhance the athletes' sport performances.

University of Malaya

REFERENCES

- Aarts, J. W., Deckx, L., van Abbema, D. L., Tjan-Heijnen, V. C., van den Akker, M., & Buntinx, F. (2015). The relation between depression, coping, and health locus of control: Differences between older and younger patients, with and without cancer. *Psycho-Oncology*, 24(8), 950-957. doi:10.1002/pon.3748
- Abu-Raiya, H., Hamama, L., & Fokra, F. (2015). Contribution of religious coping and social support to the subjective well-being of Israeli Muslim parents of children with cancer: A preliminary study. *Health & Social Work*, 40(3), e83-e91. doi:10.1093/hsw/hlv031
- Abu-Raiya, H., & Pargament, K. I. (2015). Religious coping among diverse religions: Commonalities and divergences. *Psychology of Religion and Spirituality*, 7(1), 24-33. doi:10.1037/a0037652
- Al-Omari, H., Hamed, R., & Abu Tariah, H. (2015). The role of religion in the recovery from alcohol and substance abuse among Jordanian adults. *Journal of Religion and Health*, 54(4), 1268-1277. doi:10.1007/s10943-014-9868-5
- Alase, A. (2017). The Interpretative Phenomenological Analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9-19. doi:10.7575/aiac.ijels.v.5n.2p.9
- ALharbi, B. H. M. (2017). Psychological security and self-efficacy among Syrian refugee students inside and outside the camps. *Journal of International Education Research*, 13(2), 59-68.
- Arambula, P., Peper, E., Kawakami, M., & Gibney, K. H. (2001). The physiological correlates of Kundalini yoga meditation: A study of yoga master. *Applied Psychophysiology and Biofeedback*, 26(2), 147-153.
- Arent, S. M., & Landers, D. M. (2003). Arousal, anxiety, and performance: A reexamination of the inverted-U hypothesis. *Research Quarterly for Exercise & Sport*, 74(4), 436-444. doi:10.1080/02701367.2003.10609113
- Argyle, M., & Beit-Hallahmi, B. (2013). *The social psychology of religion (Psychology revivals)*. New York, NY: Routledge.
- Azimirad, J., & Jalilvand, M. (2012). Relationship between spiritual transcendence and competitive anxiety in male athletes. *International Research Journal of Applied and Basic Sciences*, 3(9), 1783-1786.

- Bali, A. (2015). Psychological factors affecting sports performance. *International Journal of Physical Education, Sports, and Health*, 1(16), 92-95.
- Benjamins, M. R., & Buck, A. C. (2008). Religion: A sociocultural predictor of health behaviors in Mexico. *Journal of Aging and Health*, 20(3), 290-305.
- Boelens, P. A., Reeves, R. R., Replogle, W. H., & Koenig, H. G. (2009). A randomized trial of the effect of prayer on depression and anxiety. *International Journal of Psychiatry in Medicine*, 39(4), 377-392. doi:10.2190/PM.39.4.c
- Burton, D. (1988). Do anxious swimmers swim slower? Reexamining the elusive anxiety performance relationship. *Journal of Sport & Exercise Psychology*, 10(1), 45-61.
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545-547. doi:10.1188/14.ONF.545-547
- Chan, T.H. (1994). The use of prayer as a coping strategy in dealing with state-trait anxiety. Unpublished Doctoral Dissertation, Michigan State University, East Lansing, MI, USA.
- Charalambous, A., Kaite, C. P., Charalambous, M., Tistsi, T., & Kouta, C. (2017). The effects on anxiety and quality of life of breast cancer patients following completion of the first cycle of chemotherapy. *SAGE Open Medicine*, 5, 1-10. doi:10.1177/2050312117717507
- Chou, W. J., Ko, C. H., Hsiao, R. C., Cheng, C. P., & Yen, C. F. (2017). Association of stress coping strategies with suicidality in young adults the mediation effects of depression, anxiety, and hostility. *Neuropsychiatry*, 7(6), 974-982.
- Coakley, J. J. (2017). *Sports in society: Issues and controversies*. New York, NY: McGraw-Hill/Higher Education.
- Cohen, A. B., & Hill, P. C. (2007). Religion as culture: Religious individualism and collectivism among American Catholics, Jews, and Protestants. *Journal of Personality*, 75(4), 709-742. doi:10.1111/j.1467-6494.2007.00454.x
- Correia, M. E., & Rosado, A. (2018). Fear of failure and anxiety in sport. *Análise Psicológica*, 36(1), 75-86. doi:10.14417/ap.1193

- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications.
- Czech, D. R., & Bullet, E. (2007). An exploratory description of Christian athletes' perceptions of prayer in sport: A mixed methodological pilot study. *International Journal of Sports Science & Coaching*, 2(1), 49-56.
- Czech, D. R., Wrisberg, C. A., & Fisher, L. A. (2004). The experience of Christian prayer in sport: An existential phenomenological investigation. *Journal of Psychology & Christianity*, 23(1), 3-11.
- Debnam, K., Holt, C. L., Clark, E. M., Roth, D. L., & Southward, P. (2012). Relationship between religious social support and general social support with health behaviors in a national sample of African Americans. *Journal of Behavioral Medicine*, 35(2), 179-189. doi:10.1007/s10865-011-9338-4
- Department of Statistics Malaysia, O. P. (2010, 05/08/2011). Population distribution and basic demographic characteristic report 2010. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/ctheme&menu_id=L0pheU43NWJwRWVSk1WdzQ4TlhUUT09&bul_id=MDMxdHZjWTk1SjFzTzNkRXYzcVZjdz09
- Dillon, K. M., & Tait, J. L. (2000). Spirituality and being in the zone in team sports: A relationships? *Journal of Sport Behavior*, 23(2), 91-100.
- Dodo, E. O., Lyoka, P. A., Chetty, I. G., & Goon, D. T. (2015). An exploration of the perceptions of spiritual rituals among elite players and coaches associated with religiosity or psychological variables. *African Journal for Physical, Health Education, Recreation & Dance*, 21(1:1), 103-127.
- Doufesh, H., Faisal, T., Lim, K. S., & Ibrahim, F. (2012). EEG spectral analysis on Muslim prayers. *Applied Psychophysiology and Biofeedback*, 37(1), 11-18. doi:10.1007/s10484-011-9170-1
- Doufesh, H., Ibrahim, F., Ismail, N. A., & Wan Ahmad, W. A. (2014). Effect of Muslim prayer (Salat) on alpha electroencephalography and its relationship with autonomic nervous system activity. *The Journal of Alternative and Complementary Medicine*, 20(7), 558-662. doi:10.1089/acm.2013.0426

- Ford, J. L., Ildfonso, K., Jones, M. L., & Arvinen-Barrow, M. (2017). Sport-related anxiety: Current insights. *Open Access Journal Sports Medicine*, 8, 205-212. doi:10.2147/OAJSM.S125845
- Gilham, E., & Gilham, A. D. (2014). Identifying athletes' sources of competitive state anxiety. *Journal of Sport Behavior*, 37(1), 37-54.
- Gould, D., Eklund, R. C., & Jackson, S. A. (1993). Coping strategies used by US Olympic wrestlers *Research Quarterly for Exercise & Sport*, 64(1), 83-93.
- Guillen, F., & Sanchez, R. (2009). Competitive anxiety in expert female athletes: Sources and intensity of anxiety in national team and first division Spanish basketball players. *Perceptual Motor Skills*, 109(2), 407-419. doi:10.2466/PMS.109.2.407-419
- Halai, N. (2007). Making use of bilingual interview data: Some experiences from the field. *The Qualitative Report*, 12(3), 344-355.
- Hanin, Y. L. (1997). Emotions and athletic performance: Individual zones of optimal functioning model. *European Yearbook of Sport Psychology*, 1, 29-72.
- Hanin, Y. L. (2002). Metaphoric description of performance states: An application of the IZOF model. *The Sport Psychologist*, 16(4), 396-415.
- Hanton, S., Mellalieu, S. D., & Hall, R. (2002). Re-examining the competitive anxiety trait-state relationship. *Personal and Individual Differences*, 33(7), 1125-1136.
- Hanton, S., Thomas, O., & Mellalieu, S. D. (2009). Management of competitive stress in elite sport. In B. W. Brewer (Ed.), *Handbook of sport medicine and science, sport psychology* (pp. 30-42). Chichester, UK: John Wiley & Sons Ltd.
- Hardy, L. (1996). Testing the predictions of the cusp catastrophe model of anxiety and performance. *The Sport Psychologist*, 10(2), 140-156.
- Hardy, L. (1999). Stress, anxiety, and performance. *Journal of Science and Medicine*, 2(3), 227-233.
- Hardy, L., & Parfitt, G. (1991). A catastrophe model of anxiety and performance. *British Journal of Psychology*, 82(2), 163-178.

- Helminiak, D. A. (1996). A scientific spirituality: The interface of psychology and theology. *International Journal for the Psychology of Religion*, 6(1), 1-19. doi:10.1207/s15327582ijpr0601_1
- Heper, E., Yolacan, S., & Kocaeksi, S. (2014). The examine goal orientation and sports self-confidence level of soccer players. *Procedia - Social and Behavioral Sciences*, 159, 197-200. doi:10.1016/j.sbspro.2014.12.356
- Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *Psychology of Religion and Spirituality*, 5(1), 3-17. doi:10.1037/1941-1022.S.1.3
- Hill, P. C., Pargament, K. I., Hood Jr, R. W., McCullough, J. P., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, 30(1), 51-77.
- Holt, C. L., Roth, D. L., Huang, J., & Clark, E. M. (2018). Role of religious social support in longitudinal relationships between religiosity and health-related outcomes in African Americans. *Journal of Behavioral Medicine*, 41(1), 62-73. doi:10.1007/s10865-017-9877-4
- Jerath, R., Crawford, M. W., Barnes, V. A., & Harden, K. (2015). Self-regulation of breathing as a primary treatment for anxiety. *Applied Psychophysiology and Biofeedback*, 40(2), 107-115. doi:10.1007/s10484-015-9279-8
- Johnstone, B., Yoon, D. P., Cohen, D., Schopp, L. H., McCormack, G., Campbell, J., & Smith, M. (2012). Relationships among spirituality, religious practices, personality factors, and health for five different faith traditions. *Journal of Religion and Health*, 51(4), 1017-1041. doi:10.1007/s10943-012-9615-8
- Kim, M. S., & Duda, J. L. (2003). The coping process: Cognitive appraisals of stress, coping strategies, and coping effectiveness. *The Sport Psychologist*, 17(4), 406-425.
- Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry*, 2012, 1-33. doi:10.5402/2012/278730
- Kubzansky, L. D., & Thurston, R. C. (2007). Emotional vitality and incident coronary heart disease: Benefits of healthy psychological functioning. *Archives of General Psychiatry*, 64(12), 1393-1401.

- LaBarbera, R., & Hetzel, J. (2016). Christian educators' use of prayer to cope with stress. *Journal of Religion and Health, 55*(4), 1433-1448. doi:10.1007/s10943-015-0118-2
- Larkin, M., & Thompson, A. (2012). Interpretative phenomenological analysis. In A. Thompson & D. Harper (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners* (pp. 99-116). Chichester, West Sussex: John Wiley & Sons.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publication.
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*, 141-169.
- Longo, A. F., Siffredi, C. R., Cardey, M. L., Aquilino, G. D., & Lentini, N. A. (2016). Age of peak performance in Olympic sports: A comparative research among disciplines. *Journal of Human Sport and Exercise, 11*(1), 31-41. doi:10.14198/jhse.2016.111.03
- Loureiro, A. C. T., de Rezende Coelho, M. C., Coutinho, F. B., Borges, L. H., & Lucchetti, G. (2018). The influence of spirituality and religiousness on suicide risk and mental health of patients undergoing hemodialysis. *Comprehensive Psychiatry, 80*, 39-45. doi:10.1016/j.comppsy.2017.08.004
- Lovgren, M., Sveen, J., Steineck, G., Wallin, A. E., Eilertsen, M. B., & Kreicbergs, U. (2017). Spirituality and religious coping are related to cancer-bereaved siblings' long-term grief. *Palliative Supportive Care, 1*-5. doi:10.1017/S1478951517001146
- Malson, H. (2010). Qualitative methods from psychology. In I. Bourgeault, R. Dingwall, & R. de Vries (Eds.), *The Sage Handbook of Qualitative Methods in Health Research*. London, England: SAGE Publications (pp. 193-211).
- Martens, R., Vealey, R. S., Burton, D., & Martens, R. (1990). *Competitive anxiety in sport*. Champaign, Ill: Human Kinetics Books.
- Masters, K. S., & Spielmans, G. I. (2007). Prayer and health: Review, meta-analysis, and research agenda. *Journal of Behavioral Medicine, 30*(4), 329-338. doi:10.1007/s10865-007-9106-7

- Mayordomo-Rodriguez, T., Melendez-Moral, J. C., Viguier-Segui, P., & Sales-Galan, A. (2014). Coping strategies as predictors of well-being in youth adult. *Social Indicators Research, 122*(2), 479-489. doi:10.1007/s11205-014-0689-4
- McCarthy, P. J., Allen, M. S., & Jones, M. V. (2013). Emotions, cognitive interference, and concentration disruption in youth sport. *Journal of Sports Sciences, 31*(5), 505-515. doi:10.1080/02640414.2012.738303
- Mellalieu, S. D., Hanton, S., & O'Brien, M. (2004). Intensity and direction of competitive anxiety as a function of sport type and experience. *Scandinavian Journal of Medicine & Science in Sports, 14*(5), 326-334. doi:10.1111/j.1600-0838.2004.00389.x
- Menegassi, V. M., Rechenchosky, L., Borges, P. H., Nazario, P. F., Carneiro, A. F. F., Fiorese, L., & Rinaldi, W. (2018). Impact of motivation on anxiety and tactical knowledge of young soccer players. *Journal of Physical Education and Sport, 18*(1), 170-175. doi:10.7752/jpes.2018.01022
- Miller, L. M., Gall, T. L., & Corbeil, L. (2011). The experience of prayer with a sacred object within the context of significant life stress. *Journal of Spirituality in Mental Health, 13*(4), 247-271. doi:10.1080/19349637.2011.616101
- Miller, R. M., Chan, C. D., & Farmer, L. B. (2018). Interpretative phenomenological analysis: A contemporary qualitative approach. *Counselor Education and Supervision, 57*(4), 240-254. doi:10.1002/ceas.12114
- Mosley, M. J., Frierson, D. J., Yihan, C., & Aoyagi, M. W. (2015). Spirituality & sport: Consulting the Christian athlete. *The Sport Psychologist, 29*(4), 371-386.
- Nahlen Bose, C., Elfstrom, M. L., Bjorling, G., Persson, H., & Saboonchi, F. (2016). Patterns and the mediating role of avoidant coping style and illness perception on anxiety and depression in patients with chronic heart failure. *Scandinavian Journal of Caring Sciences, 30*(4), 704-713. doi:10.1111/scs.12297
- Najah, A., Farooq, A., & Rejeb, R. B. (2017). Role of religious beliefs and practices on the mental health of athletes with anterior cruciate ligament injury. *Advances in Physical Education, 7*(2), 181-190. doi:10.4235/ape.2017.72016
- Narimani, M., Babolan, A. Z., & Ariapooran, S. (2011). The role of spiritual transcendence on predictive of competitive anxiety and self-confidence in Athletes. *World Applied Sciences Journal, 15*(1), 136-141.

- Nesti, M. (2011). Sporting recommendations for spiritual encounters: Delivering sport psychology inside the English Premier League. *Physical Culture and Sport. Studies & Research*, 52(1), 14-21. doi:10.2478/v10141-011-0010-z
- Nicholls, A. R., Polman, R., Levy, A. R., Taylor, J., & Cobley, S. (2007). Stressors, coping, and coping effectiveness: Gender, type of sport, and skill differences. *Journal of Sports Sciences*, 25(13), 1521-1530. doi:10.1080/02640410701230479
- Oudejans, R. R., Kuijpers, W., Kooijman, C. C., & Bakker, F. C. (2011). Thoughts and attention of athletes under pressure: skill-focus or performance worries? *Anxiety, Stress, & Coping: An International Journal*, 24(1), 59-73. doi:10.1080/10615806.2010.481331
- Pacesova, P., Smela, P., Kracek, S., & Plevkova, J. (2018). Women's well-being, state and trait anxiety regarding their sport activity. *Sport Mont*, 16(2), 33-38. doi:10.26773/smj.180606
- Pargament, K. I., Feuille, M., & Burdzy, D. (2011). The Brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions*, 2(1), 51-76. doi:10.3390/rel2010051
- Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and validation of the RCOPE. *Journal of Clinical Psychology*, 56(4), 519-543.
- Pargament, K. I., & Mahoney, A. (2005). Sacred matters: Sanctification as a vital topic for the psychology of religion. *The International Journal for the Psychology of Religion*, 15(3), 179-198. doi:10.1207/s15327582ijpr1503_1
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37(4), 710-724.
- Park, J. K. (2000). Coping strategies used by Korean national athletes. *The Sport Psychologist*, 14(1), 63-80. doi:10.1123/tsp.14.1.63
- Patel, D. R., Omar, H., & Terry, M. (2010). Sport-related performance anxiety in young female athletes. *Journal of Pediatric and Adolescent Gynecology*, 23(6), 325-335. doi:10.1016/j.jpag.2010.04.004

- Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological Journal*, 20(1), 7-14.
- Polkinghorne, D. E. (1989). Phenomenological research methods. In R. S. Valle & S. Halling (Eds.), *Existential-phenomenological perspectives in psychology: Exploring the breadth of human experience* (pp.41-60). Boston, MA. :Springer Publication
- Raglin, J. S., & Turner, P. E. (1993). Anxiety and performance in track and field athletes: A comparison of the inverted-U hypothesis with zone of optimal function theory. *Personality and Individual Differences*, 14(1), 163-171. doi: 10.1016/0191-8869(93)90186-7.
- Regmi, K., Naidoo, J., & Pilkington, P. (2010). Understanding the processes of translation and transliteration in qualitative research. *International Journal of Qualitative Methods*, 9(1), 16-26.
- Ridnour, H., & Hammermeister, J. (2008). Spiritual well-being and its influence on athletic coping profiles. *Journal of Sport Behavior*, 31(1), 81-92.
- Roth, S., & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41(7), 813-819.
- Saba, F., Bukhari, S. R., & Rashid, A. (2018). Relationship between emotionality and psychological distress in university students. *Pakistan Journal of Medical Research*, 57(1), 29-32.
- Shafranske, E. P., & Gorsuch, R. L. (1984). Factors associated with the perception of spirituality in psychotherapy. *The Journal of Transpersonal Psychology*, 16(2), 231-241.
- Smith, A. J., & Osborn, M. (2004). Interpretative phenomenological analysis. In G. M. Breakwell (Ed.), *Doing social psychology research* (pp. 229-254). Leicester, England: Blackwell Publishers.
- Smith, R. E., Smoll, F. L., Cumming, S. P., & Grossbard, J. R. (2006). Measurement of multidimensional sport performance anxiety in children and adults: The sport anxiety scale-2. *Journal of Sport and Exercise Psychology*, 28, 479-501.

- Smith, R. E., Smoll, F. L., & Schutz, R. W. (1990). Measurement and correlates of sport-specific cognitive and somatic trait anxiety: The sport anxiety scale. *Anxiety Research*, 2(4), 263-280. doi:10.1080/08917779008248733
- South, R., & McDowell, L. (2018). Use of prayer as complementary therapy by Christian adults in the Bible Belt of the United States. *Religions*, 9(11), 1-16. doi:10.3390/rel9110350
- Spielberger, C. D. (1966). *Anxiety and behavior*. New York, NY: Academic Press.
- Storch, E. A., Roberti, J. W., Bravata, E. A., & Storch, J. B. (2004). Strength of religious faith: A comparison of intercollegiate athletes and non-athletes. *Pastoral Psychology*, 52(6), 485-489.
- Swann, C., Moran, A., & Piggott, D. (2015). Defining elite athletes: Issues in the study of expert performance in sport psychology. *Psychology of Sport and Exercise*, 16(1), 3-14.
- Tracey, J. (2003). The emotional response to the injury and rehabilitation process. *Journal of Applied Sport Psychology*, 15(4), 279-293. doi:10.1080/714044197
- Tripp, D. A., Stanish, W., Ebel-Lam, A., Brewer, B. W., & Birchard, J. (2007). Fear of reinjury, negative affect, and catastrophizing predicting return to sport in recreational athletes with anterior cruciate ligament injuries at 1 year postsurgery. *Rehabilitation Psychology*, 52(1), 74-81. doi:10.1037/0090-5550.52.1.74
- Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, 51(S), S54-S66. doi:10.1177/0022146510383501
- Walker, N., Thatcher, J., & Lavalley, D. (2010). A preliminary development of the Re-Injury Anxiety Inventory (RIAI). *Physical Therapy in Sport*, 11(1), 23-29. doi:10.1016/j.ptsp.2009.09.003
- Watson, N. J., & Czech, D. R. (2005). The use of prayer in sport: Implications for sport psychology consulting. *The Online Journal of Sport Psychology*, 7(4), 26-35.
- Watson, N. J., & Nesti, M. (2005). The role of spirituality in sport psychology consulting: An analysis and integrative review of literature. *Journal of Applied Sport Psychology*, 17(3), 228-239.

- Weightman, S. (1997). Hinduism. In J. R. Hinnels, *A new handbook of living religions* (pp. 261-309). Oxford, UK: Blackwell Publishers.
- Weinberg, R. S., & Gould, D. (2011). *Foundation of sport and exercise psychology* (5th ed.). Champaign, IL: Human Kinetics Publisher.
- Welch, D. (2017). Top 10 most successful religious athletes. Retrieved from <https://www.worldreligionnews.com/entertainment/sports/top-10-most-successful-religious-athletes>
- Wiese-Bjornstal, D. M., Wood, K. N., White, A. C., Wambach, A. J., & Rubio, V. J. (2018). Exploring religiosity and spirituality in coping with sport injuries. *Journal of Clinical Sport Psychology*, 1-35. doi:10.1123/jcsp.2018-0009
- Wong, R. S. K., Teo, E. W., & Polman, R. C. J. (2015). Stress, coping, coping effectiveness and emotions in Malaysian elite tenpin bowlers: Role of context and importance. *International Journal of Sport and Exercise Psychology*, 13(4), 320-334. doi:10.1080/1612197x.2014.999345
- Woodman, T., & Hardy, L. (2003). The relative impact of cognitive anxiety and self-confidence upon sport performance: A meta-analysis. *Journal of Sports Sciences*, 21(6), 443-457. doi:10.1080/0264041031000101809
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18(5), 459-482.
- Zeng, H. Z., Leung, R. W., & Liu, W. (2008). An examination of competitive anxiety and self-confidence among college varsity athletes. *Journal of Physical Education & Recreation (Hong Kong)*, 14(2), 6-12.
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., . . . Kadar, J. L. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36(4), 549-564.
- Zotova, O., & Karapetyan, L. (2018). Psychological security as the foundation of personal psychological wellbeing (analytical review). *Psychology in Russia: State of the Art*, 11(2), 100-113. doi:10.11621/pir.2018.0208

LIST OF PUBLICATIONS AND PAPERS PRESENTED

Paper submitted

Date submitted	Author	Title	Journal	Status
20.01.2019	1. Youngeun Noh 2. Syazana Shahdan	A Systematic Review of Religion/Spirituality and Sport: A Psychological Perspective	Psychology of Sport & Exercise	Revision submitted
06.07.2019	1. Syazana Shahdan 2. Youngeun Noh 3. Yuhanis Adnan	The Role of Religion/ Spirituality on Sport Anxiety among Elite Athletes: An Exploratory Study	Qualitative Research in Sport, Exercise and Health	Under review
09.08.2019	1. Youngeun Noh 2. Syazana Shahdan	A Theoretical and Empirical Framework for Formulating the Relationship Between Religion/Spirituality and Sport Performance – A Grounded Theory Approach	Psychology of Sport & Exercise	Under review