

The Phenomenological Experience of Competitive State  
Anxiety for Female Beach Volleyball Players at the 2012 Olympics

by

Katherine Zakrzewski

University of Ottawa

Thesis submitted to the Faculty of Graduate and Postdoctoral Studies

in fulfillment of the requirements for the degree of

Master of Arts (M.A.) in Human Kinetics

School of Human Kinetics, Faculty of Health Sciences

University of Ottawa, Canada

September, 2015

© Katherine Zakrzewski, Ottawa, Canada, 2015

## Acknowledgments

I would like to take the opportunity to acknowledge the six Olympic beach volleyball athletes who generously gave of their time and their experience to allow this thesis to come to life. To Kerri, Natalie, Elodie, Becchara, Marie-Andrée, and Laura, your honesty, compassion, full disclosure, and love of the game was clearly present in your interviews. You are all very special people to give back so open-heartedly to the sport you love, the future of the game, and the future athletes who will benefit from your legacy.

Thank you to my supportive thesis advisor Dr. Terry Orlick for your guidance, your open-mindedness, your wisdom, your flexibility, and your commitment to the success of all the athletes and students you have taught, including myself. Your dedication to personal excellence and to finding the simple joys in life, especially in your most recent work with young children, is awe-inspiring. I would also like to thank Dr. Audrey Giles both for the rigor with which you delivered the research methods course in which the first half of this thesis was written, and for your guidance and moral support through the thesis coursework and with specific questions regarding this thesis. Thank you as well to Dr. Tanya Forneris for your extra guidance and your willingness to contribute to the success of this thesis. In addition, I would like to thank my Master's colleague Laura Parrott for the speed, passion, and thoroughness, with which you edited the first draft of my thesis.

I am forever indebted to my coaches and leaders at Landmark Worldwide, including James DeStephanis, Cameron Hastings, and my Self Expression and Leadership Program Leader community. The possibility of my future after volleyball – a future in which I would “live life powerfully and live a life I love” – was created in your listening and with your relentless support and for that I am eternally grateful.

There are no words to adequately express my profound gratitude to my loving family and incredible friends for your encouragement and support, not only as I took on my thesis over the past two and a half years, but also in all my great life endeavours. To my parents Tom and Ewa, my sister Lex, my nephew Leighton, and my niece Taylor (my roommate during my Master's coursework) thank you for pushing and inspiring me to be the best I can be. It was very encouraging to know that you were always good for a supportive conversation or a laugh when I needed it. To the love of my life, Mary-Jane: I would not be who I am or accomplished what I have without your unconditional love and support. I cannot begin to describe the peace of mind and joy I draw from our relationship and from knowing that no matter what, you will always be there by my side pushing me, holding me up, and making me smile.

I dedicate this thesis to you, and to all my friends and family near and far, for without you the completion of this thesis would not have become reality.

### **Abstract**

Anxiety is one of the most studied research topics in sport psychology literature (Guillen & Sanchez, 2009); however, even though the Olympics are considered to be one of the most pressure-filled sporting events (Birrer, Wetzel, Schmidt, & Morgan, 2012), to date there has been no research aimed specifically at investigating Olympic athletes' competitive state anxiety and its impact on subsequent performance. Furthermore, according to Nesti (2011), in order to support athletes in dealing with their experience of anxiety, researchers must turn towards the phenomenological, real-lived experience of the athlete to uncover what might best support positive anxiety management and interpretation in competition. The purpose of this study, therefore, was to respond to the gap in Olympic athlete anxiety research by examining the phenomenological experience of competitive state anxiety for female beach volleyball players at the 2012 London Olympics. Six in-depth, phenomenological interviews were conducted with these Olympic female beach volleyball players. Results indicated that, while all athletes in this study experienced anxiety at the 2012 Olympics, it was not the reduced intensity of anxiety that positively impacted their performance but rather the athletes' ability to recognize, manage, and positively interpret their anxiety. In addition, it was shown that self-confidence further buffered the potentially negative impacts of anxiety. It is recommended that future research focus on extending phenomenological anxiety research to other sports and genders, and to specifically examine the impact of trait anxiety, team dynamics, and the experience of flow on athletes' anxiety interpretation.

## Table of Contents

|                                                                            |           |
|----------------------------------------------------------------------------|-----------|
| Acknowledgments                                                            | ii        |
| Abstract                                                                   | iii       |
| Table of Contents                                                          | iv        |
| <b>CHAPTER 1</b>                                                           | <b>1</b>  |
| Introduction                                                               | 1         |
| The History of Beach Volleyball                                            | 3         |
| Olympic Beach Volleyball Qualification                                     | 4         |
| The Psychology of Beach Volleyball                                         | 5         |
| <b>CHAPTER 2</b>                                                           | <b>7</b>  |
| Review of Literature                                                       | 7         |
| Anxiety and Elite Athletes                                                 | 9         |
| <b>CHAPTER 3</b>                                                           | <b>15</b> |
| Methodology                                                                | 15        |
| Epistemology                                                               | 15        |
| Phenomenological Methodology                                               | 15        |
| The Philosophical Origins of Phenomenology                                 | 16        |
| From Philosophy to the Practicality of Phenomenology                       | 19        |
| Participants                                                               | 21        |
| Method                                                                     | 22        |
| Table 1. Participant Experience, 2012 Olympic Finish, and Accomplishments  | 23        |
| Interview Schedule                                                         | 24        |
| Interview Guide                                                            | 25        |
| Data Collection                                                            | 25        |
| Data Analysis                                                              | 26        |
| IPA Foundations                                                            | 26        |
| The IPA Procedure                                                          | 27        |
| Table 2. Example of data analysis by IPA and development of initial themes | 30        |
| Trustworthiness                                                            | 32        |
| <b>CHAPTER 4</b>                                                           | <b>34</b> |
| Results                                                                    | 35        |
| Table 3. Table 3. Organization of Results                                  | 34        |
| Anxiety Antecedents                                                        | 34        |
| Anxiety Beliefs                                                            | 34        |
| Lack of Control                                                            | 37        |
| The Olympic Environment                                                    | 38        |
| Processes and Procedures                                                   | 41        |
| Injury                                                                     | 43        |
| Managing Expectations                                                      | 44        |

|                                                                        |     |
|------------------------------------------------------------------------|-----|
| Be My Best (Not Good Enough)                                           | 44  |
| Under Pressure                                                         | 46  |
| Fanfare                                                                | 50  |
| Team Dynamic                                                           | 53  |
| Anxiety Management                                                     | 56  |
| Prevention                                                             | 57  |
| Avoidance                                                              | 57  |
| Plan                                                                   | 58  |
| Developed Mental Skills                                                | 60  |
| Routine                                                                | 60  |
| Table 4. Athlete Olympic Pre-Competition Routines                      | 61  |
| Imagery                                                                | 63  |
| Mindfulness, Prayer, and/or Breath                                     | 65  |
| Mental Strategies                                                      | 67  |
| Mental Coaching                                                        | 68  |
| No Tools                                                               | 70  |
| Focus                                                                  | 71  |
| Present Moment                                                         | 71  |
| Front of Mind                                                          | 74  |
| Past Olympic Experiences                                               | 76  |
| Olympic Perspective                                                    | 79  |
| Reframing                                                              | 82  |
| Game-time                                                              | 83  |
| Expand Comfort Zone                                                    | 84  |
| Team Connection                                                        | 85  |
| Partner and Support Staff                                              | 85  |
| Family                                                                 | 89  |
| Anxiety Effects                                                        | 91  |
| Physiological Reactions                                                | 92  |
| Table 5. Athletes' Physiological Response to Competitive State Anxiety | 93  |
| Facilitative Anxiety                                                   | 92  |
| Anxiety is Part of It                                                  | 95  |
| Anxiety as a Compass                                                   | 100 |
| Be Myself                                                              | 102 |
| Love of the Game                                                       | 104 |
| Successful Anxiety Management                                          | 107 |
| Confidence                                                             | 110 |
| Debilitative Anxiety                                                   | 113 |
| In My Head                                                             | 114 |
| Unsuccessful Anxiety Management                                        | 116 |
| Lack of Confidence                                                     | 119 |
| Forced Play                                                            | 120 |
| <b>CHAPTER 5</b>                                                       | 125 |
| Discussion                                                             | 125 |
| Anxiety Antecedents                                                    | 126 |

|                                                                          |     |
|--------------------------------------------------------------------------|-----|
| Distractions and Anxiety Antecedents                                     | 126 |
| Organizational Stressors                                                 | 129 |
| Olympic Environment, Policies, and Procedures                            | 129 |
| Fanfare - Media and Fans                                                 | 130 |
| Competitive Stressors                                                    | 132 |
| Managing Expectations                                                    | 132 |
| Team Dynamic                                                             | 133 |
| Personal Stressors                                                       | 134 |
| Injury and Lack of Control                                               | 134 |
| Fanfare - Family                                                         | 134 |
| Team Dynamic                                                             | 135 |
| Anxiety Beliefs                                                          | 136 |
| Anxiety Management                                                       | 137 |
| Anxiety Management and Performance                                       | 137 |
| Anxiety Prevention                                                       | 139 |
| Anxiety Avoidance                                                        | 139 |
| Planning                                                                 | 139 |
| Well-Developed Mental Skills                                             | 140 |
| Routines                                                                 | 143 |
| Imagery                                                                  | 144 |
| Mental Strategies to Reduce Anxiety                                      | 145 |
| Meditation, Prayer, and Breath                                           | 146 |
| Mental Coaching                                                          | 148 |
| Positive Focus                                                           | 148 |
| Front of Mind                                                            | 149 |
| Perspective                                                              | 150 |
| Reframing                                                                | 150 |
| Team Connection                                                          | 151 |
| Past Experience                                                          | 152 |
| Anxiety Effects                                                          | 153 |
| Facilitative or Debilitative Anxiety Interpretation                      | 153 |
| Past Competitive Experience                                              | 155 |
| Coping Mechanisms                                                        | 158 |
| Perceived Control                                                        | 161 |
| Trait Anxiety                                                            | 163 |
| Self-Confidence                                                          | 164 |
| Strengths and Limitations                                                | 166 |
| Future Research                                                          | 170 |
| Conclusion                                                               | 172 |
| References                                                               | 178 |
| Appendix A. Athlete Interview Guide - Demographic Information            | 185 |
| Appendix B. Consent Form                                                 | 187 |
| Appendix C. Bracketing Interview Guide                                   | 190 |
| Appendix D. Figure 1 - Flow chart of a phenomenological research project | 191 |

## CHAPTER 1

### Introduction

As explained by 2000 Olympic Gold Medalist Natalie Cook:

Knowing that... the Olympic Games, [is] the highest pressure situation [you'll ever experience] in the world, that is why we trained [our mental skills]: knowing [anxiety is] coming, identifying it's coming, putting in place routines, techniques, anchors to stop it [from] interfering... If you asked me back in my first Olympics – when I came third and we... could have won – [anxiety] absolutely interfered. I had no techniques to stop it. It was like a tsunami! I thought the game was over and we may as well go home... That's why I went on such a journey learning the techniques to identify it, to sidetrack it, to dissipate it, whatever it is... to not have [the anxiety] interfere.

To say that the Olympic Games is the most important competition in which an athlete will ever take part would be an understatement (Blumenstein & Lidor, 2007). Every athlete I know has experienced anxiety in his/her career; however, nothing quite seems to compare to the pressures and ensuing anxieties of competing at the Olympics. Models of anxiety and performance, such as the inverted-U hypothesis and Hardy's (1996) catastrophe model, seem to indicate that athletes require a certain amount of anxiety to induce a necessary state of arousal in order to perform at their best (Woodman & Hardy, 2001). Moreover, competitive state anxiety has been demonstrated to have a directional component, whereby the athlete's experience of anxiety can be either facilitative or debilitative depending on the "range of personal and situational variables" (Hanton, Neil, & Mellalieu, 2008a, p. 48). Research has also shown that too much anxiety is detrimental to both the athlete's performance and to his/her self-confidence (Hanton et al., 2008a; Woodman & Hardy, 2001). Therefore, it is important to understand both



the antecedents of anxiety, what athletes can do to manage their experience of anxiety and also how they can interpret their anxiety symptoms as facilitative towards peak performance, especially at the Olympics.

The traditional positivistic psychological research protocols used to determine the cognitive behavioural antecedents of competitive anxiety have saturated the sport psychology field with explanations and symptoms of anxiety. However, this research has not helped in the understanding of how athletes experience anxiety (Nesti, 2011). In response to this research trend, Hanton et al. (2008a) urged researchers to start examining competitive anxiety in a more holistic fashion to better understand the experience of the anxious athlete, advising that “the meaning performers assign to these associations needs further consideration” (p. 52). In order to gain a different awareness of the athlete’s experience of anxiety, Nesti (2004) suggested the application of existential phenomenological research protocols. Therefore, in response to the gap in the competitive anxiety literature, especially with Olympic athletes, and the call to explore the *experience* of athlete anxiety, my research question is: What was the phenomenological experience of competitive state anxiety for female beach volleyball athletes at the 2012 Olympic Games? The following additional ‘minitour’ questions were investigated: (a) What precipitated the athletes’ experience of anxiety? (b) What did the female Olympic beach volleyball players in this study do to cope with the inherent anxiety of Olympic competition? And (c) did the athletes’ interpretation of anxiety (as being either facilitative or debilitative towards performance) affect their performance at the 2012 Olympic Games and, if so, what factors influenced the interpretation of their anxiety symptoms? This question was studied from a phenomenological perspective using the phenomenological interview method and then analyzing the results using interpretative phenomenological analysis (IPA). The thesis concludes with an analysis and

discussion of the results, within the context of sport psychology and phenomenology, followed by a presentation of future research directions.

### **The History of Beach Volleyball**

When discussing phenomenology, one must include the context in which the experience occurs, because with this methodology “the person is always and indelibly a “person-in-context”” (Larkin, Watts, & Clifton, 2006, p. 106). In other words, we are inseparable from our environment and what is happening around us (Nesti, 2006). As this study is a phenomenological account of competitive state anxiety for female beach volleyball players at the 2012 Olympics, it is essential that I first provide a brief overview of the sport of beach volleyball (the ‘context’) prior to further discussion on these athletes’ as-lived experience.

Sources show that beach volleyball most likely originated on Waikiki beach in Hawaii in 1915, within two years of its birth, beach volleyball was also being played in India and Italy (Federation International of Volleyball Ball (FIVB), 2014b). At first the game was played 6-on-6 (like indoor volleyball); however, by 1930 doubles beach volleyball was born. In that same year, the first women’s beach volleyball tournament was played at Santa Monica Beach, and the sport also began surfacing in other beach destinations in the South of Europe including France, Prague, and the Czech Republic (FIVB, 2014b). By the 1950s, the first beach volleyball tour was organized in the United States of America (USA) and in 1974 the first corporately sponsored tournament took place at State Beach in California. In 1987, the FIVB World Beach Volleyball Tour was started, and its first stop was Ipanema Beach, Brazil (FIVB, 2014b). The sport quickly grew in worldwide popularity, resulting in tour events drawing up to 140,000 spectators per week and culminating in its inclusion as an Olympic sport at the 1996 Atlanta Olympics (FIVB, 2014b).

What is so unique about the Olympic beach volleyball environment is that it retains its ‘beachy’ feel even when played in a large Olympic stadium in the middle of a city: The music is blaring, the fans are cheering and dancing, and somewhere in the stands there are always costumed Brazilian fans waving their flag and beating on their drums (FIVB, 2014a). Yet, despite this fun and somewhat laidback environment, beach volleyball competition is in no way a “day at the beach” – spectators bare witness to some of the most competitive, athletically marveling feats of modern sport. Both the environment and the athleticism of the game bring spectators to the stadium in droves, making it one of the most sought-after tickets at the Olympics (FIVB, 2014b). During the 2012 London Olympics, there were 15,000 fans at each match for a total of over 425,000 spectators over the course of the Olympic Beach Volleyball tournament (FIVB, 2014b).

The 2012 Olympic Games marked a huge milestone for beach volleyball: It was the first time that the same team, May-Traenor and Walsh, had won three consecutive Olympic gold medals (FIVB, 2014a). Historically, USA and Brazil top the women’s rankings with China coming in a close third place, and the top European nations like Germany, Austria, Norway, and Australia closing out the top 10 (FIVB, 2014a). However, no team has ever dominated the major beach volleyball competitions like May-Traenor and Walsh (FIVB, 2014a). The 2012 Olympics also marked another beach volleyball milestone: Natalie Cook competed in her fifth consecutive Olympic beach volleyball competition, the most ever for any beach volleyball athlete (FIVB, 2014a).

### **Olympic Beach Volleyball Qualification**

For the 2012 Olympics, the Federation of International Volleyball (FIVB) created a new qualification system to account for the inclusion of the 142 countries that were participating in

beach volleyball competition around the world (FIVB, 2012b). The first 16 berths were based on the team's Olympic ranking on the FIVB World Beach Volleyball tour and were calculated in the two years leading up to the Olympics (in contrast, in 2008 the only qualification opportunity was through the FIVB tour; FIVB, 2012b). The winners of the 5 continental championships plus the Olympic host country (in this case Great Britain) earned the next 6 spots (FIVB, 2012b). The final 2 teams qualified at the FIVB Beach Volleyball World Cup a few months before the Olympics (note: the second and third seeds from each Continental Championship qualified for the World Cup; FIVB, 2012b). To say that the Olympic qualification process for beach volleyball is stressful is an understatement. Some teams receive confirmation of qualification only weeks before the Olympics (FIVB, 2012b). Aside from the top teams who know early on that they have qualified for the Games, the remaining teams are competing under pressure to qualify until weeks before the Olympics (FIVB, 2012b), only to be met with even more anxiety once they actually qualify for the Olympic Games.

### **The Psychology of Beach Volleyball**

Beach volleyball growth does not show any signs of slowing down. Beach volleyball viewership is up and the National Collegiate Athletic Association (NCAA) in 2014 declared sand (beach) volleyball an official NCAA sport in which athletes can receive full athletic scholarships (NCAA, 2014). As the game continues to evolve, it is imperative that the psychological aspects of beach volleyball are studied, as this sport's unique demands and dimensions lead many to describe it as a 'mental sport'.

First, unlike other team sports, there are no substitutions in beach volleyball and the match referee strictly monitors the time in between points: There is little time wasting allowed (FIVB, 2009). The only time the athlete has a moment to step away from the play and regroup is during

timeouts and during the seconds in between plays, which leads him/her to have to work through any anxiety on the court in real-time. Unlike other team sports, there is no coaching allowed in competition (FIVB, 2009). The beach volleyball coach is not permitted to be on the sidelines or to provide any coaching from the stands (FIVB, 2009); therefore, the athletes are on their own to figure out the match strategy while they are actually playing the game, without outside feedback. Finally, there are only two athletes on each team on the court at any time (FIVB, 2009), so it is very easy for one partner to point his/her finger at the other and for the opposing team to single out a specific athlete's weakness. In an elite beach volleyball match, there really is nowhere for the athlete to hide, there is no outside support in the match, and the athlete's weaknesses are constantly on display. For these reasons, it is imperative that the beach volleyball athlete trains his/her mental skills alongside his/her physical training.

## CHAPTER 2

### Review of Literature

For a world-class athlete, training is planned in four-year intervals with the goal of peaking in time for the Olympic Games. Success at the Olympics trumps all other successes in an athlete's career (Wells, 2012). The spotlight is on, the world is watching, this is what the athlete has been waiting for, yet, he/she can feel strangely unprepared at this moment despite all his/her preparation (Greenleaf, Gould, & Deffenbach, 2001). One of the main ways in which the Olympic Games differ from other competitions is that it only happens every four years. Thus, unlike the regular competitive tour, the environment of the Games is unfamiliar to most athletes. As Orlick and Partington (1988) learned through their interviews with 75 Olympic athletes "Many of the athletes we interviewed did not perform to potential at the Olympic Games despite the fact that some had a very strong track record. They were expected to do well, wanted to do well, but fell far short of the mark" (p. 121).

What is it about Olympic competition that leads athletes to underperform despite their prior performance records? In studying fifteen Olympic athletes from the 1996 Summer Olympics, Greenleaf et al. (2002) determined that the majority of factors that influenced Olympic performance were primarily "psychological in nature" (p. 177). For example, after the Nagano Olympics, Olympic athletes and coaches revealed that to them the "Olympics differ from any other competition" (Gould, Guinan, Greenleaf, Medberty, & Peterson, 1999, p. 372). It appears as though the unfamiliar environment of the Olympic Games, combined with heightened expectations, can result in a greater sense of pressure for athletes (Greenleaf, Gould & Diefenbach, 2001) as well as a decreased perception of control and self-confidence, all of which have been shown to lead to increased competitive anxiety (Hanton & Connaughton, 2002; Hanton,

Mellalieu & Hall, 2004; Hanton, Wadey & Connaughton, 2005; Neil, Wilson, Mellalieu, Hanton, & Taylor, 2012;).

One would think that the Olympic athlete population, therefore, would be a fertile ground for competitive anxiety research. The importance placed on success at the Olympics has exploded in twenty-first century society (Gould & Maynard, 2009), and the expectations to win are very high. Yet, the athlete's confidence has been shown to be more fragile at the Games due in part to the athlete's lack of perceived control over his/her new surroundings and pressures (Gould et al., 1999). Nevertheless, despite research that has shown that the athlete's perceived control over his/her environment affects his/her perception of anxiety (Hanton & Connaughton, 2002), and the obvious implications of the anxiety-performance relationship on Olympic performance (Gould, Eklund, & Jackson, 1992a), no studies to date have dealt specifically with this unique population on this exact subject matter.

Given that the participants in my study were female Olympic beach volleyball players, for whom there is little to no research on the subject of anxiety, this literature review will focus on anxiety research on "elite athletes". Hanton, Wadey and Connaughton (2005) defined elite athletes as "participants [who have] competed internationally and won medals at major events (e.g. European Championships, Commonwealth Games)" (p. 125), including the Olympic Games. I will also reference the limited existing literature on Olympic athlete mental preparation, experience, and affect, with a specific interest in mental skill development and utilization (Durand-Bush, & Salmela, 2002; Gould, et al., 1992a; Gould et al., 1999; Gould, Jackson, & Eklund, 1992b; Gould & Maynard, 2009; Taylor, Gould, & Rolo, 2008; Greenleaf et al., 2002; Hodge & Hermansson, 2007; Orlick & Partington, 1988).

### **Anxiety and Elite Athletes**

Anxiety is one of the most intriguing, pervasive, and consequently most studied topics in sport psychology – and the field of psychology as a whole – as its influence can often make or break an athlete's performance (Guillen & Sanchez, 2009). Competitive state anxiety is defined as the “temporary, perceived feelings of tension and apprehension” (Woodman & Hardy, 2001, p. 291) that are specific to a particular experience and induced by the autonomic nervous system. This type of anxiety can be influenced by an athlete's *trait* anxiety or his/her relatively stable predisposition to experience competition as intimidating, thereby increasing his/her competitive state anxiety symptoms (Partridge, Brustad, & Babkes, 2008).

Previously, researchers thought that competitive state anxiety was to be avoided at all costs, since it was presumed that high anxiety intensity led to poor performance, especially when coupled with physiological arousal (as explained by both the inverted-U hypothesis and the catastrophe model of anxiety; Woodman & Hardy, 2001). However, upon further study of elite athletes, researchers found that anxiety could actually lead to peak performance. In fact, in their study of the mental preparation, precompetitive cognition, and affect in U.S. Olympic wrestlers, Gould et al. (1992) identified that the most successful wrestlers at the 1988 Olympic Games had felt the most nervous and emotionally intense prior to their best performances at the Olympic Games.

Additional research revealed that the greatest factor found to affect performance outcomes was the athlete's perception of anxiety direction, or “the extent that sports performers interpret the intensity of cognitive and somatic symptoms associated with competitive anxiety as either facilitating or debilitating to upcoming performance” (Hanton, Wadey, & Connaughton, 2005, p. 123). Jones (1995) explained this concept of facilitative and debilitating anxiety in his



control model of anxiety (Hanton, Neil, & Mellalieu, 2008). He stated that cognitive (mental) anxiety symptoms arise in the mind as worry, negative self-talk, or imagining poor performance outcomes, whereas somatic (physiological) anxiety symptoms manifest in the feeling state of the body as jitters, butterflies in the stomach, or tight muscles (Hanton & Connaughton, 2002). Some athletes will then perceive these cognitive and/or somatic anxiety symptoms as facilitative to performance, while others will perceive the same symptoms as debilitating (Hanton, Neil, & Mellilieu, 2008b) – but how can this be?

There are many factors that contribute to an athlete's assignment of anxiety symptoms as either being facilitative or debilitating to his/her performance, including his/her experience level, self-confidence, personal factors, and coping mechanisms (Guillen, & Sanchez, 2009; Hanton & Connaughton, 2002; Hanton et al., 2004; Neil et al., 2012; Hanton, et al., 2005). In general, it has been shown that more experienced (elite) performers, like Olympic athletes, are more likely to perceive their anxiety symptoms as being facilitative to their performance, mostly due to the heightened perception of control and self-confidence built over their years of experience (Hanton & Connaughton, 2002).

In interviewing six elite and six subelite athletes, Hanton and Connaughton (2002) determined that competitive state anxiety directionality was influenced by perceived control, which was further enhanced by the athlete's ability to attribute his/her anxiety symptoms to past positive experiences (e.g., remembering experiences of feeling butterflies or worry that led to a top performance). These researchers found that experienced (elite) athletes were better able to attribute their anxiety to positive past experiences, which thereby assisted these athletes to acquire a more facilitative anxiety direction (Hanton & Connaughton, 2002).

Similarly, Guillen and Sanchez (2009) found that the more experienced (elite) female national basketball team players they studied reported lower competitive state anxiety scores than their less experienced counterparts in the Spanish First Division basketball league. Their study also showed that playing time had an effect on competitive state anxiety, with greater minutes played resulting in lower competitive state anxiety, as did the perception of personal factors like poor preparation or performance (Guillen & Sanchez, 2009). Although these studies pointed to experience as an important variable in understanding an athlete's interpretation of anxiety direction, they did not address what happens when all the athletes in question are exceedingly experienced and are performing at a whole new level of pressure and performance expectations, as is the case with the Olympic Games. These studies also failed to examine what the experience is like for these highly experienced athletes who must now compete in an unfamiliar environment, with new pressures and surroundings, which essentially renders them inexperienced again. Furthermore, no research has been done on the anxiety experience of athletes who have been at previous Olympic Games.

Experience is not the only variable that influences anxiety symptom interpretation. Studies have shown that self-confidence has a buffering effect against high anxiety symptoms, so much so that even when an elite athlete has consistent debilitating interpretations of anxiety, he/she can still perform at a high level (Hanton et al., 2005). Self-confidence is thought to support the choice to use helpful mental skill strategies (e.g., mental rehearsal, self-talk, cognitive thought stopping or restructuring) that work to reduce, minimize, and even help the athlete to embrace his/her feelings of anxiety (Hanton et al., 2004). For example, if the athlete is experiencing the somatic anxiety symptom of butterflies in his/her stomach, he/she might use past successful performances of nervousness to cognitively restructure his/her thoughts, thereby convincing

him/herself that nerves are a precursors to an excellent performance (Hanton & Connaughton, 2002).

Therefore, what could be perceived as debilitating anxiety leading to tight muscles and impaired performance can be facilitative based on the mental strategy employed by the athlete and his/her subsequent perceived sense of control (Hanton et al., 2004). By perceiving his/her anxiety as facilitative towards peak performance, the athlete then renews his/her self-confidence (Hanton et al., 2004). The opposite is also true: when the athlete is less confident, the consequence is often that he/she does not engage in mental strategies or instead employs new, previously unused strategies (Hanton, et al., 2004; Hanton et al., 2005), as was identified to be prevalent amongst athletes who underperformed at the Olympics (Gould et al., 1992a; Orlick & Partington, 1988)

If performance and self-confidence reciprocally effect one another and if self-confidence is the key to buffering the effects of anxiety, what happens when the athlete is not performing well and thus has decreased confidence? The literature does not answer this question and only suggests that the athlete practice his/her mental strategies. It would appear that in this scenario the athlete's performance would be unsalvageable; however, athletes are often able to turn their performance around, despite high anxiety, poor performance, and low self-confidence. Perhaps these athletes are more skilled at employing advanced psychological strategies as the literature suggests (Durand-Bush, & Salmela, 2002; Gould, et al., 1992a; Gould et al., 1999; Gould, Jackson, & Eklund, 1992b; Gould & Maynard, 2009; Taylor, Gould, & Rolo, 2008; Greenleaf et al., 2002; Hodge & Hermansson, 2007; Orlick & Partington, 1988) or perhaps there is something missing in the sport anxiety literature? Until only recently, the majority of anxiety research in sport psychology followed the traditional positivistic, natural science perspective of psychology

in which quantitative research methods were heavily favoured (Nesti, 2011). Although these methods might provide insight into “how” or “why” something like competitive state anxiety may occur, they do not allow the researcher to truly understand the experience of the phenomenon.

The recent addition of qualitative methods in the area of sport psychology anxiety research extended the possibility of a more thorough understanding of the performance-anxiety relationship in sport. Greenleaf et al.'s (2002) qualitative study on the athlete's Olympic experience indicated that, “athletes who met or exceeded expectations viewed the Olympics as their ‘time to shine’” (p. 180). From the perspective of phenomenology, the athletes described in this statement had an experience that was in line with the meaning that they assigned to their experience (please refer to the methodology for further explanation). In other words, their perspective might have created a context in which they could in fact “shine”. From this example, it appears that phenomenology could further expose factors that affect Olympic athletes' anxiety perceptions by looking at the meaning athletes assign to their experience. Nesti (2011) would agree, for he has suggested that by turning to existential phenomenology, such as the work of May (1977) who described the phenomenology of anxiety in terms of human “situated” freedom and inevitability of choice, we might gain different insight into the athletes' experience of anxiety. Literally thousands of anxiety research studies have been undertaken in the philosophical, social, psychological, and even political arenas; however, the efforts have not been coordinated between fields so that all could benefit (May, 1977; Nesti, 2011). Likewise, Hanton et al. (2008b) stated that “a more holistic exploration into competition stress [and anxiety] is required to better comprehend what athletes endure . . . and the meaning performers assign to these associations need further consideration” (p. 52).

To Nesti (2011), the results of the most recent research on competitive anxiety – including the conclusions that for some athletes anxiety is facilitative, while for others it impairs performance – are commonsense to any elite athlete, as they have actually *experienced* it. As such, Nesti (2011) argued that the current research on competitive anxiety has not expanded the understanding of anxiety any further, nor has it provided applied practitioners with practical means to enhance facilitative anxiety in their athletes outside of that which was already known (e.g., the application of advanced psychological strategies; Hanton et al., 2008a). Nesti (2011) also proposed that the current way of researching anxiety is backwards; instead of choosing theoretical concepts and measuring them in the field, we must instead look phenomenologically at the experience of the athlete to indicate the direction of future research opportunities. Such is the aim of this study: To expand upon the limited body of literature pertaining to Olympic athlete anxiety and, more specifically, to explore and expose the Olympic athletes' phenomenological experiences of competitive state anxiety. A secondary aim is to provide specific beach volleyball competitive anxiety research, as there is currently none available.

## **CHAPTER 3**

### **Methodology**

#### **Epistemology**

Based on my research questions, what is immediately evident is that a quantitative methodology, with its commitment to the exactitude of data collection and analysis of phenomena that are observable, measurable, and verifiable, will not suffice (Dale, 1996; Richards & Morse, 2007). After all, I am interested in the phenomenological, or as-lived, experience of competitive state anxiety in Olympic athletes. Consequently, I will commit to a qualitative methodology, as it has been shown that “when our concern is the meaning of human experience, we need to use a qualitative approach” (Thomas & Pollio, 2004, p. 6).

Furthermore, according to the phenomenological nature of my research question, I will conduct my research through the subjective epistemological lens of the existential phenomenologist, a combination of the philosophy of existence (existentialism) (Dale, 1996) and phenomenology or the “explor[ation] of our own experience” (Crotty, 1998, p. 84). I am interested in the subjective experience of the phenomenon of anxiety, or how the phenomenon was experienced in the mind as distinct from the phenomenon itself (subjectivism, n.d.). In my commitment to report the athletes’ experiences as they experienced them, I will put aside or “bracket” (Crotty, 1998, p. 79) my personal biases and experiences as a former world-class athlete to preserve the subjective phenomenological meaning given to the experience by the athletes in this study.

#### **Phenomenological Methodology**

A phenomenological research question understandably requires a phenomenological methodology. As the human landscape is complex, researchers must not only deal with different

people with different cultural backgrounds, personalities, upbringings, and experiences, they must also take into consideration the different meanings individuals assign to experiences. To study human behaviour objectively in a vacuum and to declare that the findings are representative of the “lifeworld” (the term that phenomenologists have given to the way we experience everyday life and how phenomena exist in a real-world context; Giorgi & Giorgi, 2008, p. 29) would in essence be misrepresentative of what it is to be human in all its complexity (Giorgi & Giorgi, 2008).

Likewise, to study Olympic athletes in a laboratory setting where researchers control for such characteristics and experiential meanings, without taking into consideration the context of the Olympic Games and the meaning these athletes assign to their experiences at the Games, would be to misrepresent the complexity of being an athlete. Therefore, in order to truly understand the Olympic athletes’ experience of competitive state anxiety, it is appropriate that I chose phenomenology as the methodology for this study. I will start by introducing the philosophical underpinnings of phenomenology to further elucidate the nature of phenomenology; then, I will discuss the strengths and weaknesses of this methodology, followed by the justification of my selection.

### **The Philosophical Origins of Phenomenology**

Edmund Husserl (1900-1970) is credited with the creation of modern phenomenology. In order to address the misrepresentation of the full-lived experience of being in the world, Husserl created a system to explore human phenomena in their natural setting, or “natural attitude” (Hogeveen, 2011, p. 248). He did this to emphasize the subjective experience of the participant in the experience (Giorgi & Giorgi, 2008). Husserl did not believe in the positivistic view that objects can be discovered based on their inherent “objectness”, or “the meaning prior to, and

independent of, any consciousness of them” (Crotty, 1998, p. 27). In his rejection of this common positivistic attitude of science, Husserl designed in phenomenology an empirical approach to scientific research that could be used by all scientists (Nesti, 2011).

Husserl’s phenomenology is a call to turn back to “the things themselves” (Thomas, 2004, p. 9), or to the universal and absolute “essence” (Moustakas, 1998, p. 38) of the phenomenon before meaning was assigned. In the words of Husserl (1967), “we thus begin, everyone for himself and in himself, with the decision to disregard all our present knowledge” (p. 5). Husserl urged us to “bracket” (Crotty, 1998, p. 79), or put aside, our own perceptions, culture, knowledge, thoughts, and feelings in order to once again experience the phenomenon newly and, in so doing, allow for an emergence of new meaning and/or a greater, more authentic, understanding of phenomena as we know them.

On the concept of “bracketing”, Husserl’s student Martin Heidegger (1889-1976) did not agree. He saw that the all-pervasive *Being* was the background that illuminated the foreground of all understanding (Hogeveen, 2011) and, as such, could never be fully “bracketed”. To do so would in essence negate how we experience our world, as in Heidegger’s existential phenomenological view we are *co-constitutionalized* with the world, or rather we are inseparable from the world around us (Nesti, 2006). Instead, Heidegger called to us to “thrust aside our interpretive tendencies” (Crotty, 1998, p. 96) and return to the beginnings of our consciousness, before we assigned meaning to the objects in our experience (Hogeveen, 2011).

Heidegger was responsible for merging Soren Kierkegaard’s (1813-1855) philosophy of existentialism with Husserl’s phenomenology to create existential phenomenology. In so doing, he thereby created a means to describe the meanings we give to everyday experiences (Dale, 1994). Existential phenomenology explains freedom in terms of “situated freedom” (Nesti,



2006, p. 11), whereby our choice as human beings, either by opportunity and/or obligation, is our own; yet, is also mediated by “the framework of the given situation that world has presented” (Dale, 1994, p. 309). In other words, even though we are married to the world, as it either acts on us or us on it, our freedom exists in our choice of how we experience our world as it unfolds. According to Heidegger’s existential phenomenology then, it would be impossible to describe the athlete without describing his/her “being-in-the-world” (Dale, 1994, p. 309), or rather the athlete’s perception and ascription of meaning to his/her experience.

Heidegger was most interested in exposing *Dasein*, or the human being “as the locus where Being manifests itself” (Crotty, 1998, p. 220). He did so through elaborating on the hermeneutic circle, which allows one to comprehend the whole by understanding the meaning of the individual parts and vice versa (Crotty, 1998). Heidegger explained that our pre-understanding of *Being* is the starting point in our understanding of *Being* (Crotty, 1998). He claimed that only by exposing “this rudimentary understanding . . . that seeks to gain a first-person description of experience” (Dale, 1996, p. 309) could we then understand *Being* itself.

Like Heidegger, Merleau-Ponty described that what we perceive as our reality is in fact the foreground against the background of all being; thus, our perceptions and all being are inseparable from one another (Thomas, 2004). He explained that the individual and his/her world are co-creators, and that it is those things that are in our awareness that are most meaningful to us (Thomas, 2004). However, while Heidegger was interested in *Being*, Merleau-Ponty was concerned with the *human* being: in how we interact with other human beings in real life – at work, in conversations, and at play – and the meanings we give to these everyday occurrences (Thomas, 2004). And, like Husserl, Merleau-Ponty called for us to return to our experience of the world in all its wonderment, instead of looking down from above by using the

traditional scientific methodology (Thomas, 2004). He explained that, “in order to see the world and grasp it as paradoxical, we must break with our familiar acceptance of it” (Merleau-Ponty cited in Crotty, 1998, p. 80).

### **From Philosophy to the Practicality of Phenomenology**

One way to break our “familiar acceptance” of the world, as challenged by the forefathers of phenomenology, is to change the means by which we study it. Traditionally, the domain of sport psychology, following in the footsteps of psychology, has taken a positivistic stance on research and leaned heavily on quantitative studies. But, as Dale (1996) pointed out in his article on using existential phenomenology to understand the athlete’s experience, “those interested in studying human phenomena might find the traditional scientific view too restrictive because it essentially asks only ‘why’ something happens, not ‘what’ it is like or ‘what’ is the nature of a certain phenomena” (p. 315). So, phenomenology as a methodology allows for insight into the experience of the athlete, into “what” it is like for him/her with first person and contextual correctness.

It appears as though Dale (1996) is not the only researcher to take this stance, as other sport psychology researchers are currently using a phenomenological-based research approach, and in so doing are also closing the gap between theoretical and applied sport psychology (e.g., Hogeveen, 2011; Nesti, 2004; Omli, 2008; Post & Wrisberg, 2012; Ryba, 2007). Specifically, Nesti (2004) explained that cognitive behavioural research aimed at understanding competitive anxiety has saturated the field with explanations about anxiety, which does little to help the athlete with his/her experience of anxiety. He suggested that only by turning to existential phenomenology might we gain insight into the athletes’ *experience* of anxiety, as is the goal of this study.

Where the methodology of phenomenology is considered weak is in the inability for human researchers to fully “bracket” their perceptions, thoughts, and feelings, as was one of Heidegger’s critiques of Husserl’s phenomenology (Giorgi & Giorgi, 2008). Moreover, there is a question of whether the participants will be able to recall their lived experience with detail, accuracy, or even at all, and, if they do, whether they might withhold their true perspective out of a mistrust of the interviewer (Thomas, 2004). Therefore, this strategy could appear prone to bias on the part of both the researcher and also the subject (Giorgi & Giorgi, 2008). It can be argued, however, that there is always subjective interference from the researcher in any research project (Crotty, 1998), and always room for biased reporting on the part of the participant in all qualitative research (Gray & Guppy, 1999).

Merleau-Ponty explained that in phenomenological research, whatever the individual authentically shares holds the highest meaning or importance for him/her, as the individual only keeps in his/her awareness that which is meaningful to him/herself (Thomas, 2004). To be concerned about the incorrect reporting of a faulty memory holds no merit when one is considering the phenomenological experience of athletes, as whatever they remember holds the most important meaning of their experience and is thus exactly that in which the researcher is interested (Thomas, 2004).

Another critique of phenomenology as a methodology is that it is not generalizable, as it uses a small sample size and is focused on describing the first-hand subjective experience of the individual (Thomas, 2004). On this, Thomas (2004) reminded us that:

Phenomenological generalization is different . . . here ‘proof’ does not depend solely on purity of method but also upon the reader of the research report. In this case, when and if a

description rings true, each specific reader who derives insight . . . may be thought to extend its generalizability. (p. 42)

In other words, in regards to the reader relating to the results of phenomenological research and applying in his/her life that which makes sense to them, that reader (and all with whom he/she shares his/her experience of said research) is said to be the generalizing agent (Thomas, 2004).

In conclusion, as I am interested in the as-lived, first-hand experience of competitive state anxiety of athletes who competed at the 2012 Olympics, it is apparent that phenomenology is the appropriate methodology by which to conduct my research. This methodology will allow me to gain insight into the meaning that each individual athlete assigned to their Olympic experience, and his/her relationship to state anxiety in the context of that competitive experience. I will draw mostly on Heidegger's phenomenological methodology – most notably Heidegger's concept of 'bracketing' and his explanation of the 'hermeneutic circle' – to "bracket" my own biases in order to report on the true essence of the "as-lived" experience of competitive state anxiety of Olympic athletes.

### **Participants**

As my research concerns a very specific population of Olympic beach volleyball athletes, my participants came from a very specific judgment sample, or a sample that is very targeted (Marshall, 1996), to meet the criteria required for my study (e.g., being female and having participated in the beach volleyball competition at the 2012 Olympics). I contacted my network of female FIVB Beach Volleyball World Tour athletes to request participants from around the world, all of whom had competed in the 2012 Olympics. The sample size was limited to 6 female beach volleyball players who competed at the 2012 Olympics due to the specific qualifications to be part of this study (there was only a pool of 48 female beach volleyball

athletes who competed at the 2012 Olympics, of which one half to two thirds did not speak English well enough to engage in a phenomenological interview). I contact 16 athletes to participate of whom 6 replied with interest to take part in the study. I accepted all athletes who met the criteria and demonstrated interest prior to the start of the study. The interview guide can be found in Appendix A.

Each participant was required to give informed consent for her participation in the interview prior to commencing the interview. This informed consent was in accordance with the ethical-research standards imposed by the University of Ottawa. All participants gave consent as I read them the consent form just prior to the interview and they were sent a copy of the consent form as well (see Appendix B). All participants both agreed to take part in the study and to have their names used instead of a pseudonym. Every participant was genuinely excited and honoured to be part of the study, thanking me for the privilege at the end of our interview. All participants were interviewed via Skype. The interviews were audio recorded and transcribed verbatim. The participants' years of experience, 2012 Olympic finish, and most notable accomplishments are listed in Table 1 below.

## **Method**

As my research explored the phenomenological experience of competition state anxiety in Olympic athletes, it was clear from the outset the best data collection choice was to use the phenomenological interview. By using the phenomenological interview method, I was able to give each participant the freedom to narrate her experience and to ascertain the meanings she assigned to those experiences through “a more naturalistic style of questioning” (Nesti, 2006) using open-ended questions. The result was more like a dialogue between friends – which is why the participant in a phenomenological interview is often seen as a “co-researcher” (Nesti,

2006). All events and experiences shared by the participants were retrospective thus, the athletes were actually able to relive the experience through its retelling.

**Table 1. Participant Experience, 2012 Olympic Finish, and Accomplishments**

| Athlete / Country              | Years of Experience* | Previous Olympics | 2012 Olympic Finish | Accomplishments                                                                                                                                            |
|--------------------------------|----------------------|-------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kerri Walsh Jennings<br>USA    | 11 years             | 3                 | 1 <sup>st</sup>     | 3-time Olympic Gold Medalist (2004-2012); World Champion (2003, 2005, 2007); longest win streak (89 games straight)                                        |
| Natalie Cook<br>Australia      | 19 years             | 4                 | 19 <sup>th</sup>    | 2000 Olympic Gold Medalist; 1996 Olympic Bronze Medalist; 5-time Olympian (1996-2012); 5-time Australian National Champion; Volleyball Hall of Fame (2013) |
| Marie-Andrée Lessard<br>Canada | 13 years             | 0                 | 19 <sup>th</sup>    | Circus Reality TV Show Winner; 2004 Cagliari FIVB Challenger Gold                                                                                          |
| Laura Ludwig<br>Germany        | 9 years              | 1                 | 5 <sup>th</sup>     | 2-time European Champion; 5-time FIVB World Tour Silver (2009-2012)                                                                                        |
| Elodie Li Yuk Lo<br>Mauritius  | 4 years              | 0                 | 19 <sup>th</sup>    | 2011 All-African Games Champion                                                                                                                            |
| Becchara Palmer<br>Australia   | 7 years              | 0                 | 19 <sup>th</sup>    | 2006 U19 World Champion; 2007 U21 World Championship Silver; 2009 FIVB World Tour Poland Open Silver                                                       |

\* Years Experience competing on the FIVB World Beach Volleyball Tour prior to the 2012 Olympics. Note: all athletes have prior indoor and beach volleyball experience not noted here and all athletes have greater than 10 years of overall volleyball experience.

### **Interview Schedule**

In a chapter on interpretative phenomenological analysis, Smith and Osborne (2008) suggested that great value can be derived from creating an interview schedule prior to conducting the interview. Creating this interview schedule “forces [the researcher] to think explicitly about what [he/she] think[s]/hope[s] the interview might uncover” (p. 59) and allows him/her to attend fully to the participant when he/she is speaking (instead of getting distracted by formulating the next question). Pre-thought about potential interview questions might also help to prepare the researcher to respond to sensitive topics or to wording questions in a way that supports the research question (Smith & Osborn, 2008). However, as Smith and Osborne (2008) explained, when collecting phenomenological data, it is paramount that the participant guides the interview so that his/her own subjective, as-lived experience is the topic of interest, instead of the motives or biases of the researcher. I gave the athletes in this study full permission to speak for as long as they wanted about the topic at hand and I occasionally guided them to elaborate on their answer by asking questions like, “Is there anything else you would like to say or add to what you have already said?”

In allowing the interview to be directed by the participant, I opened the door for novel themes and issues to arise that I had not previously identified (Smith & Osborne, 2008). In this way, the phenomenological interview not only provided me with some structure, confidence, and freedom so that I could focus freely on the participant, it also helped me to flow with the conversation, to be steadfast that the line of questions and answers pertained to the topic, and to refrain from imposing my views so that the phenomenological experience of the participant could be retained (Smith & Osborne, 2008).

### **Interview Guide**

The interview guide of phenomenological interview questions was created with the overriding research questions in mind. I also reviewed previous theses' interview guides to create other questions and to mold the questions I had already created in a way that would promote participant elaboration with little prompting (Smith & Osborne, 2008). As this was a phenomenological interview, I gave myself permission to ask extra questions pertaining to the answers the participants provided. Overall, I kept one "rule" throughout the formulation and execution of the interview guide: To ensure that the questions would in no way lead the participant's responses. I found this rule the most difficult to follow, as I found myself wanting to direct the participant's responses, and as a result I was continually bracketing my thoughts and assumptions so that the participant could freely divulge her *own* experience.

### **Data Collection**

All data were collected via retrospective descriptions of the participants' experience of competing at the 2012 Olympics, specifically in terms of their phenomenological experience of competitive state anxiety. Although it may have been useful to gather this information in the weeks proceeding and immediately following the 2012 Olympics, when the experience was fresher in the minds of the athletes, one could argue that as phenomenological study deals with the meaning that athletes assign to their experience, versus the "truth" of the experience, per se, those events to which the athletes assigned the most "memorable" meaning would be just as easy to recall as when they first experienced them (Larkin et al, 2006).

Prior to commencing the interviews, all athletes were sent the consent form (see Appendix B) via email or Facebook messenger, as well as a short description of the purpose of the study and the details of the interview (e.g., next steps and what they would entail).



Interviews occurred in a span of eight weeks over Skype, in the comfort of the athletes' home and at a time and day that worked best for the athletes. I found the Skype modality to be extremely easy, time- and cost-saving (as no travel was required), and it also provided a sense of comfort as the participants were in familiar surroundings as they answered the interview questions. I would suggest that the comfort and security of this environment aided the athletes in being forthcoming in their interview responses. While I was engaging in the interview with the athlete, I was also recording it so I could listen to and transcribe it at a later date.

### **Data Analysis**

All participants were interviewed over the course of eight weeks, at the rate of about one interview per week. On one occasion, two interviews were completed in the same week. Transcription was started almost immediately after the second interview, and was finalized over the next two months. Once complete, the transcripts were then analyzed by hand in a Word document using Interpretative phenomenological analysis (IPA).

Each participant transcript's was first analyzed completely, moving between the whole and the parts of the document (Crotty, 1998), looking at each quote in isolation, then against the greater context of the interview as a whole. Then I would move on to the next transcript, following the same method, in constant movement between the parts and the whole of the previous transcripts I had analyzed. In the end, the hermeneutic procedure was observed and the common themes (see Table 3 for a list of themes) between transcripts were insightful.

### **IPA Foundations**

IPA was born out of a phenomenological methodology (see Methodology above) with the intention of analyzing and reporting on the as-lived experience of the subject(s) in question. IPA elaborates on the fundamental origins of phenomenology as it works to expose the experience of

the phenomenon in question (as mentioned above) and encourages the “bracketing” of our own experiences, using a bracketing interview performed prior to data collection (see Appendix C) to uncover any biases or preconceptions of the researcher (Smith, Flowers, & Larkin, 2009). After identifying the researcher’s biases or preconceptions, he/she can then bracket, or put aside, those biases or preconceptions there by decreasing his/her interpretive tendencies when interviewing the participants so as to truly understand the essence of the experience as lived by the participant (Smith, Flowers, & Larkin, 2009). IPA also calls for the researcher to observe the hermeneutic circle in an analytical dance between the parts and the whole of the transcript being analyzed (Smith, Flowers, & Larkin, 2009; see Appendix D for a diagram describing the hermeneutic circle in phenomenological research). At the same time, IPA is not purely descriptive and not only interested in an “insider’s perspective” (Larkin et al, 2006, p. 113). When analyzing the results, IPA also gives the researcher the freedom to interpret the meaning behind what is being said, and to generate themes that can then be analyzed across similar experiences.

### **The IPA Procedure**

There is no exact procedure for IPA, although there are some suggestions of steps to follow to support rigorous phenomenological analysis; however, regardless of the steps taken, it is most important that the researcher adhere to the underlying phenomenological methodology (Smith & Osborn, 2008). In Smith et al.’s (2009) book on IPA, they suggested starting analysis with the interview that is most “detailed, complex and engaging” (p. 90), which is exactly what I did. I chose to start with the interviews with Olympic Gold Medalists Kerri Walsh and Natalie Cook. Below is an overview of the IPA method that was used. A detailed description can be found in Appendix D.

First, I read and re-read the text of the chosen interview slowly and meticulously to fully understand and engage with “the whole” of the text, as borrowed from the hermeneutic circle (Smith et al., 2009). The point of this first step is to thoroughly engage with the text by reading it slowly and meticulously, while imagining the words being said in the participant’s voice (Smith et al., 2009).

Once I was fully engaged with the “whole of the text”, I began initial noting by “free textual analysis” (Smith & Osborn, 2008, p. 67), whereby I read the selected transcript again looking for loose themes relating to the experience of the participant (which I noted in the right margin). Smith et al. (2009) suggested that the researcher can organize initial noting into one of three categories: Descriptive comments (describing what was actually said by the participant), linguistic comments (zoning in on the meaning behind the specific words the participant used), and conceptual comments (looking past what and how it was said to the deeper meaning behind the words). Furthermore, these categories can be differentiated in the analysis by different colours or styles of font if so desired. I chose to highlight specific themes and categories directly in my word document to either differentiate between themes or to group them together. The goal in this step is to “comment on similarities and differences, echoes, amplifications, and contradictions in what the person is saying” (Smith et al., 2009, p. 92). Smith et al. (2009) described this step as often the most laborious and time-consuming; however, I found it to be a close second behind organizing the themes between different participant transcripts.

After completing the initial noting, I then read the transcript for the deeper meaning of the experience, using the far right column to document themes, descriptions, and conceptualizations that emerged from the initial notes and the text as a whole (Smith et al., 2009). In this step, I found I used the same themes numerous times in the same transcript and

the richer excerpts of the interview data (those quotes in which the athlete spoke in depth about her as-lived experience of anxiety) birthed a greater number of themes than other sections (Smith & Osborn, 2008). In identifying emergent themes after having been immersed in the “whole” text, IPA adheres to Heidegger’s hermeneutic circle whereby the whole of the interview is reduced to its parts, then reformed again in the final IPA write-up (Smith et al., 2009). In this way, the themes synergistically represent both the original descriptions of the participant, as well as the researcher’s interpretations (Smith et al., 2009). The literature indicates that there are no specific rules pertaining to theme generation, as there will be areas of the transcript that are richer in phenomenological meaning than others. However, the researcher should stick to a phenomenological, participant-meaning based approach at all times (Smith et al., 2009). A sample of IPA analysis carried out on a section of one of the athlete transcripts, including the initial noting and emergent themes in the right margin, can be seen in Table 2.

Next, Smith and Osborn (2008) suggested that I chronologically list the emergent themes on a separate page and work to regroup the themes in “clusters” based on relationships and patterns between themes. As a last step, these “theme clusters” were grouped under a superordinate theme that either emerged directly from the text, or that I conceptualized to represent the experience of the participant (Smith et al., 2009). These themes can either be descriptive or, as the researcher develops his/her craft, they can become more and more conceptualized based on the interpretation of deeper meaning of the language chosen by the participant (Smith et al., 2009).

Smith et al. (2009) suggested some strategies to distinguish commonalities between themes including: Abstraction, subsumption, polarization, contextualization, numeration, and function. Abstraction involves taking like-themes and grouping them together under a

**Table 2. Example of data analysis by IPA and development of initial themes**

| Line # | Interview Transcript                     | Initial Noting         | Emergent Themes                                                                  |
|--------|------------------------------------------|------------------------|----------------------------------------------------------------------------------|
| 197    | Yeah I think probably after our          | Lost – out of          | Anxiety Antecedent<br>= responsibility for<br>all team's<br>losses/errors; guilt |
| 198    | second game, when we lost that and       | tournament = sick to   |                                                                                  |
| 199    | we knew we weren't going to proceed      | stomach from guilt     |                                                                                  |
| 200    | through to the next section, I think     |                        |                                                                                  |
| 201    | that was probably the most – like I      | Attachment to team in  |                                                                                  |
| 202    | just felt sick, I just felt guilty, and  | terms of weight on     | Anxiety Debilitation<br>= all alone/ isolated,<br>no support                     |
| 203    | sick, and like I'd let so many people    | shoulder, like all her |                                                                                  |
| 204    | down, and our coaching staff was         | fault when they lost   |                                                                                  |
| 205    | shitty at us, and Lou shitty at me and   |                        |                                                                                  |
| 206    | I was shitty at her – and it was like    | Team not supportive –  |                                                                                  |
| 207    | really that whole "I'm really alone".    | 'shitty' towards her   |                                                                                  |
| 208    | Again. I had all these people but I felt |                        |                                                                                  |
| 209    | really isolated. But for me that was     | All alone - isolated   |                                                                                  |
| 210    | like... everything was just kind of      |                        |                                                                                  |
| 211    | happening in slow-mo. I was like         | Total confusion – like |                                                                                  |
| 212    | kind of trying to – it was kind of       | drunk, everything in   |                                                                                  |
| 213    | almost like I was drunk – and            | slow motion but no     |                                                                                  |
| 214    | returning to control this and I wanted   | control, no ability to |                                                                                  |
| 215    | to do something and I wanted to say      | take any other action  |                                                                                  |
| 216    | something but I didn't really know       |                        |                                                                                  |
| 217    | what the hell was going on. I've never   |                        |                                                                                  |
| 218    | really been in a position like that      |                        |                                                                                  |
| 219    | before.                                  |                        |                                                                                  |

superordinate, or higher level, conceptual theme (Smith et al., 2009). Subsumption is almost the same as abstraction, only the research uses an emergent theme as the subordinate theme (Smith et al., 2009). With polarization, the researcher looks for differences between the emergent themes in and across interviews (Smith et al., 2009). With contextualization, the narrative context is examined relative to how time and culture effect and are influenced by the narration, and thus lead to themes (e.g., grouping themes based on time period; Smith et al., 2009). Numeration involves counting how many times the theme is supported within the narrative, not as an indication of absolute importance, but rather as relative importance to the participant (Smith et al., 2009). Finally, themes can be determined based on function within the text, for

example, demonstrating the participant's use of certain language to position him/herself in a certain way (Smith et al., 2009).

After determining the specific themes in a transcript, I then moved on to the next transcript, as I continuously reminded myself to "bracket" what was uncovered from the IPA of the first transcript to preserve its distinctiveness (Smith et al., 2009). When all transcripts were analyzed, I then distinguished themes between transcripts using the hermeneutic circle as a guide, switching between the whole, parts, and whole of the documents (Smith et al., 2009).

In order to categorize the superordinate (overriding) themes and determine the themes and subthemes, I created a master spreadsheet that included the superordinate (overriding) theme, the initial notes, as well as an excerpt from the transcript that supported the particular theme. I then sorted by superordinate theme, further grouping together the meaning units (the specific athlete quotes) of different athletes. Next, I read through all the initial notes and athlete quotes to determine any emergent themes or subthemes. I chose an umbrella theme, and then sorted the spreadsheet by theme and subtheme until I had a detailed document that outlined all superordinate themes, themes, and subthemes that emerged from the IPA of all 6 transcripts. This step of theme categorization was the most arduous and time consuming.

Once the final themes were determined across interviews, I created a table (see Table 3) to coherently list the superordinate themes, with the supporting themes and subthemes listed alongside (Smith & Osborn, 2008). This table was taken from my spreadsheet database that included the quotation (with its in-text location) that corresponded with each theme (Smith & Osborn, 2008). According to Smith and Osborn (2008), it is not necessary for all themes to be included in the final list.

The final step of IPA is to write up the analysis by expanding on the themes, including verbatim excerpts from the original source document and making sure that “care is taken to distinguish clearly between what the respondent said and the analyst’s interpretation or account of it” (Smith & Osborn, 2008, p. 76). This final write-up (the Results below) fulfills Heidegger’s hermeneutic circle, as the whole of the transcript, which was broken down into the parts (themes) in the interpretative phenomenological analysis, is reformed as a whole again to combine both the researcher’s interpretation and the participant’s original voice (Smith et al., 2009).

### **Trustworthiness**

As I am not interested in the objective “truth” of competitive state anxiety, or even in its transferability for global use, the topic of ‘trustworthiness’ has no real place in this thesis (Jovchelovitch & Martin, 2000). There are researchers who criticize more unstructured interviewing protocols like the phenomenological interview. The most common criticism is that narrative-focused interviewing styles, like the phenomenological interview, are unreliable since they do not represent absolute truth, the story can change between interviews, the participant might not remember key facts (or might even tell only part of the story), the rules for the interviewer are unrealistic, and the themes are not generalizable to the greater population (Chase, 2005; Jovchelovitch & Martin, 2000). Another criticism is the long time it takes to both transcribe and analyze the interviews.

In response to these criticisms, supporters of this method counter that they are not interested in absolute truth or proof, but rather in discovering the context and subjective experiences of the participants (Jovchelovitch & Martin, 2000). Supporters of phenomenological interview methods argue that whatever the participant shares is significant, as it represents the most meaningful memories of the event, which are ultimately the data they are looking for.

Finally, they remind us that generalization is not the goal, but “rather [the goal] is to recognize ways in which one experience resembles another” (Dale, 1996, p. 317).

I will, however, speak to the trustworthiness of the participants, specifically in their character. All participants were confident, reflective (they took the time to respond), and self-expressed in the interviews. They spoke to me like a friend, using their full expression of language (including swear words) without shame. Whenever they thought they were unclear or that something had been miscommunicated, they were quick to retract what they said or repeat it in a clearer manner. The response of these Olympic athletes was consistent with those who took part in Orlick and Partington’s (1988) study of 75 Olympic athletes, in which they demonstrated that Olympic athletes are “highly self-directed, autonomous, and sometimes assertive in presenting their responses and clarifying their views” (p. 4). They also stated with great confidence that “it would be extremely difficult, if not impossible, to manipulate the responses of these high level Olympic achievers” (p. 4), which was my exact experience with the Olympic athletes in this study.



## **CHAPTER 4**

### **Results**

The results in this study are both inclusive and exclusive, as phenomenology requires the reporting of the as-lived experience in the voice of those who experienced it. The analyzed and interpreted data that make up the results of this thesis are the athletes' own words, taken as quotes directly from the transcripts and interwoven with the analysis. After meticulous analysis of the transcribed interviews of all 6 participants, I was able to develop three superordinate themes that described the female beach volleyball Olympians' phenomenological experience of competitive state anxiety: Anxiety antecedents, anxiety management, and anxiety effects. Each superordinate theme was then categorized into specific themes and sub-themes (see Table 3 below) and supported by quotes obtained directly from the interview transcripts of the 6 athletes who were interviewed for this study.

#### **Anxiety Antecedents**

The only logical place to start describing the phenomenological, as-lived anxiety experience of the female beach volleyball players interviewed for this study is at the very beginning: By describing exactly what it was that caused anxiety at the 2012 Olympics for each of the participants in this study. I was interested in what the Olympic experience was like for the athletes, and what it was that triggered their anxiety symptoms in the first place. What I discovered was that although their anxiety initiators were diverse, they all fit or could be categorized under the following themes: anxiety beliefs, lack of control, managing expectations, and team dynamics. I will further elaborate on these themes (and their subthemes) below.

#### **Anxiety Beliefs**

I debated on whether or not to include a section on "anxiety beliefs" in this thesis

**Table 3. Organization of Results**

| <b>Superordinate Theme</b> | <b>Theme</b>             | <b>Sub-Theme</b>                                                                                                 |
|----------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------|
| Anxiety Antecedent         | Anxiety beliefs          | Anxiety causes<br>Anxiety prevention                                                                             |
|                            | Lack of control          | The Olympic environment<br>Procedures and protocol<br>Injury                                                     |
|                            | Managing expectations    | Be her best<br>Family<br>Fanfare<br>Under pressure                                                               |
|                            | Team dynamic             |                                                                                                                  |
| Anxiety Management         | Prevention               | Avoidance<br>Plan                                                                                                |
|                            | Developed mental skills  | Pre-competition routine<br>Imagery<br>Mindfulness, prayer, and/or breath<br>Mental strategies<br>Mental coaching |
|                            |                          | No tools                                                                                                         |
|                            |                          | Present moment focus<br>Front of mind                                                                            |
|                            |                          |                                                                                                                  |
|                            | Focus                    |                                                                                                                  |
|                            | Past Olympic experiences |                                                                                                                  |
|                            | Olympic perspective      | Reframing<br>Game-time<br>Expanded comfort zone<br>Partner and support staff<br>Family                           |
| Anxiety Effects            | Team connection          |                                                                                                                  |
|                            | Physiological reactions  |                                                                                                                  |
|                            | Facilitative anxiety     | Anxiety is part of it<br>Anxiety as a compass<br>Love of the game<br>Successful anxiety management               |
|                            | Debilitative anxiety     | In her head<br>Forced play<br>Unsuccessful anxiety management                                                    |
|                            |                          |                                                                                                                  |

document, but given that this is a phenomenological study, I wanted to make sure to report *all* of the athletes' as-lived experiences of anxiety. There were a few blatant anxiety beliefs that stood

out from the others upon analysis of the transcripts, such as the belief that less experienced athletes believed that their lack of success was due in large part to their inexperience. For example Li Yuk Lo stated: “You only develop tools and strategies when you actually experience those things. If it's the first time you're experiencing them at the Olympics, then it's kind of hard to deal with them all right away”. The athletes’ beliefs about anxiety, from what caused their anxiety to what they saw to be hard facts about anxiety, were littered through all transcripts. These athletes sometimes used these anxiety beliefs to validate how they were feeling or why they were anxious, and at other times these beliefs alone resulted in further anxiety.

Each athlete in this study had some preconceived idea of what would and did cause her anxiety, and they stated these beliefs like a fact. For example, Kerri Walsh declared that transportation caused stress for her, all the time, in every competition; so much so that she would often pay hundreds of dollars a night for a hotel room across from the venue instead of staying at the free tournament hotel so she would not have to deal with transportation. Walsh also believed that it was never her body but instead her mind that would throw her off her peak performance.

Cook, on the other hand, had a strong belief that she would have had less anxiety at the 2012 Olympics had her partner chosen to stay in the village instead of staying off-site with her husband and young son. Cook believed that this physical separation caused a divide in their team, one that all her years of Olympic experience and all her anxiety management tools did not properly equip her to manage. Cook explained:

When we landed in the village, Tamsin still chose to stay with her husband and child outside of the village. That was very unique, and I thought that was a very poor decision on her part, so that caused a bit of worry: We didn’t know where she was at times, we didn’t know if she was going to make training, and when she’d come to training, we

didn't know what state she'd be in if she was up all night with the baby. In that time, it was very stressful because the preparation wasn't ideal.

The athletes in this study also described certain consistent beliefs of what caused their anxiety in competition, namely: The audience (both live and through the media), the team dynamics, managing the logistics of the Olympic village and match scheduling, their past experiences, and managing expectations. They held beliefs of what prevented their anxiety, such as: Having a supportive team, having powerful routines and tools to manage their anxiety and really training themselves to have that mental edge (which both Li Yuk Lo and Palmer shared that they did not have). Walsh quoted her sport psychologist when speaking about her belief of what prevents anxiety, "Everyone's physical, everyone's amazing; [mental focus and willpower is] what's going to separate you and give you that extra 2%, like Gervais [Walsh's sport psychologist] said, and I think I had that".

### **Lack of Control**

All of the athletes in this study experienced a "lack of control" that they explained led to anxiety at one point or another during their 2012 Olympic experience. Walsh, for example, explained that throughout the Olympics she experienced a consistent lack of control and that her anxiety originated from that lack of control. Walsh described that she thought anxiety came "from not knowing what's ahead of you and a little bit of fear of what's ahead of you", stating that her constant anxiety tainted her Olympic experience. Walsh was not the only athlete with that experience. Palmer also experienced a lack of control at the 2012 Olympics, as was evident when she shared:

Things were just kind of happening but I didn't really feel like I had control to actually consciously take a hold of it and change a situation that I was in. Yeah, it's almost like a

feeling of being there, but kind of watching myself as opposed to seeing things with my own eyes, if that makes sense?

### **The Olympic Environment**

All athletes reported that the Olympic environment – including but not limited to the audience (both live and through the media), the physical environment, food, as well as procedures and protocols – affected their anxiety levels. Cook went so far as to say that an athlete's ability to deal with her environment separates the winners from the losers: "I think that the Olympic Games... it's all about how you manage your external circumstances the best and how you manage your anxiety, worry, and stress around all of those external circumstances".

The athletes in this study consistently reported that the Olympic environment induced pressure, mostly because the environment was unfamiliar and because so much was expected of them. These athletes were expected to perform at or beyond their previous best at the Olympics, even though they were living and performing in new surroundings, with a worldwide audience, extensive media demands, and different food and living conditions. When compared to the World Tour, the athletes reported the Olympics were not the same in terms of the pressure they experienced. For example, Lessard stated that on the World Tour, there were not nearly as many spectators as at the Games, including having a worldwide audience of friends and colleagues back home who could watch and judge their performance.

Similarly, Ludwig explained how the World Tour is much less stressful than the Olympics because it is familiar and comfortable. As Ludwig elaborated, "you're going every week to a new tournament [with] the same people and [simply] doing your job... That's way more relaxed than being at the Olympics". Ludwig explained how all the teams on the World Tour battle it out for four years on the World Tour for the chance to represent their country at the

Olympics. Ludwig stressed that everything has to be perfectly lined-up for the athlete to perform optimally for the two weeks of the Games:

You have to perform really [well], and you have to play at your best, you have to be really healthy and your head has to think in the right way, your body needs to be there and everything has to be together”.

As a result of the stressful lead-up to the games and the mounting pressure to perform at one’s best during the narrow window of time of the Games, Palmer rationalized, “I think being in the Olympics [where] things are all sort of over-hyped ... that it kind of felt like I was all of a sudden completely incapable”.

Lessard described that two of her biggest anxiety sources at the 2012 Olympics were environment related. First, she stated that the on-court sand was very deep, and as the shortest athlete in the field, she felt this factor drastically reduced her offensive options and “put a little bit more pressure [on her] than in normal tournaments”. The second environmental factor that made Lessard anxious was the cold weather. At one point Lessard remembered being unable to feel her feet since the officials would not allow the athletes to dress appropriately for the weather as they might for other tournaments (note: on the FIVB World Tour athletes are permitted to wear long spandex pants as well as a long sleeved top under their uniform when it is cold, based on the discretion of the match referee). Lessard concluded that the Olympic officials were asked not to allow the alterations in uniforms so as to not influence the TV ratings, stating:

It was fucking cold, excuse my French. They didn’t allow us to wear our warm weather gear – TV ratings or something – so the whole game I felt my feet were frozen, and I could feel the cold coming [into] my legs and I didn’t feel as mobile. That whole game I

kind of felt just a little outside of my body, not fully able to express everything that my body had.

Another factor influencing the athletes' Olympic anxiety experience was the change in routine, including the difference in meal schedules, food available, as well as the inconsistency and unreliability of Olympic venue transportation. Li Yuk Lo explained how she loves to eat certain foods, including Oatmeal for breakfast, but that at the Olympics, "You don't necessarily have the food that you're actually used to... So you kind of have to adapt as well". Similarly, Lessard shared how food was a stressor for her at the Olympics. She described a time when the Canadian nutrition delegate gave her a lecture on how to eat properly, condemning her diet and telling Lessard she would provide a rice cooker so that Lessard could get the nutrition she needed. In Lessard's estimation the heated conversation that ensued was one of her most stressful experiences at the 2012 Olympics.

For Walsh and Cook, transportation was the key Olympic stressor. Cook was more concerned about whether the transportation would allow her partner (who was staying off-site) to get to training and matches on time. While Walsh, not unlike every other tournament in which she has ever competed, was concerned about the reliability of transportation. As she recounted:

I remember one day before our match, [we were at practice at] our 'serve and pass'. The marathon was going on and we couldn't get a ride back, so we had to walk back to the hotel. It was just something where we were sure that we'd get back and there'd be no problem, and then time became an issue and I was so pissed off and just so stressed out about it. (Cook)

Walsh explained, "I work really hard to control the things I can control" in life, and that "transportation is one of the things you cannot control". Nonetheless, in response to the marathon

transportation incident Walsh described how angry she was because to her “that situation was something we walked into unnecessarily”.

### **Processes and Procedures**

Outside of transportation, which could also be considered a “process” and a “procedure” over which athletes lack control at the Olympic Games, the athletes in this study explained that there were other key processes and procedures that influenced their anxiety levels. For example, Lessard described how her coach and therapist were not able to stay in the village, but that they instead, they had to take the “underground” to get to the village each day. Furthermore, Lessard elaborated that their therapist “couldn't get access to the Olympic venue, so he treated us wherever he could treat us”.

Li Yuk Lo also experienced stress of processes and procedures at her first Olympics, especially having represented Maritius (Africa), a newer beach volleyball nation. She explained that although she had a coach for the Games, none of her team had any clue about the protocols and procedures:

Every aspect of the Games was [spent] discovering what we were supposed to do and discovering what was next. We had to discover it on our own, because we are such a small team with no support. We've had to pretty much do everything on our own, [including] running around to get our uniforms (which weren't ready until the day before), to finding out how to get to places, organizing our own practices and making sure we had everything ready to go. Most teams, or nations, have people that do that for them, people know how to do it, and having to do all those things on our own, that was a lot of stress as well.



Alongside the stress of discovering all the protocols and procedures as she and her teammate navigated pretty much on their own through the Games, Li Yuk Lo also explained that in her experience, the protocol of preparing to enter and then entering the main stadium court was completely discombobulating and utterly stressful. She found it especially stressful to wait in the stadium tunnel before being announced to tens of thousands of screaming fans (an environment she had never before experienced). As Li Yuk Lo described, “the routine at the Olympics was very different from our previous tournament routines. . . it's like you kind of get distracted by following protocol, rather than actually doing the same routine that you normally do”.

Another example of an Olympic protocols and procedures stressor was the last minute match time change that Ludwig experienced. As she described it, at around 1:00 am on the morning of her upcoming match an Olympic official came to announce that their match time had changed to 9:00 am the next morning!

They just changed [the time] because apparently it was wrong or something like that, really the organization of the times was wrong. I can understand that it's pretty hard to [schedule] because the TV spots and everything from every country, I can understand it, but we had [our] game [changed to] 9 o'clock and we got the [new] time at 1 o'clock, and you can imagine that [we were] a little frustrated because [we] needed to get up in five hours at 6 o'clock and you can't sleep straightaway at 1 o'clock because you are like ‘oh my gosh I really need to sleep, I need to sleep’. That was a really, really stressful.

(Ludwig)

## **Injury**

Two of the six athletes in this study, Walsh and Ludwig, stated that “injury” was among the top three anxiety sources for them at the 2012 Olympics. For Walsh, it was the smallest thing that caused the injury: She sneezed and popped out a rib (probably a side-effect of her early pregnancy). Walsh recounted:

I sneezed and blew out a rib in the quarterfinal and I couldn't do anything. I was so stressed out. I couldn't get it to go back in. I literally couldn't bend over, I couldn't sit down, I couldn't move and I was really panicked then.

However, it is important to note that Walsh went on to explain that popping out her rib was less stressful for her than her transportation mishap during the marathon because she knew that although she could not control the injury, she had an incredible medical staff to support her recovery. I would suggest that, from a phenomenological context, by changing the “meaning” she assigned to her injury, Walsh regained some of her perceived control over the situation, thereby minimizing her anxiety.

Unlike Walsh, it was not a personal injury that made Ludwig anxious, but rather her partner's injury. Nevertheless, Ludwig's concern about whether or not her partner (Goller) would be fit to play was a constant stressor for Ludwig throughout the Olympics. Ludwig explained that they were uncertain whether Goller would be able to play the quarterfinal match since she had been unable to practice in the two practices leading up to that match. As there are no substitutions in beach volleyball, Goller's inability to play would have meant the forfeiture of their team from Olympic competition. The constant stress of Ludwig's partner's knee injury is described verbatim:

The two days before was only “the knee, knee, knee, knee” and in the game it was probably too much “knee thinking” and we couldn't really focus on the game. Actually. . . it felt like we weren't on the court.

Ludwig and her partner Goller lost in the quarterfinals, as they were not able to overcome the lack of control brought on by Goller's knee injury.

### **Managing Expectations**

With the Olympics being the biggest sporting event in the world, and with it being every World Tour athlete's overriding focus for the four years leading up to the Games, it is only natural that certain expectations to perform would accompany Olympic qualification. In the words of Ludwig:

[The Olympics are] so special, [it is what] everybody is talking about here at the Olympics. And you're fighting for it for four years and this moment is coming. And it's just those two weeks that you have to perform really [well].”

For every athlete in this study, it was a constant battle to manage the expectations created by themselves, by their situation and, or by others (including their family).

### **Be My Best (Not Good Enough)**

All athletes in this study shared a desire to have their best performance at the 2012 Olympics. They also explained how this expectation influenced their anxiety and subsequent performance. Palmer, who consequently had the least successful performance at the Games in relation to her and others' expectations, spoke the most about expectations in her interview. Palmer had been managing a negative team environment, where she believed she was outwardly blamed for the team's poor performance and told that she was too “big” and out of shape to be a World Class athlete. As a result, she determined, “I didn't feel like I was as steady, or as strong

or as lean or as whatever as I should have been” (see “team dynamic” section below). Palmer recounted how her confidence simply was not there to support her in the stress of the Olympic Games, when she badly wanted to be her best. Palmer explained her experience as follows:

I felt that there are a lot of fingers pointed at me for our performance. There is a lot of anxiety and self-doubt and insecurity about myself, like a complete lack of confidence in what I was doing, and why I was there, like all that sort of stuff. It was quite isolating. That was probably the greatest sense of anxiety that I felt.

Similarly, Li Yuk Lo experienced a lack of confidence at the Games. She had played so well on the African tour to qualify for London, winning some key matches to secure her berth. However, in her mind that was “just the African tour”, and the Olympics were where the best in the world competed – she did not count herself among the best in the world despite having qualified. Li Yuk Lo elaborated:

I’m at the Olympics, I’m supposed to be good! I’m supposed to play like I deserve to be at the Olympics. So a lot of that feeling that I didn’t realize I had until afterwards, after digesting it all and realizing that I was so hard on myself but it didn’t really help. As much as I tried to pray through it and pray about it, I did not know how to deal with that I guess.

Li Yuk Lo shared that, as she had never qualified for a main draw on the World Tour, she had never played against the class of team that was represented at the Olympics. The level was so much higher than she was used to that even if she were to have been at her best – and she so wanted to play at that level – it would not have been at an adequate level to really compete with the field. As a result, she found herself trying very hard, getting tense, and becoming anxious during her performance. Li Yuk Lo was thereby unable to play her best.

Walsh too experienced anxiety about being her best at the 2012 Olympics – what intensified it for her was that she had won the previous two Olympics and the whole world expected her to be her best and win a third Olympic gold medal. Walsh explained that for as long as she could remember she had wanted to be her best, all the time, and so she was really tough on herself and put a lot of expectations on herself to perform. As Walsh explained, “I think when I’m anxious it’s cause I just want to do well and I want to kick ass and I’m focused and I’m working hard”. Especially at the Olympics, she wanted to perform at her best: “Everything is more heightened at the Olympics. It’s all the same, it’s just maybe a level up because you want to be the best in the world, you want that gold medal and that tinges everything”.

Although Cook’s focus was not on winning gold in this Olympic competition, she still expected herself to be her best at game-time. Cook expressed that one of her top anxiety sources was “performing at my best, just because it’s so important: it’s so important to me to deliver my best every time I step on the court”. What added to the stress this time was that Cook knew it was her last Olympics. She described so vividly how in her last match she just wanted to sit down on the court so that the match would not end. Cook explained, “There was a little bit of extra anxiety in me thinking will this be my last match and wanting to perform the best that I could for my last appearance”.

### **Under Pressure**

From the interviews, I can say with great certainty that these athletes experienced the Olympics as a pressure cooker for performance: with the external pressures from the athletes’ sporting federations, the internal pressure to perform, the pressure of being on a world stage, and even the minute-by-minute pressure of “siding out” (or winning the next point on serve receive). As if that were not enough, for the athletes in this study, all of that pressure was further

heightened by the fact that every training session, every game, every competition for the two to four years prior, all culminated to the Olympics. Palmer explained:

I think it was the expectation, it was the fact that that tournament had been emphasized for two years prior to that point and I think that that was difficult to deal with because it was almost like everything we've been doing was for this. I found it quite hard to shake that idea that everything was about this, so that just added pressure.

For Palmer, this pressure had begun years before, when she was about 17 years old and was first selected by the Australian Institute of Sport (AIS) to compete on the FIVB World Tour. From the beginning, Palmer experienced that in the eyes of the AIS, the only thing that mattered was medaling at the Olympics as they received their funding based on Olympic medal finishes: In fact she explained that in her perspective Olympic medals were expected in the Australian volleyball culture. Palmer described how in the lead up to the Olympics, she was not focused on the end product of qualifying for the Olympics; however, once at the Olympics, she explained that her focus completely shifted. She focused only on winning and the pressure and expectation she felt increased exponentially as a result. Palmer recalled:

I think because of the amount of pressure, well not pressure, but the amount of expectation that we put on ourselves for just that one turn. I think that it was bigger and more than I'd ever experienced. Like, I've never played in front of a crowd that big, my parents had never been overseas to watch me before, the media, the amounts of energy around the courts, and the tournament was more than I'd had before.

Coupled with the moment-to-moment pressure to “sideout” in the match, the pressure became almost unbearable for Palmer. In Palmer’s estimation, she greatly underperformed and made uncharacteristic decisions:

I recall being under pressure with some sideout, like with some side-out pressure, some feeling like I was under the pump, it was like I was sort of going back to sideout and was going “I just, I can't even side-out”. It may be that I dropped two sideouts in a row and when normally I fire up, and be like “that's enough”. In that [Olympic] situation, I became like a deer in the headlights, like I didn't even know what I was doing, a “How do I pass the ball?” sort of thing. It kind of was the complete opposite to what I would normally do.

Similarly, Li Yuk Lo experienced pressure on serve receive. She described how at critical points in the match, when they had dropped a few sideouts in a row, she could feel the pressure rising. Li Yuk Lo explained that at those moments she would say to herself, “I need to sideout to stay within the game’. Then we started getting anxious and stressed”. Li Yuk Lo further elaborated that a lot of the pressure in those moments would come from herself, like she expected herself to be able to fix it all by herself:

I get into my head. I'm so hard on myself, so that's my biggest source of anxiety. It's like I try to please, I'm like, “It's all my fault” and I take a lot of the mistakes on myself. I create that sort of barrier around me, and I'm like “Okay I need to come out of that”. I feel like it's all on me. It creates more pressure.

Together, the sideout pressure, coupled with her internal pressure to perform, appear to be two major factors that resulted in Li Yuk Lo's under-potential performance at the 2012 Olympics.

Lessard also explained that she wanted so badly to perform for everyone and for herself at the 2012 Olympics. She stated that her second-most detrimental source of anxiety was,

Wanting to be good, wanting to show all the years of hard work and how I could play...

My desire was really to play at my level so that I could really show and express all I had in me.

Likewise, Ludwig experienced the pressure to perform at the 2012 Olympics. In particular, Ludwig experienced the pressure of making it out of her pool. Ludwig explained that like the 2008 Olympics when she first competed, she experienced the most pressure-induced anxiety during the first two matches, when she did not yet know if she would make it to the next round of the tournament (which was expected of her team based on their ranking). In Ludwig's experience, each athlete and team spends four years preparing for and qualifying for the Olympics, and then they only have two weeks in which to perform at their best. In her analysis, this pressure to compete in a tight two-week timeframe is what creates most of the anxiety at the Olympics and that the worst thing would be not to make it out of your pool. Ludwig went on to share that during those first two matches she did not have her normal feeling on the court and that she did not dig as many balls, but that "it went point-by-point, game-by-game, better and better".

In contrast to Ludwig, Walsh actually experienced her anxiety increase as the Olympics wore on, saying "it kind of got bigger and bigger and bigger, every single day of training and competition. There were moments I'm like: 'It's ok, I've been here before' and it kind of subsided, but the underlying current was always there". When matched up against the other athletes interviewed for this study (and against everyone else at the Olympics except her partner Misty May), there was one distinguishing experiential factor that separated the Walsh- May partnership from the rest of the field: At the 2012 Olympics Walsh-May were defending their



previous two Olympic gold medal performances (in 2004 and 2008) and were again favoured to win. As Walsh shared, “I [went] in with really high expectations and... I wanted to win!”

### **Fanfare**

Another expectation that all athletes spoke about needing to manage was their fans, not only in the stadium but around the world. What was different about these Olympic Games when compared to past Olympics was the massive social media presence and extensive coverage, which literally put each athlete on a world stage in front of billions of fans each match (and in between each match as well). As Lessard explained:

When you're on the world tour and you get beat down, there's 30 people in the stands or 300 people in the stands and you'll never see them again. Whereas there [the Olympics], you get a beat down and 1 million people are watching and everybody has the opportunity to judge.

Lessard's desire to perform at her best and make her country proud even had her rationalize in her first game versus Russia that, since she had achieved her goal of qualifying, it would be better if she packed up and went home rather than deal with the potential disappointment of not performing her best. As Lessard said, “I made it, I qualified for the Olympics, but now I just want to go home. I just wanted to say that I went to the Olympics and I don't want to be here anymore”. Lessard elaborated further, explaining, “It happens that you get a ‘beat down’, it happens to every team, but no one wants to have that ‘beat down’ happen in front of a million, gazillion people!”

Lessard found herself not only dealing with the pressure to perform for her fans, but also the pressure of how to deal with the criticism of her fans. With the increased social media presence, it was really hard for her and the other athletes to get away from public judgment.

Lessard recalled one incident that really affected her personal self-confidence and this incident ironically had nothing to do with the way she played. Using social media, some man made the comment "If it wasn't for your huge mustache, Canada would have won". To which Lessard replied, "That's not very nice, those are sunspots". And then he wrote back, 'Oh, I'm sorry'. So I remember that affected me". Lessard claimed it did not influence her performance on the court, but the fan criticism bothered her nonetheless.

Palmer too was burdened by the potential criticism of the fans. She felt it the most when she was in the main stadium, waiting to be called out onto centre court. Palmer shared that "knowing the crowd was there, and knowing my parents were in the stands, and knowing there were millions of people watching all over the world... that was basically daunting". Li Yuk Lo also described her overwhelming anxiety at having to perform in front of so many people and being concerned about making mistakes that the world would see. She explained, "playing in front of that huge crowd was the biggest difference. I didn't know how I was going to handle it, I don't know if I handled it, it was just crazy".

Ludwig recalled that the first game at the Olympics was the worst because to her it was the first opportunity for all of her fans around the world, those that do not have the opportunity to watch her on the World Tour, to finally see her compete against the best in the world. Not only were there the fans on centre court, but all of her fans back home in Germany and around the world, could now watch. Ludwig illustrated:

You really want to show the world "I can do this!" and you can play, and you want to show what you do all year on the world tour. Then you have so much pressure... I feel like I'm moving like a beginner.

Ludwig further explained that knowing everyone could watch the game and that it was being shared over Facebook and the internet, caused even greater anxiety for her and she did not know why. As she explained, “You want them to watch, you really want to show them like you want to show them how good you are, how big your team is, how good you can perform. And then you get really stressed” (Ludwig). Although Ludwig loved media on the one hand, one of the biggest fan pressures she experienced was organizing her time to make her training and competition a priority amidst all the media requests.

What I found interesting is that Walsh, although she would have garnered the most media attention at the 2012 Olympics as the two-time defending Olympic champion, in her interview she did not once speak about media being a source of her anxiety. What she shared instead was that,

I need approval in my life. I know that. I’m a pleaser. I’m an athlete for a reason. When people cheer for me, I like knowing that I’m doing good or knowing that I’m not doing well. So my anxiety, I think, comes from wanting to please: wanting to please myself, wanting to please my partner, and everyone else. (Walsh)

In Walsh’s estimation, this need for approval was the reason why she felt under pressure for the whole Olympics and really every time she performed throughout her career.

Lessard pointed to a unique influence of crowd participation in her match versus “hometown” Great Britain. She explained how the crowd directly affected the match in their one-sided cheering. Lessard recounted:

I remember that there were plays that we made – our great plays that usually wherever we play we become the crowd favorites because we’re small, and people love watching us play – and [at the Olympics] there was dead silence, only my mom and Annie’s [her

partner's] dad were like "Woowoooo!" It was at that moment that we were like, "Dudes, this is awesome! Come on!" So I remember knowing/noticing that in the game. The crowd affected us, you know when you do a really great play and that people share and then it just brings out more great plays: that didn't happen. So it was like all the plays were, this is one great play, and we got to manufacture another great play. It felt like we couldn't really use momentum, we needed to have energy to really link all the plays and put it away to win.

So, not only did the athletes experience anxiety from their fans at home, there was a different experience of fan pressure in the stadium as well.

One specific group of "fans" every athlete spoke about was their family. While most athletes shared that having their families there actually reduced their anxiety, dealing with the logistics of their family's Olympic stay was a source of anxiety for Lessard (leading up to the Olympics) and Cook. Cook explained how one of the top anxiety sources for her at the 2012 Olympics was ensuring her large family contingent enjoyed themselves, including the "anxiety around making sure they got tickets because it was quite tough get tickets and that they all got to enjoy the experience".

### **Team Dynamic**

The athletes' "team dynamic" also impacted their experience and subsequent performance at the 2012 Olympics. As beach volleyball is a partner sport without the opportunity for substitutions, it requires solid team dynamics to produce the best performance. If the relationship between athletes or with the coaching staff is dysfunctional, the team performance is bound to suffer as a result. For Palmer and Cook in particular, it was the team dynamic that caused the most stress at the 2012 Olympics.

In all her years of competing on tour and at the Olympics, Cook disclosed that she had created numerous strategies to deal with her common anxiety sources. None of those strategies made a difference when it came to the 2012 Olympics, as her biggest source of anxiety was managing the relationship with her partner Hinchley. Cook said, “It was a different game it wasn't the game of learning how to get ready to play volleyball. It was the game of relating and managing circumstances”.

Cook explained that at the continental championship, she and Hinchley had roomed together and gelled as a team to qualify for the Olympics; however, when they arrived at the Olympics, much to Cook's surprise, Hinchley announced she would be staying offsite with her husband and young child. This lack of communication was the biggest source of anxiety for Cook, as she simply did not have the resources to manage it. As a result, she could not keep to her routines, and as the Olympics wore on, the stress of keeping up with the whereabouts of her partner created animosity between the two of them. As Cook explained:

She sometimes wasn't even allowed out of the village because of the rules. So, we were covering for her because she claimed that would be better for her performance, but [what] she didn't quite get [was] that there was a team performance that was as important as her performance.

This animosity and resentment started to seep onto the court for Cook, especially in clutch moments of crucial matches. Cook mentioned that she did not want to dredge up these issues that had nothing to do with playing beach volleyball, and that they happened almost subconsciously in her estimation, since she knew “how damaging it can be from my experience”. However, at those key moments in important matches, when the score was tight and the game was on the line, everything sort of seemed to rise to the surface, as Cook described:

We absolutely should have won, we celebrated too early, which I've never ever done before... then our relationship got put under pressure with the short serve to the middle of both of us that [my partner] tried to steal that she hadn't tried to touch all game.

Their team dynamic let Cook-Hinchley down when they needed it the most.

Although Palmer also had to manage her team's communications, hers were much more self-destructive than those of Cook's. For Palmer, the most challenging aspects were managing her perceived comments and opinions of her partner and support staff (especially about her fitness) and dealing with the constant blame that she had cost them the win. As Palmer explained:

It was really disempowering to have someone else tell me, like a coach of mine say, "You're too heavy, you're not fit enough". And then when we lost games, it was like "You weren't fit enough the play the Games, so that was always going to happen".

It got to the point where Palmer became anxious about going to meals with her team at the Olympic Village "because I couldn't just eat what I felt like I needed. I had to be conscious of what someone was going to think or say to someone".

On top of that, Palmer had the experience of being separate from her partner and that their "communication was reasonably fake and disjointed, that's how it felt to me, so I struggled to latch on to what would actually help me through". As a result, she felt really alone with all the weight of the Australian sport culture on her shoulders, and her play suffered dramatically. As Palmer remembered, the worst moment for her was:

Probably after our second game, when we lost that and we knew we weren't going to proceed through to the next section, I think that was probably the most – like I just felt sick, I just felt guilty, and sick, and like I'd let so many people down, and our coaching

staff was shitty at us, and Lou shitty at me and I was shitty at her – and it was like really that whole ‘I’m really alone’. Again. I had all these people but I felt really isolated.

Li Yuk Lo also isolated herself from her team at the Olympics, but she isolated herself for a very different reason. She explained that the level of play, mixed with her fear of competing at a higher level than she had ever competed before, caused her to become nervous and self-absorbed. As a result, the first two Olympic matches her team played were both uncharacteristic of their style of play and did not allow them to appreciate the moment. Li Yuk Lo recalled, “We weren’t even enjoying it because we were so nervous. I was so self-absorbed in the other games that I just didn’t enjoy it. At the end it was like ‘okay, let’s just do this!’”. By that third match, her team finally came together and played their best match of the 2012 Olympic Games.

### **Anxiety Management**

The second superordinate theme I identified in the interpretive phenomenological analysis of the transcripts was “anxiety management”. This theme not only describes how the athletes coped with anxiety, it also explains what actions they took or did not take that actually increased or decreased their overall anxiety experience. In general, it appeared that the athletes who had the most practiced and effective anxiety management skills were the ones who performed best, in their own evaluation, at the 2012 Olympics. In the words of Cook:

Knowing that you’re at the Olympic Games in the highest pressure situation ever, in the world that you’ll experience, that’s why we trained things: like knowing [anxiety is] coming, identifying it’s coming, putting in place routines, techniques, anchors to stop it from interfering.

As a result of this “always-already” (Larkin et al., 2006, p. 106) as-lived Olympic pressure, the majority of the athletes in this study had predetermined anxiety management routines, while the rest did not have theirs so clearly defined. Overall, the predominant themes identified under the superordinate theme anxiety management were: Prevention, developed mental skills, focus, past experiences, perspective, and team connection. These themes are further discussed below.

### **Prevention**

It could be argued that the best way to manage anxiety is to prevent it altogether! There were two main ways that athletes in this study prevented anxiety, or at least the symptoms of anxiety: Specifically by “avoidance” or by creating a “plan” to deal with it.

#### **Avoidance**

It is interesting to note that the two athletes, Palmer and Li Yuk Lo, who actively used avoidance as a anxiety prevention tool, were also the ones who self-reported the most negative anxiety effects at the 2012 Olympics. Palmer, who dealt with major stress within her team dynamic at the Games, took on the mentality, “If I ignore it, it will just disappear”. Unfortunately, as she discovered after the Games, this avoidance tactic was not successful and it in fact often came back to haunt her when she least expected it, like when she was on the court and expected to perform well but the anxiety took over instead.

Palmer was anxiety-ridden throughout the Olympics based on her supposed dysfunctional relationship with her coaches and partner and her experience of being the scapegoat for all team failures. She felt was like she was pitted up against the rest of her team, which, she explained, caused her to rationalize that it would be better to avoid talking back, and even avoid her team in general, versus dealing with the anxiety of confronting them directly. As Palmer explained, she



did not have any specific mental tools but “as a subconscious thing, I try to kind of avoid a bunch of stuff [laughter]. Stuff that I thought was causing me great stress, I was trying to avoid it”. In the middle of her description, Palmer laughed an uncomfortable laugh, as it was apparent she wanted to avoid this topic all together. In part as a result of her avoidance, Palmer journeyed through the Olympics in a trance, describing it as an out-of-body experience.

Li Yuk Lo also used avoidance to minimize her anxiety both leading into the Olympics and in the lead up to her matches. She shared that the Olympics did not seem “real” for her until she arrived at the Olympic village, and especially not until the opening ceremonies, because she chose to avoid thinking about it to minimize her anxiety. Li Yuk Lo explained that in “the practices, and leading up to the practices, as much as possible, it was me trying to stay calm and not really think about it – that was sort of my coping mechanism for dealing with my nerves, the stress, and the pressure”. However, her avoidance mechanism would break down when it actually came to game time, as she could no longer avoid the inevitable anxiety and, as she had not been training her mental skills (since she was just avoiding the anxiety instead), Li Yuk Lo also did not have the developed mental skills to minimize her anxiety. For both Palmer and Li Yuk Lo, their avoidance of anxiety (combined with their reluctance or failure to develop an effective plan to deal with on-site anxiety) actually hurt them in the long run since it resulted in them not having developed mental tools to support them when the anxiety eventually came to the surface to haunt or distract them.

### **Plan**

While all of the athletes in this study spoke about having some sort of game-plan going into their matches, two athletes in particular used planning as a specific anxiety prevention tool. Palmer explained, “We spoke a lot about sticking to the plan...that we plan the work, and we

work the plan”. Palmer recalled that in moments of intense anxiety, she would do her best to go back to the plan. Palmer’s coaches had always given her team an exceptional game-plan, so amidst the anxiety, she knew if nothing else she could trust the plan. Palmer identified that one of the only anxiety management techniques she had was to:

Just com[e] back to a plan – a game-plan. We had really good game-plans so that was sort of like a point of strength for us, I guess, that we could [always] come back [to our game-plan]. If we could just execute the plan despite our feeling, that would often put us in a good position.

Focusing on her plan worked so well for Palmer, that despite her personal analysis of her execution and play at the 2012 Games, and her obvious anxiety, her team was still able to go to three sets against the top ranked Brazilian and German teams in their pool, almost inching out victories that would have placed them in the next round of Olympic competition.

Walsh also used planning to minimize her anxiety, especially planning around transportation logistics. As Walsh explained above, transportation is always one of her biggest competition stressors. On the World Tour, she always stayed as close as possible to the venue to avoid interruptions in transportation. At the Olympics, however, Walsh did not have a choice of where she stayed, so she had to rely on unreliable Olympic transit to get her to the venue and practice courts: This was definitely one of the biggest stressors for Walsh. To manage it, she explained, “We tried to plan things out as much as possible, you know, we were very organized but unforeseen things like transportation [made me very anxious]”.

So, although all athletes worked different plans, including their routines, Palmer and Walsh in particular benefited from the plans they and their coaches created to minimize additional or unnecessary stress at the Olympic Games. I will also mention that the plans that

Palmer and Walsh employed were not very strong or detailed and they could have seen more success had they created stronger or more detailed plans.

### **Developed Mental Skills**

In analyzing the athlete interview transcripts, one of the most obvious differentiators between the most and least seasoned athletes (and their subsequent experience of anxiety and level of play at the 2012 Olympics) was their utilization of “well-developed mental skills” at appropriate times in the lead up to Olympic competition and in the competition. The mental factors or mental skills that athletes in this study spoke of were: Routine; imagery; mindfulness, prayer and breath; mental strategies; mental coaching; and no tools.

#### **Routine**

The different pre-match routines for the athletes in this study are listed in Table 4 below. The athletes’ described “routines” appeared to be as different as their fingerprints; however, there were some similarities among athletes including the use of imagery and video to prepare for matches. Lessard was the only person without a routine; in fact, when I asked her about this she replied with "Not a chance, nothing that was set in stone. I used to do that and... I felt it made me more rigid. So, all the other tools [I used] were more about getting the body loose". In essence, her pre-performance routine was adaptable with the simple and important goal of freeing her body to perform (see Table 4). Cook also did not have a “formalized” routine (see Table 4), as she explained:

I think I have [had a routine or focus plan] over the years and I think it's become a part of my game. So, it's definitely not as formalized now, because it's a part of who I am and training has made it a part of my personality, a part of how I deal with everyday life. When I have stresses in life, I use the same techniques so its part of my makeup now.

**Table 4 - Athlete Olympic Pre-Competition Routines**

| Athlete   | Timing                      | Pre-Competition Routine                                                                                                                                                                                |
|-----------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Walsh     | Overall                     | Same routine everyday of the Olympics                                                                                                                                                                  |
|           | Pre-Warm-Up                 | Alone time; Watch a 'Champion Within' Olympic Highlight Video from Past Olympics created by her husband and Sport Psychologist; plan of attack and prep with coach                                     |
|           | Pre-Match                   | Put her feet up; partner May-Traenor would do a little dance and be silly (to break the ice)                                                                                                           |
| Cook      | Overall                     | Routine ingrained because practiced it for so many years; no longer 'formalized'                                                                                                                       |
|           | Pre-Warm-Up                 | Did not start routine this early because could not sustain the intensity for that long                                                                                                                 |
|           | Pre-Match                   | Consistency of thought and specific positive affirmations when announced onto the court, like 'I am awesome' or 'we can do this'; announcing name like WWF wrestling, got her going                    |
| Lessard   | Overall                     | No Routine (makes her rigid)                                                                                                                                                                           |
|           | Sometime Before Every Match | Visualize the end product: the outcome and how she would feel                                                                                                                                          |
| Ludwig    | Day Before Match            | Watched video of their competition                                                                                                                                                                     |
|           | 2-2.5h Before Match         | Intentionally shared feelings as a team (to release the fear, anxiety, excitement); brief game-plan; watched video clips                                                                               |
|           | 1h Before Match             | 20 hard digs from her coach to get relaxed, motivated, and excited                                                                                                                                     |
| Li Yuk Lo | Overall                     | Distracted by protocol of Olympics so did not do normal routine                                                                                                                                        |
|           | Morning of Match            | Shower                                                                                                                                                                                                 |
|           | Pre-Warm-Up                 | Use the facilities; visualize a bit to bring her warm-up into the game                                                                                                                                 |
|           | Pre-Match                   | Take a breath and pray, high-five her partner, and step on the court                                                                                                                                   |
| Palmer    | Day Before Match            | Go over game-plan for the match; coaches would pretend to be the team they were about to play                                                                                                          |
|           | 3h Pre-Match                | Get on the Bus                                                                                                                                                                                         |
|           | Pre-Warm-Up                 | Go over plan 1 more time; longer check-in with team (how they feel, etc.)                                                                                                                              |
|           | Pre-Match                   | Quick check-in with team; serve more than attack in warm-up: served a jump float, jump spin, and standing float; always ended with a good serve in the court; come off court together with her partner |

Li Yuk Lo wanted to use her routine at the Games, but she noted that the protocol of the Olympics, especially in the stadium court, took her away from her regular routine “so it's like you kind of get distracted by following protocol, rather than actually doing the same routine that you normally do”. Nonetheless, Li Yuk Lo noted, “one of the routines that sort of helps me calm my nerves is that I would pray”.

Palmer and Walsh were big proponents of respecting effective routines and relied heavily on their planning to minimize anxiety. Ludwig also had specific routines she followed (see Table 4 below) that helped prepare her for matches and manage anxiety. Palmer explained part of her routine as follows:

I liked to serve a jump serve, a jump float, and a float, so that I knew that at any point in the game I could call on it and I had done that already. And I always made sure that my last serve was within the lines and on the court! [Laughter] That is something that I like knowing: that I'd hit a serve and it had gone in. Then I was like “alright, I'm ready!”

However, Palmer's mental distractions at the 2012 Olympics (brought on by her perspective of her relationship with her team and her self-assessment of her performance compared to how she expected to perform) did at times take her way from her usual consistent adherence to her plan. On the topic of routines, Walsh shared:

We had a video that Mike [Walsh's High Performance Psychologist] and my husband made for us that we watched before every match. Kind of just to remind us of the champion we have inside us and everything we'd done that we could bring on the court with us, and that was part of our routine.

Walsh also recalled that she had the same routine everyday without fail, regardless of the ranking of team they were playing next, as outlined in Table 4 above.

## **Imagery**

Every athlete in this study, except for Palmer (who relied solely on physical game simulation) used imagery to some capacity, either to help them prepare for matches or to get them into the correct frame of mind for their peak performance. As mentioned in the ‘Routine’ subtheme above, Walsh watched a video compilation of past Olympics that her husband and her high performance psychologist had created to help her imagine herself competing at her best. Walsh explained that even though the video was of the 2008 Olympics,

Watching these great moments I was able to kind of put in place who we were about to play, what I wanted to do against them, and I was kind of playing a more current version of the video in my head than what I was actually watching. So that helped a lot.

Similarly, Ludwig used “imaginating”, as she called it, to connect with positive feelings in the match. What she would do is connect with “two or three good situations from the last two or three years, in a situation where I really felt good and I can really imagine them perfectly, and when I can feel that then I'm kind of in a good spot”. Likewise, Lessard used visualization and imagery, specifically envisioning cuddling her dog, as a way to access positive feelings on the court and in the lead up to matches so that she could re-center and minimize her anxiety. In addition, Lessard also employed pre-match imagery to both connect with how she wanted to feel in the match as well as with her desired end result, as she recalled:

Before every game I do visualization about the end result and seeing myself/seeing ourselves, win the game. I’ve done visualization also about how good I would feel throughout the game: like I visualize that no matter what would happen, this is how I will feel, this is how I want to be able to enjoy the experience.

Cook took her visualization and imagery a step further still, doing what she called “visualizing with your eyes open”, where she would actually surround herself with anything and everything that would remind her of and keep her constantly imagining herself at the Olympics. Cook recounted that not only did she use imagery to see herself marching in the opening ceremonies, but she described that on “all of my clothes leading into London I had British flags, on everything: on my belts my shirts, my underpants, anything that I could find – my coffee cups – were all sort of London-based”. In previous Olympics, when Cook had no concerns about qualifying and was a contender to win (unlike what was the case at the 2012 Olympics), she would visualize herself on the podium and surround herself with Gold paraphernalia. Cook attributes visualization with her eyes open and closed as major factors that had her win gold at the 2000 Olympic Games and that, in 2012, took her team from being greatly unexpected to qualify for her fifth Olympics to actually qualifying.

Li Yuk Lo was the last of the five athletes who also used imagery as a developed mental tool. For Li Yuk Lo, imagery was used to support her match preparation. Li Yuk Lo described:

Before [matches] I would do a lot of imagery, especially when I'm warming up to help me bring the warm-up onto the court, like actually go through the motions especially on defense: Like imagining someone hitting down the line, or rolling down the line, or actually chasing down the dig, that sort of stuff.

No matter what it was called – visualization, “imaginating”, imagery, positive mental images – imagery seems to have positively influenced the athletes experience of anxiety and subsequently their ability to perform.

### **Mindfulness, Prayer and/or Breath**

Again, like imagery, all athletes in this study employed “mindfulness, prayer, and/or breath” to help them manage their anxiety at the 2012 Olympics. Ludwig described that being at the Games was like being a kid in a gigantic candy store: her eyes would go wide and she would be over-stimulated and excited by everything around her. Her heart would race and she would calm herself down by taking a deep breath in. Palmer would also use her breath to centre herself in anxious moments, like when the game was tight or she was underperforming. She remembered “coming into a timeout and being quiet, like not actually saying anything just trying to catch the thoughts, take a breath, and sort of calm back down again”. Lessard and Cook too would use breathing as a proactive way to calm themselves down and get present.

Similarly, whenever Walsh would get worked up, she was trained by her sport psychologist to check in with her feelings and then go for a walk to reconnect with her breath and purpose. Walsh explained that she would say to herself, “K, what am I feeling? Take a deep breath or just go for a little walk, go shag a ball, go shag the furthest ball and get yourself out of that moment or out of that feeling and just gain control!” For Walsh, breath and prayer were intimately connected and together they really helped her manage her experience of anxiety. The most essential anxiety management tool Walsh used was to take “five minutes... by myself to say a prayer or just to breathe, that’s the most important piece of the puzzle for me because of the way that I live up here [hands indicating high up in her chest]”. Prayer was also the main ingredient in Li Yuk Lo’s anxiety management protocol. She would use specific verses from the Bible that reminded her that there was no need to be anxious about anything. She would repeat these verses over and over to give her peace of mind amidst the discomfort of playing at a level she had never before experienced, in front of millions of people.



These previously discussed practices, along with meditation, provided a real level of positive mindfulness for the athletes. Walsh shared that:

Why I liked London so much was because for the first time in my Olympic experience I said “Kerri, you gotta enjoy this!” It was like a mindfulness I didn’t have before. Before I just put my head down and I just went to work – I had fun doing the work but it wasn’t a fun experience. So in London, I kept reminding myself to chill out and to enjoy. And, despite the anxiousness and... the uncertainty it was really, really fun throughout all of it.

Lessard and Cook also spoke about their pathway to mindfulness at the 2012 games, which resulted in reduced anxiety for both of them. Lessard shared that she meditated everyday, both at the Olympics and in the lead-up to the Games. In the match, Lessard centred herself by either becoming fully aware of the sensations of her body or by stepping outside the play to observe from a different perspective. She would feel the sand on her feet, she would go wipe her sunglasses off to stall time and reconnect with herself, and she also explained “there were times when it was stepping out of the action to go ‘okay, what’s going on? What are they trying to do?’ So what is it that we can [do] so that we can put them in trouble?” Lessard recalled that there were specific moments in the game versus Italy where their opponent could have pulled away; however, it was this ability to be the “mindful observer” that had her create the best game-plan for her team in the moment, despite the pressure.

Like Lessard, Cook was able to centre herself despite the anxiety so she could see all options on the court. Cook described that access to this mindfulness was regular meditation and yoga, stating:

It really does feel like when there's a disconnect and here out on the periphery there are no options, but when you pull it back into the center, everything just opens up again. So meditation really helps with that and yoga practice really helps with that.

With all the athletes in this study, it appears that mindfulness, prayer and/or breath really supported them in helping them manage their anxiety.

### **Mental Strategies**

For four of the athletes, creating “mental strategies” or focus cues to deal with anxiety worked best. Lessard spoke about how she would play games in/with her mind when she really wanted to make something happen, like when she wanted to serve an ace, she would pretend that she was aiming for a container of Häagen-Dazs ice cream on the other side of the court. She found this decreased her anxiety by taking away the pressure of hitting the spot and by making it fun. Or, she would mentally cuddle her dog when she wanted to calm down. For Li Yuk Lo, it was a bit more serious, as she focused in on specific technical cues and positive self-talk to take her mind off her anxiety. In her words:

The cues I'd use would be, like the technical cues would be, “Find it early. Move my feet. Breathe.” Like those things in terms of to get myself out of – because when you're scared or nervous or kind of like stuck in the sand, you're just a statue, you're just so blocked by nerves that you can't even move.

Ludwig used pictures in her mind to remind her of how she wanted to feel, like a slideshow of good thoughts flowing across her vision. She would use these pictures as a reminder of how to perform proper technique, so that she could turn it into a feeling versus thinking so much about it and becoming anxious.

Both Cook and Lessard used time-wasting strategies on the court – like wiping off their sunglasses, filling in holes in the sand, being slow to take their place on the court, or talking to the referee – to “sidetrack” their anxiety, as Cook called it. Then they could use that time to get themselves re-centred on the task at hand. However, Cook was also quick to point out that it was more challenging to execute these time-wasting, sidetracking games at the Olympics because of TV programming. She remembers using every minute of time between points that she could,

To release anything – so that's through breathing, that's through physical triggers, that could be a click that could be a handclap, it's the high five with your partner, it's that little routine that you do to release the energy, and mine was through breathing and through a physical anchor of a hand slap probably – those are two clear ones – and clearing the sand with my feet. So, that sort of just wipes the anxiety that was there from the last point and allows me to then come back to my focus on the next point. So I'm... creating a clearing space and getting myself back into a good physiology so that I can bring my mind back to the next point.

No matter the mental game, each athlete employed her game of choice with the specific intention of dissipating anxiety.

### **Mental Coaching**

The most successful athletes, as well as those who, in their estimation, best managed anxiety at the 2012 Olympics, were either working with or had worked with a mental coach or sport psychologist in the recent past. For instance, although Ludwig admittedly did not actively put time aside for her mental preparation as she did her physical or technical preparation, she still had a mental coach from whom she learned strategies and techniques to manage her anxiety, albeit not on a regular basis. Ludwig explained that one of the biggest things she learned from

her mental coach was how to share her feelings so that she did not bottle them all up inside of her. She found this very freeing. Ludwig's mental coach was with them at the 2012 Olympics, as she described:

When we needed to talk we talked to him before the game and if not then not. If we felt good we didn't. When we talked to him, we also did little exercises which we could also just use while warming up or something... We practiced it one or two years before maybe to have this automatic in your head: little exercises that [allowed us to] really focus on action on the court.

It is evident in Ludwig's description that this was not a last minute anxiety management structure that her team threw together right before the Olympics, but something they had been training alongside their physical preparation leading up to the Games. In other words, it appears as though Ludwig valued mental training as she put in the effort leading up to the Games so that, once there, she would have the tools at her disposal. Admittedly though, Ludwig did not take full advantage of her mental coach and this could have been part of why she still experienced high levels of anxiety at the 2012 Games.

Walsh and Cook also had mental coaches that they worked with in the years leading up to the 2012 Olympics. In fact, Walsh not only credited her sport psychologist with bringing her mental game to the next level and with her having the tools to have fun amidst the anxiety at the 2012 Olympics. Walsh's sport psychologist was there with her at the Games and she explained:

We met a couple of times and just knowing that he was there and accessible was huge for me. Not that we reached out that much, but we would meet with him a couple of times before matches just to do a little meditation. That was part of the plan.

And, while Cook did not speak in depth about her mental coach, as she had by this point spent over 10 years with mental training experts, she did say that she definitely did not have the mental tools when she first competed at the 1996 Atlanta Olympics. Cook elaborated that she had to first experience the Olympics before she could really understand what she needed to develop. She also stated, “I don't think people spend enough time training the mind. They train physically at the gym, but there's not enough mind training going on”.

### **No Tools**

Li Yuk Lo and Palmer both shared that they did not really have any tools to help them proactively manage their anxiety at the 2012 Olympics, and they also both self-reported having poor performance compared to what they were capable of at the Games. Both athletes also indicated that they did not work with a mental coach leading up to or during the 2012 Olympics. Without the support of a mental training expert, and without the personal experience of having competed at a previous Olympics, it is no wonder that Palmer and Li Yuk Lo did not have the strategies they needed to manage their anxiety. This was supported by Cook's reflection that in her first Olympics she too did not have adequate mental tools to combat the pressures of the Games and so, in her estimation, her team finished in third place when they really could have won.

As noted above, Palmer shared that she followed a plan as a priority to manage the stresses of the game and she also had a defined routine to support her best performance; however, when I asked her if she used any psychological skills like imagery, reframing, or focusing/refocusing plans to help control her anxiety, she answered quite firmly with "Hmmm, not really. No. No. No". Palmer explained that she found it challenging to actually know what to

do to manage her anxiety, as she was relatively anxious all the time during the 2012 Olympics and “didn't really feel like I had skill set to do it”.

Outside of having a general routine that she found difficult to follow at the Olympics and using imagery and prayer to get her in the zone, Li Yuk Lo also did not really have an effective anxiety management toolbox. In the words of Li Yuk Lo :

I just harbored a lot of that stress and didn't have an outlet for it because everything happened so fast and within that short period of time... I just didn't have an outlet when I was there. I felt like that until maybe the last game, then it was like, “Okay, this could be my outlet. Playing could be my outlet.” [At that point] I just let it all out on the court!

So it was not until their last matches, when the pressure was off, that Li Yuk Lo and Palmer finally found anxiety management tools that really worked for them. Up until then, it was really like grasping at straws and, as a result their anxiety ran rampant and outside their control.

## **Focus**

The athletes in this study also described how their focus impacted their anxiety and overall performance at the 2012 Olympics. They described that when their focus was on the “present moment”, their anxiety seemed to dissipate. In contrast, when they were distracted by everything else that was going on around them, their experience of anxiety intensified. Two subthemes of ‘Focus’ were identified in the analysis of the athletes’ transcripts: Present moment focus and front of mind.

### **Present Moment Focus**

Present moment focus seemed to allow the athletes to play freely and for their anxiety to melt away. Palmer explained that in her last game (after having been eliminated from the tournament) she was finally able to keep her gaze connected or in her partners eyes instead of

getting distracted by the hype of the crowd like she had in the previous games. Palmer elaborated:

I was trying to show confidence, so I was looking upwards and trying to keep my chin up. But, every time I did that, I was looking at 15,000 people [laughter], so that was sort of just freaking me out! So the last game I was like, “Stuff it! I'm just going to make eye contact with Lou [her partner] the whole time and show that I'm looking at her or looking down or looking at things on my level, so that it didn't feel quite so intimidated”.

Not only did this tactic help Palmer feel less intimidated, but also allowed her to keep her focus on the match, in the present moment, instead of on her thoughts and feelings about the fans, both in the stands and watching TV at home.

Li Yuk Lo too did not achieve a present-minded focus until her last game, after she was eliminated. She explained that she was so distracted by the other demands of the games, including all the organizational stressors, that when:

You add in trying to focus on volleyball and playing, I have to admit that it was hard trying to focus on just volleyball at times because I was tired from doing all the other things, to have to focus on actually playing at times.

Cook used present-minded focus to keep her anxiety and stress off the court as best as possible (as she commented that no matter what, it is difficult to keep all the subconscious stress off the court). Cook explained:

I prided myself... [on] entering the court with an open fresh mind, regardless of circumstance. You put it all out of your mind, you start the match with passion and intensity, and the crowds go away and you get to focus on everything.

In other words, as Cook zeroed in on what was happening in the moment, everything else – all the stresses and distractions – faded into the periphery, so that she could be there, connected to the focus she required to perform at her best.

Like Cook and Palmer, Walsh and Lessard also commented on the benefits of present moment focus in decreasing their anxiety.

I think what helps with all that is what I've learned and what I'm still learning is to not be so focused on the results, just to be focused on the process and what you're doing at that time. And, generally, if we focus on ourselves in that moment, good things happen.

(Walsh)

I remember that during the game I was fully present, fully engaged to perform and there was no more [Lessard demonstrated taking a deep, vocal breath in]: "We're at the Olympics, what's going to happen?" (Lessard)

Similarly, Ludwig recalled that the Olympics "went, point-by-point, game-by-game better and better" because of her present moment focus. When asked why she thought this was, she replied:

Probably more focus and having my head more on the court, and not on all the things around: the media, the fans, everybody is at home and watching TV, your game. Like before [the match] you were reading on Facebook or any Internet page [and thinking] "This match is on this time, on TV, and watch this match" and it was just like "Oh my gosh, everybody will go watch!" (Ludwig)

Regardless of how they got there, present moment focus seemed to take these athletes away from both their negative self-talk about the stress of being at the Olympics and the distractions going on around them, and instead transplanted them right square in the



moment: where the action was happening and where they had the opportunity, moment-by-moment, to play their best.

### **Front of Mind**

The “front of mind” subtheme – which encapsulates what the athlete knew to focus on (keep at the front of their mind) if she wanted to perform her best – was highlighted right in the transcripts when Cook described:

[Focusing on] the resentments and the frustration and grasping at things that probably don't need to be brought up... happens in the back of your mind, not consciously because I know how damaging it can be from my experience. If it was at the *front of your mind*, you would lose very quickly. (219-226)

When Cook was focused on things outside the game (like the resentments and frustration about her partner), she could not perform at a level to win the match, as was evident in the score.

Instead, Cook was determined to focus on her mental strategies and her own personal performance; however, it was evident throughout her interview that the strained relationship with her partner kept intruding by moving into the front of her mind, thus causing anxiety and distracting her from her best performance at the 2012 Olympics.

Ludwig too attempted to continuously focus on herself, instead of all of the distractions around her, and she did so by keeping her technique at the front of her mind. She explained that focusing on what she could technically do to improve the next play gave her an element of control, as she was confident she could control her technique.

The focus was really on myself, like really trying to focus on the best I can do or the movements that I was practicing and learning for four years. Also when I did a bad technique or a bad serve, I was focused on “What did I do wrong? Do it next time better”.

Just to know what to control, the technique, to control myself. And, when I was focusing really on this, and not on the opponent so much and not on the screaming from outside, then it went really well.

Clearly, the more Ludwig focused on herself, on her technique, and what she could do to “better the ball” (in beach volleyball, bettering the ball involves making your ball contact better than the one before), the less she heard the crowd and the better she played. Similarly, Lessard focused in on her strengths, stating in her interview that, “I wasn’t like ‘I need to be more than what I am’. I was like ‘this is what I am; this is what I can bring to the table. This is what you are, this is what you can bring’”.

Li Yuk Lo and Walsh also brought the focus back to themselves, in order to calm themselves down and enjoy the moment. Li Yuk Lo described that if she got overexcited, she could not focus-in and perform, and Walsh shared that because she lives with so much pent-up anxiety on a day-to-day basis, she sometimes forgets to outwardly enjoy the moment.

Usually before going to the game, I have to calm myself down, so that I use that energy, that anxiety or energy, to help me play. I don't know. I feel like I need to be calmer then I need to be hyped up to be able to perform well, because if I'm too hyped up, then I get too nervous, and I'm displacing energy. (Li Yuk Lo)

I really have to focus, not on slowing down, but on just being grounded and just allowing myself to enjoy. To outwardly enjoy, cause I think inside I do regardless of the stress.

I’m having sooooo much fun, but I might look pissed off and I say things that express I’m pissed off but I’m loving every second of it. But, just allowing myself to truly outwardly love it, and just smile, is huge. (Walsh)

Although their techniques might have varied, these athletes were consistent in that they had particular focuses that they kept at the front of their mind when they performed their best, and when they were both aware of and committed to these focuses, they minimized their anxiety and brought forth excellent performance.

### **Past Olympic Experiences**

For the more experienced athletes, drawing on their “past Olympic experiences” made a significant difference in their anxiety management at the 2012 Olympics. The inverse was also true: For those athletes without past Olympic experience, their anxiety was heightened as they did not have the same past experiences and corresponding tools to draw from to support their anxiety management. For Li Yuk Lo and Palmer, the Olympics were a completely new experience – with new surroundings, new demands, and new pressures – for which they both simply did not have the tools to adequately manage their anxiety.

One would think that Lessard would have had a similar experience, given it was also her first-ever Olympic Games; however, in contrast, Lessard was at ease with and relatively unperturbed by the potential anxiety. What was different for Lessard, when compared to Li Yuk Lo and Palmer, was that she had competed in a circus reality TV show in the year leading up to the Olympics. Lessard had to compete in front of hundreds of thousands of fans for a prize that would make or break her Olympic journey, as she had declared that without the winnings from the circus show, her team would not have had the funds to continue on their Olympic journey. So, although this circus experience was not the Olympics, one could argue that the pressure created by Lessard’s need to win the circus “competition” to continue towards the Olympics, coupled with the media and social media that surrounded her during the show, was equally, if not more, anxiety-laden than the Olympics itself. Lessard explained:

Yeah, [the anxiety is] heightened [at the Olympics]. My senses were heightened and to tell you the truth, there was more attention – people write on twitter. Good thing I lived the experience when I was on the circus thing because you get all these comments and everything.

It would appear then that Lessard's past experience on the reality TV show provided her with the high pressure, media-involved environment that allowed her to train the tools she required to positively deal with the anxieties at the Olympics. In fact, outside of the lead up to her first game versus top-ranked Russia, Lessard reported little to no competitive state anxiety during the 2012 Olympics.

Ludwig also referenced past experiences when speaking of her anxiety in 2012. She shared that she was much better equipped to deal with the pressure than she was at her first Olympics, when she was overwhelmed by her fear of not making it out of her pool (note: this anxiety was still present in 2012, only she expected it and now knew how to deal with it). There seemed to be a maturity or calmness about Ludwig when she talked about her anxiety in 2012 as compared to how it was at her first Olympics. As previously mentioned, she explained the Olympic experience was still so exciting that she felt like a kid in a candy store; however, she was able to temper that excitement with her past experience. One match in particular, versus another German team that they almost always beat, she noticed her past experience minimizing her anxiety. Even though the Olympic organizers changed the match time for this match at the last minute, and as a result Ludwig barely got five hours of sleep, she recalled being completely prepared and ready to play because "it was against the Germans, that we almost always won, and we know we can feel really good against them".

Similarly, Cook and Walsh used their past Olympic experiences to their advantage in combatting their Olympic anxiety. They both spoke about the evolution of their anxiety in Olympic competition, about which Cook and Walsh elaborated:

I think I became more mature in my responses, so when I first started I would've been reactive: I was reactive and volcanic... And, as I moved through, I became more in control of my chosen responses and... I could choose [my responses] based on a better perspective and a better, "maturer" understanding that it is just a game and you're just out there performing to show your best volleyball. It's not life or death... Steve [Cook's coach] used always call it life or death. He's like "This is war!" And, he used to read to us from *The Art of War* and he talked about battle positions, and killing your enemy. So, it really was an evolution and by the time I got to London it was just: love yourself, love everything. (Cook)

I think it's how I roll and I think I've gotten comfortable with [my anxiety] over the years. When I first came out to the beach, it was overwhelming for me and I didn't know how to control it and I'd have to step aside and literally have to, not have a panic attack and work really hard to chill out. 'Cause I just wanted to do so great and I was shitty and I hated being terrible. (Walsh)

Both Cook and Walsh seem to have made peace with the anxiety and created strategies over the years from which they could draw comfort and patience, despite the anxiety. It was like every moment that led up to their Olympic experiences provided them with tools that could be used at the appropriate time, also based upon their experience. For example, Walsh started expressing her emotions with her team versus keeping them all to herself and managing them in private:

Well, I'm just more mindful of [my anxiety]. I think before I just dealt with it on my own, I didn't want to express it, I didn't want to acknowledge it. And, I just let go of that and that's just so much more empowering when you're like, "This is part of me, I accept it, I embrace it, and I'm not going to let that have too much power over me, I'm going to let it enhance me"...

Similarly, Cook, spent years since her first Olympic experience in 1996 identifying how she could best manage her anxiety:

If you asked me back in my first Olympics, when I came third and we really probably could have won, it [anxiety] absolutely interfered. I had no techniques to stop it: it was like a tsunami! And 3-1 down I thought the game was over, we may as well go home, it was all over. And that's why I went on such a journey of learning the techniques to identify it, sidetrack it, dissipate it; whatever it was to be able to not have it interfere.

Cook explained that she used her anxiety management techniques in all other areas of her life so that they would become routine and ingrained such that she would call on these tools automatically when required. This comfort and practice in using her anxiety management tools helped Cook to operate with great confidence no matter what the pressure situation was; however, as she had no past experience in dealing with the anxiety directly related to her partner at the 2012 Olympics, Cook's confidence waivered and her anxiety was heightened. Overall, it appears as though past Olympic experience positively supported the athlete's ability to positively manage her anxiety.

### **Olympic Perspective**

How the athlete both perceived her Olympic experience and also her relationship with anxiety seemed to have a great effect on her overall experience of anxiety and eventual

performance. One trend I noticed was that the athletes who positively framed their performance in a powerful context had less anxiety and better performances overall than those who did not. Walsh, Cook, Ludwig, and Lessard, for example, had such positive views of the possibility of the Olympics, which would could be described as “excitement” or “cherishing” (Ludwig and Cook even made reference to being a kid in a candy store at the Olympics), while Li Yuk Lo and Palmer carried a perspective that could be described as “overloaded” or “overwhelmed”. Not surprisingly, the first group of athletes experienced less anxiety (with the exception of Walsh, who was and is always anxious), than the second group.

Ludwig, Walsh, Lessard, and Cook described their Olympic perspective as follows:

You're just like [big eyes, deep breath in] and you're just like a little kid [with] lots of chocolate or something [very special]. But the whole time you're like “Oh my gosh, oh my gosh”. Even after the first [Olympics], being in the second Olympics, it's just so exciting and [everything that] is going on in the food area is always like an adventure, a big adventure. It definitely feels like... there will be a big adventure... So pretty exciting! (Ludwig)

I'm like a caged lion before going out, you know, I'm just like “Let me out! Let's go!” But at the same time, I so appreciate the process of the serve and pass in the morning, and the nap, and lunch with Misty, and the process of it; so, I think what we also learned was to cherish every part of it. (Walsh)

It was really, really important for us to play for our heart, to connect with the crowd, to connect to the energy, and to appreciate the whole experience no matter what was happening, because the premise was always that we were going to give it our best effort. (Lessard)

Because of our journey to get into it, it was really the perspective of “Thank God we're here!” and “Really enjoy it!” So really it was settling on that everything was a bonus from that point. It was back like being a kid in the candy store again: getting the free stuff, getting my uniform, marching in the opening ceremony. I was going to march in the opening ceremony regardless of whether we were to play the next day, and we did actually, we played the next night at 11 o'clock. So I said I'm gonna march, I've missed it on the last two [Olympics]. The marching helps your performance, so the perspective would be just enjoy it and soak it all in. Suck it all up, because this is the last go (Cook)

These four athletes were really excited, and at the same time they really enjoyed and cherished the experience.

In contrast, Palmer's and Li Yuk Lo's individual perspectives did not seem to empower their best performance. Palmer explained that her perspective of the 2012 Olympics was, “Overwhelming, and there definitely was a sense of triumph that came with it as well – obviously [from] representing my country at the Olympic Games”. And while Li Yuk Lo was definitely excited to be at the Olympics, her personal assessment that the other teams were out of her league and that she had no clue of the Olympic procedures (which, as noted above, she and her teammate had to navigate alone) also created a sense of being overwhelmed that she carried onto the court.

It is apparent that each athlete's unique perspective, and her thoughts about her perspective, seemed to have either assisted or detracted from her anxiety management based on whether her perspective was empowering her or disempowering her in their performance.



### **Reframing**

One way that the athletes in this study purposefully dictated their perspective was through the skill of “reframing”. With reframing “the event or behavior remains the same but it’s meaning or ‘frame’ is changed” (Jones, 2003, p. 480). In this case the Olympics would still be the Olympics; however, the meaning the athletes attach to the event would change. For some athletes this skill appeared to be natural or automatic. For example, Walsh shared that reframing “wasn’t something that I’m like ‘K, I’m going to consciously do this’. But no, I feel that’s kind of inherent to an athlete”. Cook pointed to the importance of practicing reframing everything, everywhere, and in every context. This was so that positive or effective reframing would become automatic, versus only using it on the court when the game was not going her way:

Reframing I use everyday, all day! And reframing so that I'm always feeling like I'm winning: I reframe to the positive all day whether it's on or off the court. And it is probably more important to do it off the court, so that when you get on the court, it's natural. People try to do it when you're under pressure on the volleyball court first, it's very hard to do so. So, if it can be practiced in everyday life, and then on the volleyball court you'll start to see that sort of transitions through performance. (Cook)

For Lessard, reframing was a conscious process:

I remember that then, there was a process, I know I had fear in that moment, the morning after I was like ‘okay, now, what's the worst that could happen? Okay, I can make peace with that.’ Then, by the end of that day, I had courage, to be like ‘okay let's go, it's going to be fun!’ Then I got enthusiastic about it [playing and performing]. That was the most fear/anxiety that I felt in that whole experience. (Lessard)

Ludwig also shared a specific experience when anxiety would have normally been a natural reaction. They had been told only hours before that their game time had switched to earlier the next morning. Instead of stressing out about the incident, and the lack of organization on the part of the Olympic officials, Ludwig explained how her team had fun with it:

When we met at 7 o'clock, close to the stadium, the venue, all three – Craig, Sarah, and I – arrived at the meeting point, and were just looking at each other and just laughing.

Because it was like, “These are the Olympics! And those things happen here!” And just, totally laughing about it because if you got frustrated with those things, you’d totally fuck it up.

In conclusion, it appears as though reframing had a very positive outcome on the athletes’ anxiety levels and subsequent performance at the 2012 Olympics.

### **Game-time**

Both Walsh and Lessard spoke specifically of their “game-time” perspective, whereby they used the game as a symbol or reminder of what they were committed to. For Walsh, game-time was like a line drawn in the sand: “I kinda live out the anxiety before I get to game time, and then at game time I’m either so done with being nervous or I’m just ready to go”. This game-time perspective seemed to have offered Walsh some space to be anxious and to work out all her nerves, as she knew that once it was time to compete, she would shift her perspective.

Lessard used a “game-time” perspective in a different way. Instead of separating pre-game from game-time like Walsh did, for Lessard it was always game-time:

The spirit I brought to my practices was always the same that I brought to my games. I always took practice day as game day. So there is nothing that was more special on game day than it was on practice day.

This perspective seemed to have reduced Lessard's anxiety not by making her practices more anxious, but instead by minimizing the importance of her Olympic matches: Like they were no different than the countless hours of practice leading up to the Olympics. Since Lessard had already practiced so much, and since game-time was the same as practice-time, the result was an in-match calmness for Lessard. The one time she deviated from this perspective was in the lead-up to the match versus Russia, when she was very mindful of the crowds and the media surrounding the game. Prior to this match, Lessard actually had the thought that she would rather just go home, having achieved her goal, rather than be embarrassed on international TV. In this incident, the match became the match versus it being just like a practice and so Lessard's anxiety ensued; however, Lessard used her other tools (especially reframing) to be able to manage the anxiety and have it be her best performance nonetheless.

### **Expanded Comfort Zone**

Cook was the only athlete who spoke specifically about expanding her comfort zone; however, given Cook's tenure as a beach volleyball athlete, coupled with this being a phenomenological study, I thought it was exceedingly relevant to include otherwise unique this sub-theme (even though I could have easily categorized it under the "reframing" sub-theme). From Cook's perspective, the more she pushed against the limits of her comfort zone, the more she could expand or focus through situations and events that most people would define as anxiety-filled. The expansion of her comfort zone helped Cook to take the whole Olympic experience all in stride. Cook explained that she would do yoga and meditation to calm her mind, and then she would do activities on the complete other side of the spectrum (e.g., skydiving, walking on hot coals) to:

...Blow the vibration out the other end. So blowing the vibration is like fire-walking, parachuting, adrenaline rushes that are way higher than anything you would experience naturally. So that when you're in that space of when you can feel the adrenaline rising to like jumping out of a plane, it never actually gets there, so you're much better at being aware and bringing it back quite quickly. What it does is, it expands the comfort zone so much that when you're at the Olympics, it's like a walk in the park!

Outside of her relationship with her partner, the Olympics had really become “a walk in the park” for Cook. She had trained so well to respect her comfort zone that she had the tools to manage her anxiety and adrenaline when she was pushing the limits of what was comfortable. As a result, even in activities that were downright uncomfortable, like the Olympics, were easy to manage in comparison. This purposeful expansion of her comfort zone, combined with drawing on her past experiences, made it very difficult to throw Cook off her game, even with the anxiety she experienced in the relationship with her partner. One could argue that Lessard’s circus experience was also an example of stretching her comfort zone; however, Lessard did not specifically speak to that so this would be merely an assumption.

### **Team Connection**

The last theme identified under the superordinate theme “anxiety management” was “team connection”. The athletes’ connection to their partners, support staff, and families while at the Olympic Games seemed to make a remarkable difference with respect to their ability to manage their anxiety in positive ways.

### **Partner and Support Staff**

The athlete’s connection with her partner and support staff was paramount in her anxiety management. The athletes who were able to take advantage of this relationship were also those

who demonstrated the lowest self-reported experience of anxiety at game-time. Ludwig, for example, was very close with her partner and coach. She explained that they would always meet two to two-and-a-half hours prior to the match, to focus solely on each other and on their team preparation. In that pre-game meeting, they would share their feelings. Ludwig recalled: “I mean sometimes it’s hard to say I’m afraid, I’m stressed – but it’s really freeing. That was always the big point in the team, that we would say what we feel or think”.

Walsh and Lessard also took great comfort in their team connection. Walsh divulged part of her secret to winning three Olympic Gold medals when she said, “I think that part of our success has been our support system around us. When you are surrounded by people you love and trust, you’re able to be yourself”. This ability to fully be themselves and to trust their partnership took a big weight off their shoulders. It gave both Walsh and Lessard the freedom to perform, the room to clear their minds, and the space to make mistakes, as Lessard explained:

I think the whole experience with Annie [my partner] brought us to a point where there was a deep trust, we always knew the other person was doing their best, so it never came up [to say] “You’re underperforming, or you’re not doing what’s right.” It was like “I’m doing my best and I’m going to better the ball [make the next contact better than the one played by her partner before]... If that doesn’t happen, then let’s re-center and [get ready for] the next point”. That was the tool though: the reset.

Trust was a huge factor in Walsh’s success as well. She trusted her team strength so much that she was able to be completely, fully self-expressed both on and off the court. One of Walsh’s anxiety management routines – of which she was initially oblivious to until her husband pointed it out to her – was to pick a fight when she got too anxious. The little spat was always innocent, and the moment she realized she was doing it she cut it off; however, this ability to fully express

herself gave her so much freedom in comparison with past Olympics, when she had kept all of her emotions and anxiety inside. There was one time in particular: it was the day of the Olympic marathon, when her team decided to go to training even though transportation might be a problem (and as mentioned in the “anxiety antecedents” section above, transportation was consistently Walsh’s biggest stressor). Walsh recalled:

I remember one day before our match... the marathon was going on and we couldn’t get a ride back, so we had to walk back to the hotel... and then time became an issue and I was so pissed off and just so stressed out about it and got in a fight with my coach. I’m like, “You’re supposed to protect us from this happening! We didn’t need to come here. You knew it was a crapshoot.” We kinda had a laugh, and he just looked at me and was like “Ok, ok, ok,” and he was a little defensive, but he just understood that I was [anxious] – ever yday I would fight with somebody. And my husband, the day of the finals, he was like, “Has Kerri fought? Have you guys gotten in with Kerri yet?” And they were like “No!” And they’re like, “Oh shit!” and he was like “Shit, that’s part of her gig!” Again, I was just ready. I’d gotten all that crap out! And I really appreciate my team for accepting me for that because it’d be just little bits of fear and emotion but they’d handle it.

Walsh went on to explain that her husband even offered to pick a fight with her to help her release her anxiety prior to the match, if it did not happen organically. Her team accepted her for this quirk, and they were stronger for it.

Palmer too experienced the least anxiety when she was connected with her partner, although those times were few and far between due to their team dynamic. Palmer recounted:

I think the times when we were able to kind of pull it together I felt like Lou and I were on a closer level with one another. I felt like when we were disjointed or when there was an obvious, I'll say "animosity" – but that's not really the word – but when there was an obvious (um) misunderstanding or disconnect between us, it was a lot harder to regain control and push forward together.

Palmer would also check-in with her partner and team to discover how they were all feeling instead of just ignoring her anxiety and allowing it to fester. This strategy worked well when the team was connected; however, when they were not, it became challenging for Palmer to open up to her team, as she tried to avoid team conversations all together. So, while on one hand Palmer saw the value of team connectedness, on the other she was unfortunately not able to take full advantage of it during the 2012 Olympics due to their team dynamic.

The same was true for Cook, whose relationship with her partner was disjointed due to her partner's choice to live outside of the Olympic village. That individualistic action drove a stake in their relationship, and caused Cook some anxiety at the 2012 Olympics. Cook described:

From a relationship-related perspective, I didn't have a set of strategies specifically for that [team dynamic] because I'd never experienced that. I was just blown away that she wasn't staying at the village, so much so that it turned into like disgust. And when you're heading into an emotion that's not common, I'm using techniques that I've used before that have never been used against disgust – they've been used against frustration and anger [but not disgust] – and it sort of hit a new level. Then I had to try to suppress that, so I didn't have anything, I just had what I'd been learning over the last 20 years. But, I didn't have anything new for the new challenges.

In contrast to Ludwig, Lessard, Walsh (and Palmer at times), who could fully express their emotions and be themselves, Cook ended up suppressing her own emotion so as to not make matters worse, at the sacrifice of her own anxiety and performance. Thankfully for Cook, all of her past experiences and the tools that she had developed to manage anxiety in other areas meant that her anxiety level outside of her team connection was very low, so she was still able to perform successfully at the 2012 Olympics; however, their team performance and final result was definitely effected.

In addition to elaborating on the benefits of a close immediate team connection, in two separate occasions in her interview, Walsh spoke about the positive influence of her greater team and support staff in managing her anxiety. First, she described how having a powerful extended team, including her medical staff, allowed her to retain peace of mind even though she had dislocated her rib, sharing “When I threw out my rib, I absolutely panicked! But, it’s a physical thing. I have a team of doctors that can help me that did help me. So as long as I didn’t let my mind make it bigger than it was or let it freak me out too much, then I was okay” (Walsh,. Next, Walsh spoke about the influence of her support staff in her developing the anxiety management tools required to perform very successfully at the Olympic level, as she shared:

It’s been a process over 12 years playing on the beach. It took me that long to get me to the point where I was sick of it, then I called on the best in the world to help me. It’s teamwork that got me there [to manage my anxiety].

### **Family**

For the athletes in this study, family was both a source of comfort and of balance. Outside of the logistical pressures of securing tickets and the like, as experienced by Lessard and Cook, the athletes did not experience pressure from their families, but instead drew great strength



from their family contingent. The athletes reported that when they spotted their families in the stands, or heard them cheering amidst the cacophony of fans, they felt more relaxed and at peace.

Palmer and Li Yuk Lo described their familial support as follows:

I probably had more excitement around them being there as opposed to anything else, and I found – it looks kind of bizarre – but I found that was probably more inspiring and motivating for me than anything else... I think because it made me feel good to have them there and there's really not much else going on within the team when we were playing that was making me feel good. So, it was one of those things that I was always acutely aware that I felt significantly better when I saw them in the stands or because of the fact that they were there. And, they were just beside themselves with proudness – that was actually the one kind of release from all the other kind of shit that was going on. (Palmer)

Knowing that they were in the stands, and my best friend was in the stands, that was very emotional for me. And it made it very real and was definitely one of my favorite memories as well from the Olympics: walking into the stadium, knowing that they were there watching. That was really special. (Li Yuk Lo)

And, Walsh explained how both finding out that she was pregnant at the 2012 Olympics, along with her amazing family support, gave her that extra strength to perform at her best:

It was the most beautiful thing. It was hard in a lot of ways because I couldn't see them. I'd see them after our matches, and we played basically at midnight, and I'd get to see them on my day off, for a couple of hours, for two to three hours. And the rest of the time I was focusing on whatever, but Casey [her husband] and I had a conversation before, he's like "We're here when you need us, and your kids are going to be in great hands,

we're going to have so much fun." I had such good peace of mind. But, I was so much – I mean I'm motivated in general – it's just a different kind of motivation and inspiration knowing that my little boys were in the stands and my husband. This was the first Olympics that I felt my husband was a part of it. And he was obviously before, because I love him so much, but [this time] he was on my team and his priority was for us to win a gold medal and he had made that very clear. I can't tell you how much strength that gave me, it's insane!

Like Walsh, Ludwig found that her family gave her a more balanced Olympic experience. Having them present at the Games allowed her to get away from the hustle and of the Olympic village and to gain greater perspective. Ludwig explained:

I had my best friend there and also my uncle and cousin. And it was pretty nice to meet them between [the matches], especially my best friend – talking to her about everything in between, and seeing her, relaxing, drinking coffee, having good food, and enjoying a little bit of London, as well really not [only] think[ing] only about the Olympics.

For Ludwig, as for all the other athletes, it appears that the balance provided by having their families at the Olympics was one of their greatest anxiety preventors.

In conclusion, for these athletes well-practiced, and relevant anxiety management routines, strategies, tools, and experiences along with the support of a connected team, and an empowering perspective, all helped the Olympic beach volleyball athlete in reducing her overall experience of anxiety, thereby allowing her to focus in on her performance.

### **Anxiety Effects**

Regardless of the athlete, regardless of the causes of her anxiety, and regardless of the tools she used to manage her anxiety, all of the athletes in this study experienced anxiety effects

over the course of the 2012 Olympics. What I mean by effect here is the resultant outcome of the athlete's anxiety experience: specifically what happened and what caused the anxiety, because there were no athletes in this study who were devoid of anxiety. Every athlete in this study was somehow affected by her unique anxiety experience. In this section, I will specifically examine how these anxiety effects impacted the athlete from a physiological perspective and I will also explore what effects influenced anxiety directionality, namely facilitative and debilitating anxiety.

### **Physiological Reactions**

Every athlete in this study spoke about some physiological manifestation of her anxiety that, if left unchecked, could implode her performance. Each athlete's physiological reaction to anxiety at the 2012 Olympics is listed in Table 5 below. A lot of their anxiety management techniques were actually set up to minimize these physiological reactions, since they could be so debilitating (as seen in the "debilitative anxiety" section). On the other hand, some athletes used these physiological reactions to "trigger" them to bring their game to the next level, thereby providing a means to interpret their anxiety as facilitative of performance.

### **Facilitative Anxiety Experience**

For the sake of the clarity in this research, the previously explored subordinate theme of 'Anxiety Management' is presented as distinct from the 'Facilitative Anxiety Experience' theme in the following way: the former describes the way in which the athletes handled or coped with anxiety at the 2012 Olympics, whereas the latter deals with the athletes' ability to positively interpret their anxiety (both the cognitive and somatic symptoms) as being facilitative of their best performance. An athlete's facilitative interpretation of anxiety is not really about coping with or managing that anxiety, but rather about taking the experience of anxiety and using it to

**Table 5. Athletes' Physiological Response to Competitive State Anxiety**

| Athlete   | Physiological Response                                                                                        | Quote From Interview Transcript                                                                                                                                                                                                                                                                                      |
|-----------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Walsh     | Anxiety moves up body, from solar plexus to the top of her head; fast talking; shallow breathing; butterflies | I just felt like I was living really high on myself... I talk fast in general but I was always up here [Kerri makes arm motion to indicate her anxiety level moving up from her solar plexus up to her eyes]. I was breathing a little shallow and Todd [her coach] would be like, 'Come on, chill out, enjoy this!' |
| Cook      | Anxiety 'rising up' in her body                                                                               | Because I know that [anxiety] could be there, my techniques I've put in place so that it doesn't 'rise up' enough to interfere                                                                                                                                                                                       |
| Lessard   | Frown; furrowed eyebrow; solar plexus shrinks; wants to collapse                                              | For me my anxiety comes like a little frown.<br><br>It happens in my solar plexus, like it shrinks. I feel like "ahhhhhhhh", like I just want to collapse.                                                                                                                                                           |
| Ludwig    | Tighter; shaky; butterflies                                                                                   | So in warming up already, it starts that you're not doing everything perfect, you're doing not so well, and that you're getting a little bit tighter.                                                                                                                                                                |
| Li Yuk Lo | Heart racing; shivery; shaking; close down                                                                    | My heart would race, I get sort of shivery...<br>So I get sort of shivery, I get quiet – that's not physiological – I try to calm myself down, so that's like quiet, because I feel like my mind is racing, and I'm kind of like shaking.                                                                            |
| Palmer    | Upset stomach; nervous; lack of clarity.                                                                      | For me it was like a nervous, unsettled stomach a lot of the time... I had an upset belly pretty much for three weeks (laughter). Also came across it in my clarity of thought and lack thereof.                                                                                                                     |

her advantage, or at the very least, recognizing it as something that is natural and expected in Olympic competition. While anxiety management processes and procedures could feasibly support anxiety facilitation towards optimum performance, this was not always the case.

Anxiety management does not necessarily have a cause and effect relationship with the athlete's ability to positively interpret his/her anxiety as facilitative at the moment of performance. In other words, just because the athlete has "managed" his/her anxiety, does not mean s/he will then interpret any residual anxiety as facilitative to performance. However, the hermeneutic analysis of the transcripts seems to indicate that the athlete's confidence in her ability to utilize these management techniques can then lead to her perception of anxiety as "no big deal" and/or even necessary or a part of her best performance.

One thing became very clear to me upon analysis of these athletes' experiences of competitive state anxiety at the 2012 Olympics: those who had top results were not safe from anxiety; in fact, they appeared to experience as much if not more anxiety due to the expectations surrounding them. Instead, the most successful Olympians in the study were best able to shift the direction of their anxiety to be facilitative of their top performance. In other words, the athletes in this study who had the best results relative to their expectations were best at channeling that anxiety to support their best play, despite that at the Olympics, no matter what the athlete's techniques and tools for anxiety were, anxiety "sort of just oozes out of you". In fact, three-time Olympic gold medalist Walsh exclaimed:

I think I'm a living example of that [anxiety can help performance]! And I think it's all mindset, you know. It's kind of like "It's not the weight you carry, it's the way you carry it!" I think that absolutely has to do with anxiety as well.

In addition, although it appears as though the most successful 2012 Olympic beach volleyball players in this study were also the most experienced, it is difficult to discern whether their ability to shift their anxiety direction to be facilitative of their top performance was directly due to their experience or rather due to the mental tools and environment they created over their tenure as professional beach volleyball players. However, one thing was evident: The “anxiety experience” was present for all athletes in the study and it could be interpreted to be facilitative of optimal performance, contrary to the historical belief that all anxiety is debilitating when experienced in and around competition. Upon meticulous examination of the transcripts, the following categories emerged under the theme “facilitative anxiety experience”: anxiety is part of it, anxiety as a compass, be myself, love of the game, and successful mental tools.

### **Anxiety is Part of It**

All athletes in this study indicated that at one point in their Olympic experience they realized that anxiety is part of it, and that it is even, in the experience of Cook, “what separates the winners and the losers at the Olympic Games”. Cook’s wisdom was demonstrated across the interviews, as it quickly became apparent that those athletes who had the most success at the Olympics were those who were both (1) able recognize earlier that anxiety is a part of the Olympics and (2) to also accept their anxiety experience at the Olympics.

For Walsh, it appears as though it was easy to accept her anxiety as she identifies as an anxious person. As a result, any anxiety she felt was just “normal” for her and easily perceived as being facilitative of her performance. From the onset of Walsh’s interview, it was apparent that anxiety is ever-present in her life, both on and off the court. She explained:

I'm just kinda an anxious person in general, so that's just kinda how I live my life. And so, the fear part of it was so minimal but like the eagerness to get things going and just take on the challenge was there everyday. (Walsh)

This ability to chalk-up her anxiety to being a part of her seemed to dissipate its importance. Not only did Walsh accept the anxiety, she also used it as a cue to enhance her performance (see “anxiety as a compass” below). By identifying as anxious, Walsh seems to have minimized the fear associated with being anxious (as this is just who she is) and its significance, thereby allowing anxiety to be interpreted as facilitative of performance. As Walsh further described, “The day of the game [anxiety is] my reality. Once it's over, awesome! But if it's time to be serious, I'm a little like that”.

One thing that seems to have differentiated these athletes, in terms of their subsequent performance, was *when* they first accepted that “anxiety was part of it” (as they all described anxiety as being a part of the Olympics). The athletes who *either* reported that they performed their best or who in fact placed well at the Olympics (Lessard, Cook, Walsh, and Ludwig), seemed to have accepted that “anxiety is part of it” leading up to the Olympics (or, in the case of Walsh, actually identified as always anxious), and so created powerful mental tools and structures to support their inevitable anxiety. These athletes were also the most experienced of the group, with three out of the four of them having competed at previous Olympics (and with Cook and Walsh having competed at four and three Olympics respectively prior to London). These previous Olympic experiences could have helped familiarize the athletes with the inevitable anxiety and its triggers at the Olympics Games; further allowing these athletes to both accept the eventual anxiety and create an anxiety management plan prior to arriving at the

Games (both of which could have led to their subsequent ability to better manage and positively interpret their anxiety).

Walsh explained that she accepted that anxiety would be present before every match, but that when it came to game-time, all she did was “push play”. As indicated above, Walsh identifies as an anxious person, and she is constantly dealing with her symptoms of anxiety, including its rising presence in her body, starting with the butterflies in her stomach. Walsh’s acceptance of this anxiety symptom, and overall of anxiety as being a part of the Olympics, is well summarized in the following quote:

At some point I kinda embraced the butterflies in my tummy ‘cause they’re always there, no matter what I’m doing, and I love them now. April’s [my new partner] actually named my butterflies: She’s named them “Victory” which I’m like “Oh my god, I love them more!”

Overall, it appears as though Walsh’s acceptance that anxiety is a part of life, that it does not have to be negative, and her belief that how she deals with it or uses it to enhance her performance was what allowed her to perform so well despite her constant anxiety.

Cook, the other multi-Olympic medalist in the group, also had great things to say about anxiety and about how she both referred to and accepted it as part of her journey. Cook elaborated that:

As soon as you get to the horizon, there's a new horizon: so, as soon as you work one thing out, something else will pop up and you'll have to work that out. So it's a constant evolution. And I think what I learned across my 20 years was to enjoy that journey, and to enjoy the evolution, even when it's negative or its not been the way you wanted to be,



to even enjoy the process of getting in and digging in and finding out why it's so traumatic.

Similarly, Ludwig and Lessard both had a positive appreciation of anxiety. They did not try to run from it, but instead used their experience and tools to both accept it and to help them perform at their best. Lessard explained how the viewership at the Olympics, and the increased opportunity for public criticism and judgment, led to heightened anxiety at the Olympics (see Anxiety Antecedents above for more on this topic). Lessard shared that she had to manage her heightened anxiety, but that there was also “an opportunity to really make peace with that [anxiety], and to know that no matter what, I was putting forward my best effort and that was all that I was responsible for”.

Ludwig too was focused in on her best effort in every match despite the anxiety mixed in with the excitement, like the yin with the yang of her Olympic experience. Ludwig was the first to admit that she was tighter, the environment felt different, and that she did not have her best performance at the 2012 Olympics (although her finish would say otherwise); however, what still allowed her to perform was her acceptance that she would not play her best at the Olympics. In Ludwig's words, “I think in your head you just have to accept that you definitely play a little bit worse at the Olympics because there is so much pressure and not everything is going well these two weeks. So you can tolerate [the anxiety]”. Thus, despite her personal assessment that she had a sub-par performance, Ludwig still finished on par with her pre-Olympic ranking. This demonstrates that although she might not have had her best performance, this acceptance that anxiety is part of the Olympic experience allowed her to perform at the level she is capable of at the 2012 Olympics.

Furthermore, Lessard had a breakthrough performance, pushing a top Russian team (who had won the grand slam FIVB World Tour tournament just prior to the Olympics) to three sets in what would on paper look like an improbable feat. She explained how concerned she was to perform and commented that, “no one wants to have that beat down happen in front of a million, gazillion people” (Lessard). In the lead up to the Russia match, Lessard explained the process that allowed her to go from fear to acceptance (from wanting to go home and be happy with just having qualified) to being excited for the upcoming match. The process began in the morning with a question and over the course of the day she was able to accept or make peace with the fact that anxiety is a part of it. She explained that her process, which started the morning before the match, began with a question that led to her acceptance of the fact that anxiety is a part of it. Lessard asked herself:

“Okay, now, what's the worst that could happen? Okay, I can make peace with it.” Then by the end of that day, then I had courage, to be like, “Okay let's go, it's going to be fun!” Then I got enthusiastic about it. That was the most fear/anxiety that I felt in that whole [Olympic] experience.

Experience also seems to have played a factor in the athletes’ anxiety acceptance, as those athletes who had not previously competed at an Olympics (or a comparable big pressure event) were less equipped to recognize and accept that anxiety is part of it. For example, both Li Yuk Lo and Palmer never really accepted their anxiety; in fact, they would often push it away or try to avoid it all together. In their last matches respectively, they both realized how anxious they had been and chose to embrace the anxiety of the Olympics for the first time. For both of these athletes, they found they played their best when they embraced their anxiety, granted this was after they were no longer capable of advancing in the Olympic tournament, so the pressure

to win was definitely not as strong. In the words of Li Yuk Lo, “You only develop tools and strategies when you actually experience those things. If it's the first time you're experiencing them at the Olympics, then it's kind of hard to deal with them all right away”.

Whether due to past Olympic experiences (Ludwig, Cook, and Walsh), or the experience of a similar high intensity competition (Lessard's circus experience), or upon completion of their first Olympic experience (Li Yuk Lo and Palmer), all athletes agreed upon reflection that anxiety is part of the Olympic experience. The main difference that was observed in this sub-theme was the point in time in which the athlete chose to accept that anxiety is a part of the Olympic experience: it was the early acceptance that anxiety is part of it that seemed to best support the positive interpretation of the athletes' anxiety experience and thus their best performance at the 2012 Olympics.

### **Anxiety as a Compass**

Three of the six participants (consequently those who achieved the most success at these Olympics and over their careers) indicated that their anxiety was helpful when they used it as a sort of “compass” to both direct what actions to take next and to point them to what was missing in their performance or in their preparation. Lessard explained:

When I got into my head and started thinking about things, that's when anxiety wasn't productive let's say. But when I quit getting to my feelings, and I could be more of the observer and see the environments and get more specific into the one thing I have to accomplish right now, and being in my body, and being connected to Annie [her partner], that's when the anxiety became a prelude to performance.

For some of the participants, the anxiety would be like a cue to take a different tactic or to employ a different mental tool, and ultimately to raise their performance to the next level. Five-

time Olympian Cook explained that anxiety would enact a certain “trigger” for her, as she commented that in her experience anxiety does not help performance on its own. She explained: “I think [anxiety] triggers another response that would help, but I don't think it's helped in its own state” and that, “If it doesn't release the trigger, it is harmful”. Cook shared that anxiety would trigger a reminder that she was being too serious, as she said, “when I identify that stress or anxiety, it then shows me how important it is to me. So, if I get stressed or anxious, it's like ‘Oh maybe I'm taking myself too seriously!’” She would then use the anxiety-induced trigger to shift to a childlike state in which she would act out her favourite superhero on the court, and have fun doing it. She said that when anxiety was present, she would be like “I’ve gotta trigger, I’ve gotta trigger. I’ve got to be active in my consciousness to navigate through the rapids” (Cook), which then allowed her to reorient the direction of her anxiety towards the facilitation of her best performance.

Similarly, Walsh would use anxiety to “trigger” herself to work harder. She explained that she had anxiety “seriously everyday” (Walsh) of the Olympics and that, as a result, she would get angry because she is a people pleaser. As a result, when she experienced anxiety it would “actually drive me to work my ass off!” Ludwig would use her anxiety as a compass to remind her to focus in on her confidence, as when she allowed her anxiety to take over, she would become slow on the court, but when she could, in her words, “switch [the anxiety] around into confidence”, then she would move well on the court and play her best.

Natalie Cook, when asked to reflect on her experience of anxiety and how she had turned it into something facilitative towards her best performance, explained that over her 20 years as a professional beach volleyball player she has discovered that the more she embraces her fear and

anxiety, the greater her opportunity is to develop the tools to both combat and utilize her anxiety to her advantage. She explained:

Most people, especially when they're just starting, run away from the fear, and the negativity, and the anxiety. My advice would be to get into it, and sit with it, and reflect on it and find a coach or mentor, someone that can help facilitate you getting into the middle of it, rather than running away from it. Because the more you run away from it, the more momentum it picks up and by the time you turn around, you're running from a tsunami and it'll just engulf you. If you turn and run into it, you will address it a lot quicker; but you've got to have the environment around you to help with that, so get the environment and start being reflective, and find your own methods to help deal with that. You're only as strong as your weakest link, so most people stay away from their weak links but get in there and kind of understand them to lift up that weakness, and that's how you can just overcome anything. (Cook)

### **Be Myself**

The athletes in this study demonstrated that in their experience it is easier to “turn and run into” the anxiety (as Cook suggested above) when they were able to be themselves within the team dynamic. In fact, Walsh called her ability to “be myself” a “life changer” in terms of her anxiety. Walsh explained that in the past she would allow her anxiety to build up because she did not want to concern her team or her partner, but that in London she was free to be herself with her team because there was no fear of judgment and that made all the difference in her being able to accept and interpret her anxiety as facilitative towards performance. Walsh concluded, “When you are surrounded by people you love and trust, you’re able to be yourself”. She also noted how important it was for her to be loved by her team: This family-like

environment (where everyone was free to express their feelings and be themselves) supported Walsh in playing her best and having the most fun, notwithstanding her great anxiety, at the 2012 Olympic Games.

Ludwig shared a similar experience to Walsh in that she too explained that she performed her best, despite the anxiety, when she was able to be herself. As Ludwig explained:

I'm my best when I'm just being myself. It begins with confidence and just doing what I want, just saying what I want, just being happy and smiling a lot, and just enjoying and learning what I'm doing. Even when it was stressful, I just loved being there at the Olympics, so I was just myself. And I really want to be how I am, and I'm actually always at my best when I'm just myself.

Ludwig shared that her ability to speak openly with her team and to fully express herself also supported her in positively interpreting her anxiety. She felt like she was not alone in what she was dealing with and could solve these problems as a team. In this way, Ludwig's anxiety at the 2012 Games was not debilitating, but instead something that she could take on with her team because she was able to be herself.

Lessard and Cook also mentioned how their ability to be themselves positively effected the interpretation of their anxiety symptoms. For example, Lessard explained that she, her coach, and her partner focused on their relationship with each other and their experience as a team, and chose not to focus on the hype of the Olympic Games.

I'm me, and I'm showing who I am and who I am not! I was totally at peace with that... I felt that the team spirit we built, Annie, and Vince, made us really stick to who we were and we never pretended to be something that we were not: either on the Olympic site,

with the Canadian Olympic team, or the committee, or even on the court, or with opponents.

Even when she was anxious or stressed, she knew she could completely be herself in the lead up to and during her matches; therefore, she did not experience her anxiety as debilitating but rather as something that she and her team could manage together as they went about achieving their goals at the Games.

While Cook did not have the same relationship with her partner – in fact she probably had the opposite team dynamic of Lessard, Walsh, or Ludwig – Cook’s experience and confidence in her ability as an athlete still had her “be herself” for the majority of the Games. She trusted her preparation and experience, and wanted to complete her beach volleyball career on her terms despite the difficulty she had managing the relationship with her partner. Although Cook experienced the anxiety surrounding her team dynamic at the 2012 Olympics as debilitating, overall she was not disturbed by the anxiety and instead perceived it as facilitative for performance, as she explained: “I just knew it was about my experience, in my closing of the chapter of my life as an Olympian, that I was going to do it my way and experience myself the way I do”.

### **Love of the Game**

One of the strongest predictors of competitive state anxiety being interpreted as facilitative for performance was the athlete’s profound “love of the game”. The athletes for whom anxiety was positively interpreted indicated that although they were aware of the anxiety, their ultimate love for playing the beach volleyball game, coupled with their desire to compete, would trump that anxiety at the Games. In other words, even amidst the pressure of the Olympics, it appeared as though Ludwig, Walsh, Lessard, and Cook were really present to their

love of the game. Ludwig, for example, finished in the top 10 at the Olympics (higher than her previous Olympic finish) and even though she was not completely satisfied with her play, she was able to play at a level among the best in the world in 2012. Ludwig described:

I just love what I'm doing (laughter). My God, I'm so happy to actually have been there, to participate in the things actually. I just feel like, it's always this feeling that like this was my hobby, and now it's my profession I can do this at such a high level. That has me always feeling really happy and being proud. It's not always the best experience, the Olympics; but there are so many little cool experiences in between, but these are definitely high moments that everyone will remember.

Similarly, Walsh has a deep love and appreciation for her job as a professional beach volleyball player. She shared, “I love my job, and the best me is when I’m acknowledging that! In London I did that so much better than my previous three Olympics” (Walsh). She explained that in her past Olympic experiences, she so was caught up in the stress and anxiety of the Games that she really could not enjoy the process and that, outside of winning, it was not much fun. Walsh went on to describe how her newfound commitment to cherish the process with her family gave her solace in times of stress and excitement:

I want to take this with me, with my children, for the rest of my life, in the next Olympics, next world tour, it’s just to cherish it, because it is so special what we get to do and that helps with the times when I’m overwhelmingly stressed and it helps with times when I’m overwhelmingly excited.

Cook, who was obviously agitated, derailed by, and even angry about something that was completely out of her control at the 2012 Olympics, was able to return to her best game despite the anxiety. She did so by deciding that the Olympics were going to be the time of her life,



despite the rift in the relationship with her partner. After the Olympics, Cook's fans commented that she appeared as though she was having the time of her life, to which she responded:

I did [have the time of my life], because I knew I was there to soak it all up and enjoy it, so the perspective allowed me to live into that, fulfill that emotion, and I really enjoyed that part. And, I loved performing, and getting ready, and I love waiting to come out, and the warm-up, and all of those things. I really think that it helped fulfill it on the court.

Cook decided that given that it was her last Olympics, and that she absolutely loved to play beach volleyball, she was going to give everything she had to her Olympic experience. Giving everything included marching in the opening ceremony for the first time in 5 Olympic appearances, as previously she feared that the long procedure of the opening ceremony would effect her play. This time around she declared, "I was going to march in the opening ceremony regardless of whether we were to play the next day . . . The marching helps your performance, so the perspective would be just enjoy it and soak it all in. Suck it all up, because this is the last go".

For Palmer and Li Yuk Lo who did not often experience their anxiety as being facilitative (and who also did not have their best performances at the Olympics), it is possible that they forgot their love of the game along the way as neither athlete spoke about the fun of playing or their love of volleyball while recollecting their 2012 Olympic experience. The Olympics for them became about pressure, meeting expectations, and avoiding disappointment or even embarrassment, from their team, their country, or themselves. It was not until these athletes had been eliminated from the Olympics that they were able to put their play into perspective and finally enjoy playing. Both Li Yuk Lo and Palmer explained that in their final match they had

the experience of playing freely and that they finally performed at an acceptable level (based on their own personal judgments).

### **Successful Anxiety Management**

As noted above, anxiety management is distinct from anxiety facilitation in that it dissipates the experience of anxiety while the latter involves the athlete embracing anxiety as something that can support their performance. Nevertheless, some of the anxiety management techniques used by the Olympians in this study also seemed to support their positive interpretation of anxiety. Below I will describe a few ways in which the athletes in this study used the previously mentioned anxiety management themes to support their positive interpretation of anxiety as being facilitative of their best performance.

Walsh used the anxiety management technique of “mindfulness, prayer, and breath” to shift her anxiety interpretation to being facilitative towards performance. Walsh spoke about how her mindfulness at this her third Olympics led her to declare, “Kerri, you gotta enjoy this!” She went on to explain that “it was like a mindfulness I didn’t have before. . . And, despite the anxiousness and the uncertainty it was really, really fun throughout all of it” (Walsh). Walsh’s focus on mindfulness and being in the present moment allowed her to be more aware of the precursors and effects of her anxiety, and from there she could choose to enjoy and take full advantage of the complete Olympic experience in spite of her anxiety.

In addition, all athletes in this study described that their “past experiences” either set them up to better interpret their anxiety as facilitative, or their lack of past experiences actually prevented them from either recognizing the anxiety or knowing how to shift it to being facilitative of their best performance. For example, Ludwig explained how in her past experience, talking about how she felt with her coach, mental coach, and/or partner reduced the

anxiety she felt in Olympic competition. Knowing this, she no longer viewed her anxiety as debilitating, but rather as something that she could manage and even use as a trigger to get in communication with her partner and coach so that she can feel and perform better. As Ludwig explained:

To know when it didn't work in the situation, when I felt bad, to talk after about how I felt and how I was thinking and the thoughts which I had and then really analyze that and have ideas about what I can do next time in this situation, just really talking about those things made me feel really confident.

“Reframing” was another anxiety management tool that, when successful, supported facilitative anxiety. In this case, the presence of anxiety would alert the athlete to the need to reframe, at which point the athlete’s anxiety would diminish. Such was the case with Lessard prior to her match versus Russia. This was one of the only times Lessard experienced anxiety at the Games and she used this anxiety to her advantage by not letting it rule her. Lessard reframed her perspective by asking the question “what’s the worst that could happen?” and after answering, deciding she could make peace with the worst possible scenario. In so doing, she reframed her mindset and went out and had an extraordinary performance.

Similarly, it was obvious that Walsh’s perspective about her anxiety made all the difference in taking her everyday experience of anxiety and making it facilitative of her best performance. Walsh summed up her comfort with being uncomfortable and anxious when she declared: "My kick in life is to make myself uncomfortable so that I grow". In Walsh’s perspective, the discomfort and corresponding anxiety was necessary for her growth, so looking from this perspective it was easy for her to embrace anxiety in 2012 Olympic competition.

“Mental coaching” is the final successful anxiety management tool from the themes above that I am going to identify as supporting anxiety facilitation. Aided by the support of a mental coach or sport psychologist, the top athletes in this study were in essence training themselves to perceive their anxiety as facilitative towards their best performance by working on tools and minimizing the significance of their anxiety. Walsh explained:

I’d have that moment where I’d check in with myself. That came with a lot of work with my sport psychologist... He literally asked me “What’s going on with you now?” if we were having a tough conversation about something that makes me uncomfortable. “What are you feeling like inside? What are you thinking about?” So I would have – and I do have these moments every day – where I’m like “K, what am I feeling?”

After she asked herself what she was feeling, then she would react appropriately with the tools to support her best performance.

In general, analysis of the beach volleyball athletes’ interview transcripts indicate that when the athlete successfully managed her anxiety, the tools she used to do so also supported her perspective of anxiety as facilitative for peak performance, in that she no longer automatically viewed anxiety as debilitating. In other words, successful anxiety management practices seem to provide a sense of control over the athlete’s anxiety, so that she no longer has to fear or avoid anxiety, but rather can use her tools to both minimize it and have it work in her favour.

In conclusion, what seems to have separated the top performing, and consequently most experienced, athletes in this study from the rest is their ability to take their anxiety in stride, and even to use it to trigger the use of “anxiety management” tools to help them perform even better. The athletes who best dealt with their anxiety also appeared (1) to have a greater acceptance of it as a part of the Olympic experience and (2) to be able to take it all in stride as they simply loved

playing so much. Finally, the successful use of anxiety management strategies also supported these athletes to perceive their anxiety experience as being facilitative and even necessary for their best performance.

### **Confidence**

One common thread that linked the above-mentioned subthemes was their resultant effect on athlete confidence in either their mental skills or their physical abilities. Those athletes who determined anxiety is part of the game, who were able to use it as a compass to guide their next actions, whose love of the game was the driving force, and who were successful with their anxiety management practices, were also those who experienced confidence in themselves, in their team, and/or in their ability to perform at the 2012 Games. Walsh explained that anxiety is just part of life and it does not need to be debilitating. One of Walsh's fundamental realizations, that allowed her to successfully interpret her overwhelming anxiety as facilitative of her best performance was that:

Confidence comes from yourself. You can tell me how great I am, that's going to make me feel good for like 5 seconds and then I'm going to go into reality and be like "Shit, I'm not confident with myself". I think the same thing happens with anxiety. It's the way you talk to yourself that's most important.

Cook also identified that the way in which she spoke to herself would make a big difference in her in-match confidence and her ability to positively interpret her anxiety symptoms as facilitative for performance. Throughout the interview, Cook exuded confidence in the way in which she spoke about her abilities, both in terms of her physical capacity as well as her mental toughness. Cook explained that she had trained her anxiety management tools and strategies intensely in the 16 or so years since her first Olympics. When she started playing

internationally, Cook described that she was often overcome by anxiety and was reactive, even “volcanic” as she described herself; in contrast, at the 2012 Games Cook had become a mature athlete with a well-developed tool box of coping mechanisms. She said she would practice daily her affirmations and other tools loudly on the court in practice and matches so that they would become natural, as she explained: “You know you start with... saying it out loud and openly, and all of a sudden when you get to the Olympics you, it just happens in your head” (Cook). As a result, Cook was very comfortable with anxiety, since they were such old friends and she was confident she had the tools to manage whatever might be thrown her way. She was so confident, in fact, that she was still able to perform to her potential at the 2012 Olympics despite her team performance and her discomfort in her team dynamic (which was the one area for which she had not developed coping tools). Even with a lack of tools to deal with this new team stressor, her overall confidence buffered her anxiety, which allowed her to perceive the anxiety as facilitative for performance.

In contrast, Ludwig and Lessard both had confidence in their team’s ability to perform under any conditions, so that when stressors arose at the 2012 Games, they were able to take them in stride and even interpret the ensuing anxiety as facilitative. Furthermore, Ludwig commented, “When I don’t get this under control being anxious and stressed, when I don’t control it, it’s no good, when I can’t switch it around into confidence”; however, when she could switch anxiety to confidence, that made the difference between interpreting the anxiety as being facilitative versus debilitating.

Even Palmer, whose overall anxiety experience was debilitating, was still able to perform well despite both the intensity and interpretation of her anxiety symptoms, as she brought top teams to three sets in tight matches a couple of times at the 2012 Olympics (Note: Palmer went

to three sets versus Germany and Brazil, losing 15-8 and 15-9 respectively in pool play at the 2012 Olympics. Had she won one of those matches, she probably would have advanced at the Games). Although Palmer did not have confidence in her own ability to perform at the 2012 Olympics, she did have tremendous confidence in her team's game-plan as she knew it had consistently worked for them in the past. Palmer explained that it was her confidence in their game-plan that had her perform despite the debilitating anxiety she felt:

It was just [about] coming back to a plan, a game-plan, and we had really good game-plans so that was sort of like a point of strength for us, I guess, that we could come back [to the game-plan]. And, if we could just execute the plan despite our feeling, that would often put us in a good position.

The confidence Palmer had in the team's game-plan coupled with her confidence that they could bounce back (because they always did) seemed to buffer the overwhelming debilitating anxiety that Palmer otherwise felt at the 2012 Olympics. This seems to have allowed her to perform well despite the overall debilitating interpretation of her anxiety symptoms, so long as she could remember to go back to her game-plan. Palmer explained, "I think with all the anxiety that plan didn't always, wasn't always necessarily front of mind, as much as it would be another games".

Confidence in the athlete's physical ability and/or her mental skills seems to have an overall buffering effect on anxiety interpretation such that even when anxiety was present and not viewed as facilitative towards performance, the athlete could still have a great performance. It appears that confidence can either support the facilitative interpretation of anxiety (such was the case with Cook, Lessard, Ludwig, and Walsh) or it can buffer the debilitating experience of anxiety (as was seen with Palmer and Cook). For example, Cook experienced confidence as a buffering agent that allowed her to perform well despite her lack of mental tools to deal with her

team dynamic (for which she was not prepared) and in contrast, Lessard's, Walsh's, and Ludwig's relationship with and confidence in their team allowed them to shift their view of anxiety at the 2012 Olympics.

In summary, coping mechanisms (e.g., successful anxiety management, anxiety as a compass), the athlete's past experience (e.g., anxiety is a part of it, anxiety as a compass, successful anxiety management,), and personal factors (e.g., love of the game, ability to be myself), along with the buffering effects of confidence, all seem to support the athlete's positive interpretation of anxiety as being facilitative towards performance, or, in the case of confidence, act to buffer interpreted debilitating anxiety symptoms. With the facilitative interpretation of anxiety or the buffering effects of confidence, the athlete then has the opportunity to perform at her best despite the intensity of anxiety felt and at times despite her interpretation of anxiety.

### **Debilitative Anxiety**

Historically, the predominant school of thought in the field of anxiety was that anxiety negatively influenced performance, or in other words, all types, forms, and intensities of anxiety were always debilitating. Contrary to that notion, this study has demonstrated that anxiety has a directional interpretation that effects the outcome of the athlete's experience of anxiety regarding her performance: it can be either debilitating or facilitative, depending on the athlete's personal interpretation. Below, I will examine which factors had all athletes – with the exception of Walsh who did not seem to experience debilitating anxiety (arguably because she identifies as anxious, therefore anxiety is always present) – identified as being debilitating at different times during the 2012 Olympics. The five main sub-themes of this section are as follows: In my head, unsuccessful anxiety management, lack of confidence, and forced play.



### **In My Head**

One of the effects of anxiety, as described by the athletes in this study, was that they would “get in their head” and consequently be distracted from what they had to do to win the game at hand. Instead of focusing on their play, these athletes would instead be caught up in their thoughts or assessments about the game or in how they were feeling, thereby getting distracted from their performance. Palmer talked openly about the distracting effect of anxiety, describing:

It’s kind of like a numbness, or more so that I just had no real control. Like my body was just running on muscle memory, like there was not really too much in terms of conscious thought going on. I think I felt really heavy, I felt really slow, and I felt jittery: like sort of that nervous jittery energy where I just felt out of control, like I couldn’t be smooth and slow and the kind of way that I want to play.

Like Palmer, Li Yuk Lo experienced her anxiety as debilitating at the 2012 Olympics, in fact she declared that anxiety always was debilitating, stating, “Anxiety or stress never helps me play better, it always has the adverse effect. I’m wasting so much energy to call myself out on being anxious, that I just kind of lose it”. In other words, in response to her anxiety Li Yuk Lo would get distracted and locus focus trying to sort it out, to the detriment of her game. Lessard also found that being in her head about her anxiety took her out of the game, as is evident when she divulged that “When I got into my head and started thinking about things, that’s when anxiety wasn’t productive let’s say.”

Li Yuk Lo shared many examples of being in her head during the 2012 Olympics. She had all but ignored even the possibility of anxiety leading up to the Games, and, as such, had few mental tools to support her getting out of her head. A consistent comment in Li Yuk Lo’s

interview was that the game was going too fast. Two separate times in the transcript she spoke about how, in her head, she could not keep up with the speed of the game:

I felt like I was kind of falling deeper and deeper into a hole, and that was sort of just the mental challenge to get myself out, but at the same time in certain games it went by so fast that I didn't even have time to think about it. It was just like 'Bam'. Yeah, it was way too fast. (Li Yuk Lo)

In my game against Czech, I was so hard on myself and I was trying to calm myself down, that I wasn't transitioning to the next point well, it just kind of snowballed into a really big mess. I couldn't get myself out, and trying to get myself out of the last point evolved into that over-trying the next point, I didn't do it fast enough for me to be able to .... Because I have mental cues and I do those mental cues, and go through those strategies; but, I wasn't doing them fast enough to be able to transition to the next point, and then the next point would be a shank [note: a shank is unplayable serve receive error], and it's like "Oh shoot, I have to go through it all again". But the transition was very slow. (Li Yuk Lo)

Ludwig also commented that when she was in her head, things sped up, she had no time to think, and she would start to focus on the negative. This was when anxiety was debilitating for her. Ludwig revealed that in these moments it was:

Like you're thinking wrong actually (laughter). You're thinking about the negative things. Only it's really hard to switch it up. So in warming up already, it starts that you're not doing everything perfect, you're not doing so well, and that you're getting a little bit tighter. Like getting tight, and everything's not loose, and not every movement is like

you normally do. So this was stressing me out, that I was not relaxed enough, that my body doesn't do what I want.

It became a vicious circle for Ludwig in these moments: she would “think wrong”, her body would get tighter, and her body would not respond as she wanted, so there would be more negative thinking. While this was happening, her anxiety intensity would increase as would her incidence of interpreting her anxiety symptoms as debilitating, because she had the proof in that moment that they were!

To conclude, when the athletes in this study were in their head, the game would speed up and/or their mental processing would slow down and, as a result, there was no room for facilitative anxiety. In these instances, everything seemed to spiral out of control and the anxiety seemed to be the culprit. Accordingly, the only option was a debilitating anxiety experience. Ironically, the more the athletes experienced debilitating anxiety, the more they were in their head, thus perpetuating the cycle and causing the downward spiral of performance that they experienced in these occasions.

### **Unsuccessful Anxiety Management**

It seems obvious that unsuccessful anxiety management would increase the athlete's odds of experiencing debilitating anxiety. Such was the case with both Palmer and Li Yuk Lo in particular, as it was explained above that they neither had the experience nor the tools to properly manage their anxiety. Palmer, for example, exclaimed that at the Olympics she felt anxious "the whole time!" Unlike Walsh, who also stated her whole Olympic experience was filled with anxiety, Palmer did not seem able to move past her ever-present anxiety, and her performance suffered as a result. It is also important to point out that Palmer, along with Li Yuk Lo, did not have well established anxiety management protocols nor did they have any Olympic or similar

past experiences from which to draw confidence or create Olympic-specific coping mechanisms. Palmer described:

I really hoped that things worked out because, I think that just sort of goes to show the sense of lack of control over the situation, so I was just like “Oh, I'll just pray to God that this works out!” because I don't know if I'll perform here . . . For each of the games. . . it was definitely an “okay we've got a plan, and I know what I have to do, and God help me!” Like we can do it and I hope that this works out. As opposed to having that real confidence to say what I'm going to, it was like “I hope I can”.

Palmer relied heavily on her plan as really the only tool to get her through the incessant anxiety. Even with her trusted game-plan, and the buffering effect caused by the confidence in her plan, it was not enough for her to break free from the grasps of debilitating anxiety.

Lessard spoke of one time when her focus effected how she perceived her anxiety:

At the end of the game against Great Britain, I remember they were playing really well, like better than I've ever seen them play. We'd always beaten that team all the times before. They were ready and for us there was a bit of jitters.

What was implied in Lessard's description was that they should have been winning because they had always beaten that team before. Lessard explained that the game had been tied at 13-13, and although she used the same mental tools that normally dissipated her anxiety, this time with the game tied so close to the end of the match, these tools did not work like they had in the past. Contrary to previous examples where past experiences actually helped the athlete positively interpret their anxiety, in this case Lessard's past experiences actually discouraged her best performance instead of supporting her to perform better. More specifically, her past experiences heightened her sense of pressure because of her past-based expectation to win against this team

coupled with the close score of the match that was not supposed to be so close. As a result, unsuccessful anxiety management led Lessard to a debilitating interpretation of anxiety.

As previously indicated, Palmer (along with Li Yuk Lo) did not have any Olympic or equivalent past experiences to draw on to support her interpreting the anxiety as being facilitative for performance. This lack of Olympic experience coupled with her lack of focus on developing anxiety management tools left Palmer in a quandary when the pressure intensified at the 2012 Olympics. She had no tools to cope with her mounting anxiety, so it was no wonder that she buckled under the stress and pressure of her Olympic experience and could not see any way to switch focus to reduce her anxiety and regain a positive and fully connected performance focus. Palmer explained:

It was the ability to actually do something about [the anxiety] that was going to make a difference that I found challenging, I think because I was reasonably anxious for the whole time. Yeah I'm getting on the court and then switch to something other than anxious, was just not really viable. Maybe it's possible, but I didn't really feel like I had skill set to do it.

Li Yuk Lo also did not have the skill set to 'switch' her anxiety. She described, "it felt helpless" (Li Yuk Lo) in her anxious moments: a perspective that she did not know how to reframe and that was both a precursor to as well as an effect of debilitating anxiety. Li Yuk Lo felt like she had no control over the situation, and so her anxiety mounted without the tools to either dissipate or shift her anxiety to being facilitative for performance.

Cook and Palmer also experienced a lack of control when it came to managing the anxiety surrounding their team connection. Cook, who had a full arsenal of well-trained anxiety management practices, tools, and strategies, was caught empty-handed when it came to the

anxiety surrounding the relationship with her partner “because I'd never experienced that before”. Without the tools to manage the anxiety brought on by her team connection, Cook found herself forcing the play more, especially when the game was tight. Cook spoke of a time when their team was put under pressure and they started to make mistakes they never made. At that point she would normally use her time-wasting strategies to slow down the game and regain composure; however:

It was a night game so I couldn't fix my sunglasses, there was nothing there to waste time. I knew it was coming. I was trying to waste time. The referee wouldn't let me waste time. I had no timeouts left and it overcame and interfered and it was probably the only time in the Olympics where it was so front-of-mind.

Without the mental tools to support her, and without the support of her partner, the anxiety effected Cook's performance despite all her training and past experience triggering a facilitative interpretation of anxiety. Although her overall confidence had buffered the influence of the debilitating anxiety up to this point, when everything came together, it was her lack of tools and specific confidence in the partnership that had Cook's performance falter at a few key points in this match.

### **Lack of Confidence**

As was noted above, confidence seems to have a buffering effect on debilitating anxiety and it can even support the athlete's facilitative orientation of her anxiety. The inverse also appears to be the case, as a lack of confidence can further bury an athlete in her anxiety and help her interpret her anxiety as debilitating towards performance. Li Luk Lo, for example, admitted that she never really related to herself as an Olympian, even after she had qualified for the Games because “I struggled with the fact that ‘okay well, did I really deserve to be there?’” Li

Yuk Lo brought that lack of confidence into the Games even before she began playing, so there was little opportunity for her to rely on her self-confidence when the game was tight and the anxiety at its peak. Li Yuk Lo went on to proclaim that if she were to compete at another Olympics, she would focus on “having the confidence to be able to say that I [deserve to be at] the Games. So preparation and confidence would be the two key things for the next Games”.

Palmer also noted how her lack of confidence effected her play, as she described that:

I think the biggest thing for me and London was that it was a confidence thing. And, I think for me it was physically that I didn't feel like I was as steady, or as strong or as lean or as whatever as I should have been... I felt that there are a lot of fingers pointed at me for our performance. There is a lot of anxiety and self-doubt and insecurity about myself. Like a complete lack of confidence in what I was doing, and why I was there, like all that sort of stuff. It was quite isolating. That was probably the greatest sense of anxiety that I felt.

So, Palmer's confidence diminished alongside her Olympics “failures” to the point where she can remember that “as opposed to having that real confidence to say what I'm going to, it was like ‘I hope I can’”. As if hand in hand, Palmer's confidence shrank and her experience of debilitating anxiety increased, and at the same time her performance declined.

### **Forced Play**

Several of the athletes in this study described that a result of their debilitating anxiety was “forced play” on the court. In an ideal situation, the athlete would be loose, focused, and free on the court; however, when anxiety struck, if left unchecked, the result would be body tightness, reckless choices, and forced execution on the court. Cook shared that she had a lot of training

around managing the physiological effects of anxiety on her heart rate or body tightness. So, while her anxiety might not have show physically, Cook explained:

It would probably manifest in anger and frustration through the ball, so it might come out in inappropriate hitting choices. Overplaying the ball potentially was the biggest problem of not having all choices or solutions available and being able to only focus on one or two.

She would start hitting the ball out, or her over thinking would cause her to hit it right at the opposing defender: two outcomes that would never happen if she were not forcing the play.

Palmer had a similar experience, saying that when she was anxious she would become more tentative which would subsequently affect her physical play. Palmer shared, “When I was feeling really anxious or nervous I would go conservative and try to just get the ball in, or not jumping quite as high as I didn't want to ‘stuff it up’, or whatever”. Ludwig also saw her play effected by anxiety. In the quarterfinals of the 2012 Olympics, Ludwig matched up against first-ranked Brazil. The score of the first set reflected her debilitating anxiety: 21-10 for Brazil.

Ludwig recalled:

We felt like we couldn't do anything, we were just frustrated. Your head was down, you try to keep your head up and keep fighting but it was really stressful to have the feeling that you don't know what to do. Everything that you're doing is totally shit, it's not working, you can put the ball on the court, and you don't know why, you feel weak. Your legs feel weak, they do everything right, and that was a really, really bad feeling.

Although Ludwig came back to almost win a tight second set, 21-19 (at which point she was knocked out of the Olympic competition), the influence of Ludwig's debilitating anxiety on her skill execution probably took her out of the Olympic tournament.



Li Yuk Lo's anxiety also influenced her play at the 2012 Olympics, as she concluded:

If I'd been less anxious, I would've been able to execute a lot better, or served a lot tougher instead of giving them easy serves because I was too scared that I was going to miss it, things like that. I think I could've been a little bit more aggressive if I wasn't as anxious.

In this quote, it appears as though Li Yuk Lo only knew how to interpret anxiety as negative, as she spoke about how if it was not there, she could have been more aggressive and played better. There is nothing in her choice of words that indicated she could possibly have interpreted the same anxiety symptoms as being facilitative of performance, but only that the anxiety 1) caused her tightness and tentativeness and 2) if it was not there, things would have gone better. Li Yuk Lo seemed to lack the awareness that she could shift the interpretation of her anxiety symptoms, which would be in line with her minimal international experience in high-pressure situations.

The rest of the athletes in the study (excluding Walsh) also found that their heightened anxiety resulted in forced play at times during the 2012 Olympics. In these moments their anxiety was perceived as debilitating and they did not have the mechanism in place to switch the directionality of their anxiety experience, as the athletes' described:

You know those feelings when you just think "Pffft. Serve me! Give me the ball."

[Where] I want to take the ball, I want to take it in my hands. It was not always the feeling [at the 2012 Olympics] that [I] could say, "Just give me the ball, I will kill it!"

That makes me a little bit disappointed to not have always everything under control, like also when I watch the matches over again – that was actually just a month ago – and I was like 'Oh my gosh, this is not the way I'm playing', you know? This is like really disappointing, to see this how many mistakes you've made. Like when you have a good

set and you're not hitting it, you give a fucking shot, an easy shot, because you're just afraid to lose the ball or to make a mistake. I was disappointed. (Ludwig)

The game wasn't so much that I freaked out and they won, it was more like they still kept their level up and my level didn't all of a sudden go "Oh, it's now like 13-13, let's now play awesome and great", I just kept playing with that okay performance, but not awesome. (Lessard)

Yeah it's more when [anxiety is] not there, it's more free flow, it just feels like you're in a calm stream versus being in that rapid pace: whitewater rafting. So when it's not there, it's just a free flow of expression of volleyball, when the anxiety is there it's like, "I've gotta trigger, I've gotta trigger. I've got to be active in my consciousness to navigate through the rapids". (Cook)

Thus, forced play was evidently an outcome of debilitating anxiety for the athletes in this study. There is no surprise that Walsh did not experience forced play, as she also did not appear to experience debilitating anxiety at the 2012 Olympics.

All athletes in this study, except for possibly Walsh, experienced the debilitating interpretation of anxiety for at least part of the 2012 Olympics, while Palmer and Li Yuk Lo experienced it almost exclusively. The difference seems to be that these athletes who most often experienced debilitating anxiety (Li Yuk Lo and Palmer) were also those who spent more time in their heads, who did not have extensive successful anxiety management protocols based on their past experience, and who experienced a lack of confidence at the 2012 Games. In contrast, Cook, Lessard, and Ludwig experienced little lapses into debilitating anxiety that were based on their past experiences and whether or not they had created tools to deal with the specific stressor at hand. It appears as though having developed coping mechanisms and a perception of control

over the situation (e.g., anxiety management practices), past experiences to draw from (e.g., anxiety is a part of it, anxiety as a compass), and self-confidence (e.g., the opportunity to be myself and free myself to play my best), the athlete was much better equipped to both manage and interpret the inherent Olympic anxiety as being facilitative of peak performance.

## CHAPTER 5

### Discussion

The purpose of this investigation was to explore the phenomenological experience of competitive state anxiety for female beach volleyball players at the 2012 London Olympic Games. Four questions were examined during this study: (a) What was the phenomenological experience of competitive state anxiety for female beach volleyball athletes during the 2012 Olympics? (b) What precipitated the athletes' experience of anxiety? (c) What did the female Olympic beach volleyball players in this study do to cope with the inherent anxiety of Olympic competition? And, (d) did the athletes' interpretation of anxiety (as being either facilitative or debilitating for performance) affect their performance at the 2012 Olympic games?

The results were categorized into three main superordinate themes: anxiety antecedents, anxiety management, and anxiety effects, which together painted the full picture of the phenomenological experience of competitive state anxiety for these athletes. Each superordinate theme housed more detailed themes and subthemes, upon which I will elaborate below by discussing their relevance against current competitive state anxiety research in the field of sport psychology.

As defined earlier, competitive state anxiety is the "temporary, perceived feelings of tension and apprehension" (Woodman & Hardy, 2001b, p. 291) by the automatic nervous system in response to the particular competitive environment or experience. The experience of competitive state anxiety can be heightened by trait anxiety, the athlete's predisposition to perceive competitive environments as threatening (Partridge, Brustad, & Babkes, 2008), and can be moderated by the athlete's self-confidence (Hanton et al., 2004; Hanton et al., 2005), ability to cope with the competition stressors (Hanton & Connaughton, 2002), including the successful use

of advanced psychological strategies (Durand-Bush, & Salmela, 2002; Gould, et al., 1992a; Gould et al., 1999; Gould, Jackson, & Eklund, 1992b; Gould & Maynard, 2009; Taylor, Gould, & Rolo, 2008; Greenleaf et al., 2002; Hodge & Hermansson, 2007; Orlick & Partington, 1988), perceived control (Hanton & Connaughton, 2002), and past competition experience (Gould & Maynard, 2009; (Gould et al., 1992, p. 391).

This discussion addresses the overall phenomenological experience of competitive state anxiety for female beach volleyball players at the 2012 Olympics, while it investigates their specific antecedents to anxiety, the subsequent coping mechanisms they used to manage their anxiety, and the pathway they used to interpret their anxiety direction as being either facilitative or debilitative towards performance. As this research was conducted within a phenomenological paradigm, this discussion also addresses Nesti's (2011) demand to use the athlete's phenomenological experience as the starting point for competitive anxiety research. The use of phenomenology both expands the understanding of as-lived anxiety and provides practical means for athletes to both manage and positively interpret their anxiety in the field.

### **Anxiety Antecedents**

#### **Distractions and Anxiety Antecedents**

Olympic studies to date have pointed to the need for Olympic athletes to prepare psychologically to manage the unique and amplified distractions of the Olympic Games (Gould & Maynard, 2009; Greenleaf, Gould, & Deffenbach, 2001; Gould, Eklund, & Jackson, 1992a,b; Orlick & Partington, 1988). Researchers have shown that due to the nature and expectations surrounding the Olympics, Olympic athletes experience significant anxiety from multiple factors that can be categorized as personal, situational, and environmental (Gould & Maynard, 2009). As a result, Gould and Maynard (2009) stated that "it is clear, then, that Olympic athletes must

be prepared to cope with high stress that arises from [these] personal, situational, and environmental factors” (p. 1400). If Olympic athletes can be made aware of what those potential anxiety-inducing factors might be, they could then have the opportunity to prepare for, look for, and plan effective strategies for potential anxiety antecedents in their own preparation. This could help athletes prepare themselves to either manage them earlier or avoid them altogether, thus potentially interrupting potential negative anxiety-inducing responses before they even start. Current studies, however, have not fully studied or acquired relevant detailed information about the common anxiety antecedents experienced by high performance athletes at the Olympics. For this reason, the first minitour research question of this study is, what precipitated the athletes’ experience of anxiety at the Olympic Games?

Although each athlete is unique with respect to what may initiate his/her anxiety response mechanism, due to a multitude of interrelated potential performance factors (Gould et al., 2002; Orlick, 2008; Taylor et al, 2008), there is something valuable to be learned from what causes anxiety in Olympians as well as what frees them to successfully negotiate through potential anxiety in the Olympic performance context. By learning vicariously from what previous Olympic athletes have identified as potential stressors, athletes preparing for upcoming Olympic competition can ready themselves for these stressors and better prepare for their unique Olympic experience. In their review paper on athlete psychological preparation for the Olympics, Gould and Maynard (2009) identified “that successful athletes and teams drew energy from the Olympic excitement while avoiding distractions [like] media, transportation, dealing with families, [and so on]” (p. 1402). In other words, it is imperative that Olympic-level athletes who are performing in this Olympic context be aware of their anxiety antecedents to maximize their success at the Games. This heightened awareness was definitely the case with the athletes in this

study, as those who were the most successful were best able to identify, manage, or focus through their distractions and subsequent anxiety antecedents.

Gould, Greenleaf, Chung, and Guinan (2002) recognized that the factors influencing athlete performance at the 1996 and 1998 Olympic Games were diverse, at times interconnected, and multifaceted, including: competition factors (e.g., possessing the tools to deal with distractions), team factors (e.g. team cohesion), coaching factors (e.g., how the coaches responded to stressors), family and friend factors (e.g., providing social support), and environmental factors (e.g., transportation and/or media concerns). While my study was not designed to provide an in-depth examination into athlete performance, it is interesting to note that these same performance factors were identified in my study as being antecedents of anxiety (as seen in Table 3), and, when not adequately attended to, to eventual poor performance. Thus, there appears to be a link between anxiety and performance outcome, in that the management and interpretation of anxiety could be a potential moderator of eventual performance.

In their desire to better understand the causes of athlete stress at the Olympics or World Championships, Woodman and Hardy (2001a) developed a theoretical framework to differentiate between stressors that arose from the athlete's performance (competition stressors), as distinct from those that resulted from logistical and procedural stressors that happened outside of the competition (organizational stressors). To add to Woodman and Hardy's (2001a) framework which accounted for what they called "personal issues" at the "organizational stressor" level, Birrer et al. (2012) developed a unique "personal stressors" category (e.g., anxiety antecedents personal to that specific athlete) that they felt was missing from the framework Woodman and Hardy (2001a) provided. Birrer and colleagues (2012) also identified

that research into personal stressors is limited and should be researched in more depth to better comprehend the full gamut of anxiety antecedents experienced by the Olympic athlete.

### **Organizational Stressors**

The organizational stressors identified in my study were: (1) Olympic environment (e.g., overall Olympic environment, transportation, and weather); (2) policies and procedures (e.g., pre-match etiquette and procedures, last minute communication from Olympic officials, and coach/therapist staying outside village); and (3) fanfare - media (e.g., media and social media presence, fan and audience expectations).

### ***Olympic Environment, Policies, and Procedures***

Gould et al. (1999) conducted different studies to investigate why certain US teams at the Atlanta Olympics met or exceeded what was expected of them, while others underperformed relative to expectations. These researchers argued that transportation was one organizational factor that effected athlete performance at the Games. Specifically, trouble-free Olympic transportation supported successful athlete performance, while transportation breakdowns led to increased anxiety and poorer performance for Olympic athletes (Gould & Maynard, 2009). Such was the case for both Walsh and Cook, and to a small extent, Lessard as well. Walsh's biggest anxiety antecedent at the 2012 Olympics was transportation (like previous Olympic and World Tour competitions), as the lack of transportation reliability at the Games left her unable to properly prepare for pre- and post-training and competition. Transportation reliability also caused anxiety for Cook, as her partner Hinchley was staying with her family outside the Olympic village and so Cook was anxious Hinchley would not make it to the village in time for games and practices. Lessard's concern was similar to that of Cook, as her coach and therapist



also had to rely on the erratic Olympic transportation and had to travel in to the village for training and competition.

Weather and the policies related to weather were also an Olympic stressor for one athlete in this study. Olympic athletes in Gould and Maynard's (2009) review of Olympic performance also experienced stress due to weather and weather policies: "coaches and athletes felt that changes in weather conditions did adversely influence performance" (Gould & Maynard, 2009, p. 1404). In the current study, Lessard explained that the cold weather conditions caused her feet to go numb, yet the weather uniform policies specific to the Olympics did not permit her to wear warmer clothing, undoubtedly because of TV ratings.

Woodman and Hardy (2001a) classified all stress induced by policies and procedures of the organization (in this case the Olympic organization or the athlete's sporting organization) under the category "organizational stressors"; however, neither they nor other Olympic researchers have yet to explicitly identify what these stressful Olympic policies and procedures might be. Looking at the present study, one could identify the following potential organizational stressors that could be studied further in future research: (1) Pre match-etiquette and procedures (e.g., procedure to walk onto the stadium court prior to the match, weather-specific uniform policies), last minute communications from Olympic officials (e.g., match-time changes at the last minute), and Olympic village policies and procedures (e.g., coach/therapist not permitted to stay in the village or do therapy in the Olympic medical facility).

### ***Fanfare - Media and Fans***

The "fanfare" anxiety antecedent was the third organizational stressor identified in this study and it included media and social media presence as well as fan and audience expectations. Both Gould and Maynard (2009) and Orlick and Partington (1988) identified media as a key

Olympic stressor, indicating that the athletes who had the best media management plans and media training were least influenced by this anxiety antecedent. Greenleaf et al. (2012) explained that eight of the 15 Olympic athletes they interviewed viewed media as a negative performance factor. They explained that on the one hand the media were beneficial to increase visibility (especially for those athletes who do not regularly attract media attention), but on the other, the media were also a hindrance when they singled out athletes (Gould et al., 1998) and took too much time away from the athletes' other responsibilities (Gould & Maynard, 2009).

Under the “fanfare” theme, spectators (both those who were virtual and in the stadium) seemed to influence athlete anxiety in this current study. This was consistent with the literature on elite athlete anxiety, as in 1999, Gould et al. performed focus group interviews with a total of 23 Olympians and 10 Olympic coaches to determine the factors that influenced the excelling or failing of athletes at the Atlanta Olympics. One finding was that the teams who met/exceeded performance expectations “mentioned spectators and crowds as a positive performance influence” (Gould et al., 1999, p. 383).

Two of the six athletes in the current study (Ludwig and Lessard) spoke in depth about the influence of media on their performance and identified it as a source of their anxiety. Specifically, Ludwig and Lessard cited constant media attention, the influence of social media's twenty-four hour presence and worldwide forum, and media viewership as the biggest stressors. In contrast, the two least Olympic-experienced athletes (Palmer and Li Yuk Lo) only spoke briefly about their concern about underperforming in front of a larger, global, media-fed audience; the infrequent media mentions indicate that their low-profile status did not attract as much Olympic media. Conversely, despite their huge media following at the 2012 Games, both Olympic medalists and multi-year Olympians (Walsh and Cook) did not speak at all about the

media, the fans, or the audience. Research suggests this was quite possibly because these experienced Olympians had received media training and had a specific media plan (Gould & Maynard, 2009), although the reason why was not specifically addressed in this study.

### **Competitive Stressors**

Besides experiencing organizational stressors, the female beach volleyball players also experienced competitive stressors at the 2012 Games: (1) Managing expectations – under pressure (e.g., Olympic pressure, ‘sideout’ pressure, pressure to perform and advance); (2) managing expectations – be my best (e.g., focus on being the best on the court); and (3) team dynamic – in-game pressure (e.g., pressure experienced by the team).

### ***Managing Expectations***

Orlick and Partington (1988), in their seminal research on Olympic performance, identified “performance blocks” that prevented athletes from reaching their potential at the Games. For example, Orlick and Partington (1988) identified that those athletes who underperformed were “blown away by [the] distractions” (pp. 122-123) at the Olympics, including all of the frenzy surrounding the Games. As Orlick and Partington (1988) explained, “These athletes had prepared well for performing their physical skills, but they were not prepared for the multitude of distractions” (p. 123). In other words, the Olympic pressure got to them, which is understandable given that an athlete’s career culminates in this one competition. Such was the case for Palmer, who was physically prepared for the Games, having trained in the strict Australian Institute of Sport, but who simply was not prepared for the overwhelming pressure of her federation and the trickle-down effect of that pressure from her team and from herself. She, like Li Yuk Lo, also felt the mounting pressure on serve receive, especially in tight moments in the match.

In fact, every athlete in this study experienced being under pressure and wanting to be her best at one moment or another during the 2012 Olympics. Ludwig explained Olympic athletes only have the two weeks of the Games to perform at their best after four years of working hard for that opportunity. The prospect of not making it out of her pool into the play-off round exuded the most pressure on Ludwig, and as soon as she achieved that milestone, she felt the pressure subside. In contrast, Walsh's anxiety mounted as the Games wore on, possibly due in part to her desire to win gold in London (and thus defend her previous two Olympic victories) coupled with her relentless need to always "be her best". Cook was most concerned with having a stellar last performance prior to retirement, while both Li Yuk Lo and Palmer were torn between playing up to expectations and suppressing their own self-criticisms of their performance.

### ***Team Dynamic – In-Game Pressure***

Gould et al. (1999) revealed that the underperforming Olympic teams in their study had more apprehensions about team cohesion and trust. Such was the case for Cook, whose team dynamic was tested by her partner's decision to stay with her family outside of the Olympic village, which left Cook apprehensive of Hinchley's commitment and focus at the Games. When the game was on the line and the pressure was on, her team dynamic would breakdown mid-match. Both Palmer and Li Yuk Lo also experienced their team dynamic as a stressor. Palmer experience was that she was the scapegoat of all team failures and her team criticized her weight, so she was conscious about what she ate around her team. On the other hand, Li Yuk Lo was not able to manage all the distractions of the Games, so she tried to do it all herself versus working with her partner to deal with her overwhelming feelings and inexperience.

## **Personal Stressors**

In addition to experiencing organizational and competitive stressors, the Olympians in this study experienced the following personal stressors: (1) Lack of control – injury (e.g., athlete or partner injury); (2) fanfare – family (e.g., organization of tickets and accommodations); (3) Team dynamic - cohesion (e.g., poor team communication); and (4) Anxiety Beliefs (e.g., the meaning the athletes' assign to anxiety).

### ***Injury and Lack of Control***

Greenleaf et al. (2001) conducted a study in which 15 Olympic athletes were interviewed about their experience and the positive and negative factors that influenced their performance. Six of the 15 athletes interviewed indicated that injury negatively effected their performance with one of the athletes describing “that [being injured] was an obstacle that was mentally [and physically] scary... because you were just afraid... because it’s kind of painful” (p. 174). Two of the Olympic beach volleyball players in this study (Walsh and Ludwig) had to cope with either their own or their partner’s injury at the 2012 Olympics. Ludwig seemed to experience greater stress due to her partner’s injury than Walsh did due to her own, possibly because Walsh had a greater perception of control over her injury, whereas Ludwig had little perceived control over her partner’s injury. Unlike in the study by Greenleaf et al. (2001) where the athletes described the negative effect of sustaining an injury in the lead up to the Olympics on athlete confidence and training, none of the athletes in the current study spoke about an injury prior to the Olympics.

### ***Fanfare - Family***

The athletes in this study described having their family and friends at the Olympics as a positive performance factor, except when it came to managing the logistics of accommodation

and stadium tickets, as their families provided strong social support. The same was seen in Gould et al.'s (1999) report on Olympic athlete performance factors, in fact they distinguished that “less successful teams experienced more stress from distractions from securing tickets for family and friends or external pressure. More importantly, the less successful teams typically did not have plans to deal with these [family and friend] distractions” (p. 389). Although this study did not delve into whether or not these athletes had specific family management plans in place, Walsh did share that she and her husband had created a detailed plan to ensure her two sons were looked after at the Games and Lessard explained her mom stayed home due to the stress surrounding the logistics of the Olympics.

### ***Team Dynamic - Cohesion***

Strong team cohesion also allows for social support within the team dynamic, as Gould and Maynard determined in their 2009 review study on Olympic performance. Gould and Maynard (2009) explained, “strong team chemistry and coach-team cohesion were critical [to the team's success], because teams that had such characteristics reported positive performance impacts and teams lacking these attributes reported negative performance impacts” (p. 1404). Such was the case with the athletes in the current study. Walsh, Lessard, and Ludwig all experienced team cohesion as a precursor to their best performance, despite anxiety. In contrast, for the other three athletes their team dynamic was a stressor. Furthermore, coach-athlete communication has been exposed as a critical factor for peak performance (Gould & Maynard, 2009). Such was the case with Palmer and her coach. Their exchanges were experienced by Palmer as one-sided, judgmental, and hurtful; whereas in the case of Walsh, Lessard, and Ludwig, they described their coach/athlete communication as supportive, inclusive, and fun.

*Anxiety Beliefs*

“Anxiety beliefs” was the one anxiety antecedent identified in this study that was not mentioned anywhere in the previous anxiety literature. One simple reason could be that there have been no phenomenological studies to date concerning Olympic athlete anxiety in particular. According to phenomenology, the athlete’s experience of the world is determined by the meaning he/she assigns to his/her experience (Dale, 1994). In this case, the athlete’s belief of anxiety causes and prevention would in fact be the meaning he/she assigned to his/her anxiety experience. For example, Walsh believed transportation would be her biggest stressor at the Games, and so it became her predominant stressor (as her context for the environment of transportation was anxiety and stress). Furthermore, Li Yuk Lo believed her lack of Olympic experience would hold her back at the Games and this belief was a source of stress for her (as it was something she could not control or change). Lessard, who did not hold the same belief about her experience, was not anxious about her lack of Olympic experience and instead was able to deal with her anxiety (even though she too had never competed at an Olympics). Regarding these facts, the age-old question comes to mind: “Which came first the chicken or the egg?” Only this time, the question becomes “Which came first the anxiety experience or the meaning the athlete assigned to it?” Further phenomenological research is required to better understand the relationship between an athlete’s beliefs and his/her eventual anxiety experience and performance, as phenomenology addresses the meaning the athlete assigns to his/her experience.

Stressors and distractions appear to be inevitable for athletes who compete at the Olympics. In other words, at the Olympic Games anxiety is assumed; whether that is due to environmental factors like the weather and transportation, team factors like cohesion and injury,

organizational factors like Olympic policies and procedures and the media, competitive factors like managing expectations and pressure, or personal factors like family and anxiety beliefs. As identified by Gould and Maynard (2009), the literature is so far unanimous in its findings “that Olympic athletes must be prepared to deal effectively with stress that results from an array of personal, situational, and environmental factors” (p. 1400). Researchers, performance consultants, coaches, and athletes alike must strive to better understand what it looks like to “deal effectively with stress” (Gould & Maynard, 2009, p. 1400), especially since anxiety is expected at the Olympics and since studies have shown that athletes can be anxious and still perform at their best (Gould et al., 1992).

### **Anxiety Management**

#### **Anxiety Management and Performance**

If anxiety is inevitable at the Olympics and if studies indicate that Olympic athletes must be able to cope with an assortment of organizational, competition, and personal stressors (Gould & Maynard, 2009) to perform as expected at the Games, then the next logical question would be the second mintour question for this study would be: “What did the female Olympic beach volleyball players in this study do to cope with the anxiety of Olympic competition?”

In the beginning of anxiety research, researchers associated any heightened anxiety with poor performance, which was confirmed by the inverted-U hypothesis (Woodman & Hardy, 2001): performance would increase along the graph of an inverted U up to a point (the apex or “optimal arousal”), and then it would decline. However, this model has since been widely discredited due to its simplicity in dealing with such a complex processes as athlete anxiety (Woodman & Hardy, 2001b). New models, including Hardy’s (1996) catastrophe model of anxiety and performance were introduced to account for, and better explain, the multiple factors



that interplay to achieve the anxiety phenomenon (Woodman & Hardy, 2001b). Regardless of the pathway to anxiety, it has been shown that certain anxiety management protocols both decrease athlete anxiety and increase an athlete's capacity for performance (Durand-Bush, & Salmela, 2002; Gould, et al., 1992a; Gould et al., 1993a; Gould et al., 1999; Gould, Jackson, & Eklund, 1992b; Gould & Maynard, 2009; Haberl, 2007; Taylor, Gould, & Rolo, 2008; Greenleaf et al., 2002; Hodge & Hermansson, 2007; Orlick & Partington, 1988).

One way in which anxiety management protocols help athletes cope with anxiety is to minimize their anxiety symptoms. The idea is simple: If the experience of anxiety is reduced, the athlete can attend more to the task at hand (versus his/her anxiety) and there is a greater opportunity for optimal performance. According to the catastrophe model of anxiety and performance, which explains that a decrease in cognitive anxiety would allow room for increased physiological arousal, these anxiety management techniques would work by reducing cognitive arousal to a level in which the athlete could then access his/her ideal performance state (Woodman & Hardy, 2001b). A variety of anxiety management tools and strategies have been identified to reduce anxiety and/or enhance performance: Emotional control, self-talk, imagery, mental preparation, team cohesion, commitment to excellence, developed plans and routines, and appropriate physical preparation (Gould et al., 1992; Haberl, 2007; Orlick & Partington, 1988). Taylor et al. (2008) identified, "emotional control, self-talk, and imagery [to be] the strongest predictors of successful Olympic performance" (p. 32). Orlick (2008), from a lifetime of experience working directly with high performance Olympic and world class athletes, identified focus, and more specifically a positive and fully connected focus, to be the strongest predictor of successful Olympic and world class performance.

### **Anxiety Prevention**

#### ***Anxiety Avoidance***

In this study, athletes identified that anxiety prevention was the first protocol they used to manage their anxiety, the idea being that if they could prevent the anxiety then they would not have to deal with its possible implications. The athletes in this study used two anxiety prevention protocols: anxiety avoidance and planning, the former of which was not found to be effective as the stressor would not go away simply by avoiding it; instead, it would show up stronger at a later point. Interestingly, in this study only the two least experienced and least successful athletes attempted anxiety avoidance, while the rest of the athletes saw anxiety as something to be expected and even embraced as part of the Olympic experience. There are no studies that address anxiety avoidance as an anxiety management tool, likely because it only intensifies the symptoms of anxiety, as was demonstrated in this study.

#### ***Planning***

In contrast, planning did have a positive effect on anxiety dissipation and overall athlete performance. In particular, Walsh and Palmer used planning not only as a pre-competition routine, but also to help prevent anxiety and create the opportunity for peak performance. Planning seemed to help by introducing a perception of control over their environment and circumstance. Palmer noted that her trust in the team's game-plan, for example, allowed her symptoms of anxiety to dissipate, but that anxiety from other factors would often prevent her from remembering to follow the game-plan. In other words, as long as Palmer could remember to follow the plan, her anxiety would decrease and her opportunity for performance would increase; however, when she forgot to do so, her anxiety increased and her performance decreased as a result. These findings are consistent with that of Gould et al.'s (1999) research

that investigated the factors influencing peak and sub-par US Olympic athlete performance at the Atlanta Olympics, in which they identified that athletes who failed to meet expectations either did not plan or did not execute that plan at the appropriate time. Outside of Palmer and Walsh, none of the other athletes in this study spoke specifically about creating a plan to prevent anxiety.

### **Well-Developed Mental Skills**

Every athlete in this study had at least a few well-developed mental skills to support their anxiety management and best performance; however, what differentiated the best and most experienced athletes from the rest was the diversity and mastery of their well-developed mental skills, which seemed to have resulted from their extra practice over the years. In fact, a significant discovery of Orlick and Partington's (1988) Olympic athlete research was that:

Many of these highly successful athletes felt that they could have reached the top much sooner if they had worked on strengthening their mental skills earlier in their careers.

Some mentioned that they had had the same technical and physical skills honed to perfection four years before becoming world champions, but they had not yet learned how to hold their best focus in important competitions. (p. 119)

Furthermore, Taylor et al. (2008) stated that the US Olympic medalists in their study more consistently utilized their mental skills in training and competition than those athletes who did not medal at the Olympics. The same was the case with the athletes in this study, as the most successful were also those who regularly employed mental skills in all areas of their life. For these athletes who had developed mental skills, it was only when they were challenged by a situation for which they did not have a developed mental tool that they noticed their performance falter. As an example, Cook had a toolbox full of well-developed mental tools that served her

well in managing anxiety in all areas of her life. The one exception was the dysfunctional relationship she had with her partner at the Games, for which she did not have a developed tool. As a result, Cook experienced anxiety and a reduction in performance relative to that area only; but, due to her ability to cope with anxiety in all other areas, she was still able to perform well at the Games. Cook's inability to cope with the stress surrounding her partner's relationship could also have been due to her resultant lack of mental skill automaticity in that specific situation. According to Gould et al. (1993), it is not the size of an athlete's mental skill toolbox but rather the automaticity of mental skill employment that is the determining factor of Olympic performance. This underdeveloped mental skill processing lag-time could also have been one of the factors that influenced the athletes in this study who were less trained in the development and utilization of mental skills (e.g., Palmer and Li Yuk Lo).

In contrast, those athletes who possessed well-developed mental skills (e.g., Walsh, Ludwig, Cook, Lessard) found themselves more mentally ready to perform in Olympic competition. The ability for well-developed mental tools to bring about mental readiness becomes highly relevant when paired with Orlick and Partington's (1988) realization that "of the three major readiness factors rated by the athletes – mental, physical, technical – mental readiness provided the only statistically relevant link with final Olympic Ranking" (p. 129). In other words, no matter how much the athlete prepared physically or technically for his/her competition, according to Orlick and Partington (1998) the athlete's mental preparation would be the limiting reagent in his/her subsequent performance outcome. Such was the case with Palmer who was technically a very strong athlete, but who lacked the mental skills to bring her best performance at the 2012 Olympics, especially with all the team distractions she experienced. Additionally, Ludwig shared that despite what could be regarded as a successful finish and

notwithstanding her physical and technical preparation, she felt she had underperformed at the Games due to mental factors that she described as specific to, and always present at, the Olympic Games. Ludwig also pointed out that she did not put as much emphasis on training her mental skills as she did on mastering her physical or technical skills. This lack of consistent focus on mental skill development could have resulted in her underperformance at the Games according to Orlick and Partington's (1988) assertion that mental preparation had the biggest effect on eventual Olympic performance.

Conversely, by employing consistent, dedicated mental skill training, like Cook, Walsh, and Lessard, it is possible for an athlete to cope effectively with anxiety and perform at her best in any circumstance (Gould et al., 1992a; Gould et al., 1999; Orlick Partington, 1988; Orlick, 2008; Taylor et al., 2008), since "mental skills are important in producing superior athletic performance" (Gould et al., 1999, p. 373). If these mental skills are not adequately trained, as was the case with 30% of the Olympic wrestlers in Gould et al.'s (1992a) study and with two of the six athletes (e.g., Palmer and Li Yuk Lo) in this study, then the athlete has a greater chance of having a less than successful performance during their most important Olympic match. Even Cook explained that this was the case in tight matches when she lacked the mental skills required to cope with her difficult team dynamic, which ultimately forced them to underperform despite all of her other mental tools.

Mental skills or focusing skills have been identified throughout Olympic athlete and elite athlete performance literature as being beneficial to peak performance, due in part to their ability to support athlete anxiety management. The primary mental skills discussed in the literature are: (1) Pre-competition plans and routines, (2) imagery (and competitive simulations), (3) thought control (e.g., positive self-talk), (4) emotional control strategies (e.g., breathing), (5) goal

orientation, and (6) work with a sport psychologist (e.g. mental/focusing skill development support) (Gould & Maynard, 2009; Gould et al., 1992a,b; Gould et al., 1999; Greenleaf et al., 2001; Orlick, 2008; Orlick & Partington, 1988; Taylor et al., 2008). The Olympic athletes in this study used all of these mental skills either in whole or in part.

### ***Routines***

Pre-competition plans or routines have been shown to help the athlete perform well (Gould et al., 1999; Orlick & Partington, 1988), presumably by reducing the anxiety associated with the unknown. Orlick and Partington (1988) showed that of the 75 athletes they studied, those who had the most consistent and practiced pre-competition routines were also the most successful. This was also the case with all of the athletes in this study, as the top female beach volleyball performers at the 2012 Olympics (and consequently those who experienced the least anxiety in competition) were those who had the most detailed and/or practiced routines (see Table 4 for a complete list of routines by athletes). One important point to note is that although Lessard, who I included in the category of successful performers in this study, did not have a specific pre-planned pre-competition plan, as they had historically made her more anxious, she had practiced a set pre-game routine for years prior to the Olympics that she performed each match without labeling it as a routine or feeling that she had to strictly adhere to the same detailed routine (it was more of a positive and yet flexible routine). In contrast to Lessard, who did not consciously prescribe to a specific detailed routine, Walsh had a plan for everything, including exactly what she did in the lead-up to the match. Walsh also explained that she would do the same routine without fail, regardless of the ranking of the team against whom she was training or competing.

The most successful and most experienced athletes in this study (namely Walsh, Ludwig, and Cook) all emphasized the importance of reliably observing and practicing their routines in order to effectively manage their anxiety. This discovery is consistent with Olympic research that indicates that teams who performed to, or surpassed, their potential both spoke more frequently about, and stressed the importance of consistent application of, their routines (Gould et al., 1999). The Olympic performance literature also revealed that unsuccessful athletes tended to deviate from their pre-competition plan at the Olympics (Gould & Maynard, 2009), as was the case with both Palmer and Li Yuk Lo at the 2012 Olympics who were distracted from their routines. Palmer was distracted because of her strained relationship with her team and her own performance expectations and Li Yuk Lo was distracted because of the unfamiliar Olympic policies and procedures. As a result, neither followed their regular routines at the 2012 Olympic.

### ***Imagery***

Imagery was another mental skill discussed in the Olympic literature as being at the source of successful Olympic athlete performance (Gould & Maynard, 2009). In fact, Taylor et al. (2008) were so bold as to call imagery one of “the strongest predictors of successful Olympic performance” (p. 32), a statement with which Orlick & Partington (1988) agreed. Orlick’s (2008) subsequent ongoing work with many Olympic athletes over many years still supports the importance of positive imagery; however, he now believes that the biggest performance separator is the athletes’ skills for carrying a positive and fully connected focus into their high performance events for the duration of their performance. All but one athlete in this study described using imagery to some extent and just like the athletes in this study, the most successful Olympians studied by Orlick and Partington (1988) “had very well developed imagery skills and used them daily” (p. 112). The two least experienced, most anxious, and least

successful athletes in this study either did not use imagery at all, or simply used it to practice game scenarios in their mind; it is interesting to note that these same two athletes had a hard time producing a positive and fully connected focus.

On the contrary, the more experienced, high performing athletes in this study took full advantage of the power of mental imagery to help them best cope with their anxiety. Outside of visualizing game scenarios in their mind, they were also creative with their use of imagery, including: visualizing their intended outcome (e.g., Cook and Lessard visualizing themselves winning matches), watching inspirational video clips of past performances while imagining future success (e.g., Walsh watching the highlight video of past Olympics with her partner), ‘imagining’ past positive feelings and successes (e.g., Ludwig using the term ‘imagining’ to explain how she would see images of past wins and positive experiences in her mind), and/or visualizing with eyes open (e.g., Cook surrounding herself with visual reminders of London, like the British double-decker bus coffee mug that she drank from everyday, so that she was surrounded by her goal). Cook also attributed the power of imagery as the key factor in both her winning Olympic Gold at home in Sydney and her unexpectedly qualifying for her fifth Olympics at the last minute.

### ***Mental Strategies to Reduce Anxiety***

In addition to the mental imagery strategies listed above, four of the six female Olympic beach volleyball athletes in this study described fun strategies they used to cope with anxiety both before and during Olympic competition. Cook explained that she would use a physical trigger, like a handclap or a deep breath, as a mental strategy or focus cue to help her focus back on the task at hand. In addition, Cook and Lessard used time-wasting games to slow down the match, including wiping sand off their bodies, filling in holes on the court, and speaking to the



referee (although these time-wasting games were arguably more challenging at the Olympics due to TV programming rules). Lessard also described two other mental strategies she played with herself. In the first game she would mentally place some fun object on the court (like a container of Häagen-Dazs ice cream) and aim for that object to help her to hit the spots on the court without pressure. Her second mental strategy was to mentally cuddle her dog when she was tense (this strategy or focus cue would help her refocus on how she wanted to feel). Ludwig too would use mental pictures of past positive experiences to both calm her down and remind her of how she wanted to feel on the court, while Li Yuk Lo would use verbal technical cues to focus back on what she needed to do versus on whatever was stressing her.

Although the current Olympic athlete anxiety literature does not describe specific games that athletes play to reduce their anxiety, I thought it was important to discuss the ones identified in this study for two unconnected reasons. First, given that this is a phenomenological study, I wanted to report the complete, as-lived experience of the athletes in this study. Secondly, by sharing the specific mental strategies of Olympic athletes, coaches and sport psychology consultants may uncover new ideas that they could mimic to maximize their performance.

### ***Meditation, Prayer, and/or Breath***

In this study, athletes identified that the use of meditation, prayer, and/or breath made a significant difference in reducing their anxiety symptoms. In the current Olympic and/or elite athlete anxiety research, there is no mention of meditation, prayer, or breath as a successful mental skill to minimize anxiety, nor is it mentioned in the Olympic performance literature. However, very current sport studies on prayer, meditation, and/or breath have demonstrated that athletes who utilize these practices exhibit an increased ability to concentrate and positively manage their anxieties both in sport and in life (Kudlackova, Eccles, & Dieffenbach, 2013),

enhanced self-efficacy, confidence (Pineau, Glass, Kaufman, & Bernal, 2014) and overall flow (Pineau et al., 2014; Cathcart, McGregor, & Groundwater, 2014), and improved standing dynamic balance (Alabdulwahab, Kachanathu, & Oluseye, 2013), which could be perceived as a physical manifestation of the athletes' centredness. Furthermore, relaxation skill research by Kudlackova et al. (2013) on 150 recreational, college, and professional athletes also indicated that collegiate and professional athletes were more inclined to use consistent relaxation protocols including meditation, prayer, and breathing.

Orlick (2008) identified that the top athletes were best at becoming relaxed and completely connected to and centred on the present moment task. Orlick (2008), in his pioneering book *In Pursuit of Excellence*, dedicated a full chapter to "Zen experiences" or the "concept of oneness" (p. 136), which is comparable to that of mindfulness, referencing the *Tao Te Ching* by Lao-tzu as the originator of modern Zen philosophies. In his book, Orlick (2008) explained, "one of the greatest lessons that I have learned from great performers is the oneness or absolute connection that they have with what they are doing, seeing, feeling, or creating" (p. 138).

Meditation, prayer, and/or breath has not been extensively researched as a tool to help Olympic athletes manage the anxiety of their Olympic experience. However, in this current study the phenomenological method allowed this theme to emerge organically from the athlete data, which is consistent with Nesti's (2011) contention that future research must from the athletes' experience instead of taking what is already known and trying to create studies to prove its validity. In the current study, the athletes' phenomenological experience indicated that the athlete's ability both to centre herself and discover mindfulness through the use of meditation, prayer and/or breath, directly affected that athlete's experience of anxiety and her subsequent

performance at the 2012 Games. For example, three-time Olympian Kerri Walsh explained that the five minutes she dedicates to breathe and pray prior to a match is “the most important piece of the puzzle” for her. The findings in my study support current research on mindfulness, prayer and/or breath and indicate that anxiety intensity could be reduced using these tools, especially in the Olympic context, which has its unique set of anxiety initiators.

### ***Mental Coaching***

In addition, Gould and Maynard (2009) also identified the importance of working with a sport psychologist to develop solid mental skills, as the successful Olympians in their study had used a sport psychologist to assist them in mentally preparing for the Games while the unsuccessful athletes had not, and they also did not spend the time on their own to develop their mental skills. The same can be said about the athletes in this study, as those who had the most well developed mental skills (and also those who were the most successful) were those who currently worked with a mental coach or had worked with one in the near past. Cook was adamant in her declaration that most athletes do not spend enough time training their minds and Walsh even went so far as to declare that her performance psychologist was responsible for saving her marriage! In contrast, both Li Yuk Lo and Palmer did not have a mental coach, nor did they have the well-developed mental skills or strategies to best cope with their unique anxiety antecedents at the 2012 Olympics.

### **Positive Focus**

The next anxiety management tool identified by the female Olympic beach volleyball players in this study was “positive focus”. When the athletes in this study were focused on the “present moment” and on what they knew to do (the “front of mind” theme), they reduced their anxiety experience and performed their best. Orlick and Partington (1988) similarly identified

that focus was one of the biggest factors effecting Olympic performance, undoubtedly because the athletes in their study took the time to both determine and consistently achieve their best focus. On the topic of best focus, Orlick and Partington (1988) unveiled:

In almost all cases the [athlete's] best focus was one that kept [him or her] connected to what he or she was doing (his or her job)... [and] the worst focus was one in which the athlete was dwelling on factors over which he or she had no direct control, such as other competitors, final outcome, or other distractions. (p. 116)

In other words, the Olympian's best focus was when he/she was focused on the present moment, and his/her worst focus was when he/she was not. It was the Olympic athlete's best focus that allowed successful performance. The same was identified in this study, as every athlete in this study played their best when they were able to access this present-moment, best focus.

Furthermore, the athletes who were more experienced and had more refined focus plans – like Cook, Ludwig, Walsh, and Lessard – were better and more consistently able to cope with their anxiety and bring forth their best performance.

### ***Front of Mind***

Similarly, by keeping their best focus at the “front of their mind”, versus attending to the distractions around them, these athletes were also able to best manage their anxiety and perform at their peak. What worked best for the athletes in this study was to purposefully focus on the game, technical cues, their strengths, enjoying the moment, or being relaxed. By keeping these positive focuses (instead of their resentments or frustrations) at the front of their mind, the Olympians in this study better managed their anxiety and performed their best. These findings are again consistent with the Olympic performance literature, as Gould et al. (1999) demonstrated that the “teams that successfully met expectations more often reported a sole

performance focus [their “front of mind” focus], total commitment, and the ability to reframe negative events in a positive light” (Gould et al., 1999, p. 386).

### **Perspective**

#### ***Reframing***

As a result of their ability to positively reframe and adapt to negative situations and perspectives, the successful Olympic athletes in Gould et al.’s (1999) study mentioned few negative performance factors when recalling their Olympic experience. The same trend was seen in this study, as the successful athletes who best managed their anxiety were also those who had positive outlooks on their Olympic environment (e.g., describing the Olympics as “exciting” and something to be “cherished”), while the athletes who experienced great anxiety used negative descriptors like “overwhelming” or “overload”. Moreover, the athletes in this study who chose to reframe their negative thoughts and experiences had a diminished experience of anxiety (e.g., Lessard reframed her feelings of fear and intimidation to fun and excitement prior to her match versus Russia).

In addition, Cook took reframing (a tool she practiced in every area of her life) to the next level by intentionally engaging in anxiety-inducing situations (e.g., skydiving, waking on hot coals) to purposefully “expand her comfort zone”, so that her Olympic experience would pale in comparison. As a result of her expanded comfort zone and the time she spent training her anxiety management tools off as well as on the court, Cook claimed she was rarely anxious in competition.

Outside of reframing, Lessard and Walsh also used a “game-time” perspective to support them in coping with anxiety. For Lessard, her “game-time” perspective involved treating every practice and every game as if it were “game-time”, so there was no differentiation between the

two, whereas for Walsh, a “game-time” perspective was achieved right before every match, when she knew it was time to just play and trust that she had managed the anxiety beforehand. The only athletes (Palmer and Li Yuk Lo) who did not use mental skills to support a positive Olympic perspective were also those who were the most anxious and least successful at the Games.

No matter the athlete, it appears that, from a phenomenological vantage point, the meaning (the perspective) that the athlete assigned to their Olympic experience at any point actually dictated her perception of anxiety, and consequently her performance, in that moment. It is recommended that a phenomenological study be undertaken to better understand how the meaning athletes assign to their experience directly affects their experience and their affective states.

### **Team Connection**

The athletes in this study who had the most connected team were also those who best coped with anxiety at the 2012 Olympics: They were able to communicate openly and had great trust in one another. In contrast those athletes who did not have strong team unity also experienced more anxiety and were unable to cope with their anxiety as well, given that the isolation and pressure for the team added to the stress instead of taking it away. These findings are consistent with the Olympic performance research (Gould et al., 1999; Greenleaf et al., 2001; Orlick & Partington, 1988) and are aligned with Gould and Maynard’s (2009) assertion that “team cohesion and harmony factors were identified by athletes and coaches as critical for Olympic success” (p. 1403). Furthermore, the presence of the athletes’ family at the Olympics acted as a source of balance and comfort for all athletes in this study by providing them with a social support network, giving them an opportunity to get away from the Games, and reminding

them that no matter what happened, they were loved. Correspondingly, of the 15 Olympic athlete participants in the study by Greenleaf et al (2001), “nine athletes cited social support, including support from family and friends, as a positive performance factor” (p. 167).

### **Past Experience**

In their research on Olympic success, Gould et al. (1999) reported that the teams that met or exceeded expectations were also those that had the largest “database” of prior Olympic information and experience (Gould et al., 1999). The same can be said about the athletes in this study, as those who had previously competed at an Olympic Games were less anxious and performed better in 2012 than those who had not. Not only had their “past experience “allowed them to develop Olympic-specific anxiety management tools and know better what to expect, these athletes also had more time to train the automaticity of these tools. Similarly, Gould (1993) stressed that automaticity was the most important factor in effective mental skill execution.

Conversely, the least experienced athletes did not have the mental skills or the wherewithal to employ those skills to help them cope with their anxiety, which they outwardly blamed on their lack of experience. This finding is consistent Gould et al.’s (1999) review study that indicated that athletes who “did not meet or exceeded expectations more often identified a lack of experience as a negative performance factor” (p. 388). In addition, Hanton and Connaughton (2002) suggested that an athlete’s past experience enhances his/her perception of control, which could in turn both reduce the athlete’s anxiety symptoms as well as support him/her in interpreting that anxiety as being facilitative for his/her upcoming performance.

### **Anxiety Effects**

#### **Facilitative or Debilitative Anxiety Interpretation**

Anxiety is a given or “normal” at the Olympics. No matter the athlete’s experience, anxiety management protocol, or understanding of his/her unique stressors, the athlete is expected to at one point experience some kind of uncertainty or anxiety; but could that anxiety actually be beneficial or even necessary for performance excellence? Current Olympic anxiety research, along with the findings of this study, has indicated that Olympic athletes can be very nervous in competition and still perform at their peak (Gould et al., 1992). Orlick (2008) contended that performing your best in any high performance context depends on how you direct your focus. Most successful athletes have at times been very anxious; as was the case with Olympic gold medalist Walsh, who said that she was unrelentingly anxious throughout all three Olympics, yet won back-to-back-to-back Olympic gold medals. Walsh even referred to herself as a “living” example that anxiety can help performance.

If it is not the intensity of anxiety that is the deciding factor in an athlete’s performance, then what is it that allows the anxious athlete to perform despite his/her anxiety symptoms? Research has shown that it is the athlete’s interpretation of anxiety, or in the realm of phenomenology, the meaning the athlete gives to his/her anxiety symptoms, that most influences his/her performance outcome despite the anxiety (Gould & Maynard, 2009; Guillen, & Sanchez, 2009; Hanton & Connaughton, 2002; Hanton et al., 2005; Neil et al., 2012). In the words of Gould and Maynard (2009) in their review study of Olympic athletes’ psychological preparation: “These findings show that it is not just the strength of emotions or stress an [Olympic] athlete experiences that influences performance, but his or her interpretation of that emotion or stress as functional or dysfunctional” (p. 1400).



There is one other aspect that has its roots in phenomenological theory and has not really been explored in the research on anxiety interpretation to date: That an intricate combination of our individual past experiences gives us the lens through which we see and thus assign meaning to (interpret) our present experience (Dale, 1996). In other words, there is an interplay of past experience infused with current perception that has us interpret our own personal set of situations, environments, and experiences as unique to each one of us. In fact, two people could be in the same situation, in the same environment, arguably “living” the same experience, however, each person could have a completely different interpretation of his/her overall experience. What might be a source of anxiety for one athlete, therefore, will not be for another and what one athlete will easily interpret as anxiety symptoms (cognitive or physiological) that are facilitative for performance, will cause another athlete to become completely unglued (Hanton, Neil, & Mellilieu, 2008b).

Such was the case for the athletes in this study, as different situations and events triggered the unique interpretation of anxiety symptoms for each athlete. Subsequently, the third minitour question of this study is: Did the athletes’ interpretation of anxiety (as being either facilitative or debilitating towards performance) affect their performance at the 2012 Olympic Games and, if so, what factors most influenced the interpretation of their anxiety symptoms? The findings of this study indicate that the answer is yes: the athletes’ interpretation of anxiety symptoms did influence their performance at the 2012 Olympics. When an athlete interpreted her anxiety as facilitative of performance, she was able to perform as expected (and when she did not, she could not). Also, the athletes who were the most adept at choosing a facilitative anxiety interpretation in the widest set of circumstances were also those who finished at their best when compared to what was expected of them at the 2012 Olympics.

Furthermore, to answer the second part of the abovementioned minitour question, there were six main themes identified in this study where the athletes, regardless of the physiological implications, either interpreted their anxiety symptoms as being facilitative or debilitating towards performance, (see Table 5 for a complete list). All six of these anxiety interpretation themes can be categorized into what anxiety researchers have determined to be the five main factors that result in either debilitating or facilitative interpretations of anxiety: Past competitive experience, coping mechanisms (i.e., anxiety management), perceived control, trait anxiety, and self-confidence (Guillen, & Sanchez, 2009; Hanton & Connaughton, 2002; Hanton & Jones, 1999a; Hanton et al., 2004; Hanton, et al., 2005; Hanton et al., 2008a; Mullen, Lane, & Hanton, 2009; Neil et al., 2012).

### **Past Competitive Experience**

In general, athlete anxiety research has indicated that elite and Olympic athletes are more likely to interpret their anxiety symptoms as being facilitative towards performance due to their past competitive experience (Hanton & Connaughton, 2002). So too did the athletes in this study explain that their past experiences, or lack thereof, effected their interpretation of anxiety symptoms. The athletes with the most Olympic experience seemed to understand that “anxiety is a part of it”, that from the four-year lead-up, the worldwide expectations, the twenty-four-hour-a-day media coverage, and the unfamiliar surroundings at the Olympics comes unavoidable Olympic anxiety. Those with the most experience were able to accept the anxiety as a starting point, and then use their past experiences to further support the interpretation of their anxiety symptoms as facilitative towards performance at the Games.

For example, anxiety “facilitators” like Ludwig and Walsh used their past Olympic experience to support their positive anxiety interpretation. Ludwig described how past

experience had her identify that the exercise of talking about her feelings with her coach, mental coach, and/or partner actually shifted her anxiety to being facilitative towards Olympic performance. In addition, Walsh explained how in her past Olympic experience she was extremely anxious. So, she expected to have a great deal of anxiety at these Games and even welcomed it as a prelude to her best performance. In contrast, the inexperienced Olympic athletes in this study (i.e., Palmer and Li Yuk Lo) either were unable to early-recognize their anxiety, did not have the experience in shifting the interpretation of their anxiety symptoms to being facilitative towards their best performance, or did not have the coping mechanisms to support their facilitative interpretation of anxiety.

These results were both consistent and yet inconsistent with the anxiety interpretation literature. The results were consistent with current research in that, like the recent competitive anxiety research (Guillen & Sanchez, 2009; Hanton et al., 2007; Hanton et al. 2008), this study demonstrated that experience influences the athletes' interpretation of their anxiety symptoms. Current research indicates that competitive experience works to both reduce the athlete's anxiety intensity and supports his/her facilitative interpretation of anxiety by decreasing their somatic anxiety levels (Hanton et al., 2008b), thereby increasing the athlete's perception of control, for example by applying coping mechanisms like advanced psychological strategies (Hanton et al., 2007; Hanton et al. 2008b,c), and enhancing his/her self-confidence (Hanton & Connaughton, 2002; Hanton et al., 2004; Hanton et al., 2005; Neil et al., 2012).

Furthermore, "reflective practice was also identified as being important in generating knowledge concerning the interpretation and control of anxiety-related symptoms" (Hanton et al., 2008, p. 28). In this thesis study multiple athletes described how they used their past experiences to drive ongoing development (e.g., Cook sharing how she learned from her first

Olympic experiences how to best manage her anxiety in future Olympics). Hanton et al. (2007) identified in their study on the influence of experience on elite athlete competitive anxiety that the experienced athlete is better able to use his/her knowledge and familiarity with the subject matter (in this case the Olympics) to positively orient their direction of anxiety.

Yet, at the same time, the findings of this thesis are not consistent with the current operational definition of “experience” used in anxiety research, as measured by the number of years in sport (Hanton et al., 2007). Although this definition of experience is in line with the literature concerning talent acquisition and expertise, whereby ten years of deliberate training is required to become a masterful performer (Ericsson, 2003), it does not take a phenomenological look at the effect of different experiences (of different durations) on the athlete. For example, a recreational athlete who has trained for 10 years will have less mastery than one who has trained for less, but at an international level. Or, in this case, an athlete who has previously competed at an Olympic Games will have a certain anxiety management skill set based on their specific Olympic experience that others who have never been in that context before will not likely have. All of the athletes in this study had over 10 years of volleyball experience, yet they had differing anxiety orientations. In terms of anxiety interpretation and experience, the deciding factor seemed to be two-fold: (1) the athlete’s years of international experience (of which both Palmer, Lessard, and Li Yuk Lo had the least international beach volleyball experience at seven years and four years respectively) and (2) the athlete’s years of Olympic experience (of which Palmer, Lessard, and Li Yuk Lo were the only athletes to have none). It would appear important, therefore, to specify the current operational definition to account for the quality of specific experience of each athlete. Further research would be required to determine exactly what that definition of experience might be.

### **Coping Mechanisms**

Another factor identified in elite athlete anxiety literature as supporting the facilitative interpretation of anxiety symptoms is the athlete's perceived ability to cope with the task at hand (Hanton et al, 2007; Hanton et al. 2008b,c). Gould et al (1993a) identified that Olympic athletes do not have one specific way that they cope with the anxieties of Olympic competition, but instead their coping mechanisms varied depending on which situation they were in. Such was the case with Cook who explained she had a variety of different tools she used to cope with her anxiety, but that she was missing the specific tool to deal with the anxiety surrounding her team dynamic at the Olympic Games.

Orlick and Partington (1988) further elaborated that the Olympics athletes who consistently performed at their best had the most thorough and well-rehearsed strategies to manage their distractions. These strategies included well-developed mental skills, positive focus, past positive experiences, reframing, and pre-competition routines, as outlined in the "anxiety management" section above. In contrast, these researchers identified that many of the 75 Olympians they interviewed performed under potential at the Games because they did not have the appropriate anxiety management protocols to deal with the distractions at hand (Orlick & Partington, 1988). Gould et al. (1992b) added that these distractions "included references to ineffective cognitive patterns, such as task-irrelevant thoughts, lack of focus, and negative thoughts and feelings, and to deviating from strategic plans or making poor strategy selections" (p. 399).

These findings were confirmed in this study, as the athletes who interpreted their anxiety symptoms as debilitating towards performance (i.e., the "debilitators" Li Yuk Lo and Palmer) did not have adequate coping mechanisms to deal with the distractions listed above by Gould et al.

(1992b) and, thus, performed poorly up against what was expected at the 2012 Games. For example, Li Yuk Lo shared how the Olympic procedures and protocols took her away from her normal routine, Palmer spoke mostly of her negative thoughts towards herself, and both Li Yuk Lo and Palmer shared how they made poor strategy selections, which further influenced their anxiety. Li Yuk Lo even stated that without prior Olympic experience, Olympic athletes cannot have the tools to properly cope with Olympics anxiety.

In contrast, as is supported by the anxiety interpretation literature (Hanton et al., 2008a), the athletes in this study who regularly and successfully used well-developed mental skills and had the most well-developed anxiety management protocols (i.e., Walsh, Cook, Ludwig and Lessard) were also those who most often interpreted their anxiety symptoms as facilitative towards performance (the “facilitators”). For example, Walsh used the mental skill of mindfulness, prayer, and/or breath to support her facilitative interpretation of anxiety by connecting to the enjoyment of the game in the present moment. Walsh also reframed the butterflies in her stomach to be precursors to victory instead of that of impending doom (in fact, after the Games, her partner even named her butterflies “Victory”). Similarly, Ludwig used imagery to recall positive snapshots of past experiences, and in so doing, was able to shift her anxiety from debilitating to facilitative of performance.

These findings are consistent with Hanton and Connaughton’s (2002) research comparing anxiety directionality in elite versus subelite athletes. These researchers identified that athletes who attributed their anxiety to past positive experiences (as Ludwig did with her mental snapshots and Walsh did when reframing her butterflies as a prelude to success) were more likely to interpret their anxiety as facilitative towards their best performance (Hanton & Connaughton, 2002). Hanton et al. (2008c) also concluded that advanced psychological strategies

positively effect an athlete's interpretation of anxiety symptoms. In their study on elite athletes in the United Kingdom National Sports Institute, they identified that cognitive restructuring (i.e., the "cognitive-behavioral intervention that is based on the underlying premise that cognitions are central to predicting and/or explaining behavioral responses" (p. 474), the overlearning of skills (i.e., the repetitive practice of the desired mental and physical skills in competition), pre-competition routines (i.e., the specific procedure the athlete carries out prior to competition), and simulation training (i.e., the recreation of both internal and external demands of competition like frustration, stress, crowd noise) all positively influenced the athlete's facilitative interpretation of anxiety (Hanton et al., 2008c). It is important to note that the athletes in my study also described these same "developed mental skills" as supporting their positive anxiety interpretation. Further qualitative and phenomenological research is necessary to better understand the full gamut of potential anxiety-supportive mental skills.

Studies have also shown that "facilitators" more often utilize "problem-focused" coping mechanisms (e.g., Walsh creating a transportation plan, Lessard reframing her perspective of anxiety surrounding her game against Russia) rather than "negative emotion-focused" coping mechanisms that are used almost exclusively by "debilitators" (e.g., Palmer avoiding conversations with her team, Li Yuk Lo trying to ignore her anxiety). This is not to say that "debilitators" do not use problem-focused coping strategies, as Palmer and Li Yuk Lo both did (i.e., Li Yuk Lo reminded herself of technical cues, Palmer focused on her game-plan), but rather that they have a greater tendency to also employ the negative emotion-focused strategies.

Finally, in this study the athlete's "team dynamic" also effected her ability to cope with anxiety and her subsequent interpretation of anxiety symptoms. Walsh, Ludwig, and Lessard all spoke of how they were able to "be themselves" with their teammates, including having the

freedom to say whatever was on their mind. This ability to cope with anxiety within the team dynamic supported these athletes in interpreting their anxiety symptoms as facilitative. In contrast, Palmer and Cook's team dynamic was not one that allowed them to better cope with anxiety; in fact, it was their team dynamic that caused them the most anxiety.

### **Perceived Control**

As a result of an athlete's competitive experience and well-developed coping mechanisms, studies have shown that he/she will have a greater perception of control over his or her situation or environment and thus will be more likely to interpret anxiety as facilitative towards performance (Guillen & Sanchez, 2009; Hanton & Connaughton, 2002; Hanton & Jones, 1999a). This was the case with the athletes in this study, as the "facilitators" explained how their control over the "Olympic situation", based on their past experience and well-developed coping mechanisms, allowed them to positively interpret their anxiety. A perfect example is Walsh who, through the successful and appropriate use of well-developed coping mechanisms (i.e., anxiety management) established over years of training and competition (i.e., competitive experience), was able to achieve a "game-time" perspective despite her elevated anxiety levels. Walsh even referred to herself in her interview as a real-life example that anxiety can help performance. In contrast, the "debilitators" in my study did not have a perception of control over their Olympic experience.

Interestingly, in their study on elite versus non-elite swimmers, Hanton and Jones (1999a) identified that the elite athletes who experienced facilitative anxiety actually did not attempt to minimize the intensity of their anxiety symptoms. Instead, these elite athletes were able to ascribe a different meaning to their anxiety symptoms (e.g., associating nervous feelings like butterflies with having a good race, just like Walsh associated her butterflies with victory).



Again, from a phenomenological perspective, an athlete's experience is dictated by the meaning he/she ascribes to it. In this case, what Hanton and Jones (1999a) described further supports the phenomenological interpretation of anxiety as being a precursor to the athlete's actual experience of anxiety. These researchers also explained that the elite athletes who interpreted anxiety as facilitative, like those in the current study, used positive self-talk and imagery (i.e., mental skills) to justify their newly "reframed" thoughts (Hanton & Jones, 1999a). Moreover, the symptoms that were interpreted to be under the swimmers' control were viewed as facilitative, whereas anxiety symptoms that were deduced as outside the swimmers' control were interpreted as being debilitating towards performance (Hanton & Jones, 1999a).

Similarly in the current study, the athletes who had the greatest perception of control were best able to interpret their anxiety as facilitative, regardless of its intensity. These athletes (e.g., Walsh, Ludwig, Cook, and Lessard) tended to view "anxiety as a compass" that would trigger the appropriate next tool or action to best support optimal performance. Furthermore, for the most part these athletes were also able to "be themselves". Conversely, in areas where they had limited control, the athletes in this study had a greater chance of experiencing debilitating interpretations of anxiety. All athletes in this study (except possibly Walsh) experienced debilitating anxiety at one point during the Olympics; however, debilitating anxiety interpretations were most prevalent for two of the six athletes (i.e., Palmer and Li Yuk Lo). These two athletes were in their head for the majority of the Games, dealing with Olympic policies and procedures, negative self-talk, and forced play. In the case of Palmer, she did not experience a perception of control until their last match, after they had been officially eliminated from the Olympic competition. As a result, both she and Li Yuk Lo experienced high debilitating anxiety, and resultant underperformance, for the majority of the Games.

The last anxiety facilitation theme identified in this study that I would assert supported the athletes' perception of control was their "love of the game". While the athletes in this study might not have been able to control their surroundings at the Olympics, they could derive a perception of control from their feelings towards the game. The "facilitators" in this study explained that, although their symptoms of anxiety were present, their love of the game would take precedence: They would become completely enthralled in the enjoyment of the experience, as described in the resonance performance model (RPM) or flow theory (Kimiecik, Durand-Bush, & Doell, 2002). Currently, there is no research linking flow theory or the RPM to anxiety interpretation.

### **Trait Anxiety**

An athlete's trait anxiety is a dispositional factor that predisposes him/her to respond to his/her environment with high state anxiety (i.e., the subjective, perceived sensations of tension and/or apprehension produced by the autonomic nervous system (Woodman & Hardy, 2001b). In other words, an athlete's disposition can increase the incidence of anxiety symptoms. In fact, studies have shown that "performers high in multi-dimensional competitive trait anxiety symptoms responded with greater state levels than those low in trait anxiety" (Hanton et al., 2002). Thus, athletes high in trait anxiety would have more to contend with when interpreting their anxiety symptoms. Both Mullen et al. (2009) and Hanton et al. (2002) quantitatively examined the influence that high trait anxiety has on anxiety interpretation using the Competitive State Anxiety Inventory-2 (CSAI-2). While Hanton et al. identified that there was no significant difference for those athletes who scored high in trait worry or trait somatic anxiety, Mullen et al. (2009) revealed the opposite: Athletes who were high in trait anxiety conveyed greater anxiety

intensity, lower self-confidence, and more debilitating interpretations of anxiety than their low trait anxiety counterparts.

Although the current study was not intended to examine the influence of trait anxiety on athlete anxiety interpretation, this anxiety interpretation factor emerged directly from the phenomenological nature of this research. In describing her as-lived experience of competitive state anxiety, Walsh related back to an innate, trait-like personality or dispositional factor whereby she actually identified as anxious. In Walsh's words, "I'm just an anxious person in general, that's just how I live my life". I would suggest that since Walsh is almost always anxious both on and off the court, and since she accepts her anxiety as being a part of who she is, this trait anxiety actually supported her facilitative interpretation of anxiety (contrary to other research findings). Unlike the current research on trait anxiety and anxiety interpretation, this finding was derived phenomenologically, directly from the experience of the athlete, versus from a positivistic test on trait anxiety and interpretation.

### **Self-Confidence**

An athlete's competitive experience, coping mechanisms, perception of control, and possibly even trait anxiety, can all work to increase his/her self-confidence in managing anxiety as well as his/her subsequent ability to perform. Conversely, increased self-confidence has also been shown to increase an athlete's perceived control (Hanton et al., 2004), to help the athlete choose the appropriate mental skills to cope with the situation at hand (Hanton et al., 2004), and to increase the likelihood of the athlete interpreting anxiety as facilitative towards performance (Hanton et al., 2004, Hanton et al., 2005; Hanton et al., 2008), whereas low self-confidence has been shown to increase the athlete's tendency to choose brand-new or previously unsuccessful mental tools and strategies (Hanton, et al., 2004; Hanton et al., 2005). The findings in this study

support the current research, as all athletes who viewed anxiety as facilitative demonstrated high levels of confidence despite their circumstance at the 2012 Olympics (while the “debilitators” did not). They derived this confidence from their team, their past experiences, and their ability to apply anxiety management strategies. In addition, the athletes in this study who viewed anxiety as debilitating and who also demonstrated a lack of confidence, tended to deviate from their previously successful routines to attempt new coping mechanisms, which further added to their anxiety symptoms and subsequent poor performance.

Furthermore, studies have indicated that self-confidence has a buffering effect on the symptoms of anxiety, such that even when self-confident athletes interpret their anxiety as debilitating towards performance, they are still able to perform to their potential (Hanton et al., 2005; Hanton et al., 2008). This protective effect of self-confidence was also demonstrated in this study: Even though every athlete experienced debilitating anxiety, only those with a *lack of* confidence suffered in their performance at the 2012 Olympics.

The athletes in this study with high confidence were either able to use their self-confidence, among other factors, to interpret their anxiety symptoms as facilitative or to buffer the debilitating anxiety symptoms they were experiencing. For example, Cook experienced debilitating anxiety towards her team’s performance and any interactions with her partner given their rift at the Games. However, Cook’s overwhelming confidence in her abilities, past Olympic experience, and anxiety management strategies provided her with a high perception of control and essentially buffered the effect of debilitating anxiety. As a result, Cook, along with the other seemingly confident athletes in this study (i.e., Lessard, Walsh, and Ludwig) were personally able to perform as expected at the 2012 Olympics.

These findings also support current Olympic performance literature, which has shown athlete self-confidence to be a key performance factor (Gould & Maynard, 2009; Greenleaf et al, 2001). In Gould et al.'s (1992) study of Olympic wrestlers, all the wrestlers experienced similar emotional intensity and anxiety; however, those who won Olympic medals described heightened self-confidence while the non-medal winning wrestlers did not. Due to the positive effect of self-confidence on both an athlete's facilitative interpretation of anxiety and his/her ability to perform despite debilitating anxiety interpretations, Olympic coaches, sport psychologists, mental coaches, and athletes alike should incorporate confidence-building techniques and strategies into their training protocol. In doing so, they would be supporting positive interpretations of anxiety and athlete performance excellence.

### **Strengths and Limitations**

This study investigated the phenomenological experience of competitive state anxiety for female beach volleyball players who competed at the 2012 Olympic Games. It is important to understand both the strengths and limitations of this study, like that of any investigation, to best understand and interpret the results. To begin, this study drew from the experience of two Olympic gold medalists (who were both also multi-Olympic medalists) to better understand how an Olympic champion deals with competitive state anxiety when compared to the other athletes in the field (as this study also included three athletes who had never before competed at an Olympic Games). This diversity of athlete experience at the Olympics provided a more diverse cross-section of Olympic anxiety experience and management for beach volleyball players. Furthermore, the unique pressures imposed upon beach volleyball athletes made these athletes an ideal group to study the experience of competitive state anxiety at the 2012 Olympics. Other

athletes and coaches from different sports can extrapolate the findings as best suited for their individual needs.

An identified strength of Gould et al.'s (1999) paper on Olympic athletes was that the athletes in their study "appeared very cooperative, open and honest, and frank in their discussions" (p. 392). This was also true for the athletes in this study, as they frequently made sure their point was clear, they were very candid in their descriptions, they did not censor their language (often using expletives to enhance their point), their descriptions were exceedingly rich and vulnerable, and they appeared genuinely interested in sharing their experiences so as to strengthen the sport of beach volleyball as a whole. In addition, this paper responded to Nesti's (2001) demand that athlete anxiety research be examined using a phenomenological methodology, so that the athlete's experience could dictate future research in the field that would enhance practical management of competitive state anxiety versus simply describing and labeling athlete anxiety.

In contrast, one perceived weakness of this study was its retrospective design as the athletes in this study might have been subject to "memory bias and/or other attribution effects" (Greenleaf et al., 2001, p. 180) as the interviews were conducted one year after the 2012 Olympics took place. For example, the athletes who performed well might have remembered more positive experiences and less anxiety than those who did not perform as well as they expected. For this reason, one must be careful when interpreting these results (Greenleaf et al., 2001). The length of time (just over one year) between the Olympic event and the athletes' interviews could also have influenced the athletes' ability to recollect their experiences of anxiety (Gould et al., 1999). However, I purposefully used the word "perceived" to qualify the retrospective design as a potential weakness since researchers using a phenomenological method

have indicated that athletes remember their most dominant and memorable sporting experiences, and, in the context of phenomenology, it is in fact these memorable experiences, and the meaning ascribed by the athletes to these experiences, that are of most interest to phenomenological researchers (Larkin et al., 2006). As a result, retrospective descriptions have become a dominant means of data collection for as-lived experiences for sport psychology researchers (i.e. Greenleaf et al., 2001; Hanton et al., 2007; Orlick and Partington, 1988). Moreover, in phenomenological research, the objective “truth” and the minute details are not the topic of interest, but rather the meaning that the participants assign to their experience, which is oftentimes easy for the participant to recall even years after the event (Larkin et al., 2006).

Furthermore, the generalizability and transferability of the results could be brought into question due to the small sample size and use of purposeful sampling (using a judgment sample that consisted only of female beach volleyball players who competed at the 2012 Olympics) (Greenleaf et al., 2001). However, as described by Greenleaf et al. (2001) in their Olympic athlete interview study:

Generalizability in naturalistic/qualitative studies is not used the same as it is in traditional/positivistic research. In fact, from an epistemological perspective many qualitative researchers argue generalizing results in the traditional sense is almost impossible because human behavior is mediated by the context in which it occurs. (p. 181)

This would definitely be the case from the perspective of the phenomenologist who counters the positivistic standpoint by saying that in order to truly understand the experience of the athlete, one must also focus on the experiential context since we as human beings are intimately linked to the context in which we live our lives (Larkin, Watts, & Clifton, 2006; Nesti, 2006)

It was recommended by Greenleaf et al. (2001) that qualitative researchers “moderately extrapolate and discuss transferability of their findings beyond the narrow confines of a particular study” (p. 181), while still providing participant information and context so that each individual reader could determine for themselves whether the results were transferable and generalizable to his/her particular situation or population. Specifically, in the case of phenomenological research, Thomas (2004) explained that the generalizability or transferability of phenomenological research depends not so much on the “purity of method” (p. 42), but on the reader, who he referred to as the “generalizing agent” (p.42). This generalizing agent would read the research and take from it what applied best to him/her based on his/her individual situation, experience, and circumstance, and could even pass on what he/she discovers, further enhancing the transferability and generalizability of the research (Thomas, 2004). So, in reading this study, any athlete could take from the rich descriptions and discussions what they judge to best apply to their sport according to his/her unique situational and circumstantial variables (Greenleaf et al, 2001; Thomas, 2004).

Finally, another weakness offered by those opposed to the phenomenological design is that is impossible for the research to fully “bracket”, or put aside, his/her thoughts, emotions, perceptions, beliefs, and the like in order to allow the participants to dictate how the results will emerge (Giorgi & Giorgi, 2008). Crotty (1998) countered this argument with a reminder that the researcher’s subjective opinion always interferes with the research, regardless of whether it is qualitative or quantitative in nature. In other words, as identified by Gray and Guppy (1999), all research is vulnerable to bias due to the human nature of the researcher. Furthermore, as this study utilized interpretative phenomenological analysis, some interpretation on the part of the researcher was both recommended and advised.



### **Future Research**

This study has opened the door to better understanding the many possible areas of future research, especially since it has responded to Nesti's (2011) bold request for sport psychology anxiety researchers to turn away from positivistic research methods to that of phenomenology. Nesti (2011) made this request so that research might be driven by the experience of the athlete rather than by validating what is already known in the anxiety field. As described in the results and discussion of this paper, the phenomenological experience of the athletes in this study have shed light on future research directions. One interesting future research opportunity would be to determine whether those athletes who intentionally push their limits off the court, as Cook demonstrated in this study when she described her extreme attempts to stretch her comfort zone (e.g., parachuting, walking on hot coals, etc.), would be better equipped to deal with anxiety in competition. Or, to look more closely at whether trait anxious athletes, like three-time Olympic gold medalist Walsh, are better able to interpret their anxiety as facilitative towards performance than those who are not. More specifically, researchers could examine what mental skills these trait anxious athletes have uniquely developed to deal with their relentless experience of anxiety both in their sport and in their life; these skills could then be adopted by other athletes or sport psychology professionals to apply to similar situations on a case-by-case basis.

This study also distinguished a potential link between anxiety and performance outcome, as the same factors that Gould et al. (2002) identified influenced Olympic athlete performance were shown in this study to also effect the athletes' anxiety experience. I suggested that anxiety management might, therefore, be a moderator of performance outcome. I recommend, therefore, that further research examine anxiety management as a potential moderator of athlete performance so as to better understand how one effects the other.

It would also be interesting to study the isolation and depression experienced by athletes, like Palmer, who underperform at an Olympic Games. This research could help support athletes in managing the longstanding and oftentimes devastating aftereffects of poor Olympic performance. Conversely, it would be of benefit to conduct a multi-sport Olympic study on multi-year and multi-medal winning Olympians, like Walsh and Cook, to determine what skills these successful multi-Olympic athletes developed to both manage and positively interpret their anxiety, as well as to uncover commonalities across sports. In general, it would be interesting to repeat this study across different sports and different genders to better understand the intricacies of the phenomenological experience of competitive state anxiety, specifically which management tools and antecedents were consistent or not across sports and genders. By conducting such a multi-sport, multi-gender study, we could better understand the influence of gender and sport on competitive anxiety experience.

In this study, I highlighted how the current definition of athlete experience as defined by Hanton et al. (2007) to be measured by the number of years in sport is inadequate. This definition does not take into consideration the level of sporting experience, and thus is unable to adequately differentiate between the recreational athlete who competed for 10 years and the professional athlete who might technically have less years of experience (e.g., having only competed for 5 years), but might actually be more “experienced”. Just like with specificity of training, the quality not only the quantity of experience might make the difference, as appeared to be the case with the athletes in this study who had all competed for over 10 years in the sport, but who differed in their international and Olympic experience (with those athletes with the most international and Olympic experience faring the best and having the best control over their anxiety at the Olympics). It is recommended that further research be conducted on athlete

experience and its influence on anxiety interpretation and management, so as to newly define experience in this context.

Another interesting finding in this study was the wide range of mental strategies the athletes played in order to both manage and shift the interpretation of their anxiety experience. A future phenomenological investigation with multiple Olympic athletes of various sports could uncover a wider variety of mental strategies to support competitive anxiety experience. Furthermore, by studying mindfulness, flow theory, and the resonance performance model (RPM) and their influence on anxiety interpretation and management, researchers might develop further insight into how to support athletes in managing, preventing, and interpreting anxiety. In addition, as team dynamic and social support seemed to effect the anxiety interpretation and performance of athletes in the study, I would suggest future research into these factors as well. Overall, due to this study's rich and detailed descriptions of anxiety antecedents, management, and interpretation, I recommend that researchers continue to use a phenomenological methodology to study and better understand the role of anxiety in athlete performance in the Olympic and other competitive sport contexts.

### **Conclusion**

Competing at the Olympics is a unique high-pressure experience. The dynamics, environment, and importance given to the Olympic Games create “extraordinary pressures for all persons involved, whether athlete, coach or other support staff” (Birrer et al, 2012, p. 702). Yet, even though anxiety is heightened at the Olympics, to date there have been few Olympic performance studies and none that have dealt specifically with competitive state anxiety at the Olympic Games. Furthermore, Nesti (2011) proclaimed that current athlete anxiety research looks to take what is already known and prove it in the field and, as such, has provided few

findings that can be applied to support athletes with their performance anxiety. Nesti (2011) called for the use of phenomenological methods to study the as-lived experience of the athlete, from which the findings could be directly applied with athletes in training competition, and from which further relevant research directions could be identified.

The purpose of this research was to better understand the as-lived, phenomenological experience of competitive state anxiety for female beach volleyball players who competed at the 2012 Olympics; specifically I was interested in the antecedents of anxiety, how athletes coped with their anxiety, and how the athletes' interpretation of anxiety effected their performance. The underlying objective of this study was two-fold: 1) To provide much needed phenomenological competitive state anxiety research (Nesti, 2011), especially in the Olympic context and 2) to contribute to the sport of beach volleyball for which there are currently no published competitive state anxiety research studies. Using an in-depth phenomenological interview protocol, six Olympic female beach volleyball athletes shared their experience of competitive anxiety at the 2012 Olympics. The interpretative phenomenological analysis (IPA) of the athletes' interviews, resulted in the emergence of specific themes which described the athletes' anxiety antecedents, management, and effects (including anxiety interpretation).

Anxiety antecedents identified by the athletes in this study included: anxiety beliefs (e.g. about anxiety causes and/or prevention), a lack of control (e.g. of the Olympic environment, procedures and protocol, and/or injury), managing expectations (e.g. to be her best, to negotiate family needs and fanfare, and perform her best under pressure), as well as nurturing a positive team dynamic (e.g. ideally supportive or not resistive). The female beach volleyball players recognized that their anxiety management was supported by the following: prevention (e.g., avoidance of anxiety triggers and/or creating a plan), well developed mental skills (e.g., pre-

competition routines, imagery, mindfulness, prayer, and breath, mental strategies, mental coaching, and/or no tools), focus (e.g., on the present moment and/or controlling what was at the front of her mind), past experiences (e.g. the athlete having past positive experiences to draw from, including past Olympic experiences), Olympic perspective (e.g. reframing, a 'game-time' perspective, and/or expanding her comfort zone), and team connection (e.g. with her partner and support staff as well as her family). Additionally, the following anxiety effects were uncovered in this study: physiological reactions (e.g., anxiety rising up her body, furrowed eyebrows, butterflies, shallow breathing, heart racing, shaking, lack of clarity), facilitative anxiety (e.g., athletes interpreting their anxiety as facilitative towards performance, such as recognizing: anxiety is part of it, anxiety can be used as a compass, their love of the game, and/or successful anxiety management), and debilitating anxiety (e.g., the athletes interpreting their anxiety symptoms as debilitating towards performance, such as: being in her head, forced play, and/or unsuccessful anxiety management).

This study, like many before, indicated that anxiety is not necessarily detrimental to performance: in fact it can support an athlete's best performance, as was the case with Olympic Gold Medalist Walsh and other athletes in this study. In this study, it was identified that a multifaceted combination of the early recognition of anxiety antecedents, anxiety intensity reduction, the interpretation of anxiety as facilitative towards performance, and the buffering effect of self-confidence was what allowed the athletes to perform well despite any anxiety they might have experienced. As such, the athletes with the most refined anxiety management protocols, with the best ability to interpret their anxiety as facilitative in its direction, and who demonstrated high self confidence (and so could rely on the anxiety-buffering effect of self-confidence) were those who best dealt with their anxiety and consequently had the best

performances at the 2012 Olympics; and those who did not, had poorer performances than what was expected of them.

A few unique and significant findings were uncovered in this study. First, as was demonstrated by three-time Olympic gold medalist Walsh, there could in fact be a competitive anxiety advantage for those athletes who identify as anxious and view it in a positive way. It appears that trait anxiety might actually support the athlete's ability to positively interpret anxiety in competition. Secondly, all the athletes in this study who interpreted their anxiety symptoms as facilitative towards performance spoke about how their love of the game positively influenced their perceptions of anxiety and overall performance. Although enjoyment in competition has been described in flow theory and the resonance performance model as a precursor to peak performance (Kimiecik, et al., 2002), this is the first time a possible link between flow and anxiety management and/or interpretation has been identified.

Furthermore, Cook identified how intentionally expanding her comfort zone allowed other often-perceived-as-anxious activities on the court to pale in comparison to adrenaline-inducing, fear-busting activities like skydiving or walking on hot coals. Cook identified that this, along with "visualizing with her eyes open" (i.e., surrounding herself with anything and everything that reminded her of her Olympic goal), were two of the major factors that supported her to compete at five Olympic Games. Even though a phenomenological study is not "generalizable" or "transferable" in the traditional sense, given Cook's repeated success using these tools and strategies, it would make sense for other athletes to at least attempt these same tools and strategies. In addition, it was shown that being aware of and putting in place a plan to deal with Olympic anxiety antecedents resulted in a more positive anxiety experience and better performance. This finding is especially important for athletes who have not attended an Olympic

Games, so as to allow them to better plan and prepare through the vicarious experiences of former Olympic athletes. Lastly, those athletes who worked with mental coaches/sport psychologists or who put aside targeted time to train their mental skills were those who both best dealt with anxiety at the 2012 Games and who also had their best performances relative to what was expected.

In conclusion, by employing a phenomenological methodology, this study allowed for the athlete to describe her as-lived experience of anxiety, including its precursors, how she coped, and what influenced the interpretation of her anxiety symptoms. In so doing, not only did this study support the most current findings of anxiety management and interpretation research, it also allowed for unique perspectives and findings to emerge from the experience of the athlete versus attempting to fit the athlete into a prefabricated box based on the desire to verify past anxiety research (Nesti, 2011). As was identified in Walker and Nordin-Bates' (2010) research on ballet dancer performance anxiety, athletes "may benefit from education about anxiety interpretations and the potential positive effects of performance anxiety" (p. 143). Such was an underlying intention of this study: to educate the athlete on the experience of anxiety at the Olympic Games, including identifying potential precursors to anxiety, how athletes manage anxiety, and what can be done to interpret anxiety as facilitative towards performance, with the overall purpose of this study being to respond to the gap in Olympic athlete anxiety research.

Even though this study was phenomenological in nature and dealt with a specific female population of Olympic beach volleyball players, rendering it non-transferable in the eyes of the positivistic researcher, the originators of phenomenology would explain that this research could still be applied to any athlete in any sport. Readers of all genres, including athletes, their coaches, and their parents, can learn from the experiences of the athletes in this study by

attempting to use the tools, strategies, and suggestions offered herein, and then by continuing to use those tools and strategies that work and by discontinuing those that do not. In other words, it is my contention that, although this study was not designed to define specific, generalizable, and/or transferable anxiety prevention, management, and or interpretation skills or “truths” that would apply to all athletes, every athlete in every sport can potentially learn from and apply the positive anxiety management and interpretation tips, tools, strategies, and insights that were so generously shared by the female Olympic beach volleyball players in this study.



## References

- Alabdulwahab, S.S., Kachanathu, S.J., & Oluseye, K. (2013). Physical Activity Associated with Prayer Regimes Improves Standing Dynamic Balance of Healthy People. *Journal of Clinical Sport Psychology*, 8, 119-141.
- Birrer, D., Wetzel, J., Schmidt, J., & Morgan, G. (2012). Analysis of sport psychology consultancy at three Olympic Games: Facts and figures. *Psychology of Sport and Exercise*, 13, 702-710.
- Blumenstein, B. & Lidor, R. (2007). The road to the Olympic Games: A four-year psychological preparation program. *Athletic Insight*, 9(4), 15-28.
- Cathcart, S., McGregor, M., & Groundwater, E. (2014). Mindfulness and Flow in Elite Athletes. *Journal of Clinical Sport Psychology*, 8, 2, 119-141. DOI: 10.1123/jcsp.2014-0018
- Crotty, M. (1998). Introduction: The research process. In *The foundations of social research* (pp. 1-86). London, UK: SAGE.
- Culver, D.M., Gilbert, W., & Sparkes, A. (2012). Qualitative research in sport psychology journals: The next decade 2000-2009. *The Sport Psychologist*, 26, 261-281.
- Dale, G. A. (1996). Existential phenomenology: Emphasizing the experience of the athlete in sport psychology research. *The Sport Psychologist*, 10, 307-321.
- Durand-Bush, N., & Salmela, J. H. (2002). The development and maintenance of expert athletic performance: Perceptions of world and Olympic champions. *Journal of Applied Sport Psychology*, 14(3), 154-171.
- Ericsson, K.A. (2003). Development of elite performance and deliberate practice: An update from the perspective of the expert performance approach. In J.L. Starkes, & K.A.

Ericsson (Eds.), *Expert performance in sports: Advances in research on sport expertise* (pp. 39-85). Champaign, IL: Human Kinetics.

FIVB World Beach Volleyball Tour Website. (2014b). Beach Volleyball History. Retrieved from <http://www.fivb.org/EN/beachvolleyball/Rules/rules.htm>

FIVB World Beach Volleyball Tour Website. (2012a). 2012 London Olympic beach volleyball information and results. Retrieved from <http://www.fivb.org/en/olympics/london2012/indexbvb.asp>

FIVB Beach Volleyball Tour Olympic Website. (2012b). Qualification Process. Retrieved from [www.fivb.org/en/olympics/london2012/qualification\\_process\\_BVB.asp](http://www.fivb.org/en/olympics/london2012/qualification_process_BVB.asp).

FIVB World Beach Volleyball Tour Website. (2014a). Beach Volleyball General Information. Retrieved from [www.fivb.org/en/BeachVolleyball.asp](http://www.fivb.org/en/BeachVolleyball.asp).

FIVB World Beach Volleyball Tour Website. (2014b). Beach Volleyball History. Retrieved from [www.fivb.org/en/BeachVolleyball/History.asp](http://www.fivb.org/en/BeachVolleyball/History.asp).

Focus. (n.d.). In Merriam-Webster online dictionary. Retrieved from [i.word.com](http://i.word.com).

Giorgi, A., & Giorgi, B. (2008). Phenomenology. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 26-52). Thousand Oaks, CA: SAGE.

Gould, D., Greenleaf, C., Chung, Y., & Guinan, D. (2002). A survey of US Atlanta and Nagano Olympians: Variables perceived to influence performance. *Research Quarterly for Exercise and Sport* (73)2, 175-186.

Gould, D., Guinan, D., Greenleaf, C., Medberty, R., & Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *Sport Psychologist*, 13(4), 371-394.

- Gould, D., Jackson, S. A., & Eklund, R. C. (1992a). 1988 U.S. Olympic wrestling excellence: I. Mental preparation, precompetitive cognition, and affect. *Sport Psychologist*, 6, 358-382.
- Gould, D., Jackson, S. A., & Eklund, R. C. (1992b). 1988 U.S. Olympic wrestling excellence: II. Thoughts and affect occurring during competition. *Sport Psychologist*, 6(4), 383-402.
- Gould, D., & Maynard, I. (2009). Psychological preparation for the Olympic Games. *Journal of Sports Sciences*, 27(13), 1393-1408.
- Gray, G., & Guppy, N. (1999). *Successful surveys: Research methods and practice* (2nd ed., pp. 44-49). Toronto, Canada: Harcourt Canada.
- Greenleaf, C., Gould, D., & Dieffenbach, K. (2001). Factors influencing Olympic performance: Interviews with Atlanta and Nagano U.S. Olympians. *Journal of Applied Sport Psychology*, 13(2), 154-184.
- 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 and Motor Skills*, 109(2), 407-419.
- Hanton, S. & Connaughton, D. (2002). Perceived control of anxiety and its relationship to self-confidence and performance. *Research Quarterly for Exercise and Sport*, 73(1), 87-97.
- Hanton, S., Cropley, B., Neil, R., & Miles, A. (2007). Experience in sport and its relationship with competitive anxiety. *International Journal of Sport and Exercise Psychology* 5 (1), 28-53.

- Hanton, S. & Jones, G. (1999). The acquisition and development of cognitive skills and strategies: I. Making the butterflies fly in formation. *The Sport Psychologist*, 13, 1-21.
- Hanton, S., Mellalieu, S.D., & Hall, R. (2002). Re-examining the competitive anxiety trait-state relationship. *Personality and Individual Differences*, 3, 1125-1136.
- Hanton, S., Mellalieu, S.D., & Hall, R. (2004). Self-confidence and anxiety interpretation: A qualitative investigation. *Psychology of Sport and Exercise*, 5, 477-495.
- Hanton, S., Neil, R., & Mellalieu, S. D. (2008a). Recent developments in competitive anxiety direction and competition stress research. *International Review of Sport and Exercise Psychology*, 1(1), 45-57.
- Hanton, S., Neil, R., Mellalieu, S. D., & Fletcher, D. (2008b). Competitive experience and performance status: An investigation into multidimensional anxiety and coping. *European Journal of Sport Science*, 8(3), 143-152.
- Hanton, S., Wadey, R., & Connaughton, D. (2005). Debilitative interpretations of competitive anxiety: A qualitative examination of elite performers. *European Journal of Sport Science*, 5(3), 123-136.
- Hanton, S., Wadey, R. and Mellalieu, S. (2008c). Advanced psychological strategies and anxiety responses in sport. *The Sport Psychologist*. 22(4), 472-490.
- Hodge, K., & Hermansson, G. (2007). Psychological preparation of athletes for the Olympic context: The New Zealand summer and winter Olympic teams. *Athletic Insight*, 9(4), 4-4.
- Hogeveen, B. (2011). Skilled coping and sport: Promises of phenomenology. *Sport Ethics and Philosophy*, 5(3), 245-255.

- Husserl, E. (1967). *The Paris lectures*. (P. Koestenbaum, Trans.). The Hague, Netherlands: Martinus Nijhoff. (Original work published 1929).
- Jones, M. (2003). Controlling emotions in sport. *The Sport Psychologist*, 17, 471-486.
- Kimiecik, J., Durand-Bush, N., & Doell, K. (2002). The Role of Resonance in Performance Excellence and Life Engagement. *Journal of Applied Sport Psychology*, 14, 249-267.  
DOI:10.1080/10413200290103545
- Kudlackova, K., Eccles, D.W., & Dieffenbach, K. (2013). Use of relaxation skills in differentially skilled athletes. *Psychology of Sport and Exercise*, 14(4), 468-456.
- Larkin, M., Watts, S., & Clifton, E. (2006). Giving voice and making sense in interpretative phenomenological analysis. *Qualitative Research in Psychology*, 3, 102-120.
- Marshall, M.N. (1996). Sampling for qualitative research. *Family Practice*, 13 (6), 522-525.
- May, R. (1977). *The meaning of anxiety*. New York, NY: Ronald Press.
- Moustakas, C. (1988). *Phenomenology science and psychotherapy*. Sydney, Canada: University of Cape Breton Family Life Institute.
- Mullen, R., Lane, A., and Hanton, S. (2009). Anxiety symptom interpretation in high-anxious, defensive high-anxious, low-anxious and repressor sport performers. *Anxiety, Stress and Coping*, 22 (1), 91-100.
- NCAA - National College Athletic Association Website.. (2014). Emerging Sports: Sand Volleyball. Retrieved from <http://www.ncaa.org/about/resources/inclusion/emerging-sports-sand-volleyball>
- Neil, R., Wilson, K., Mellalieu, S. D., Hanton, S., & Taylor, J. (2012). Competitive anxiety intensity and interpretation: A two-study investigation into their relationship with performance. *International Journal of Sport & Exercise Psychology*, 10(2), 96-111.

- Nesti, M. (2011). Phenomenology and sport psychology: Back to the things themselves! *Sport, Ethics and Philosophy*, 5(3), 285-296.
- Nesti, M. (2006). Existential psychology and sport: Theory and application.
- Omli, J. (2008). The MVP model: From phenomenology to practice. *The Sport Psychologist*, 22, 229-243.
- Orlick, T., *In Pursuit of Excellence: How to Win in Sport and Life Through Mental Training*, 5<sup>th</sup> edn., Leisure Press, Human Kinetics, 2008.
- Orlick, T., & Partington, J. (1988). Mental links to excellence. *Sport Psychologist*, 2(2), 105-130.
- Partridge, A., Brustad, P., & Babkes, G. (2008). Advances in sport psychology. In T. S. Horn (Ed.), (pp. 236-242). Champaign, IL: Human Kinetics.
- Pelletier, L.G., Fortier, M.S., Vallerand, R.J., & Briere, N. (2001). Associations among perceive autonomy support, forms of self-regulation, and persistence: A prospective study. *Motivation & Emotion*, 25(4), 279-306.
- Pineau T.R., Glass C.R., Kaufman K.A., & Bernal, D.R. (2014). Self- and Team-Efficacy Beliefs of Rowers and Their Relation to Mindfulness and Flow. *Journal of Clinical Sport Psychology*, 8, 142-158.
- Richards, L., & Morse, J. M. (2007). The integrity of qualitative research. In *Readme first for a user's guide to qualitative methods* (2<sup>nd</sup> ed., pp. 25-44). Thousand Oaks, CA: SAGE.
- Ryba, T. (2007). Cartwheels on ice: A phenomenological exploration of children's enjoyment in competitive figure skating. *Athletic Insights*, 9(2), 58-73.
- Smith, J.A., Flowers, P., & Larkin, M. (2009). Interpretative phenomenological analysis: Theory, methods and research. Los Angeles, CA: Sage.

- Smith, J.A., & Osborn, M. (2008). Interpretative phenomenological analysis. In J. A. Smith (Eds.), *Qualitative psychology: A practical guide to research methods* (2<sup>nd</sup> ed., pp. 53-80). Thousand Oaks, CA: SAGE.
- Subjective. (n.d.). In Dictionary.com online. Retrieved from <http://dictionary.reference.com/browse/subjective>.
- Thomas, S. P., & Pollio, H.R. (2004). *Listening to patients: A phenomenological approach to nursing research and practice*. New York, NY: Springer Publishing Company.
- Taylor, M. K., Gould, D., & Rolo, C. (2008). Performance strategies of US Olympians in practice and competition. *High Ability Studies*, 19(1), 19-36.
- Walker, I.J., & Nordin-Bates, S.M. (2010) Performance Anxiety Experiences of Professional Ballet Dancers The Importance of Control. *Journal of Dance Medicine and Science*, 14(4), 133-166.
- Wells, Todd (2012). Olympics London 2012 athletes: Todd Wells. *The Washington Post*. Retrieved from <http://stats.washingtonpost.com/olympics/athlete.asp?id=437655&country=USA&sport=CYC>
- Woodman, T., & Hardy, L. (2001a). A Case Study of Organizational Stress in Elite Sport. *Journal of Applied Sport Psychology*, 13(2), 207-238, DOI: 10.1080/104132001753149892
- Woodman, T., & Hardy, L. (2001b). Stress and anxiety. In R.N. Singer, H.A. Hassenblas, & C.M. Janelle (Eds.), *Handbook of sport psychology* (2<sup>nd</sup> ed., pp. 290-318). New York: John Wiley & Sons.

## **Appendix A**

### **Athlete Interview Guide - Demographic Information**

Name:  
 Age:  
 Gender: Male/Female  
 Country of Origin:  
 Schooling:  
 Years of experience playing Volleyball:  
 Years of experience playing Beach Volleyball:  
 Years playing on the FIVB World Beach Volleyball Tour:  
 Highest World Ranking Achieved:  
 Best Ever Finish (Year/Event/Finish):  
 Number of Olympic Games Competed at:  
 Best Olympic Finish (Year/Finish):  
 Address:  
 Phone Number:  
 Email Address:  
 Website:

### **Athlete Interview Guide – Getting Related**

- 1) How long have you played volleyball? Beach volleyball?
- 2) What got you started in volleyball? Beach volleyball?
- 3) What is your favourite thing about beach volleyball?
- 4) What is your favourite beach volleyball memory?
- 5) When did you decide that the Olympics were a real possibility for you? (probing: was there any particular incident that precipitated your desire to train for the Olympics?)

### **Athlete Interview Guide – Phenomenological Interview Questions**

I will be conducting an open-ended, phenomenological interview. These questions, therefore will serve as a guide, with the first question being consistent across all interviews.

- 1) Overarching open-ended question to begin all interviews: Can you tell about a time when you felt anxious, stressed or worried at the 2012 Olympics?
  - a. Can you tell me about when and where that happened how that anxiety or stressful experience felt? (Probe for details).
  - b. Do you think that anxiety or those stressful feelings interfered with your ability to perform? (Yes or No – Probe for details).
  - c. Did you do anything or focus on anything in particular to turn your anxiety around or turn it into an advantage?
- 2) Can you think of a time at the 2012 Olympics where you feel that your anxiety or heightened levels of stress actually helped your performance or helped you perform better?
  - a. If yes, please give an example. (Probe for details).



- b. What did you focus on to regain control and perform your best if or when you started to stressed, worried or anxious?
  - c. Did you use psychological skills like imagery, reframing, pre-performance or within performance routines or focusing and refocusing plans to help control your anxiety and guide your focus to where you wanted it to be? If yes, can you give an example or a few examples?
  - d. What did you do to get ready to compete in a particular game or match:
    - i. a few days before you competed?
    - ii. the day before you competed?
    - iii. the day of your competition?
    - iv. on-site in your warm up?
    - v. when you stepped on the court?
- 3) Did you have a specific pre-planned routine or focus plan to manage your anxiety at the 2012 Olympics? If yes, what did you do? (Probe for details)
- 4) (For athletes who competed at previous Olympics) How did this Olympic experience compare with previous Olympic experiences in terms of:
- a. Your level of anxiety, stress, or uncertainty? Can you give a detailed example?
  - b. How you managed your anxiety or stayed focused on what helps you perform your best? Please give an example.
  - c. Were you able to manage your levels of activation or anxiety to be supportive of your best performances? If yes, how did you do this? If no, why do you think you were not able to do this?
  - d. Do you have any other thoughts or experiences you would like to share related to your personal levels of stress, anxiety, or activation and how that may influence your performance in positive or negative ways.

Thank you for sharing your wisdom. It is greatly appreciated.

## Appendix B

### Consent Form

**Title of the study:** The phenomenological experience of competitive state anxiety in female beach volleyball players at the 2012 Olympics.

**Principal Researcher:** Katherine (Kara) Zakrzewski, MA Candidate, School of Human Kinetics, Faculty of Health Sciences, University of Ottawa, Canada; [phone number and email included in the consent form given to participants].

**Thesis Supervisor:** Dr. Terry Orlick, School of Human Kinetics, Faculty of Health Sciences, University of Ottawa; [phone number and email included in the consent form given to participants].

**Invitation to Participate:** I am invited to participate in the above mentioned research study conducted by graduate student Katherine (Kara) Zakrzewski. The purpose of the study is to understand the to explore the experience of competitive state anxiety in female beach volleyball players who competed at the 2012 Olympics. My participation will consist of sharing experiences related to my experience of anxiety at the 2012 Olympic Games in one audio recorded interview lasting no longer than 90 minutes (probably closer to 60min), scheduled at a time and location that is convenient and chosen by me, and providing feedback regarding the transcribed interview afterwards. All names will be removed from all data reviewed and analyzed to ensure confidentiality. However, I may choose to keep my name within the interview transcripts and future research manuscripts to enhance the understanding of the relationship between my as-lived (phenomenological) experience of competitive state anxiety and how I finished in the rankings at the 2012 Olympics.

Participants in the study must (i) be women; (ii) have participated in the beach volleyball competition at the 2012 Olympics; (iii) speak English; (iv) be greater than 19 years of age; (v) have represented a country who took part in the 2012 Olympic Beach Volleyball competition. Athletes will be chosen on a first come first serve basis with one exclusion: if the Olympic Gold medalists choose to join the study after the participants are chosen, I will open up the study to also include them.

**Risks and Benefits:** This study is an opportunity to provide practitioners and researchers relevant information related to the as-lived experience of competitive state anxiety for female beach volleyball Olympians. Potential benefits for me include the recognition and the strengthening of mental skills that may contribute to the improvement of my performance and the consistency of high-level performance. I will have the opportunity to further gain insight into my Olympic experience by revisiting any limitations and celebrate any successes I might not have noticed previously. I will also have the opportunity to give back to future athletes in my sport of beach volleyball and in all sports. The results of this study will be compiled as the principal researcher's dissertation study and will be presented at future research conferences and published research manuscripts. I am assured by the researcher that any information revealing my identity will be safeguarded. I am also aware that specific quotes from my interview may be

used to display the results of this study. I have been assured by the principal investigator that my name will be replaced by a pseudonym unless I choose to keep my name in all proceeding disseminations of the results.

**Compensation:** I will be compensated \$75 CDN via Paypal for taking part in this study. If you choose not to participate in the study, you will still be compensated. You have a right to withdraw without negative consequences.

**Confidentiality and anonymity:** I have received assurance from the researcher that the information I share will remain strictly confidential. In order to preserve confidentiality, all names and quotes will be replaced by pseudonyms unless I choose to have my name displayed in dissemination of the research results. All of my information (i.e., audio recorded interview, transcribed interview, and feedback from the transcribed interview) will be safeguarded through password protected files only accessible by the principal researcher and her thesis supervisor.

**Conservation of data:** The data collected will be kept in a secure manner in a locked filing cabinet in the office of the supervisor, Terry Orlick (Montpetit Hall, 125 University Avenue, Room 355, Ottawa ON, K1N 6N5). It will be accessible only to Katherine (Kara) Zakrzewski and her supervisor Dr. Terry Orlick. All of my information (i.e., audio recorded interview, transcribed interview, and feedback from the transcribed interview) will be conserved for five years. Any inquiries about any part of the research being conducted should be addressed to Katherine (Kara) Zakrzewski at [phone number and email included in the consent form given to participants] or to her supervisor Dr. Terry Orlick at [phone number and email included in the consent form given to participants].

If I have any questions regarding the ethical conduct of this study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 154, Ottawa ON, K1N 6N5.

**Voluntary Participation:** I am under no obligation to participate and I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequence. If I choose to withdraw, all data gathered from my audio recorded interview, transcribed interview, and feedback from the transcribed interview will be excluded from analysis and destroyed.

**Acceptance:** I, \_\_\_\_\_, agree to participate in the above research study conducted by graduate student Katherine (Kara) Zakrzewski and her thesis supervisor Dr. Terry Orlick of the School of Human Kinetics, Faculty of Health Sciences at the University of Ottawa.

**Identity Information:** I, \_\_\_\_\_, may choose to include or not include my name in the dissemination of the results of this study (which may include personal quotes). I will check the corresponding space below confirming whether or not I will allow my name to be used in this study.

\_\_\_ Yes, I will allow my name to be used in this study.

\_\_\_ No, I would like my name to be replaced by a pseudonym to assure confidentiality.

*Participant's E-mail Address* (for receiving the transcribed interview and providing feedback):

\_\_\_\_\_

There are two copies of the consent form, one of which is mine to keep.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Appendix C**

### **Bracketing Interview Guide**

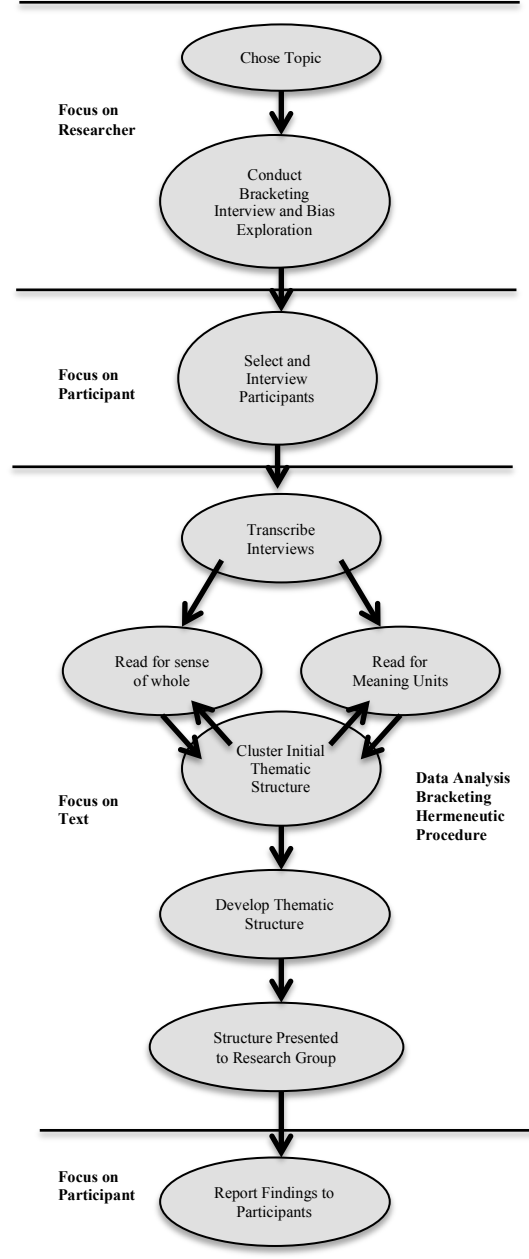
The following are the questions that another researcher asked me in a bracketing interview so I could determine my assumptions and biases prior to commencing the research for this thesis:

1. Tell me a bit about your proposed research?
2. Why is the study of the phenomenological experience of competitive state anxiety in Olympic athletes important to you? Why do you care about this topic?
3. What is your experience with your proposed research?
4. Can you think of any negative experiences in your elite sporting career that led to debilitating competitive state anxiety in your career?
5. Can you think of any positive experiences of facilitative competitive state anxiety?
6. From your experience, what level of anxiety is facilitative and when does it become detrimental to performance?
7. What are some assumptions you have about the competitive state anxiety in Olympic athletes?

## Appendix D

Figure 1

*Flow chart of a phenomenological research project\**



\* Figure taken from "Existential phenomenology: Emphasizing the experience of the athlete in sport psychology research" by G.A. Dale, G. A., 1996, *The Sport Psychologist*, 10, p. 307-321.