POSITIVE COACHING AND OLYMPIC SUCCESS: CASE STUDIES OF TRACK AND FIELD OLYMPIC MEDALIST COACH-ATHLETE RELATIONSHIPS

A dissertation

Presented to

The Faculty of the Graduate School

At the University of Missouri

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

By

BRIAN M. ZULEGER

Dr. Alex Waigandt, Dr. Richard McGuire, Dissertation Supervisors

May, 2014

The undersigned, appointed by the dean of the Graduate School,

have examined the Dissertation entitled

POSITIVE COACHING AND OLYMPIC SUCCESS: CASE STUDIES OF TRACK AND FIELD OLYMPIC MEDALIST COACH-ATHLETE RELATIONSHIPS

Presented by Brian M. Zuleger

A candidate for the degree of

Doctor of Philosophy

And hereby certify that, in their opinion, it is worthy of acceptance.

Dr. Alex Waigandt

Dr. Richard McGuire

Dr. Joe Johnston

Dr. Bryana French

Dr. Scott Brooks

ACKNOWLEDGEMENTS

I would like to thank my committee chairs Dr. Alex Waigandt and Dr. Rick McGuire for their guidance and advice. I would especially like to thank "Coach" Dr. Rick McGuire; this study would not have been possible without his knowledge and experience in coaching and working with Olympic athletes and coaches. I would also like to thank him for his support and guidance in serving as my mentor over the past three years. I would also like to thank Dr. Bryana French for sharing her knowledge and experience regarding qualitative research. I would like to thank Dr. Scott Brooks, for sharing his knowledge and experience in qualitative research with athletes and coaches as well as his experience as a basketball coach and former basketball athlete. I would like to thank Dr. Joe Johnston for introducing me to positive psychology and forever changing my life in the process. I would also like to thank Dr. Ralph Vernacchia, my master's degree advisor, for his continued mentorship, for introducing me to the world of working with Olympic athletes and coaches and for teaching me to DREAM BIG! This study would not have been possible without all of their help. Thank you to my mother, Linda Zuleger, for all the time she spent proofreading drafts and for providing moral and financial support. Thank you to my father, David Zuleger, for being my first influence in coaching. You provided a great role model for me. Thank you for the moral and financial support as well. Thank you to my family and friends for the support and understanding that the time commitment necessary for a project like this impacted the time I could spend with you all. Thank you to my research assistant, Bobby Low, for his assistance throughout this process. Thank you to Jack Brown, Miranda Walker and Alejandro Cubria for their help in transcribing interviews. I would like to thank all of the coaches over the course of my

life; you have all helped shape and influence my coaching and teaching philosophy. I would like to thank the three coaches and athletes in this study for graciously giving of their time, knowledge and experiences, not only for the benefit of this but also for the sport of track and field. Furthermore I would like to thank them for providing me with their stories and experiential knowledge regarding coaching, competing and the coach-athlete relationship in regards to winning a medal at the Olympic Games. Finally I would like to thank the athletes and coaches of the University of Missouri track and field team who I have been very fortunate to work with for the last three years. I appreciate their understanding that due to the many late nights and long hours spent devoted to this project that I may not have always been at the top of my game as a coach or able to spend the dedicated time with them that I would have liked.

Table of Contents

TABLE OF TABLES

ABSTRACT

Competing at the Olympic Games is different than any other performance setting, and presents many challenges to the athlete and coach. The purpose of this study was to investigate the coach-athlete relationship with Olympic medal winning track and field athletes and their coaches. This qualitative study utilized case study design consisting of multiple interviews with the participants. The participants consisted of three Olympic medalist athletes and their coaches. The athletes each had won a medal in track and field at the London 2012 Olympic Games. The in-depth interviews ranged from 60-90 minutes and consisted of open-ended questions exploring the coach-athlete relationship. Cross-case analysis identified the following three general themes: autonomy supportive environment, caring relationship, and mental strength. These three aspects of the coach-athlete relationship emerged as important in the process of developing an Olympic medal winner. Each coach and athlete had developed a unique relationship that worked for each case in helping the athlete to be successful at the Olympic Games. While each case presents a unique relationship, the core methods and theories behind the approach of the coaches and athletes are similar. Consideration of these findings may provide meaningful opportunities for coaches and athletes in the future to learn and benefit from the experiences of these highly successful Olympic medal winning athletes and their coaches. The findings will help contribute to the body of research on Olympic coach-athlete relationships, which may help improve athlete and coaching education programs.

CHAPTER 1

Overview

Michael Johnson is one of the most successful track and field athletes of all-time having won four Olympic gold medals and nine World Championship gold medals. His double gold medal performance in the 200m (broke the world record) and 400m at the 1996 Olympics in Atlanta was a moment that will forever stand out in the history of Olympic track and field. In *Gold Rush,* Johnson (2011) wrote about his experiences as an Olympic track and field athlete and he interviewed many other highly successful Olympic athletes consisting of: Usain Bolt, Daley Thompson, Nadia Comaneci, Chris Hoy, Rebecca Adlington, Sally Funnell, Sir Steve Redgrave, Mark Spitz, Lord Sebastian Coe, Ian Thorpe, Cathy Freeman, Dame Tanni Grey-Thompson, and Jackie Joyner-Kersee.

Johnson shared his and the other athletes' stories of success, failure, lessons learned, personal weaknesses and vulnerabilities (Johnson, 2011). In talking about the coach-athlete relationship, Johnson says, "the coach-athlete relationship is crucial to Olympic success" (Johnson, 2011, p.267). In describing his relationship with his coach, Johnson stated, "To me, Clyde felt much more like a teacher than a coach. Even so, he accepted my input and even my challenges. If I asked why are we doing this? I'm thinking we should be doing something else, he'd ask why. Sometimes my answers actually would make sense to him. In short, we had a partnership where we worked together" (Johnson, 2011, p. 266). Sebastian Coe described a similar relationship with his coach who was his dad, "He would structure stuff in a way that allowed you to fill in some of the bits" (Johnson, 2011, p. 266).

These examples illustrated the coach developing autonomy, which is a part of self-determination theory (Deci & Ryan, 2000; Ryan & Deci, 2000). The coach in each example provided autonomy by empowering the athlete to make decisions about things that were important to him. Researchers have found when people/athletes have autonomy they were more intrinsically motivated and experienced improved satisfaction, well-being and performance (Deci & Ryan, 2000; Lafreniere, Jowett, Vallerand & Carbonneau, 2011; Mallet, 2005; Ryan & Deci, 2000).

One of the aspects cited by athletes and coaches alike is the coach-athlete relationship and the impact this can have on performing well at the Olympic Games (e.g. Jowett & Cockerill, 2003; Vernacchia et al., 2000). This study investigated the coach-athlete relationship through interviewing the athlete and the coach separately and then interviewing the coach and athlete together to provide for a more in-depth understanding of the coach-athlete relationship.

Outside of the coach-athlete relationship, there are many factors that go into performing well at the Olympic Games. Aside from the obvious need for physical talent and skills; the psychological aspects of peak performance at the Olympic Games play an important role as well (e.g. Fletcher & Sakar, 2012; Gould, Greenleaf, Guinan, Dieffenbach & McCann, 2001; Vernacchia, McGuire, Reardon & Templin, 2000).

Purpose

Thousands of track and field athletes in the United States of America begin each quadrennium physically and mentally preparing to make the Olympic Team. Only a small percentage of these athletes qualify to compete in the Olympic trials. From there, an even smaller number actually qualify to compete in the Olympic Games

(approximately 100-130). Even fewer, only 21 individual athletes, actually won a medal (Gold, Silver or Bronze) in their Olympic competition in London. For these athletes, their process of preparation and performance delivery worked. The research question for this study was "What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?" The purpose of this study was to investigate the coach-athlete relationship with Olympic medal winning track and field athletes and their coaches.

Self-determination theory (Deci & Ryan, 1985; 2000) was included as the theoretical framework to investigate the coach-athlete relationship. This theory was chosen to be consistent with previous researchers (Fletcher & Sakar, 2012; Mallet & Hanrahan, 2004), who have suggested that an autonomy supportive environment provided by coaches was beneficial for Olympic athletes and their performance. This led to the inclusion of self-determination theory for the investigation of the aspects of these coach-athlete relationships that helped in the process of developing an Olympic medal winner.

Based on the work of Vernacchia, McGuire, Reardon and Templin (2000) this current study aimed to further explore the coach-athlete relationship of Olympic track and field athletes from the United States of America. In their study, athletes discussed that their coach had an important role in their success (Vernacchia et al., 2000). The focus of their study was on the athletes and their psychosocial aspects related to sport performance (Vernacchia et al., 2000). They did not explore this area of the coach-athlete relationship any further (Vernacchia et al., 2000). This current study expanded on their work by specifically exploring more in-depth the coach-athlete relationship with Olympic medal

winners. This study has the potential to add to the existing research on Olympic athletes, and coach-athlete relationships, by capturing the experiences and perspectives of both the athlete and the coach.

Olympic athletes from a variety of sports have identified and highlighted the coach-athlete relationship as being important to their success (e.g. Gould, Greenleaf, Guinan, Dieffenbach, & McCann, 2001; Gould, Guinan, Greenleaf, & Chung, 2002; Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999; Jowett & Cockerill, 2003; Mallet, 2005). The area of interpersonal relationships in sport is a relatively new area of research in sport psychology that needs more exploration (Wylleman, 2000). In the last decade research has picked up in this area and in looking at coach-athlete relationships.

Leading researchers in the area of coach-athlete relationships conducted an analytical research review of methodological approaches to studying athlete-coach dyads (Poczwardowski, Barott, & Jowett, 2006). They suggested that future research focus on: diversifying units of analysis and considering multiple units of analysis; shifting the methodological and conceptual focus from the individual to inter-individual unit of analysis; diversifying theoretical frameworks that can be used to understand athlete-coach relationships; diversifying methodological approaches to investigating athlete-coach dyads, which will allow for pairing specific research problems with ideal methodological solutions; considering a more general framework of inquiry that suits the emerging field of interpersonal relationships in sport; and diversifying the phenomena under study such as including interpretations and meanings, diversifying issues and populations (Poczwardowski et al., 2006). They further suggested the need for sport specificity of the theoretical models of athlete-coach dyads (Poczwardowski et al., 2006).

The current study is a direct response to these suggestions for future research. The current study shifted the focus from individual to inter-individual unit of analysis by exploring the coach-athlete relationship from both the coach and athlete's perspectives for each case. The current study had sport specificity in interviewing track and field athletes. Using self-determination theory added to diversifying the theoretical frameworks used to analyze athlete-coach relationships. Using case study methodology added to diversifying the approaches to investigating athlete-coach dyads. Individual interviews with the athletes and coaches as well as a combined interview with the coach and athlete will serve as the primary source of data collection supplemented with demographic information to develop an in-depth portrayal of the coach-athlete relationship for each individual case (Carron & Chelladurai, 1978; Thompson, Vernacchia, & Moore, 1998).

The findings of this study are exploratory due to the sample size and time spent investigating the participants. Access to the participants was very limited because they were all still engaged in training and competitions. The findings have the potential to contribute to previous research by providing a better understanding of the coach-athlete relationship of USA track and field athletes in the context of winning a medal at the Olympic Games. This information may help in contributing to the education and preparation of coaches and athletes in the future. The information learned from this study may benefit our finest junior athletes and their coaches in their quest for future Olympic medals.

CHAPTER 2

Review of the Literature

Introduction

This review of literature will first introduce self-determination theory. Next, the various challenges of the Olympic Games will be presented. This will be followed by an exploration of the research on Olympic athletes. Lastly the research on coach-athlete relationships will be reviewed. There are many factors that go into performing well at the Olympic Games and aside from the obvious need for physical talent and skills; the psychological aspects of peak performance at the Olympic Games play an important role as well (e.g. Fletcher & Sakar, 2012; Gould, Greenleaf, Guinan, Dieffenbach & McCann, 2001; Vernacchia, McGuire, Reardon & Templin, 2000). One of the most important aspects cited by athletes and coaches alike is the coach-athlete relationship and the impact this can have on performing well at the Olympic Games (e.g. Jowett & Cockerill, 2003; Vernacchia et al., 2000). The coach-athlete relationship is an important aspect to consider in coaching, as previous research has found that there is a high probability that the relationship will have an effect on the athlete's experience in relation to enjoyment, self-esteem and performance achievements (Jowett & Cockerill, 2003; Jowett & Meek, 2000a,b; Lyle, 1999; Vealey, Armstrong, Comar, & Greenleaf, 1998).

This study was based on the theoretical framework of self-determination theory (Deci & Ryan, 1985; 2000) in relation to coach-athlete relationships. Self-determination theory (Deci & Ryan, 2000; Ryan and Deci, 2000) is based on establishing intrinsic motivation through three methods: autonomy, relatedness and competence. Self-

determination theory provided a framework for investigating the coach-athlete relationship for evidences of intrinsic motivation being developed through autonomy, relatedness and competence.

Self-Determination Theory

A person's level of intrinsic motivation and engagement in social situations is determined in large part by the social context in which they operate (Ryan & Deci, 2000). Within this social context there are factors that can facilitate intrinsic motivation, self-regulation, and well-being (Ryan & Deci, 2000). Self-determination theory (SDT) provides that in order to understand human motivation, there has to be an acknowledgement of the instinctive psychological needs for competence, autonomy, and relatedness; that when met, provide for increased self-motivation and well-being (Deci & Ryan, 1985; 2000; Ryan & Deci, 2000; Ryan & Deci, 2002). Competence is defined as the need to be effective in dealing with one's environment (Deci & Ryan, 1985; 2000; Ryan & Deci, 2000; Ryan & Deci, 2002). Autonomy is defined as the need to control the course of one's life (Deci & Ryan, 1985; 2000; Ryan & Deci, 2000; Ryan & Deci, 2002). Relatedness is defined as the need to have a connectedness through relationships with others (Deci & Ryan, 1985; 2000; Ryan & Deci, 2000; Ryan & Deci, 2002). Regardless of perceived competence, people whose motivation comes from an internal source as opposed to externally controlled source have more interest, excitement, and confidence, which facilitates improved performance, persistence, creativity, increased vitality, self-esteem and well-being (Deci and Ryan, 2000; Ryan and Deci, 2000). The theory discussed above provided the framework for investigating the coach-athlete relationship of Olympic track and field medal winning athletes and coaches and was used to guide the

analysis. The next section discussed the unique challenges that the Olympic Games present to an athlete and coach in trying to achieve the success of winning a medal.

Challenges of the Olympic Games

The global importance placed on the Olympic Games builds the anticipation, excitement and pressure to an all-time high for athletes (Haberl & Peterson, 2006; Orlick, 2002). Haberl and Peterson (2006) discussed the challenges of the Olympic Games based on their experiences as sport psychology consultants for the USOC. The Olympic Games, for most athletes, represents the highest level of achievement in an athletic career. Qualifying for the team or winning an Olympic medal can forever alter an athlete's career and path in life. The fact that the Olympic Games only happen once every four years adds to this moment. This creates limited opportunities for athletes to compete in this environment, placing a greater importance on the competition, which adds to the pressure of performing. As a result of this pressure athletes place great importance and meaning behind getting to the Olympics and their performance there (Haberl & Peterson, 2006; McCann, 2008; Orlick, 2002).

> Few of us have actually experienced the enormous challenge of performing within an Olympic Games context, but most of us have had our Olympic moments. How well we handle those moments, and the extent to which we are able to embrace them, is often determined by two factors: how prepared we feel to accept those opportunities or challenges, and the extent to which we are able to remain positive and fully absorbed in the process of engaging ourselves in the experience or performance. Excelling in the Olympic context is almost entirely dependent on perspective and focus (Orlick, 2002, p. 5).

Orlick, who is considered one of the leaders in the field of applied sport psychology, has worked with Olympic teams, athletes and coaches in every summer and winter Olympics since 1973. Based on his experience, he has found that the two main factors (change and lack of preparation) are causes for why athletes and teams do not reach their goals in the Olympics (Orlick, 2002). In his experiences people are unsuccessful when they change routines that have worked for them up to that point, or when they do not change routines that have not worked (Orlick, 2002). The second reason he cited was that people do not properly prepare to handle the distractions of the Olympics (Orlick, 2002). Athletes and teams can increase the chances of having their best performance at the Olympics if they are fully prepared, find positive energy from the Olympic environment, and are completely in tune and focused with their performance (Orlick, 2002). "The performance demands at the Olympic Games are no different than the performance demands at any other major competition, but everything that surrounds the performance is different" (Orlick, 2002, p. 6). The environment of the Olympics has a large influence on performance. Thus the rest of this section explored the literature that discussed the unique context of the Olympics in regards to the effects on performance: physical bankruptcy/illness/injury, drug testing, politics/national governing body, sponsors/agents/media, staff stress, and performance issues.

Qualifying process. In track and field specifically, the U.S. Olympic trials typically take place about 4-6 weeks prior to the Olympic Games themselves (ex. Vernacchia & Henschen, 2008). This short turnaround time can create challenges for athletes to maintain physical fitness at a peak level (Vernacchia & Henschen, 2008). Furthermore, the middle to late summer is the prime time for big meets on the European

track and field tour, which has a large fan base and provides opportunity for newly minted Olympic athletes to earn money for competing in the meets (Vernacchia & Henschen, 2008). As a result of this demanding training, competition and travel schedule, many athletes arrive at the Olympics with major injuries, or a lack of physical, emotional, and psychological energy for them to perform at a high level (Vernacchia & Henschen, 2008). In other studies with Olympic athletes, similar negative effects on performance were reported, such as overtraining and injury (Greenleaf, Gould & Dieffenbach, 2001; Haberl, 2001).

Olympic Village. There is no other event that brings together so many countries, sports and athletes into one setting. This creates an atmosphere that is unmatched in spectacle and performance which makes for a challenging competition environment even for those most skilled and experienced athletes (Haberl & Peterson, 2006). The large number of athletes, coaches, support staff, officials, etc. from each country combined with media and fans create for a chaotic environment (Haberl, 2001; Haberl & Peterson, 2006). For the coaches and athletes, most would be considered lucky just to function at a normal level, much less be able to achieve peak performance (Haberl, 2001; Haberl & Peterson, 2006). Add to this that coaches and athletes now have an unexpected amount of attention being paid to them. Family, friends, sponsors, etc., that prior to the Olympics were not a part of the individual's daily life, now want to be associated with them because they are an Olympian (Haberl & Peterson, 2006).

The chaos and lack of normalcy in the Olympic village can cause problems for the athletes (Greenleaf, Gould & Dieffenbach, 2001). "As a result of living, eating, and training in the Olympic village, many athletes became ill with flu or related upper

respiratory infections" (Vernacchia & Henschen, 2008, p. 256).

Pressure of the Olympics. The pressure that athletes experience at the Olympic Games is unique and challenging, but it is not unique to the athletes, as coaches and managerial staffs experience pressures and challenges that are equal in difficulty and intensity (Vernacchia & Henschen, 2008). Many of the coaches view the Olympics as the most important moment in their coaching careers (Vernacchia & Henschen, 2008). These Olympic coaches are important and experienced people in their areas of expertise and are used to being the leader (Vernacchia & Henschen, 2008). In the case of the Olympic Games, all these leaders are asked to come together and work under one leader of the team and take on supporting roles, which can be a source of stress and conflict (Vernacchia & Henschen, 2008). The coach and support staff can have a negative effect on performance of the athletes and teams by becoming stressed, or losing composure and become another distraction to the athletes (Olusoga, Maynard, Hays, & Butt, 2012; Orlick, 2002).

Dr. McCann, a long-time sport psychologist with the United States Olympic Committee made the point that due to the uniqueness of the Olympic Games, it creates an environment where anything that potentially disrupts the peak performance of an athlete becomes a performance issue (McCann, 2008). He discussed some of the issues faced by the United States athletes, which consists of clinical issues, adjustment to external factors, interpersonal conflicts, distraction at the Games, and performance pressure (McCann, 2008).

Other sport psychology members of the United States Olympic Committee (USOC) have presented similar findings over the years (e.g Haberl & Peterson, 2006;

Vernacchia & Henschen, 2008). In a setting where fourth place in the world is an enormous let down and first to eighth place can be hundredths of a second apart, even minor distractions or changes in ability to perform at the Olympics are significant (McCann, 2008). "The external psychological challenge that disrupts athletes the most and creates secondary issues is the Olympics itself and the meaning it has for the athlete" (McCann, 2008, p. 270). The USOC sport psychology staff has learned that as a result of the impact of this psychological challenge, they have identified the need to specifically prepare athletes and coaches for it in the years prior the Games (McCann, 2008).

Coping with Injury. Coping with injuries or medical issues that occur just prior to the Olympic Games can cause great stress for all involved (Vernacchia & Henschen, 2008). Coaches have to make decisions regarding the athlete competing or attempting to replace this athlete with an alternate in a short time span (Vernacchia & Henschen, 2008). This lack of time caused issues as access to proper medical care may have time and cost considerations depending on the location of the Olympics (Vernacchia & Henschen, 2008). This process was evidenced in detail by two cases faced by track and field athletes at the 2000 Olympic Games (Vernacchia & Henschen, 2008).

Olympic track and field athletes discussed overcoming injuries throughout their career as an important aspect of their ability to succeed (Vernacchia, McGuire, Reardon & Templin, 2000). Athletes found that a gradual progression of training allowed them to develop a solid training foundation that allowed them to manage the injury and rehabilitation process and return to be successful (Vernacchia, McGuire, Reardon & Templin, 2000).

Dealing with Media. At the Olympic Games, there are more journalists

accredited than athletes, which places a large demand on athletes and coaches' time and attention (Haberl & Peterson, 2006). Even the most experienced and skilled athletes can be affected by these media distractions (Haberl & Peterson, 2006). The athletes from more obscure, or referred to by the mainstream media and culture as "Olympic sports," do not typically receive much media attention. This often changes after they make the Olympic team. Just prior to and during the Olympics Games, the athletes often get caught up in the media attention and become distracted (Haberl & Peterson, 2006). Researchers found that Olympic athletes cited media distractions as having a negative effect on performance at the Olympic Games (Greenleaf, Gould & Dieffenbach, 2001; Haberl, 2001).

Drug Testing. With the Sydney 2000 summer Games, the International Olympic Committee (IOC) renewed their interest in making the Olympics a sporting event that is void of doping and drug use (Vernacchia & Henschen, 2008). This meant that there was more drug testing during the Olympic Games and new processes that the athletes may not have been familiar with (Vernacchia & Henschen, 2008). At this particular Olympics there were five different drug testing agencies and they were not coordinated; which created miscommunication issues and often resulted in the drug testing process taking large amounts of time that in certain cases caused athletes to miss training sessions (Vernacchia & Henschen, 2008). Drug testing may appear to be a simple process on the surface and one that should not have a large effect on the coach-athlete relationship, but when it interrupts the athlete's routine and creates issues with training sessions, the process can create stress. This is a potential pitfall if the coach and athlete do not have a good working relationship and have not prepared and do not know how to respond

effectively when things do not go as planned.

Low Confidence. Although Olympic athletes are seen as being at the top level of their sport and confident and competent performers, the most common performance issue presented to sport psychology consultants by track and field athletes at the 2000 Olympic Games was doubt and low confidence (Vernacchia & Henschen, 2008). It is important to identify the challenges present in the context of the Olympics Games in order to be able to identify with and understand coaches and athletes when they discussed their experiences of competing at the Olympic Games.

Olympic Athletes

The last section explored the challenges present in the Olympic Games environment and this section explored research done specifically on Olympic athletes and the psychosocial factors related to their performance at the Olympic Games. In a study by Vernacchia, McGuire, Reardon and Templin (2000) they interviewed fifteen Olympic track and field athletes (9 male, 6 female) who were: Olympians from 1984 (2), 1988 (6), and 1992 (13); world record holders (1); Olympic medalists (3, 1 gold, 2 silver, 1 bronze); American record holders (4) and U.S. national champions (7 past and current). The researchers used qualitative research methodologies in order to gain a phenomenological and idiographic view in relation to the psychology of athletic performance (Vernacchia et al., 2000). They found that the emergent themes of the psychosocial characteristics of Olympic track and field athletes were mental skills and attitudes; developmental concerns; socioeconomic factors; and spiritual/religious factors (Vernacchia et al., 2000).

Mental Preparation. Establishing a plan, routine, and clear tactical strategies in

mental preparation has been established by researchers as a key factor for Olympic athletes in preparing, performing well and winning a medal at the Olympic Games (e.g. Eklund, Gould & Jackson, 1993; Fletcher & Sakar, 2012; Gould, Eklund & Jackson, 1992a; Gould, Greenleaf, Guinan, Dieffenbach & McCann, 2001; Gould, Guinan, Greenleaf, Medbery & Peterson, 1999; Greenleaf, Gould, & Dieffenback, 2001; McGuire & Balague 1993; Portenga, Aoyagi, & Statler, 2012; Vernacchia, McGuire, Reardon, & Templin, 2000). Athletes from teams that met or exceeded expectations at the Olympics identified the importance of sticking to the plan and continuing to use the mental preparation routines that had been established prior to the Olympics (Gould et al., 1999). While many Olympians use mental preparation strategies, there is reason to believe that the specifics of how they prepare may differ greatly on an individual basis. This was evidenced in the study by Ecklund et al. (1993) where they found that one Olympic gold medalist wrestler described his mental preparation as removing all distractions from his thoughts by intently focusing on the task at hand and was so developed that it was an automated process. Another gold medal winner described his mental preparation as a complex routine of relaxation, breath control, perspective taking, focusing on strengths, motivating thoughts, self-talk and purposeful mental focusing (Eklund et al., 1993). Furthermore, there were differences among the six medalists in how they approached the technical/strategy of each opponent, with some being very detailed in focus on specific situations and tactics on offense and defense with an opponent, while others intentionally avoided such thoughts (Eklund et al., 1993). One medalist discussed the need to be alone prior to matches, while another wanted to have other people around, specifically someone to help him keep from getting too serious in his thoughts and preparations (Eklund et al.,

1993).

Motivation. Motivation can be a complex process to understand and one that is heavily researched in athletes in an attempt to help the athlete to achieve peak performance. As previously mentioned by Balague (1999) in order to truly understand and develop motivation, it is important to first start with identity and values. Mallet and Hanrahan (2004) investigated motivation within a sample of five male and five female elite (top ten performances at 1996, 2000 Olympic Games or 1995, 97, 99 World Championships) track and field athletes from Australia and found that they were strongly driven by personal goals and achievement, had a strong belief in self, and track and field was a pivotal part of their lives. The researchers used qualitative semi-structured interviews to collect the data. They analyzed the results from three perspectives, self-determination theory, hierarchical model of motivation, and achievement goal theory (Mallet & Hanrahan, 2004). Through inductive analyses they discovered that the athletes used self-determined forms of motivation and goal attainment improved their views of competence, which in turn helped reinforce self-determined forms of motivation (Mallet & Hanrahan, 2004).

Focus. Researchers have identified that the ability to focus on the task at hand prior to and during competition is a key psychological attribute of successful Olympic athletes (e.g. Durand-Bush, & Salmela, 2002; Gould, Dieffenbach, & Moffet, 2002; Gould, Greenleaf, Guinan, Dieffenbach & McCann, 2001; McGuire and Balague, 1993; Vernacchia & Henschen, 2008; Vernacchia, McGuire, Reardon, & Templin, 2000). More specifically, athletes cited focusing on the process, focusing on what one can control and focusing on one's self as methods for helping improve their performance

(Gould et al., 2002; Vernacchia et al., 2000). Teams and athletes that failed to meet expectations identified issues related to focus as one of the reasons for being less successful (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999).

Quality Practice. Teams and athletes that met or exceeded expectations at the Olympic Games cited participation in resident training programs as one of the reasons for their success (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999). Olympic track and field athletes identified their ability to partake in quality training over the course of their career as important to their success (Vernacchia, McGuire, Reardon, Templin, 2000).

Flow in Sport. Fourteen male and 14 female elite athletes (28 international competition level, 7 Olympic medalists, 3 world champions) from Australia and New Zealand competing in seven different sports, four of which were from track and field were interviewed regarding their flow experiences (Jackson, 1996). The researchers used semi-structured interviews and content analysis and found that the athletes identified all the characteristics of flow (Jackson, 1996). The most commonly identified characteristics of flow were autotelic experience, complete focus on the task at hand, merging of action and awareness, and the paradox of control (Jackson, 1996). Jackson found that factors athletes identified as assisting them in getting into flow were being physically and mentally prepared, positive mental attitude, positive pre-competitive and competitive feelings, maintaining the necessary focus, and having optimal motivation and physical activation (Jackson, 1992; 1995).

Resiliency. Another theme that emerged from their findings from Vernacchia, McGuire, Reardon and Templin (2000) was the mental attribute of patience. Patience

helped the athletes to deal with challenges in their careers from injury or illness (acute or chronic); training and performance plateaus; and legal issues (Vernacchia et al., 2000). Along with patience the athletes cited work ethic and perseverance as important to their success and that young athletes should focus on developing such attributes (Vernacchia et al., 2000).

Fletcher and Sakar (2012) interviewed 12 Olympic champions (8 men and 4 women) from a range of sports: figure skating, pentathlon, hockey, athletics, rowing, cycling, modern pentathlon, curling, and sailing. The athletes had won their medals in Olympics over the course of four decades (1-1960's, 1-1970's, 5-1980's, 5-2000's) (Fletcher and Sakar, 2012). The interviews were conducted to investigate the athletes' experiences of handling pressure in their sport careers (Fletcher and Sakar, 2012). The researchers used a grounded theory approach (Strauss & Corbin, 1998) to guide their study as this aligned with their predominantly post-positivists beliefs (Fletcher & Sakar, 2012).

The researchers have found that the Olympic champions were resilient athletes, chose to compete in difficult sport settings and that they are better at internalizing and integrating more self-determined forms of extrinsic motivation (Fletcher & Sakar, 2012). Olympic champions viewed external challenges as integral, placing more emphasis on these challenging situations (Fletcher & Sakar, 2012). Olympic champions identified long periods of time in their sport careers where they needed to endure pressures such as competitive, organizational and personal stressors (Fletcher & Sakar, 2012). While they faced many challenges, these Olympic champions discussed the importance of the exposure to stressors (parental divorce, serious illness, and career-threatening injuries) in

developing their stress-response abilities, which they viewed as being essential to them winning their gold medals (Fletcher & Sakar, 2012). One of the ways the athletes developed resiliency to demanding situations was by focusing on their own thoughts as opposed to external thoughts (Fletcher & Sakar, 2012).

Researchers have found that Olympic medal winning athletes identified the importance of having developed coping strategies for dealing with the challenges of the Olympics (Dale, 2000; Eklund, Gould & Jackson, 1993; Gould, Dieffenbach, & Moffet, 2002; Gould, Eklund, Jackson, 1992a,b; Gould, Finch & Jackson 1993; Gould, Guinan, Greenleaf, Medbery & Peterson, 1999; McGuire and Balague, 1993; Orlick & Partington, 1988; Pensgaard & Duda, 2002). Coping strategies can be both problem focused and emotional focused when faced with challenges (Pensgaard & Duda, 2002). Reframing negative situations into positives helped Olympic athletes to cope with minor challenges (Gould et al., 1999; Haberl, 2001; Pensgaard & Duda, 2002). Athletes accomplished this through a strong belief in a positive outcome, which allowed the athlete to view the negative and potentially destructive situations as positive and constructive as the athlete had confidence to handle the situation (Gould et al., 1999; Haberl, 2001; Pensgaard & Duda, 2002). Olympic medal winning wrestlers from 1988 Olympics acknowledged that expectations from others required them to have different responses (Eklund et al., 1993). Some embraced the expectations and used them for energy and motivation, others ignored them, and yet for some they needed to cope with these expectations in order to be successful at the Olympics (Eklund et al., 1993). Athletes can vary on how they approach stressful situations like the Olympics. Haberl (2001) found that to cope with the stress of the Olympics some athletes did activities (eg. e-mail, or journal writing) to

keep their mind distracted, while others focused specifically on the task to block out other distractions and stressors.

Imagery/Visualization. Researchers have found that the use of mental skills such as imagery/visualization was a common practice among Olympic track and field athletes (Balague, 1999; Dale, 2000; McGuire & Balague, 1993; Vernacchia, McGuire, Reardon & Templin, 2000). In the study by Vernacchia et al. (2000) the athletes discussed how they specifically use imagery/visualization to anticipate environmental conditions; review motor skill execution; to assist physical and mental relations; to see themselves winning or being successful; to improve confidence; to assist with goal setting strategies; to develop kinesthetic and emotional feel for their coming performances; to recall mental images to improve performance; to reduce stress and to help with focus and concentration (Vernacchia et al., 2000). Furthermore, in a large-scale study of 235 Canadian Olympic athletes, researchers discovered that the athletes had well-developed imagery skills and used them daily (Orlick & Partington, 1988). Fletcher and Sakar (2012) found that Olympic champions identified using imagery as part of their strategies to control their thoughts. Not all Olympians approached visualization use the same way (Eklund, Gould, & Jackson, 1993). There was some evidence that the researchers suggested that some Olympic medal winners used visualization to help with pre-performance preparation for strategy and technique, while others viewed visualization as a negative as it made them feel too automated (Eklund et al., 1993).

Confidence. Researchers have found that successful Olympic athletes were confident (Gould, Dieffenbach, and Moffett, 2002; Hays, Maynard, Thomas, & Bawden, 2009; Pensgaard & Duda, 2002; Vernacchia, McGuire, Reardon & Templin, 2000).

More specifically, athletes discussed the challenges of overcoming self-doubt and becoming confident (Pensgaard & Duda, 2002; Vernacchia et al., 2000). They accomplished this by developing trust and belief in one's physical preparation and the importance of this link between physical confidence and psychological confidence (Pensgaard & Duda, 2002; Vernacchia et al., 2000). Olympic medalist athletes discussed that high sport confidence assisted in performance through its positive effect on athletes' thoughts, feelings, and behaviors (Hays et al., 2009). These athletes also identified the relationship between thinking right (positive) thoughts and the ability to stay focused on the competition and their confidence (Hays et al., 2009). Furthermore, these athletes felt that their confidence provided them with protection from thinking wrong (negative) thoughts (Hays et al., 2009). Some of the athletes addressed that in their most confident moments they were in a flow like state where things seemed to happen automatically (Hays et al., 2009). Confidence can be derived from many sources as evidenced in a study by Hays et al. (2009) where nine sources of confidence were identified by elite athletes (13 Olympic or World Championships medalist and 1 world record holder) as: preparation, performance achievements, coaching, innate factors, social support, experience, competitive advantage, self-awareness, and trust. These athletes also discussed six types of sport confidence: skill execution, achievement, physical factors, psychological factors, superiority to opposition, and tactical awareness (Hays et al., 2007). High sport confidence was demonstrated through body language and adherence to competition plans in decision-making (Hays et al., 2009). Factors that were seen as detrimental to confidence in Olympic medalists were poor performances, injury/illness, poor preparation, coaching, pressure and expectations and psychological factors (Hays et

al., 2009).

Growth Mindset. Athletes often define their identity by their talent which is determined by genetics and is fixed when determining how successful they might be. This is a reflection of how society views athletic potential. A more healthy approach is one that looks at talent but also takes into account ability, which can be controlled and improved through time and effort in deliberate practice. Carol Dweck (1986) first conducted research in the field of education looking at motivation and learning and this concept of talent versus effort in achieving success. Over the years of her research she developed the idea that people have either fixed (talent is a given, ability is stable) or a growth mindset (talent is a given, but effort can improve ability) and that a growth mindset is the key determinant in achieving success in learning (Dweck, 1986). From her research in education she identified three key components of a growth mindset that are found in champion athletes, which are doing their best in learning and improving, setbacks are motivating, taking charge of the processes that bring success and maintain it (Dweck, 2007). Jowett and Spray (2013) interviewed four track and field Olympic hopefuls for Great Britain in the 2012 Olympic Games looking at their inherent ability beliefs and their effects. They discovered that the athletes as a whole believed in a growth mindset in regards to ability (Jowett & Spray, 2013). Specifically that talent is only a piece of the puzzle and that learning, improving, and hard work are necessary to attain success at an elite level (Jowett & Spray, 2013). Olympic champions viewed stressors as opportunities for growth, development and mastery as well as a chance to develop a "psychological and competitive edge" over their opponents (Fletcher & Sakar, 2012).

Goal Setting and Attainment. Two other important aspects athletes discussed were the ability to set and attain goals and to have dream goals and pursuits as sources for motivation (Balague, 1999; Fletcher & Sakar, 2012; Gould, Dieffenbach, & Moffett, 2002; McGuire & Balague, 1993; Vernacchia, McGuire, Reardon & Templin, 2000). In her experience Balague (1999) has found that goal setting with elite athletes aligns with the literature and that it should be specific, flexible, written down and imagined. Action plans are a key component in getting from goal setting to goal attainment (Balague, 1999). Balague (1999) states, "For elite athletes, goals should translate into a clear, concrete knowledge of what to do at each practice. The question here becomes, how will this practice, exercise, etc. get me closer to my goal?" Lastly elite athletes need to be able to be flexible in working to attain their goals (Balague, 1999). Having a growth mindset is important to be able to understand failure and mistakes as challenges and opportunities to learn, grow and adjust the path to goal attainment if necessary (Balague, 1999).

Another area to address in working with elite athletes was discovering their values, or what was important to them (Balague, 1999). Often athletes discuss things they would like as opposed to what they value and this becomes important for the athletes and coaches when discussing the athletes' priorities (Balague, 1999). Based on her experience, elite athletes are more likely to commit to putting forth the effort required to accomplish goals when they value the pursuit of the goals (Balague, 1999). As athletes and coaches it is important to know what you value first before determining priorities and eventually setting goals (Balague, 1999). Goals should be value driven and when this occurs, it is much easier to find intrinsic motivation to accomplish these goals (Balague,

1999).

Fletcher and Sakar (2012) found that Olympic champions early in their career cited passion for the sport, achieving a progressive approach to goals, and social recognition as factors for motivation. While later in their career they were motivated by personal excellence, showing competence and proving their self-worth to others (Fletcher & Sakar, 2012).

Positive Attitude. Olympic athletes discussed the importance of having a positive attitude toward their sport (Greenleaf, Gould, & Dieffenbach, 2001; Haberl, 2001; Pensgaard & Duda, 2002; Vernacchia, McGuire, Reardon & Templin, 2000). Researchers' analyses have found that for track and field athletes "enjoyment of their sport appeared to be an outgrowth of their passion for excellence" (Vernacchia et al., 2000 p.22). Mastery of their event/sport as well as a focus on the process helped facilitate enjoyment of their sport for the athletes (Vernacchia et al., 2000). Fletcher and Sakar (2012) found that Olympic champions had positive personality traits that consisted of: openness to new experiences, contentiousness, innovative, extroverted, emotionally stable, optimistic and proactive. Researchers investigated differences between Olympic medal winning wrestlers and non-medal winners and found that the medal winners had higher positive expectancy ratings prior to competition (Gould, Ecklund, & Jackson, 1992a; 1992b).

Social Support Systems. Olympic athletes discussed the importance of social support systems, which typically consisted of family, parents and spouses (Durand-Bush, & Salmela, 2002; Gould, Dieffenbach, & Moffet, 2002; Gould, Greenleaf, Guinan, Dieffenbach & McCann, 2001; Gould, Guinan, Greenleaf, Medbery & Peterson, 1999;

Vernacchia, McGuire, Reardon & Templin, 2000). The athletes characterized these support systems as nurturing supportive social environments where people did not put pressure on them to succeed (Vernacchia et al., 2000). Financial well-being was also a concern for some athletes, which led them to pursue athletic scholarships to provide financial security and a proper training setting to allow for them to develop as an athlete (Vernacchia et al., 2000).

Identity. For elite athletes, their identities are often strongly tied to their performance (Balague, 1999). When working with elite athletes it is important to understand this piece and help them to understand their identity (Balague, 1999). In her work with elite rhythmic gymnasts and track and field athletes from the United States, Balague (1999) discussed how she used a framework that is based on Cairo (1995) and organizational psychology when she asked the athlete questions such as: 'Who are you?' 'How do you describe yourself?' 'Who do you want to be?' 'What needs to change?' She mentions that some key areas to investigate are the athlete's strengths, areas for improvement and skills that they might not be using effectively (Balague, 1999).

Spirituality. Spirituality, religion, or prayer was an integral part of the athletes as they used it to help them stay committed to goals and belief in their abilities as an athlete (Balague, 1999; McGuire & Balague, 1993; Vernacchia, McGuire, Reardon & Templin, 2000). The athletes also discussed how spirituality played a role in finding meaning and comfort in dealing with athletic successes, failures, and challenges such as injury, personal and athletic-related issues (Balague, 1999; Vernacchia et al., 2000).

Coach-Athlete Relationships

This section will explore the literature on coach-athlete relationships with the

main focus being on the literature related to Olympic and elite level athletes. This quote from Orlick, who as mentioned above has many years of experience working with Olympic athletes and coaches, highlighted what he has found to be the key to coach-athlete relationships and Olympic success.

> Truly great coaches have mastered the art of coaching largely because they mastered their capacity to: listen, respect, challenge, believe, care and support. In the preparation and lead-up phase to the Olympic level events, listening, respecting and challenging athletes in positive ways is critically important. In the on-site performance phase, demonstrating belief in each performer and supporting them in simple ways, become the central factors in facilitating excellence (Orlick, 2002, p.12).

Athlete-Centered Approach. Coach-athlete relationships that are developed by a coach with an athlete-centered philosophy have been suggested to be beneficial to the athlete's development (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Jowett & Cockerill, 2003; Poczwardowski, Barott, Henschen, 2002; Zuleger, 2011; 2012). Bloom et al. (1998) interviewed 21 expert Canadian coaches from the team sports of field hockey (n=5), ice hockey (n=5), basketball (n=6), and volleyball (n=5) on their athletic and coaching histories, as well as their evolving philosophies of coaching, organizational skills, training and competition routines and recommendations for education for aspiring coaches. The coaches were considered experts based on recognition by their National Sport Organization, minimum of 10 years or 10,000 hours of high-level coaching experience, the number of elite athletes they had developed up to that point, and their win/loss percentages (Bloom et al., 1998). They analyzed the data inductively using

qualitative techniques suggested by Cote and colleagues (1993, 1995), which consisted of establishing meaning units and creating tags to categorize data relevant to mentoring (Bloom et al., 1998). The researchers found that the coaches' philosophies for coaching athletes were to nurture the development of the athlete as a total person in and out of sport with an emphasis on well-being (Bloom et al., 1998).

Jowett and Cockerill (2003) conducted a qualitative study consisting of interviews about the coach-athlete relationship with 12 Olympic medalists (three females and nine males) who had won a medal in at least one Olympic Games between 1968-1988. They found that athlete-centered relationships are grounded in mutual respect, trust, care, concern, support, open communication, shared knowledge, understanding and clear corresponding roles and tasks (Jowett & Cockerill, 2003). The methodology and results of this study will be discussed more in-depth in the section on track and field coach-athlete relationships.

Self-Determination Theory and Coach-Athlete Relationships. Mallett (2005) used self-determination theory as his basis for creating an autonomy-supportive motivational climate in his study where he acted as researcher and coach with Australia's two men's track and field relays for the 2004 Olympic Games. He stated, "Promoting a healthy coach-athlete relationship is posited as key to high quality sport performance and positive affective outcomes" (Mallett, 2005, p. 421). The autonomy-supportive coaching method he used aligned with the approach presented by Mageau and Vallerand, (2003). An example of how he created this environment is that he allowed the athletes to make choices for themselves, by themselves, and about themselves in regards to training

content, training times, training venues, and uniforms for training and competition (Mallett, 2005).

In a 2011 study by Lafreniere, Jowett, Vallerand and Carbonneau, 103 coach-athlete dyads completed self-administered questionnaires independently. The coaching dyads consisted of (93 male coaches, 10 female coaches, 63 male athletes, and 40 female athletes) participating in one of many sports (e.g., gymnastics, volleyball, football) (Lafreniere et al., 2011). The mean age of the coaches was 44.23 years (SD = 7.94 years), while the mean age of the athletes was 22.04 years (SD = 5.29 years) (Lafreniere et al., 2011). On average, coaches had been coaching for 15.75 years (SD =12.53 years), while athletes had been participating in their sport for 8.54 years (SD = 3.64 years) (Lafreniere et al., 2011). The coach-athlete relationship length ranged from "five months to thirteen years, with an average relationship length of 2.88 years (SD = 2.03 years) (Lafreniere et al., 2011). Fifty-eight percent (58%; N = 60) of dyads had both a male coach and a male athlete, 32% (N = 33) had a male coach with a female athlete, 3% (N = 3) had a female coach with a male athlete, and 7% (N = 7) had both a female coach and a female athlete (Lafreniere et al., 2011). The coaches classified their team level as follows: club level (N = 39; 37.9%), county level (N = 5; 4.9%), university level (N = 5; 4.9%), national level (N = 41; 39.8%), and international level (N = 13; 12.6%) (Lafreniere et al., 2011). They utilized several quantitative assessments to measure various factors such as coach's passion, autonomy supportive environment, controlling behaviors, athlete's perceived relationship quality, and athlete's happiness (Lafreniere et al., 2011).

The researchers used structural equation modeling (Bentler, 1993) to analyze the

data and found that coaches who possessed a harmonious passion (Lafreniere et al., 2008; Vallerand et al., 2003) for coaching also were positively associated with autonomy-supportive behaviors toward their athletes (Lafreniere et al., 2011). While obsessive passion for coaching was positively associated with controlling behaviors (Lafreniere et al., 2011). The athletes whose coaches exhibited autonomy-supportive behaviors reported higher quality coach-athlete relationships, which were related to the athlete's general happiness (Lafreniere et al., 2011).

Coaching behaviors can have a large impact on the athlete and thus Hollembeak and Amorose (2005) investigated 280 (n = 146 males and n = 134 females) NCAA Division I university student athletes from 12 different sports including track and field (n = 42). They used self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000) to explore the effect of perceived competence, autonomy and relatedness on the relationships between perceived coaching behaviors and athletes' intrinsic motivation (Hollembeak & Amorose, 2005). They measured coaching behavior with the Leadership Scale for Sports (LSS; Chelladurai and Saleh, 1980), intrinsic motivation with the Sport Motivation Scale (Pelletier et al., 1995), perceived competence with a three question inventory (Amorose, 2003), autonomy with a six question scale developed for the study from the work of Deci and Ryan (1985), and relatedness with the Feelings of Relatedness Scale (Vallerand, 1997) (Hollembeak & Amorose, 2005). The researchers found that democratic behavior had a positive effect on autonomy, which improved intrinsic motivation, while autocratic behavior negatively affected autonomy, relatedness and intrinsic motivation (Hollembeak & Amorose, 2005).

The studies presented above on self-determination theory and coach-athlete relationships highlight the importance of an autonomy supportive environment, but lack in-depth explanations for how that is developed from the perspectives of the athlete and the coach.

Trust and Belief. In the study by Vernacchia, McGuire, Reardon and Templin (2000) on Olympic track and field athletes, the impact of the coach was highlighted by seven of the fifteen athletes. The athletes discussed the importance their coach(es) had in their development through their knowledge of training design, application and the development of a strong trust and belief in the coach (Vernacchia et al., 2000). "The coach-athlete relationship was of paramount importance and influence in several of the athlete's development" (Vernacchia et al., 2000 p.25).

In a study by Pensgaard and Roberts (2002) they investigated elite athletes (7 Norwegian Winter Olympic skiers, 5 earned medals at Olympics or World Championships) from the 1994 Lillehammer Winter Olympic Games. These seven athletes were pulled from a larger study of all of the Norwegian athletes who competed in the 1994 Olympic Games (Pensgaard & Roberts, 2002). In this larger study the athletes had been administered the Perceptions of Success Questionnaire (POSQ; Roberts, Treasure, Balague, 1998) and the Perception of Motivational Climate Questionnaire (PMCQ; Seifrez, Duda, Chi, 1992). In this study with the seven athletes, they utilized in-depth interviews as a follow up to the assessments to explore the climate surrounding an athlete and the role of the coach for elite athletes (Pensgaard & Roberts, 2002). The researchers used an orientation inquiry qualitative approach (Kvale, 1996) using a specific theoretical perspective achievement goal theory (Nicholls, 1984; 1989) to

develop the interview guide (Pensgaard & Roberts, 2002). The interviews focused on four topics: early stages of the athlete's career, perception of and coping with stress, the 1994 Olympic experience, and the meaning of the coach and team climate (Pensgaard & Roberts, 2002). The researchers used the theoretical framework for the study to guide the analysis of the interviews (Pensgaard & Roberts, 2002). The researchers found that the athletes had very high task orientation and moderate to high ego orientation (Pensgaard & Roberts, 2002). They also found that the athletes perceived their climate to be highly focused on mastery and low in performance focus (Pensgaard & Roberts, 2002). It is important that the coach provides a positive learning environment that provides athletes with optimal conditions for preparation and peak performance (Pensgaard & Roberts, 2002). This helped facilitate the athlete's trust and belief in attaining the goal through demonstrated competence, which led to confidence (Pensgaard & Roberts, 2002). The athletes identified the coach's role in building an environment and that they preferred for that environment to be a supportive and caring climate that focuses on mastery (Pensgaard & Roberts, 2002).

Jones and Spooner (2006) in their study investigated high achievers and coaches of high achievers (CHA) to discover what are the important variables to consider when coaching high achievers (HA). The participants consisted of seven CHAs (4 males, 3 females) and 14 HAs (9 males and 5 females) from business and sports with five of the CHAs being from sport and six of the HAs being from sport (4 males, 2 females) (Jones & Spooner, 2006). The athletes had competed successfully in national and international competitions and had been at an elite level for at least five consecutive years (Jones & Spooner, 2006). Semi-structured interviews from the participants were analyzed using

content analysis (Jones & Spooner, 2006). The researchers discovered that a "one-size-fits-all" approach to coaching might not be the best approach as there are multiple variables that need to be taken into consideration when coaching high achievers. The most important factor that athletes and coaches identified was the need to build a coaching relationship that centered on trust and mutual respect (Jones & Spooner, 2006).

Fourteen athletes from the 1998 Olympic gold medal winning U.S. Women's hockey team were interviewed as part of a psychosocial case study (Haberl, 2001). The athletes discussed that their coach's ability to maintain control without being dictatorial allowed them to have autonomy on the ice, which facilitated their use of creativity and improved performance (Haberl, 2001). Two of the characteristics athletes highlighted in their coach-athlete relationship with their head coach were trust and belief (Haberl, 2001). These athletes felt that this trust and belief in their ability made them more confident and helped improve their performance (Haberl, 2001). The coach was socially supportive and that this support had a large positive influence on the team's performance (Haberl, 2001). In specifically investigating the role of the coach, Haberl (2001) found that the coach-athlete relationship was built on: trust, respect, caring, maintenance of coach-athlete barriers, and idiosyncratic yet effective communication. For the athletes in the study, their professional relationship with the head coach played a large role in their performance (Haberl, 2001). The coach had great technical knowledge, cared about them, understood their motivation and had a strong belief in their ability, which they felt helped improve their performance (Haberl, 2001).

Communication. Researchers have suggested that communication between coach and athlete is the key to having a successful relationship and limiting stress for both

individuals, thus creating a positive experience (Frey, 2007; Sagar & Jowett, 2012). "When there are problems within a coaching context, it is rarely related to an absence of technical knowledge. It is almost always a communication issue" (Orlick, 2002, p.12-13). When there are communication issues, athletes experience feelings of a lack of listening, respect, positive challenge, belief, caring or support (Orlick, 2002). If coaches do not properly handle these communication breakdowns, athletes lose confidence and motivation, which leads to performance decrements (Orlick, 2002).

Communication at critical moments can often make or break a relationship. In the coach-athlete relationship one of these critical moments is after a loss and after an athlete makes a mistake or in a pressure situation such as the Olympic Games (Sagar & Jowett, 2012). Sagar and Jowett, (2012), investigated these two moments of communication from the coach in response to the athlete and how that impacted the athlete in a large-scale study of 324 British athletes (159 females and 165 males) in track and field, rugby, American football, basketball, gymnastics, football, soccer, swimming, netball, rowing, volleyball, triathlon, tennis, badminton, judo, cricket, and from local, regional, national, and international levels (Sagar & Jowett, 2012). They used a two-section open-ended qualitative survey with the first section requesting demographic information (Sagar & Jowett, 2012). The second section was divided into two-parts and contained seven questions that examined the athlete's perceptions of their coaches' reaction when they lost competitions and when they made mistakes in training (Sagar & Jowett, 2012). The athletes' written answers were in reference to the coaches (263 males and 61 females) who had coached them over the course of their athletic career, from childhood to the time of data collection (Sagar & Jowett, 2012). The data were analyzed deductively and

inductively employing principles of thematic analysis (Smith, 1995) to identify emerging patterns (Sagar & Jowett, 2012).

The researchers found that athletes thought that positive responses from coaches consisted of: the expression of positive emotions (e.g., being calm and relaxed, congratulating the athletes, having a positive outlook), and giving post-competition evaluations (e.g., giving athletes feedback and instructions on performance), and encouragement/motivation (e.g., supporting, consoling, reassuring) (Sagar & Jowett, 2012). Negative reactions consisted of: the expression of negative emotions (e.g., anger, disappointment), hostile reactions (e.g., aggression, blame), and punitive behaviors (e.g., threat, punishment) directed at the athletes (Sagar & Jowett, 2012). Positive responses from the coach helped facilitate overall positive emotion and mood in the athletes, while negative responses promoted negative emotions in the athletes (Sagar & Jowett, 2012). The athletes identified that coaches' negative expressions had damaging effects both at an interpersonal (i.e., made them feel that they had failed to meet coaches' expectations) and intrapersonal levels (i.e., made them feel as less competent and skillful sport performers) (Sagar & Jowett, 2012). Coaches' reactions to mistakes in training consisted of coaches' displaying negative emotions, hostile reactions, and punitive behaviors, as well as negative verbal interactions such as criticism and telling the athlete off (Sagar & Jowett, 2012). These negative responses added to the athletes' experiences of damaging psychological emotions such as disappointment, frustration and dissatisfaction, and lowered self-esteem (e.g., feeling unworthy and less valued, incompetent, and unskillful) (Sagar & Jowett, 2012).

Successful coaches interactions with athletes are a multifaceted and mutually

significant process based on social interactions (Bowes & Jones, 2006; Cote & Gilbert, 2009; Cushion, Armour & Jones, 2006). Coaches should strive to improve their interpersonal knowledge in an effort to improve communication with their athletes (Cote & Gilbert, 2009). Haberl (2001) found that athletes from the 1998 gold medal U.S. Olympic women's ice hockey team described their coach's communication as conveyed in a calm, effective, subtle metaphorical style, which helped them to stay composed and confident in a high intensity pressure packed environment.

Role of the Coach. Not all athletes view the role of the coach the same though, as evidenced in the study by Eklund, Gould, & Jackson, (1993). They conducted a qualitative study interviewing six of the 20 US Olympic wrestlers who won medals at the 1988 Games in Seoul. The six medalists ranged from 23-29 years of age, had an average of six years international experience, and experience in World Championships or Olympics that ranged from zero to seven years (Eklund et al., 1993). Collectively the six medal winners accounted for two gold, one silver and three bronze medals (Eklund et al., 1993). The researchers found that where one of the medalists saw the role of coach support as someone to help them relax and have fun, while another medalist referred to the need to have a very task-oriented coach to help narrow his focus and respect his need to be alone in pre-competition preparation. Coaches were seen as a source of confidence (Eklund et al., 1993).

Negative Coach-Athlete Experiences. In a study by Gould, Guinan, Greenleaf, Medbery, & Peterson (1999), athletes and coaches from eight of the Atlanta US Olympic teams were interviewed investigating the factors affecting Olympic performance. Four of the teams met/exceeded performance expectations and four of the teams failed to perform

up to performance predictions (Gould et al., 1999). Focus group interviews were conducted with two to four athletes from each team and individual interviews were conducted with one to two coaches from each team (Gould et al., 1999). The interviews were analyzed by three trained investigators using hierarchical content analysis (Miles & Huberman, 1994) (Gould et al., 1999). The researchers found that negative attitudes toward the coach, poor athlete-coach communication and lack of athlete-coach trust were identified by teams that were not as successful at the Olympic Games and failed to meet expectations (Gould et al., 1999). Lack of experience at the Olympic Games on the part of the coaching staff was also mentioned as being an issue that affected performance (Gould et al., 1999).

Hays, Thomas, Maynard & Bawden, (2009) investigated the role of confidence in world-class sport performance. They interviewed seven male and seven female athletes, of which 13 of them had won a medal in at least one major championship (i.e. Olympic Games, World Championship, World Cup) with the remaining athlete being the current world record holder in her discipline (Hays et al., 2009). The researchers used an open-ended, semi-structured interview that allowed for a natural flow of conversation (Patton, 1990). Analysis procedures followed Miles and Huberman (1994) with raw data response organized into patterns to create meaningful higher-order themes through an inductive process. The researchers found that Olympic medalists discussed the negative influence the coach can have on their confidence, specifically citing coaches who continually pointed out weakness and insecurities in an attempt to make the athlete stronger, which didn't work, as well as other methods such as lack of time with personal coach due to national team training, lack of belief in the athletes' ability, arguments with

the coach and the athlete doubting the coach's ability (Hays, Thomas, Maynard & Bawden, 2009).

Emotional abuse in a coach-athlete relationship can have negative psychological effects, which hinder the athlete's performance and affect them throughout the rest of their life (Kerr & Stirling, 2012). In their study of 16 parents of retired (in the last 1-6 years) elite (16 international/national level, 5 Olympians, 9 World Championship participants) athletes from multiple sports (gymnastics, figure skating, ice hockey, swimming and trampoline) they found that parents had witnessed emotionally abusive coaching practices (Kerr & Stirling, 2012). Due to the culture of elite sport the parents accepted these negative coaching behaviors throughout their child's sport career (Kerr & Stirling, 2012). "Emotional abuse refers to a pattern of deliberate non-contact behaviors by a person within a critical relationship role that have the potential to be harmful (to an individual's emotional well-being)" (Stirling & Kerr, 2008, p.178), which is a standard definition that researchers in sport science have used (Stirling, 2009). Negative coaching behaviors that are emotionally abusive may involve demeaning remarks, ridicule, belittlement, name-calling, humiliation, physical threats, and intentionally ignoring an athlete (Stirling & Kerr, 2012). For a more thorough understanding of the definition of emotional abuse in the coach-athlete relationship see Stirling (2009); Stirling and Kerr (2007; 2008; 2009; 2013).

Track and Field Coach-Athlete Relationships. Most Olympic athletes identified the coach as being critical to their success in providing support and guidance (e.g. Jowett & Cockerill, 2003; Jowett & Gale, 2002; Vernacchia, McGuire, Reardon & Templin, 2000). In a qualitative study using interviews of 12 Olympic medalist athletes,

Jowett and Cockerill (2003) investigated the coach-athlete relationship in regards to the interpersonal constructs of closeness, co-orientation, and complementarity. The athletes had medaled in at least one of the Olympic Games between 1968-1988 in a variety of sports: gymnastics, sailing, swimming, track and field and wrestling, representing eight different countries including the United States (2 athletes) (Jowett & Cockerill, 2003). The researchers used an interview schedule that consisted of open-ended questions about the interpersonal relationship the athletes had with their coach based on (Patton, 1990), the author's previous experience working with elite athletes and previous research (Jowett & Cockerill, 2003). Content analysis (Weber, 1990) was used as a systematic method for exploring the content of the data (Jowett & Cockerill, 2003). The researchers found that feelings of closeness (e.g. trust and respect), thoughts of co-orientation (e. g. common goals) and complimentary roles and tasks defined the coach-athlete relationships (Jowett & Cockerill, 2003). Researchers have concluded that a coach-athlete relationship that is personal and caring has a large influence on the athlete's development as an athlete and a person (Jowett & Cockerill, 2002; Jowett & Cockerill, 2003; Antonini Philippe & Seiler, 2006). Furthermore, for the importance of the present study, they recommended that coach education programs offer information that will help coaches in learning how to build positive relationships with their athletes (Jowett & Cockerill, 2003). Commitment in the coach-athlete relationship is another important variable. Jowett & Gale (2002) administered the Coach-Athlete Relationship Questionnaire (CART-Q) (Jowett & Ntoumanis, 2004) to 34 national level track and field athletes and 19 national level track and field coaches and found that commitment was an important aspect of the coach-athlete relationship and is based on the coaches' and athletes' prior interactions.

Summary

Competing at the Olympic Games is different from competing in any other performance setting and presents many challenges to the athlete and coach. As outlined above, the coach-athlete relationship can have a positive or negative influence on performance outcomes, especially in the highly chaotic environment of the Olympic Games. In order to succeed in this context it is important to have a solid detailed plan that includes mental preparation.

The coach can have a large role in acting as a positive or negative model for the athlete. Some examples are: having a positive or negative attitude; how they respond and react in times of distress; communication between coach and athlete.

Successful coach-athlete relationships occur when the coaches are authentic in their commitment to their athletes and have an athlete-centered approach that exemplifies a caring relationship placing the needs of the athlete first. Additionally, the coaches provided the athletes with an autonomy-supportive environment.

The gaps in the literature are that the coach-athlete relationship of Olympic track and field athletes has not been explored in-depth in a way that provided evidence for how elements such as trust, communication and care are developed in successful coach-athlete relationships. Previous research has identified these elements as important to successful coach-athlete relationships for Olympic track and field athletes but have lacked in depth and understanding from both the coach and athlete's perspectives on the nuances of how the relationship was developed, how it is maintained and the reasons for why they take their approach. Based on an extensive literature review of coach-athlete relationships of Olympic athletes, it appears the coach and athlete have not been studied together as a unit

where both have been interviewed as part of the study. This study also has a unique component as the coach and athlete were interviewed together at the same time in the third interview. This was done in an attempt to better understand the coach-athlete interaction through the interview process. Prior to this the coach-athlete relationship in Olympic athletes has had limited investigation in the context of winning a medal at the Olympic Games. The purpose of this study was to investigate the coach-athlete relationship with Olympic medal winning track and field athletes and their coaches.

CHAPTER 3

Methods

Case Study

A case study approach based on qualitative methodology was used as it fit this rare and unique set of participants. Smith (1988) stated "case studies allow for the study of rare or noteworthy phenomena that, by definition, are not available in sufficient numbers at any one time to be evaluated in other types of research designs" (p.2). He further discussed, "case studies can serve as a rich source of ideas about behaviors, its causes, and processes of change" (Smith, 1988, p.2). Case studies in sport psychology can have variations in the amount of information covered, but typically they involve an investigation of an athlete's psychological mindset in relation to individual performance (Kazdin, 2011). Case study methodology best fit my research purpose, as there are not very many active medal-winning athletes available to participate in the study. The athletes in this study not only won Olympic medals, but also are world record holders, world champions and are the best in the world. The cases may have some commonalities, but each one is a unique case. It is best to investigate these coach-athlete relationships as separate units rather than a group, to allow for the identification of how each coach and athlete pair interacted on an individual personal level. Cross-case analysis was used to explore any potential commonalities and differences in themes and sub-themes across cases. This method is relevant when there are two or more cases to analyze data from (Yin, 2013).

This study utilized a methodological framework similar to that of previous research on coach-athlete relationships (Poczwardowski, Barott & Henschen, 2002; Poczwardowski, Barott & Peregoy, 2002), and specifically coach-athlete relationships of Olympic medalists (Jowett, 2003; Jowett & Cockerill, 2003). Within the case study framework, an interpretive paradigm was used (Littlejohn & Foss, 2008). This takes the viewpoint that human beings cannot be studied using models developed for the physical sciences because humans are qualitatively different from natural events (Littlejohn & Foss, 2008). The interpretative paradigm supports the belief that reality is constructed by subjective perception and predictions cannot be made (Littlejohn & Foss, 2008).

Researcher as the Instrument

The researchers consisted of two sport psychology doctoral students who were trained in qualitative research methods. The lead researcher has a very in-depth background in track and field as a coach and sport psychology consultant. I have been mentored for three years by Dr. Ralph Vernacchia and for three years and counting by Dr. Rick McGuire. Together they developed and were involved as the co-chairman of the USA Track and Field Sub-committee on Sport Psychology and are considered experts in the field of applied sport psychology by their peers (Aoyagi & Poczwardowski, 2012). Both have been a part of the staff for several world championships and Olympic Games for USA Track and Field (USATF).

I conducted the interviews and analyzed the data. The other doctoral student assisted with the interviews and analysis and acted as a second independent coder. I have previously conducted qualitative research investigating leadership characteristics of successful track and field coaches (Zuleger, 2011). I am currently coaching men's and

women's track and field at an NCAA Division I university as an assistant coach, as well as involved in teaching sport psychology and coaching education classes to undergraduate and graduate students and teaching coaching education programs across the United States. I have been coaching collegiate track and field for six years (3 NCAA DII, 3 NCAA DI) and was a student manager for three years with an NCAA Division I men's track and field program. Prior to that, I participated in track and field for one year in college at the NCAA Division I level and four years at the high school level. My past athletic experiences and experiences as a coach in track and field and cross country for the last 20 years have helped to develop and guide my philosophy of teaching and coaching that comes from self-determination theory (SDT) (Deci & Ryan, 2000; Ryan & Deci, 2000). Specifically, within this theory I place a large emphasis on the importance of autonomy in the coaching context.

As the researcher I was involved in reflexivity during the research investigation. I did this by using a journal to keep track of my thoughts, feelings, reactions and conversations with my research team, advisor and my research committee. In this process I looked for and wrote about my potential biases related to my background as described above in my interpretations of the content of the interviews and my reactions to the interview process. I discussed what I perceived to be the evolving ideas from the research process in an attempt to take other views into consideration to temper my biases, values and experiences that I brought to the research.

As a research-practitioner I am actively engaged in coaching collegiate track and field athletes as well as coaching athletes on mental training. I am around athletes that are potential future Olympians and engaged in assisting them and their coaches on a daily

basis. This role put me in a unique position as a researcher because I understand and live a similar life to that of my participants, more so than the average researcher. My background and experiences helped in establishing rapport with the participants and helped facilitate the interview in a naturalistic way, as I was able to understand and speak the language of the sport. As a male researcher in a study with all male participants, my gender may have had an impact on the participants' responses as someone that they could associate with. I am 29 years old and thus am older than two of the athletes and close to the same age as the other. I am substantially younger than the coaches. This may have played a role in the athletes feeling like they could relate with me more as a young researcher. For the coaches they may have felt that they were in more of mentor role. My familiarity with the sport may have been a barrier as I may not have explored potential responses as in-depth with follow up questions because the response made sense to me. I needed to be cognizant of my views and beliefs about the sport and coaching so as to allow for the participants to explain their perspectives.

Given my awareness of the potential biases acknowledged above, I have approached this research with a strong resolve to uncover truth and meaning. My experiences as an athlete and coach in track and field, and being around coaches who coached in a positive way, have influenced me to explore this topic of understanding coach-athlete relationships in this study with Olympic track and field medal winners and their coaches.

Participants

The participants were selected on the criteria that they had won an Olympic medal in track and field at the London 2012 Olympic Games (21 total athletes). These athletes

had spent the years preceding the Olympics (2009-2012), known as the Olympic quadrennium, training and engaged in a coach-athlete relationship with their coach. Three USA Track and Field athletes (n=3) and their individual coaches (n=3) agreed to participate in the study. Obtaining access to athletes of this caliber that are among the best in the world ever in their sport is a difficult process. Receiving access to study even one of these coach-athlete dyads would be considered rare and noteworthy, and an extraordinary research study of its own. With profound respect for receiving access to three of the best coach-athlete dyads in the world in their sport discipline, the researcher realized this was an opportunity to be protected.

In-depth descriptions of the athletes and coaches' experience and accomplishments are provided in the findings at the beginning of each case presentation. The athletes ranged in age from 22-29 and were all males. The coaches ranged in age from 41-65.

Only Olympic medal winners were chosen, as this study is a specific piece of a larger research project being conducted for the United States Olympic Committee (USOC) and USA Track and Field. The larger study is a performance study and focused on exploring psychosocial characteristics of track and field athletes from the United States of America who had medaled in the London Olympic Games. The USOC and USATF define their success by the number of medals won. This current study is focused on the specific psychosocial aspect of the coach-athlete relationship, and how they experienced the preparation and performances that led to the medal winning.

Data Collection

Institutional Review Board (IRB) approval was granted for this study protocol. This study utilized an informed consent process. Each athlete was initially contacted through his coach. Initial contact was made with the coach in person to indicate his interest in participating in the study. All participants were then contacted individually by telephone to confirm a commitment to participate in the study. The coaches and athletes each individually determined a convenient time and location to conduct the individual interviews and the coach-athlete interview.

The most important element in the case study is the personal interview, where the participant can think, reflect, and describe his or her performance behaviors and results (Thompson, Vernacchia, & Moore, 1998). In this part of the investigation the applied sport psychology professional can ask questions of the participant to gain understanding of how the participant perceives his or her thoughts and actions in relation to effective and ineffective performances (Thompson et al., 1998). Initial interviews with the athlete and coach used a case interview approach (Thompson et al., 1998), which consisted of open-ended questions that were asked in a way that gives the interview direction (Dale, 2000; Patton, 1990; Poczwardowski, Barott, & Henschen, 2002; Poczwardowski, Barott, & Peregoy, 2002). The participant determined the direction of the interview after each initiating question with a conversational approach (Dale, 2000; Patton, 1990; Poczwardowski, Barott, & Henschen, 2002; Poczwardowski, Barott, & Peregoy, 2002). The researcher made every attempt to prevent leading the participant and each question followed the dialogue.

Face-to-face, in-depth interviews lasting from 60-90 minutes were conducted to collect all of the data from the participants. Interviews were recorded on a digital audio recorder. The interviews took place between March, 2013-November, 2013. The questions were general and non-directive encouraging the athletes and coaches to tell their story. The researcher, who conducted the interviews, is highly skilled at natural conversation, which assisted in allowing the interviews to form naturally. Each athlete and coach chose his preferred location for the interview. Sites included coach's office, conference room, and hotel room.

The interview procedure consisted of interviewing the athletes and coaches separately to gain insight into how each individual in the relationship perceived and made meaning of the coach-athlete interaction. In each case the coach was interviewed first, then the athlete, followed by the coach-athlete interview. For each case, the coach was not present during the interview with the athlete, and the athlete was not present during the interview with the coach. Following the individual interviews, both athlete and coach were interviewed together to clarify and gain further insight into the relationship and how the two interacted and worked together in the lead up to the Olympics and during the Olympics that resulted in winning a medal.

The interview schedule consisted of 14 questions for the athlete and coach interviews. The questions were the same for the athlete and coach. For the coach-athlete interview there were four questions regarding the coach-athlete relationship. Then follow up questions were asked based on the responses from the individual interviews with the athlete and coach separately.

The main questions for individual and group interviews focused around five questions. How the coach and athlete communicate in practice and competition? How would you describe your coach-athlete relationship when it works and when there are interpersonal challenges? What about your coach-athlete relationship allowed you to win an Olympic medal? What advice do you have for future Olympic athletes and coaches on the coach-athlete relationship? Can you provide an example of moment or challenge where you relied on the strength of the relationship in order to prevail? (See Appendix C for the full interview schedule) Follow-up questions were asked, for example: "What was that like? Can you tell me more about…? How did you feel when that happened? In asking these follow-up questions the researcher again attempted to use the participant's vocabulary (Dale, 2000). This process allowed for the participants to tell their story from their perspective. Follow up questions were only asked under specific circumstances such as missed information, oversimplified responses, or when a new concept emerged. The researcher chose to conduct individual and group interviews to provide for more depth in understanding the coach-athlete relationship with multiple interviews that allowed for the coach and athlete to voice their perspectives individually and collectively. The researcher chose to interview the coach and athlete simultaneously in an effort to capture the coach-athlete relationship in a more natural context, where they can interact and respond based on each other's words and body language.

As part of the interview process the researcher used photographs of the coach and athlete together at the Olympic trials (n=1) and Olympic Games (n=2) to elicit thoughts and memories from their experiences. The photographs were used at the end of the interviews to minimize the influence they may have had on the responses to the interview

questions. This technique is referred to as photo elicitation, which is based on the simple idea of using a photograph to elicit thoughts, emotions, etc. about the photo during a research interview (Harper, 2002). Using photographs versus words in the interview process changes the approach as the photographs have a different symbolic representation than words do (Harper, 2002). The difference between words and photographs has a neurological influence as the parts of the brain that process visual information are older in terms of development than the parts that process words (Harper, 2002). Photographs therefore provide a different stimulus that elicits deeper elements of the human mind than words, as it requires more of the brain to be active in processing images and words (Harper, 2002). These examples suggest that the use of photographs to elicit descriptions of thoughts and emotions regarding an experience provide a different response than words alone could produce (Harper, 2002).

As Harper (2002) has described this technique was beneficial in eliciting thoughts and emotions, not only about the photo itself, but also the context surrounding the picture. Photographs were chosen based on those available to the public on the Internet. In one case the wife of the coach provided the researcher with a personal picture of the coach and athlete. Neither the athlete nor the coach knew she provided this photograph, which prevented them from knowing about it and potentially preparing an answer ahead of time. The pictures were selected from an Internet search for photographs of the coach and athlete together. Due to the nature of the sport of track and field the coach and athlete are not often side-by-side as the athlete competes and the coach is in the stands with the other spectators. Therefore it was difficult to find photographs available of the coach and athlete together. Because of the limited photographs the researcher was not

able to avoid photographs that may have primed a positive response. The photographs of the coach and athlete were chosen based on available photographs that showed the coach and athlete interacting at the Olympic Games competition. For example a congratulatory hand shake/embrace between coach (in the stands) and athlete (on the track) shortly after the conclusion of the event was used. One of the coach-athlete pictures was from the Olympic trials as a photo at the Olympics was not available. The photographs were used at the conclusion of each interview so as not to disrupt the flow of the interview schedule, and to provide another level of insight and description from the athlete and coach regarding their Olympic experience and their coach-athlete relationship.

Along with in-person interviews, the researcher collected demographic background data as well to add to the personal history narrative. For example, previous accomplishments, records, years of experience, years spent with coach/athlete, etc. These methods are consistent with previous successful and rigorous research in coach-athlete relationships (Jowett, 2003; Poczwardowski, Barott, & Henschen, 2002; Poczwardowski, Barott, & Peregoy, 2002).

Data Analysis

The data analysis took an approach developed by Yin (2013) that suggests the researcher use the theoretical propositions that guided the study. This consists of organizing the findings around the research question and then presenting the themes with supporting data (Yin, 2013). Analysis for generating themes followed an inductive process that began from the verbatim transcription of the participant interviews conducted by the researcher that consisted of line-by-line coding to form initial codes. An example of some initial codes from an interview with an athlete was "a lot of

observation" and "a lot of question asking." An example of some initial codes from an interview with a coach was "it all comes down to cues" and "keep communication short and sweet." An example of some initial codes from the coach-athlete interview was "listen to the athlete" and "athlete listens to coach." From these codes, sub-themes such as "empowering effective decision making" were developed and then grouped into general themes such as "autonomy supportive environment."

The cross-case analysis followed that of Yin (2013), which consists of creating a word table to display the data so that the researcher can look for similarities and differences between cases based on the themes and sub-themes for each individual case and the study as a whole. The word tables display the data for each case through the general themes, sub-themes and short quotes. Self-determination theory (Deci & Ryan, 1985; 2000) was used as the theoretical framework to investigate the coach-athlete relationship in this analysis. However, the purpose of this study was neither to confirm nor to disconfirm self-determination theory. The purpose of this study was to explore elements related to the coach-athlete relationship.

Trustworthiness

Similar to Poczwardowski, Barott, and Henschen (2002) and Poczwardowski, Barott, & Peregoy (2002) and based on Patton (1990) this study developed trustworthiness by: thoroughness in data collection and analysis (e.g. in-depth description, study checking through on-going conversations with the peer debriefing team), the credibility of the researchers (e.g. reflexivity, ensuring ethical conduct), the precise research paradigms and member checking. To enhance the validity of the findings the research assistant independently checked the data analysis.

Ethical Considerations

There were minimal risks or discomforts reported by the participants. The researcher asked the participants to share their experiences with the coach-athlete relationship leading to and competing in the Olympic Games. By their very nature, these experiences with the Olympic Games preparation and competition were very intense, with extreme personal identification and personal investment. One potential area for risks or discomfort was that each athlete might not have felt comfortable to disclose to the researcher any potential negative relationship issues with his coach. The researcher attempted to control for this potential disclosure issue by allowing the athletes to choose the location for the interview and through the voluntary nature of the study.

The information shared in the interviews was personal and candid. There were no emotional risks mentioned by the athletes or coaches in discussing their challenges and obstacles they faced in their Olympic experience. The athletes and coaches did not report any emotional distress, but if they did, a licensed counseling sport psychologist was available for them to meet with.

To protect the privacy of the participants the following process took place: First, the interviews were conducted in a quiet, private setting, free from distractions. Second, the data collected was reviewed with the athlete and coach separately to best assure that what was recorded was accurate relative to what the athlete and coach were attempting to share and convey. This was done by having them review the transcripts after the researcher had transcribed the interviews and prior to analysis. This protected the accuracy of the themes developed from the interview. Third, each athlete was allowed to delete or change any information, which they felt concerned about, regarding its inclusion

in the study and report.

The informed consent process emphasized the purpose, procedures, risks and benefits of the study, as well as the voluntary nature of the study. The participant had the right to refuse to answer any unwanted questions or withdraw from the study at any time. Participants were given a written Letter of Consent, and investigators offered to review with the participants had any questions arose. Participants signed a copy of the Letter of Consent, and kept one for their reference.

A unique aspect of this study and process was that the participants of this study are the very best athletes and coaches in the world in their sport discipline. Participants were made aware that due to their status as highly successful athletes, that they could potentially be identified. In participating in the study, they agreed to, and desired to be role models for aspiring athletes and coaches of the future. Any information they wanted to be kept private was deleted from the interview immediately upon their review and request. To help limit identification of the participants, pseudonyms were used in place of their real names in the presentation of the findings and discussion.

CHAPTER 4

Findings

Introduction

The presentation of the findings begins with a description of each case through demographic data. Following the case description, a cross-case analysis will be presented to explore similarities and differences between cases using the research question and the themes (Yin, 2013). The research question is presented for review, "What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?"

Case Study #1

Case Description: Coach: Jack, Athlete: Seth

Seth is an Olympic gold medalist and a three-time world champion. He holds four world records. He has also won a silver medal in the world championships. He is a three-time national champion with a second place national championship finish as well. While in college he was a five-time NCAA champion and collegiate record holder. His coach, Jack, was the USA Track and Field (USATF) National Coach of the year award winner. He coached two collegiate record holders, the world record holder in two events, and multiple Olympians at four different Olympic Games. He has 37 years of experience at every level from youth to professional. Jack and Seth have been together for five years and counting.

Case Study #2

Case Description: Coach: Lawrence, Athlete: Tyler

Tyler is a two-time Olympian and an Olympic silver medalist. He is also a two-time World Champion, with one World Championship silver medal as well. He is a national champion. During college he won an NCAA championship. Coach Lawrence has coached two athletes to the same Olympic Games, one silver medal and one 10th place athlete, one national champion, one runner up, and a two-time national champion. He was a national team coach at the world championships. He has 17 years of experience at every level from high school to professional. Lawrence and Tyler have been together for nine years and counting.

Case Study #3

Case Description: Coach: David, Athlete: Cory

Cory is an Olympic Silver medalist, national champion, as well as earning both second and third place finishes at national championships. He was two-time NCAA champion, an NCAA runner-up, and an 8 time All-American. Coach David is an eight-time USATF international team coach, coached six different athletes in the Olympic Games, two of them in multiple Olympics. He coached two Olympic silver medal winners and one 4th place finisher. He has 33 years of experience at every level from youth to professional. Coach and athlete have been together for five years and counting.

Cross-Case Analysis

A cross-case analysis of the three cases was conducted to identify similarities and differences in the three relationship experiences. The purpose of this cross-case analysis was to identify evidence to be able to potentially provide a better insight and understanding of what the coach-athlete relationships were like for these Olympic medal winning track and field athletes and their coaches. The general themes that emerged from all three cases were the same, though some uniqueness was identified within each case. They were: autonomy supportive environment, caring relationship and mental strength.

Research Question: What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?

Theme #1: Autonomy Supportive Environment

General Theme		
Autonmy Supportive Environment		
Jack and Seth	**Lawrence and Tyler**	**David and Cory**
Sub-themes	Sub-themes	Sub-themes
Empowering Effective Decsion Making	Empowering Effective Decsion Making	Empowering Effective Decsion Making
Open and Honest Communication	Open and Honest Communication	Open and Honest Communication
Keep Communication Simple	Keep Communication Simple	Keep Communication Simple

Table 1. General Theme: Autonomy Supportive Environment

The first general theme was the coaches' intention to develop an autonomy supportive environment. This refers to the coaches' intentional plan and actions to nurture independence in the athlete as opposed to creating dependence on the coach. This plan consisted of the coaches working to develop the athletes' opportunities and

skills to be able to think and act as an independent person. Sub-themes for this general theme included: empowering effective decision-making, keep communication simple, open and honest communication.

In each case it emerged that the coaches created an autonomy supportive environment for the athletes. The coaches and athletes accomplished this in their own unique ways, but they shared the same concept of providing an environment that supported autonomy. The coaches wanted the athletes to be able to have independence as they viewed this as an important aspect of their preparation to achieve success at the Olympic Games. (See Appendix D, for specific examples of each general theme from each case).

Empowering Effective Decision Making. The coaches committed to understanding and accepting their athletes, and allowing them to include their ideas in regards to their development as an athlete and person. They viewed the athletes' success as being contingent upon their ability to be autonomous (Deci & Ryan, 1985; 2000). The coaches understood that the athletes needed to be independent and able to make decisions, and to feel confident and trust those decisions. This was important in competition, especially the Olympic Games, because the coach was not always able to be right by the athletes' side telling them what to do. Ultimately the athlete is the one that has to perform. The coaches have to be prepared to handle any situation that might arise. The coaches discussed that the process of empowering the athletes to make effective decisions was learned in practice. They accomplished this by developing training to prepare the athlete for competition. This preparation helped the athlete to be more independent and not as reliant on the coach in competition. Seth provided an example of

this when he discussed the importance of Jack listening to him and allowing him to make decisions. When asked in the athlete interview to describe his coach's communication, Seth provided the following,

> *Seth:* I've had three different coaches and coach's way of communication makes me feel like I have choice in something. If I don't like something with the technique, I can—I feel comfortable telling him. What makes it work for us is coach listens to us rather than dictates what we do all the time.

This example of Seth having a choice in regards to his training is an example of the coach providing the athlete autonomy (Deci & Ryan, 1985; 2000).

In the interview with Tyler he said, "Part of being a good coach is not giving feedback and letting athletes figure it out. Coach does a really good job of that." In the interview with Lawrence he described how he helped facilitate Tyler's learning and decision-making.

> *Lawrence:* As our relationship continued to grow, and the communication improved, the feedback from Tyler was going to do one of two things. It allowed him to have the input knowing that we are on the same page trying to get from point A to point B. At the same time, if something didn't go right, it just wasn't, coach wanted me to do that, he had to take the equal ownership of that too. That made our bond, between the coach and athlete even stronger so that we could find ways to continue to make improvements along the way.

Lawrence discussed how he allowed Tyler to take some ownership and the impact this had on their relationship growing stronger. The way Lawrence empowered Tyler to make decisions aligns with autonomy (Deci & Ryan, 1985; 2000).

David placed a large emphasis on developing an athlete that could effectively make decisions. This quote from the interview with David really highlighted this process.

> *David:* I have made it clear to him that these are all decisions that he ultimately is going to have to live with and feel good about. I am not going to make those decisions for him. He is making the decision; he is just making it from an informed position. He is going where he wants to go. I am just doing a lot of the legwork for him so he knows what's available.

In the interview with Cory he expressed how David allowed him autonomy in making decisions. He said, "He has given me that latitude to make some decisions on my own. I'd want it. I'd say, 'Coach don't tell me a thing. If I make a mistake, let me figure it out on my own.'" David described that it is very important for Cory to be able to be independent in competition in order to be successful.

For all three athletes it was very important to have a coach who listens to the athlete. They discussed that good coaches listen to their athletes. Tyler discussed that early on, that this is a good way to figure out if you have a good coach or not. Having a coach that listens to the athlete aligns with autonomy and building intrinsic motivation in the athlete (Deci & Ryan, 1985; 2000).

The knowledge and experience level of the coaches was an important element for the athletes in terms of their ability to learn to make effective decisions. They also discussed specifics of how their coaches were able to teach them so that they gained the knowledge as well, which helped them to be more self-determined in their efforts (Deci & Ryan, 1985; 2000). An example of this was provided from Seth and Jack. Seth

discussed the importance of his coach's competence in relation to his success. He said, "Coach's knowledge of the event helped me be successful in the Olympics." Jack discussed how he developed and applied this knowledge to help empower the athlete in his decision-making.

> *Jack:* You have to understand in every single event in track and field, what that event is asking you to do in order to be successful. If an athlete looks at you and goes, "Are you sure?" You give them the scientific principle behind it.

Jack also discussed how he worked to stay abreast of all the knowledge necessary to coach an elite athlete of Seth's caliber. Seth learned from Jack's knowledge and experience in many different aspects of their relationship. This knowledge and experience helped him feel competent in his ability to make decisions (Deci & Ryan, 1985; 2000). Seth discussed how his coach's knowledge helped him learn how to be successful and how this aspect of the coach-athlete relationship may have helped in the process of developing an Olympic medal winner.

Cory and David revealed how learning to make effective decisions related to sport and life. Cory said, "Attitude you know reflects leadership, my attitude in a sense is because of how he's led me." In the interview with Cory, he provided the following about his coach,

> *Cory:* He's a teacher first and that's what coaching is about. It's an important aspect in coaching. You not only have to prepare people for success and for failure but for life. It's been a huge contribution to my success on and off the field of play.

In the interview with David he had a similar outlook on coaching. He said, "I think that coaching is about teaching. I think that teaching is about creating a good learning environment, it's about giving people good information." Both Cory and David see the role of the coach as being a teacher of not only sport but life as well.

Open and Honest Communication. Open and honest communication was another sub-theme that the coaches and athletes discussed in relation to developing an autonomy supportive environment. Open and honest communication was defined as the coach and athlete's ability to communicate their thoughts and feelings to each other without worrying about potential conflict. Open and honest communication was something that both the coaches and athletes discussed as having importance in terms of developing their relationship and the athletes' ability to be independent. Open and honest communication helped them to develop an autonomy supportive environment as they were able to communicate in a way that was genuine and helped both sides to be on the same page and understand and respect each other's thoughts and feelings.

The athletes discussed that over time they began to know what to expect from their coach as far as communication. This helped them feel competent and trust that they were on the same page with their coach (Deci & Ryan, 1985; 2000). In his interview, Jack he made reference to how he handled any potential conflict in the coach-athlete relationship. Jack said, "If there is an issue between athlete and coach then you better resolve it right away before you go forward." Jack concluded this description of their coach-athlete communication process with this summary quote, "Make it honest. He will be very honest with me."

All three coaches and athletes expressed similar views and were able to communicate with each other what they were thinking, knowing that the other would not take it personally. They were able to have productive discussions that helped them have a better relationship.

Tyler discussed how having good communication helped them to navigate many of the situations they encountered. In the interview with Tyler, he said, "That's why it's worked for us so well, for so long, because we both respect each other enough to be open and honest. There's no power struggle, there's no egos." Lawrence discussed that with any coach-athlete relationship there are conflicts that occur. He discussed how they were able to handle them constructively because Lawrence was open and honest with Tyler about his intentions to help him be the best he could be.

In the interview with Cory he said, "We can speak plainly with each other. We respect each other and we work it out like that." David had a similar view on their communication. In the interview with David he said, "We are and always have been, really, really honest with each other. We pretty much tell it like it is." From day one both coach and athlete were honest and open with each other and very straight forward in their communication. This served to deepen the understanding of each other and has created a very strong relationship. Cory described how he and Coach have a great relationship that is built on respect and honesty.

Open and honest communication emerged throughout the athletes and coaches' discussions as a key aspect in the success of the coach-athlete relationship. These examples of the coaches listening to the athletes when they made a suggestion were evidence of the coaches allowing for autonomy (Deci & Ryan, 1985; 2000). The coaches

allowed the athletes to have a voice in the communication process, which helped support their intention to develop an autonomous athlete.

The coach and athlete also demonstrated relatedness with each other, as they were able to be open and honest with each other in their communication (Deci & Ryan, 1985; 2000). Open and honest communication between coaches and athletes helped to facilitate the athletes becoming independent, and was consistent with an autonomy supportive environment. The sub-themes presented as examples of an autonomy supportive environment provided evidence of the aspects of the coach-athlete relationship that may have helped in the process of developing an Olympic medal winner.

Keep Communication Simple. In competition the coaches provided concise technical and strategic guidance, as well as a large amount of support, encouragement and affirmation. One of the ways that the coaches and athletes kept communication simple was through the development and use of a cue system. In each case the development of the cue system and the cues used were different and individualized. The coaches allowed the athletes to have some autonomy in working with them to establish the cues for communicating (Deci & Ryan, 1985; 2000).

These cue systems allowed the athletes to be more independent in competition. They described how this process worked, as they might look to the coach for a cue to help them and they know what the meaning is behind that cue and can apply it. This was the result of hours and hours of practice and communication between coach and athlete and working on honing this system over the course of the season at competitions prior to the Olympic Games.

In the interview with Seth and Jack together they further discussed how the cues helped in competition and the importance of keeping it to three cues or less for each event.

> *Seth:* As an athlete your job is to maximize your performance and sometimes scenarios can take you away from the mindset of that maximization. So, you'll do an attempt and you know that that was either good or bad. If I was missing something and I don't know what it is, then I go to that (cues).
>
> *Researcher:* Can you elaborate what that does for you?
>
> *Seth:* Because our cues are developed around simplicity and when all hell's breaking loose just come back to the basics, come back to what you know, and those kind of, bring you back.
>
> *Coach*: You said very early on when I first got here, "I don't need any more than three cues." You really don't, nobody does. It's too complicated.

This discussion of the cue system between Seth and Jack highlighted the importance of the cue system and how it helped Seth feel competent (Deci & Ryan, 1985; 2000). This example also demonstrated the coach-athlete interaction in the competition setting and provided evidence for how the coach-athlete relationship may have helped in the process of developing an Olympic medal winner.

The cue system developed by the coaches and athletes in all three cases helped to simplify the communication process for competition. This system helped the athletes to be more independent and not as reliant on their coach for large amounts of information. This use of cue systems helped foster feelings of competence for the athletes as the cues

reinforced what they already knew and helped them focus on the key points of their event that were necessary for successful performance (Deci & Ryan, 1985; 2000).

Communication during competition was kept very simple in all three cases. Lawrence discussed the communication in competition and the importance of simplifying things. In the interview with Lawrence, he said, "Even in the highest pressured situations. It's not about putting on a coaching clinic in the big meets. Anything or any type of talk that goes on, just keeping it simple." Their ability to keep communication simple is partially a result of the length of their relationship and the strength of it. This simplified communication also helps Tyler deal with the pressure situations and feel competent (Deci & Ryan, 1985; 2000).

The three sub-themes that emerged from the data and the examples provided within to support the sub-themes are evidence that one of the aspects of these coach-athlete relationships was an autonomy supportive environment. In all three cases having a coach that provided an autonomy supportive environment was an aspect of the coach-athlete relationships that may have helped in the process of winning an Olympic medal.

Theme #2: Caring Relationship

General Theme		
Caring Relationship		
Jack and Seth	**Lawrence and Tyler**	**David and Cory**
Sub-themes	Sub-themes	Sub-themes
Developed Trust	Developed Trust	Developed Trust
Other-Centered	Other-Centered	Other-Centered
Coach's Passion		Authentic Personality

Table 2. General Theme: Caring Relationship

The second general theme, caring relationship, emerged as evidence of the coach-athlete relationship that may have helped in the process of developing an Olympic medal winner. Caring relationship was defined by intentional thoughts and actions from the coach and athlete to benefit each other. There were two sub-themes that represented the general theme caring relationship in all three cases. These sub-themes were: developed trust, and other-centered. There were two sub-themes that were unique to an individual case. In the case of Jack and Seth, this sub-theme was coach's passion. In the case of David and Cory, this sub-theme was authentic personality.

In each case it emerged that the coaches had caring relationships with the athletes. The coaches and athletes accomplished this in their own unique ways. They shared the same concept of creating an environment that supported the needs of the athlete and their best interests. The coaches understood the need to have a caring relationship with the athlete and to connect with them as a person. They viewed this as important to the athlete's success. (See Appendix D, for specific examples of each general theme from each case).

Developed Trust. The developed trust between the coaches and athletes was a sub-theme that showed up in all cases and in multiple areas of the study. In considering caring relationships, the coaches' and athletes' ability to develop trust over time helped foster a positive relationship that, according to coaches and athletes, helped in creating an Olympic medal winner.

The athletes talked about the importance of the length of the relationship and commitment to each other by the coach and athlete as being a large influence on the development of trust between the two. The athletes and coaches discussed that trust is not something that just happens in a short time frame. Trust was built and developed over time through the commitment from the coach and athlete to work together, to find a common ground, and to be on the same page in their relationship.

The athletes discussed how their trust in their coach grew over time. They relied on this trust in critical moments in their competitions and in the Olympic Games. This was specifically evident in the Olympic Games, when the athlete's had to make decisions and their coaches supported and trusted their choices to be appropriate and effective. An example of this is when Tyler had to choose to throw a second attempt in the javelin, which went against the pre-competition plan that he established with Lawrence. Tyler said he wanted to take another attempt because he knew he could do better, and most likely needed it to stay in medal contention. Lawrence trusted Tyler's decision, who threw substantially further and positioned himself to have a chance to win a medal going into the last event of the competition.

In the interview with Seth, he discussed how trust was developed over time in a variety of ways. In the interview with him, he said, "It's not just all at that point. I mean,

there's a lot of things throughout, I think a coach and athlete's history that contribute to success." Jack had a similar response, sharing "Trust has to come not just by saying 'I'm the coach, trust me.' You have to show that. It comes from your knowledge of the skills and events, your integrity and your consistency along the line." In relation to success at the Olympic Games, Jack discussed the importance of the coach-athlete relationship having been developed well in advance. Jack said, "The coach is important, but the coach and athlete—you can't just change that—it's better to have that be developed way back here in September or in years before and bring it down to that point."

Tyler discussed how trust was developed over time with his coach through experiences they both have encountered. For Tyler, trust is not something that "You can't just say 'I trust somebody.' It's not just a word." He described trust as something that has to be developed through "real life circumstances where you, literally have to trust someone, and everything builds on itself and you can't do that in a season." Lawrence had a similar response regarding developing trust. He said, "The athlete has got to be able to look up in the stands and know and trust, and that doesn't just happen overnight." Lawrence was referring to when the athlete looks to the coach in the stands for guidance and coaching, that the athlete could trust what the coach is saying.

For Cory, his college decision was based on just one factor, the coach. Cory was highly touted out of high school as he competed in the Olympic trials. He could have gone to any school in the country. For Cory the decision came down to the coach being a competent person; someone he could trust and communicate and connect with on his level. Cory discussed how David fit all of those criteria. When Cory went on his college visit, he was mentally preparing himself to see if David was the right fit. He had this to

say regarding his thoughts from that experience, "Can I deal with this guy for four years? Can I trust this guy for four years? Can I trust him for two days? So I trust him like I said 100%." Cory chose where to go to college based on David. That decision alone said a lot about the meaning that was derived for Cory from his interactions with David. David did things the right way and with honesty and integrity. He demonstrated competence through his history of successful athletes. As a result Cory felt like he could trust coach and that he would be the best model to learn from and help him become an elite athlete.

Open and honest communication, which was discussed earlier as a subtheme of autonomy supportive environment, also played a role in the athletes and coaches developing trust. Another way the athletes developed trust with their coaches was through the coaches being open and honest in their communications. The coaches and athletes discussed that part of their trusting each other came from their connectedness on a personal level. This connectedness provided evidence that the coach-athlete relationship may have helped fulfill the need for relatedness in the athletes (Deci & Ryan, 1985; 2000).

Other-Centered. Other-centered was another sub-theme that provided evidence of the general theme caring relationship. The coaches discussed their emphasis on putting the athletes first in everything they do. Their philosophies and approaches to coaching revolved around the athlete and that each athlete is a unique individual and in order to help them be at their best it is important for the coach to put his ego aside and have the athlete's best interest at the forefront of every decision they made. The coaches

wanted the best for the athletes as they truly cared for them and the athletes wanted to perform at their best to honor their coaches because they wanted to reciprocate that care.

In Jack's interview, he described the photo of him embracing Seth after the world record and the meaning he derived from it and he was moved to tears of joy and sentiment at one point. His following statement really highlighted the caring relationship he had with Seth when he said,

> *Jack:* It's way beyond athletics. You know more athletically ups and downs, the problems you solved, you know, the whole—it's the journey. It's not crossing the line. It's the human—it's like a family outside of family. So it's just the coming together of everything. To me, that's the important thing.

In the interview with David he described his outlook on their coach-athlete relationship as this, "I do think it's (coach-athlete relationship) very important, but I think that it's important that it's a healthy relationship. It's about the athlete. It's about showing people that you care about them and not just how talented they are." It became very apparent that David and Cory both genuinely care about each other. This relationship may have helped in developing Cory's ability to be successful.

In Tyler's interview, he expressed that "You should always treat others with kindness and respect. You should always have love for other fellow human beings." Tyler discussed how he lives his life with an open mind and tries not to judge other people and to love others. Lawrence discussed that an area where Tyler and he connected was that their families are an important part of their lives. Lawrence said, "I've watched him and his interaction with his family and the support that they have always provided to him, and that's how I am as a person with my own kids." Lawrence discussed how he

grew up in a family of teachers and coaches and how that influenced the way he approached his coaching. He described his coaching philosophy as the following,

> Whether there was success or defeat, you were still treated the same, you were still reassured the same. I've tried to do that, whether it's been with him, or any other athlete that has been at the highest level. At the same time, sometimes it's just a developmental kid that you're trying to get to make the conference roster and score a point. That really should never waiver. It's how you grew up, and the same philosophy that you try to instill with your own athletes.

Both Lawrence and Tyler find meaning and purpose in things bigger than self. These examples provided evidence that supported that a caring relationship may have existed between Lawrence and Tyler.

Gratitude provided evidence of a caring relationship as the coaches and athletes both discussed the positive emotion that they experienced from sharing their gratitude for each other and other important people in their lives. It was evident from the discussions with the coaches and athletes that the coaches were grateful for the opportunity to work with such highly talented and driven individuals and the athletes all reciprocated this appreciation for their coaches and the sacrifices they make for them.

This quote from the athlete was from his response to the meaning he derived from the photo of his coach embracing him after his world record performance at the Olympic trials. Seth discussed how the best way for him to thank his coach was through his achievements. He discussed this in reference to breaking the world record. In the interview with Seth, he said, "So that was my thanks to him for being such a great coach, such a great guy." For Seth achieving success was a way to show his appreciation for

everything that Jack did for him. This expression of gratitude is another example of how Seth and Jack may have fulfilled their need for relatedness through their relationship (Deci & Ryan, 1985; 2000).

Tyler and Lawrence both described the moment captured in a photograph of them embracing each other in a congratulatory handshake after the Olympic Games competition where Tyler won a silver medal. This was an important moment for Lawrence and Tyler in their relationship. They had waited four years for this opportunity to redeem the experience from the previous Olympics where Tyler had a poor performance. Lawrence said, "I remember I wasn't even congratulating him, it was more thanking him, for allowing me to be a part of that." He discussed all the trials and tribulations they had gone through to get back to that point. He referenced the Beijing Olympics and the disappointment they had when Tyler failed to medal. Opportunities to win a medal at the Olympic Games are very rare. He discussed how in that moment in Beijing he felt like he failed Tyler and contemplated giving up. This was only a fleeting thought, and they both renewed their commitment to each other and to being successful. Lawrence discussed that was why this was a special moment for them.

Tyler discussed how he remembered Lawrence saying thank you and how in that moment he felt "Nostalgic about everything that it's built up to and where it came from, because in that moment I'm just like, we did it." Tyler expressed his appreciation for Lawrence as well. He said, "Thank you for sacrificing more than I have to. It's selfless stuff that he had to do. It was more about being incredibly appreciative of being able to share it with the guy that got you there kind of thing."

This story highlights the coach-athlete relationship as one that is centered on care for each other. Lawrence expressed gratitude towards Tyler for allowing him to be a part of the journey in helping him achieve his goal. They both had set a goal together to get back to the Olympics and have a successful performance. Tyler reciprocated Lawrence's gratitude in expressing appreciation for everything Lawrence has done for him and the sacrifices he had made. This story captured the essence of a relationship that had evolved over the years to become a very successful partnership that was built on care for each other.

The athletes and coaches discussed the meaning and purpose they derived from representing one's country at the Olympic Games. They described that it was bigger than the coach and athlete and that having this understanding helped them to perform.

Coach's Passion. Coach's passion was the last sub-theme within the general theme caring relationship. It became evident through the interview process that Jack was very passionate about coaching Seth as an athlete and person. Jack's passion extended beyond that though, as he also had a passion for the sport and for helping people in general. This quote from the interview with Seth described how he views his coach's passion and what it means to him, **"**He's just an absolutely great guy. I mean he lives his life like he coaches. He has unbelievable amounts of energy, always just passionate, up beat, happy. He's a very, very, emotional passionate guy." He further discussed that while his coach was older and he had only known him the last four years that he has heard from others that his coach has always been that way. Seth stated "I wish I had known him longer, he's just an amazing, person, and he never changes which is

awesome." This example provided evidence to support Seth's relatedness with his coach (Deci & Ryan, 1985; 2000).

Another example of the sub-theme coach's passion that further supports the theme caring relationships was the interaction between Seth and Jack at the world championships during the year prior to the Olympic Games. Seth was struggling in the competition because he was putting too much pressure on himself to be perfect in every event. When his performances in each event did not reflect the high standards he had for himself, he began to mentally struggle to stay focused. Seth described this moment as "I kept going downhill for sure, and the pole vault comes up and I don't clear a pretty critical height and I'm thinking I'm out of the medal chase, like I'm done."

Seth began to discuss the role his coach played in helping him regain the proper mindset. He stated, "Coach was with me the whole time trying to console me and trying to pick my spirits up because he knew I could still get a medal." Seth discussed how another coach might have just given up on him, but that Jack's passion and care and belief in Seth helped him. Seth said, "That constant encouragement of him believing in me and wanting me to succeed and that really helped because it really was the turnaround point." For Seth this moment helped him to perform like himself again in the last event (1500m) and was able to still get the silver medal. He finished this story by stating the impact this moment had on his future success. He said, "His picking me up and pushing me toward silver, that was a real big deal as an athlete because eventually, it led to me getting the gold medal. It led to like all the great things in 2012 and beyond." This example highlighted the sub-theme coach's passion as part of the caring relationship

between coach and athlete. This example provided evidence of the relatedness between Jack and Seth (Deci& Ryan, 1985: 2000).

Jack's positivity, confidence and belief for Seth in a high-pressure situation helped Seth to respond appropriately. Both Jack and Seth discussed this experience as being critical to Seth winning a medal at the Olympic Games the following year. The sub-themes presented examples of the existence of a caring relationship between Jack and Seth that may have helped in the process of developing an Olympic medal winner.

Authentic Personality. The sub-theme, authentic personality, was another example of how David and Cory had a caring relationship. Authentic personality was defined as David and Cory's ability to connect with each other on a personal level even though they come from very different backgrounds. Open and honest communication was presented earlier but also was related to authentic personality. When David described their communication he said, "It just fits our personalities and so, it just works. We don't have to pretend, we can just be ourselves." In the interview with Cory he described how they are able to speak a "common language" where they can speak plainly, openly and honestly with each other.

In the coach-athlete interview David followed up on this concept. He said, "The message is what's most important right. The language, sometimes it needs to be colorful. We know where it's coming from, it's the message, and it's the intent." David and Cory have the ability to speak to each other as they described "plainly." The communication often involved colorful language that might shock or appall other people who do not understand their relationship and the intent behind the messages. In reality this coach and athlete have great respect and care for each other. The language used evolved from Cory

wanting to be himself, as this language is common in his upbringing and culture. It was important for Cory to have a coach who he could communicate with in this way.

David and Cory have been together for a long period, and through that time have been able to develop an understanding with each other that has strengthened the relationship. In the interview with Cory, he provided the following, "First of all it is our relationship. I have a huge amount of respect for him so I think that's where it all stems from when you spend countless hours with somebody you really truly get to know each other."

David discussed how Cory made the decision to remain with him as his coach and to continue to live and train there post college as a professional. In the interview with David he discussed that Cory had realized the importance of his training environment and the people he was around. David mentioned he looked forward to being able to continue their relationship. He said, "I think it will be good for him and more importantly he thinks it will be good for him." This commitment to each other is another reason why they have been able to develop the depth and strength in their relationship. Cory discussed the importance of this long-term relationship to his past success and his ability to give himself the best chance for future success by continuing their partnership.

In the coach-athlete interview, David and Cory discussed how they came to understand each other. David understood that Cory was a highly competitive individual who wanted to win every time he competed. David respected that. With Cory's goal in mind, David's focus was on how he could prepare him to be the best he could be. Cory added, "We shared a goal, you know, his goal was to make me better, my goal was to get better. We shared a commonality as far as my progressions in life and athletics." David

understood where Cory was coming from. In turn Cory reciprocated that understanding in knowing where his coach was coming from. David discussed how Cory knew what to expect from him, and because he didn't change, that helped Cory to connect with him.

David and Cory discussed another example of Cory's unique personality and their ability to connect and understand the importance of staying true to self. In the coach-athlete interview they said,

> *Cory:* Understanding that hugging a little kid or wearing striped socks is a huge statement to others. It's just me being me. Someone else might not do that because it's the Olympic Games and might be frowned upon. I just don't care what they are talking about. If I am going out, I am going out like me.
>
> *David:* From my perspective I want him to be who he is. There are times where it may be fine for you (Cory) but it might be misconstrued by others or it may be perceived as being disrespectful, so I'll share with him thoughts about that because I know that's not the intended message.

Both David and Cory had relatedness and were able to connect on a personal level because they understood each other and the importance of being true to self (Deci & Ryan, 1985; 2000). Earlier in the findings, Cory mentioned that one of the reasons he chose which college he would attend was his ability to relate to his coach. David and Cory developed trust over time due in large part to their relatedness. They were able to connect on a level where each understood the other and where he was coming from. They had a mutual respect that fostered intrinsic motivation in Cory, which may have helped in the process of developing an Olympic medal winner.

Cory and David discussed how neither one takes himself too seriously. They are able to have fun interacting with each other. Cory discussed their unique personalities and how they would probably never openly admit they love each other. In the interview with Cory in describing the close relationship they have, he said, "Coach is not the most outgoing person. I like to think that I helped open him up. I connected as a person with coach and what he stood for in doing things right."

Behind all the fun they have playing around and joking with each other, they still know how to "get down to business" when they need to. Throughout the interviews it became apparent that there was a unique bond between David and Cory and they genuinely care about each other. These examples suggest the fulfillment of their need for relatedness (Deci & Ryan, 1985; 2000).

In all three cases coaches and athletes provided examples to help support that a caring relationship was an aspect of the coach-athlete relationships that may have helped in the process of winning an Olympic medal.

Theme #3: Mental Strength

General Theme		
Mental Strength		
Jack and Seth	**Lawrence and Tyler**	**David and Cory**
Sub-themes	Sub-themes	Sub-themes
Resiliency	Resiliency	Resiliency
Focus on the Process	Focus on the Process	Focus on the Process
Balance	Balance	
Composure		

Table 3. General Theme: Mental Strength

Mental strength was the third general theme that appeared across cases. Mental strength was defined as the coach and athlete's ability to mentally prepare for training

and competition, and how they responded to challenges in their relationship on the path to winning an Olympic medal. The sub-themes for mental strength for all three cases were: resiliency and focus on the process. In two of the cases, the sub-theme of balance emerged. In the case of Jack and Seth the sub-theme composure emerged as well.

The athletes and coaches discussed the importance of not just investing in thorough physical preparation but thorough mental preparation as well. They discussed that mental preparation often was the difference for them in having success. This was especially important in the context of the Olympic Games, which as discussed in the literature review, is a highly chaotic environment full of distractions. (See Appendix D, for specific examples of each general theme from each case).

Resiliency. Resiliency was the first sub-theme that related to the general theme, mental strength. Resiliency was defined as the ability to respond to adversity. All three athletes and coaches mentioned resiliency as an important aspect to their success and ultimately achieving at the highest level by winning a medal at the Olympic Games. They approached adversity with a mindset that provided for learning and growth opportunities. This helped them be motivated to achieve even more. They discussed that having gone through adversity helped them appreciate and enjoy success that much more.

According to Seth and Jack, one of the most challenging moments in their relationship was when Seth struggled in his first outdoor world championships one year prior to the Olympic Games. Although Seth was a favorite going into that World Championship competition, he only achieved the silver medal, not the gold. This was perceived as a failure experience by Seth. These quotes from the individual interview

with Seth and Jack provided evidence of the sub-theme resiliency. To explain Seth's perspective he said,

> Having gone through that experience we kind of knew what to expect, having prior knowledge about that experience together gave me confidence that he wouldn't let me go down that path again. It helped because I believe in myself now and then he believed in me, so it was good.

Jack described it in this way,

> In hindsight, Daegu was the best thing that could have happened to him. He said to me "Coach that will never happen again." If he had walked through that and blown everybody away, and then the same funk would have happened in London, he wouldn't have been ready.

Seth and coach both felt that Seth's ability to learn from his mistakes and see them as opportunities for growth was a contributing aspect for his ability to be better prepared and more competent (Deci & Ryan, 1985; 2000) to be able to handle the situation successfully the next time around in the Olympics. This is evidence of an aspect of the coach-athlete relationship that may have helped in the process of developing an Olympic medal winner.

Lawrence and Tyler both discussed how the coach-athlete relationship was better as a result of their ability to learn from failure and how that may have helped to create an Olympic medal winner.

Coach-Athlete Interview

> *Tyler:* In the back of everybody's head, they have that little like tiny voice that doesn't want to fail. If you just ignore it for a little bit and give it a shot, and

maybe you fail and maybe you don't but if you learn from each outcome. We didn't make it but this is why we didn't make it.

Lawrence: The fact that we have seen the lowest of lows, whether it was at the NCAA level, or at the biggest stage of track and field at the Olympics. I am a true believer of fate, had those things not happened, we would not have achieved or had the level of success that he's had.

Tyler felt he was physically and mentally ready to compete but the pressure of the moment still made it challenging. His long-term dream of getting to the Olympics and medaling there were on the line. At the trials there were so many variables for something to go wrong. Tyler had many elements that were all challenging his mental strength. These elements were: his recent surgery, the weather, sponsorship money, and the distraction of a world record performance. The margin for error was really small and would make the difference between making and not making the Olympic team.

Tyler discussed the enormous amount of pressure that is involved in competing at the Olympic trials when the athlete is one of the favorites to make the team. The athlete has more to lose. The typical pressure of being one of the favorites was magnified for this athlete as he was recovering from a major surgery just six months prior to the trials. While he trusted all the work he had done in preparing and rehabbing, he still struggled to feel fully competent and confident that he could perform because he had not taken full throws yet with the javelin. Lawrence discussed a similar scenario where Tyler was able to feel competent and relied on his coach to reassure that belief (Deci & Ryan 1985; 2000). They mentioned how they both just had to trust it in that moment and that it could potentially ruin his arm and his career with the throw.

Tyler: There was never any wavering. It was, we're gonna do everything in our power to be ready for London, and I think that's where the confidence comes well that's just where, you need a coach. You need someone in your corner not only pumping you up, telling you that you're the best, but you need someone to write the plan and be the architect of what you're trying to do.

There was a day in practice when Cory was struggling to focus and was bringing outside distractions from his life into practice and it was making it difficult for him to perform at his usual level. David threatened to kick him out of practice unless he could figure out how to leave those outside distractions out of practice and focus on the task at hand. This was an important moment as it not only taught him a crucial life lesson but it also taught him that in order to compete at a high level in a high pressure, chaotic environment such as the Olympic Games he had to be able to handle distractions and re-focus on the task at hand in order to have the best chance for peak performance.

Focus on the Process. The coaches and athletes all discussed the importance of focusing on the things they need to do on a daily basis to help them stay mentally engaged. Focus on the process provided evidence of the athletes' seeking out mastery of their particular event and that while they all wanted to win, they truly set out to master the skills of their event and bought into focusing on the process in order to achieve mastery.

The athletes and coaches discussed being focused on the process and the fundamental concepts and steps that they need to achieve in training. Their focus on the process helped them to feel more competent in competition as they knew they have

achieved the necessary steps in their progression to be ready and able to perform at the necessary level to be competitive at the Olympic Games (Deci & Ryan, 1985; 2000). The main concept they discussed was that everything they did in preparation and training and even in other competitions was with the Olympic Games in mind. An example of this was provided from the case of Jack and Seth. In the interview with Jack he said, "The Olympic champion does the fundamentals better than you or I and they do it with a gun held to their head in a high-pressure situation." In the interview with Jack and Seth, Seth stated, "The Olympic moment is not about necessarily what you do then, but what you do leading up 'til then." Jack followed that statement by saying, "You're both there, you've done all the work, all the preparation technically, thought process, everything." Everything was set up and prepared with success at the Olympic Games as the ultimate end goal. This detailed preparation involved looking not only at the current season but multiple seasons at a time and understanding the big picture. They discussed being willing to sacrifice some things along the way in terms of achievement opportunities in order to be best prepared to be successful at the Olympic Games (Deci & Ryan, 1985; 2000).

Resiliency was a sub-theme of mental strength, as this was ultimately what the coaches and athletes discussed as one of the keys to success in the Olympic Games and other major competitions. The athletes' abilities to focus and re-focus were crucial to feeling competent and navigating the Olympic Games successfully (Deci & Ryan, 1985; 2000).

Balance. Balance was also a sub-theme that related to the general theme, mental strength. Balance was important for Jack and Seth in relation to mental strength because

taking time away from sport helped them to recover physically and mentally. They discussed that the lead up in the year prior to the Olympic Games can be very stressful. One of the ways they manage the stress was to take time off and to limit the communication between coach and athlete during that time. Jack and Seth knew when to train hard and when to take it easy and allow for rest and relaxation. They both discussed that "less is more."

Jack gave a good example of the importance of balance when he said, "Everybody needs a break. I don't try to send them emails during the off-season. 'Hey are you stretching?' I don't care what they do." Jack discussed that rest and relaxation are his most important factors in regards to training for high performance. This related to mental strength as balance allowed for the coach and athlete to be refreshed when they returned to the training and competition environment. Balance was a concept that Seth and Jack relied on to help them be able to focus and be mentally strong when they needed to in competition and is related to the athlete feeling competent (Deci & Ryan, 1985; 2000).

A difficult part for the coaches and athletes is all the down time that they experience just prior to the Olympic Games. Down time consists of a 2-3 week period with no other track and field competitions, and the track and field portion of the Olympic Games all occurs during the last week of the Olympic Games. This down time presents a challenge in making smart decisions and finding ways to stay occupied so that you are not constantly thinking about the coming competition, but at the same time not losing focus on why they are there which is to try to win a medal.

Another important element of balance that Tyler described was the importance of knowing how and when to pick and choose what activities you were going to engage in

around the Olympic Games. He said, "Not getting caught up in doing a lot of things. Finding time in your training, cause you do need to do something. You can't lock yourself in your room for 12 days leading into a track meet, you'll go nuts." Tyler and Lawrence both discussed the importance of Lawrence being able to be there with Tyler in the month leading up to the Olympic Games in helping Tyler to maintain balance. There are plenty of opportunities for distractions, which can be good and bad, and they discussed the importance of knowing what is best for them in order to be ready to perform at a high level. Tyler discussed the benefit of having someone there to support and reassure him that it would be okay and that he could relax at the right times. Tyler discussed that being alone during the lead up to the Olympics probably would have put more pressure on himself and caused more anxiety.

Composure. The final sub-theme in relation to mental strength was composure. This emerged only in case #1 with Jack and Seth. In the interview with Jack, he said, "He (athlete) deals with chaos really well." He later described that this may be his best attribute in terms of his success. In the interview with Seth he cited his coach's calm, composed demeanor as being helpful for his ability to remain composed. He said, "It's good to have someone to go to that you have confidence in that you trust during a time when things can go bad." For Seth his coach's composure help him to feel confident and trust in his skills to perform. This is closely related to competence and feeling capable of one's abilities to perform a task (Deci & Ryan, 1985; 2000). This evidence added support that the coach-athlete relationship may have helped in the process of developing an Olympic medal winner.

The cross-case analysis provided evidence that while each case was unique in many aspects there was a credible amount of commonality on a theme level. This overlap will be presented more in depth in the discussion section in terms of importance in application. The findings of this study had three general themes that emerged in exploring the coach-athlete relationships of track and field Olympic medal winning athletes and their coaches. The themes were creating an autonomy supportive environment, developing a caring relationship, and the development and maintenance of mental strength. The findings provided evidence to support that each coach-athlete relationship had elements that aligned with fulfilling the needs for autonomy, relatedness, and competence in developing intrinsic motivation (Deci & Ryan, 1985; 2000). The findings provided supporting examples that the coaches and athletes perceived the coach-athlete relationship to have helped in the process of developing an Olympic medal winner.

CHAPTER 5

Discussion

This chapter will include the discussion, applications, limitations and implications for future research. The chapter will be organized by a discussion of the findings in relation to the research question, previous research and theory, methodological implications of the study and finally the summary with conclusion (Heppner & Heppner, 2004).

The purpose of this study was to investigate the coach-athlete relationship with Olympic medal winning track and field athletes and their coaches. The research question for the study was "What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?" The theoretical framework that was used to provide structure to answering the research question on coach-athlete relationships was primarily derived from self-determination theory (Deci & Ryan, 1985; 2000).

The researcher found evidence to support that each coach-athlete relationship had aspects that aligned with fulfilling the needs for autonomy, relatedness, and competence in developing intrinsic motivation (Deci & Ryan, 1985; 2000). Based on the findings that emerged, the coaches and athletes perceived the coach-athlete relationship to have helped in the process of developing an Olympic medal winner.

Competing at the Olympic Games is different than competing in any other performance setting and presents many challenges to the athlete and coach. As outlined above, the coach-athlete relationship can have a positive or negative influence on

performance outcomes, especially in the highly chaotic environment of the Olympic Games. "Olympic contexts, in and out of sport, are highly charged emotional events, because at that moment you feel like your life, mission, reputation, value, relationship, or worth is on the line, and the outcome really does matter" (Orlick, 2002, p.13).

Furthermore there was evidence to support other previous research on Olympic athletes and the need to engage in the early preparation and development of the psychosocial understandings, skills, perspectives, characteristics and approaches that are necessary for supporting successful performance at the Olympic Games (Balague & McGuire, 1993; Durand-Bush & Salmela, 2002; Fletcher & Sarkar, 2012; Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999; Taylor, Gould & Rolo, 2008; Guinan, Greenleaf, Medbery & Peterson, 1999; Orlick & Partington, 1988; Vernacchia, McGuire, Reardon & Templin, 2000).

Autonomy Supportive Environment

All three coaches placed a large emphasis on the importance of developing an independent athlete. They discussed that for the athlete to be successful they need to be independent. Many times they see coaches who try to have the athlete be dependent on the coach, and that in their opinion is not the best method for achieving success at the Olympic Games. From the findings it appeared these coaches developed independent athletes by providing an autonomy supportive environment, where the athletes were allowed to make choices and have a voice in their training and competition. This example of allowing the athletes to make choices and have a voice aligns with previous research with athletes and coaches (Lafreniere, Jowett, Vallerand & Carbonneau, 2011; Lafreniere, Jowett, Vallerand, Donahue, & Lorimer, 2008; Mageau & Vallerand, 2003;

Mallett, 2005, Vallerand et al., 2003). From the athlete's perspective, the coaches' willingness and ability to provide an autonomy supportive environment led to higher quality coach-athlete relationships, which also appeared to have an impact on the athlete's general happiness (Haberl, 2001; Lafreniere et al., 2011). The athletes discussed the importance of their coaches allowing them to have autonomy, and how this helped facilitate them being able to perform at a high level and experience enjoyment and fun in the process.

These athletes described having coaches who demonstrated high integrity, good morals, solid values, expert knowledge of human behavior and experiential knowledge of sport in leadership roles, which has benefited the athletes' development in sport and life (Bloom, Durand-Bush, Schinke, & Salmela, 1998). These coaches provided a positive learning environment that provided the athletes with optimal conditions for preparation and peak performance (Pensgaard & Roberts, 2002).

The athletes highlighted the influence of the coach as they discussed the impact of their coach being a teacher had in their development. The coaches influenced the athletes through their knowledge of training design and application and how that helped their development of a strong trust and belief in the coach. Previous researchers studying Olympic track and field athletes found the importance of trust in athlete-coach relationships (Vernacchia, McGuire, Reardon & Templin, 2000). The coach can have a large effect on the athlete through role modeling. The coaches and athletes suggested that the coach should act as a positive model for the athlete both in sport and life. Some examples are: having a positive attitude; how they respond and react in times of distress, and communication between coach and athlete. The coaches taught and modeled for the

athletes how to make effective decisions, which may have helped in empowering them through creating an autonomy supportive environment.

As was evidenced, there were scenarios that the coach and athlete found themselves in at the Olympic Games that were handled in a successful way. Being able to control the moment led to success because they had prepared for that in competitions and practices over the prior years together and the athletes had learned how to make effective decisions. This highlighted the importance of the coach and athlete having a long-term relationship as being a key factor in their ability to control the Olympic moment. The coach-athlete relationship has not been previously explored in the context of moments in competition at the Olympic Games. Thus these findings appear to be unique to this study.

Communication was another very important element that was discussed in relation to the coach-athlete relationship. The coaches tailored their communication to each athlete and had developed similar yet unique ways of communicating that evolved over time and resulted in the coaches and athletes being on the same page with each other when communicating. The coaches and athletes discussed how keeping communication simple made things easier and less stressful in competition as they were able to trust each other and be on the same page. Previous researchers have found that, for athletes and coaches, communication in competition can be challenging and stressful (Frey, 2007; Sagar & Jowett, 2012). They also discussed times when they have had issues, and the need to resolve those issues as soon as possible in an honest and open communication process. The issues that the athletes and coaches encountered that were mentioned all revolved around communication and were able to be resolved because both sides were

able to have honest and open communication. The involvement of the athlete in the communication process may have helped facilitate an autonomy supportive environment.

The coaches provided the athletes with an autonomy-supportive environment where they: listened to their athletes, allowed them to make choices, valued and respected their input, and made decisions based on good information. The coaches made a concentrated effort to develop an autonomous athlete who was intrinsically motivated. In working to develop an independent athlete this also allowed the athlete to develop competence. This helped the athlete trust that they could handle challenging situations because of what their coaches had taught them in preparation for those moments. One of the key aspects of competence and facilitating an autonomy supportive environment was the cue systems they developed that allowed for the athlete to have a simple way to communicate with their coach. The athletes trusted their coaches through their ability to demonstrate competence over time in various moments they encountered in practice and competition on the path to the Olympic Games.

The main point from the findings and analysis on autonomy supportive environment was how the coaches empowered the athletes to have a voice and to make decisions, which may have helped facilitate the athlete developing independence.

Caring Relationship

The coach-athlete relationship was very important for these athletes in their overall athletic development and personal development (Vernacchia et al., 2000). The most important factor that athletes and coaches identified was the need to build a coaching relationship that centered on trust and mutual respect (Jones & Spooner, 2006). Two of the characteristics coaches and athletes highlighted in their coach-athlete

relationship with their head coach were trust and belief (Haberl, 2001). These athletes felt that this trust and belief in their ability made them more confident and helped improve their performance (Haberl, 2001). The coaches and athletes identified that the coach's role is to build the environment. This environment needs to be a supportive and caring climate that focuses on helping them to achieve personal excellence (Pensgaard & Roberts, 2002). The findings from this study support this quote from Mallet (2005) where he states, "promoting a healthy coach-athlete relationship is posited as key to high quality sport performance and positive affective outcomes" (Mallett, 2005, p. 421).

In looking at all three cases and the themes that were evident from the data, the global theme that defines the coach-athlete relationship in the context of helping create an Olympic medal winner is that the coaches had an athlete-centered approach in developing their relationship with the athlete. For these coaches they set out to help the athletes be successful, and everything they did in terms of athletic development was centered on how to best serve the athlete in achieving personal excellence in sport and life (Pensgaard & Roberts, 2002). This example from the literature described these three coaches and how they have mastered the art of coaching.

> Truly great coaches have mastered the art of coaching largely because they mastered their capacity to: listen, respect, challenge, believe, care and support. In the preparation and lead-up phase to the Olympic level events, listening, respecting and challenging athletes in positive ways is critically important. In the on-site performance phase, demonstrating belief in each performer and supporting them in simple ways, become the central factors in facilitating excellence (Orlick, 2002, p.12).

The literature further supports that coach-athlete relationships that are developed by a coach with an athlete-centered philosophy have been shown to be beneficial to the Olympic athlete's development (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999; Jowett & Cockerill, 2003; Orlick, 2002; Pensgaard, & Roberts, 2002). This is also supported for collegiate athletes who are often future Olympians (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Poczwardowski, Barott, Henschen, 2002; Zuleger, 2011; 2012).

These coaches demonstrated having a caring relationship as their egos were removed from the situation and they truly made the athletes their first priority. These coaches and athletes discussed the importance of using an athlete-centered approach, especially with athletes of their level of skill (Olympians), because each athlete is unique and even within the same event there will be nuances that are different with each athlete (Jones and Spooner, 2006).

For these coach-athlete relationships, gratitude was an important aspect that athletes and coaches discussed. Gratitude was not specifically part of the literature review and was not part of the research agenda, but emerged from the findings as an important element of the coach-athlete relationships as evidence of a caring relationship. Gratitude has been found to have positive effects on athlete's well-being (Chen, & Kee, 2008; Chen, 2013), as well as the general population (Emmons & McCullough, 2003; McCullough, Emmons, & Tsang, 2002; Wood, Joseph & Maltby, 2009). Researchers have found that when people make intentional efforts to focus on things for which they are grateful, that it has a positive effect on well-being (Emmons and McCullough, 2003).

The athletes also discussed how their coaches' passion and attitude toward their sport and their coaching as examples of the coach being a positive model for them. They expressed that this helped them try to match that passion and attitude which they cited as important to their success in sport and life.

Based on the findings for these coach-athlete relationships, the coaches were authentic in their commitment to their athletes and have a caring relationship. Their caring relationship is exemplified by their egos being removed from the situation and by having the athletes' best interests in mind. The coaches and athletes relatedness (Deci & Ryan, 1985; 2000) allowed them to connect on a more personal level, which helped strengthen the development of trust in their coach-athlete relationship over time. The coaches' willingness to be open and honest in their communication was very important in establishing a strong coach-athlete relationship.

The aspects of the coach-athlete relationship mentioned in this section aligned with the coach and athlete having a caring relationship where both coach and athlete reciprocated care for each other.

Mental Strength

The development and maintenance of mental strength was another area that the athletes and coaches perceived to be a part of the coach-athlete relationship. The coaches helped facilitate the athletes' development of mental strength through teaching them to focus on the process. This involved staying focused on the tasks that were necessary to be successful through thorough mental preparation. Another area of mental strength that the athletes and coaches highlighted was their response to adversity and failure. The coaches and athletes approached challenges as opportunities to learn, grow and improve.

This helped them to reframe potentially negative situations into positives, which they perceived to be important to their success, specifically at the Olympic Games.

The coaches and athletes in this study expressed that it is important to have a solid detailed plan that includes mental preparation. A big part of this plan should be preparation for handling the potential issues that might affect peak performance and the unknown variables of the Olympic Games. It is important to have a plan for how to stay positive and effectively handle distractions, so as to remain focused and composed while conserving energy, and remaining optimistic, which the coaches and athlete discussed as being important to their performance.

> "Few of us have actually experienced the enormous challenge of performing within an Olympic Games context, but most of us have had our Olympic moments. How well we handle those moments, and the extent to which we are able to embrace them, is often determined by two factors: how prepared we feel to accept those opportunities or challenges, and the extent to which we are able to remain positive and fully absorbed in the process of engaging ourselves in the experience or performance. Excelling in the Olympic context is almost entirely dependent on perspective and focus" (Orlick, 2002, p. 5).

The athletes and coaches' all discussed resiliency as being crucial to their mental approach and ultimately their success at the Olympic Games (Fletcher & Sakar, 2012). These coaches and athletes displayed an ability to cope with the highly stressful and chaotic environment that is the Olympic Games (Gould et al., 1999; Haberl, 2001; Pensgaard & Duda, 2002). These findings aligned with previous research that found the Olympic Games to be a challenging experience because of the excitement and pressure

that come from the societal importance placed on the competition (Haberl & Peterson, 2006; Orlick, 2002). The coaches and athletes discussed different ways in which they developed mental strength, but the key point was that it was something they worked at developing on their own as an athlete, or with the help of their coach.

A scenario that affected two of the athletes was injury prior to the Olympic Games. Both of the athletes were able to recover in time and be ready, but they discussed the psychological challenge that it presented and both were able to handle it very well considering their circumstances. This scenario has occurred in previous Olympics, and can be a great source of stress and anxiety for the athlete and coach (Vernacchia & Henschen, 2008). These athletes were able to handle a potentially negative situation and reframe it into a positive due to their optimism and confidence in their ability to handle the situation, and still be ready to perform. This aligned with previous research with Olympic athletes who used similar coping strategies to successful respond to negative situations (Gould et al., 1999; Haberl, 2001; Pensgaard & Duda, 2002).

As was reported in the literature review, the challenge presented by the short time period between the Olympic trials and the Olympic Games is an area where coach and athlete can often make mistakes that result in negative performance at the Olympic Games (Greenleaf, Gould & Dieffenbach, 2001; Haberl, 2001; Vernacchia & Henschen, 2008). In the cases of these coaches and athletes all three had specific plans for the time between trials and the Games to avoid these pitfalls. Their plans involved minimal competition as each athlete only competed in one competition and emphasized rest, regeneration, and quality practice. All three athletes entered the competition healthy and with optimistic outlooks. This aligned with other research on Olympic medal winning

athletes which showed that medal winning athletes had higher positive expectancy ratings prior to competition than did non-medal winning athletes (Gould, Ecklund, and Jackson, 1992a; 1992b). The coaches and athletes discussed the importance of this in terms of their mental strength and preparation for success at the Olympic Games.

A key element of mental strength was the positive outlook by the athletes and coaches in their approach to "learning from failure." Their discussions of how they learned from failure may provide evidence of a growth mindset and understanding that failure can provide an opportunity for growth and improvement (Dweck, 2007; Fletcher & Sakar, 2012; Jowett & spray, 2013).

Seeking mastery of their events by focusing on the process was another key concept that the athletes and coaches discussed (Vernacchia et al., 2000). These athletes and coaches discussed the importance of having the ability to focus on the task at hand prior to and during competition as a key psychological attribute of their success at the Olympic Games (e.g. Gould, Dieffenbach, & Moffet, 2002; Durand-Bush, & Salmela, 2002; Gould, Greenleaf, Guinan, Dieffenbach & McCann, 2001; McGuire and Balague, 1992; Vernacchia & Henschen, 2008; Vernacchia, McGuire, Reardon, & Templin, 2000). More specifically, athletes cited focusing on the process, focusing on what one can control and focusing on one's self, as methods for helping improve their performance (Gould et al., 2002; Vernacchia et al., 2000).

The key take-away point from the findings and analysis on mental strength was how the coaches approached these athletes and how they responded in ways that helped empower the athletes and facilitated them being able to have peak performances in pressure packed moments, suggesting an impact on their success at the Olympic Games.

Applications

One benefit of this study is that the knowledge gained from these in-depth case studies may have the potential to be used to help develop coach education programs for USATF and the USOC. This could provide an opportunity for other coaches and athletes to be exposed to the knowledge and experiences of coach-athlete relationships from these expert coaches and athletes. The findings from this study could be used to provide access to awareness of a more inside and intimate view of these three coach-athlete relationships. This could provide an opportunity for others to consider them as possible models for learning, and gaining insights about developing their own coaching expertise and repertoire. This modeling opportunity could be considered as providing a form of indirect mentoring on the part of these great coaches and athletes.

Previously, coach education programs have mainly focused on knowledge regarding the technical and physical training theory aspects of coaching athletes. These case studies provide rare insight into how these Olympic medalist athletes and coaches interacted on a daily basis and in competition in preparation for the Olympic Games. There may be the potential to better design the coach and athlete education programs, as this study provided insight from both the athletes and coaches' perspectives on how they approached developing a coach-athlete relationship that gave the athletes the best chance to be successful at the Olympic Games.

Limitations

One of the major limitations to this study was the high profile of the participants. The participants are some of the best athletes in the world ever in their events. Working with elite athletes and specifically Olympic medal winning athletes as participants in a

study brings with it specific unique challenges. "It is widely recognized that researching 'elites' raises distinct challenges, partially in access and recruitment" (e.g. Carless & Douglas, 2013, p. 27; Pensgard & Duda, 2002). All of the athletes in the study are still actively competing, and thus access was limited so as not to disrupt their normal routines. This meant that each athlete and coach chose his preferred location for the interview. Sites included coach's office, conference room, and hotel room. The researcher acknowledges that these venues may not have been ideal, if the athlete did not like certain aspects about his coach, he may not have felt comfortable acknowledging it.

Another limitation was the small amount time spent interacting with the coaches and athletes. This limited the length of the interviews, the ability to spread the interviews out over more time, and the ability to conduct any follow up interviews. The researcher attempted to minimize impact on the coaches and athletes and complied with their desires and needs throughout the research process.

Olympic medal winners are high profile people, frequently in the focus of society, and regularly interviewed by the media because of their athletic achievements, especially following winning a medal at the Olympic Games. Because of this, there could be a tendency for the athletes to give responses that are "generic" or "politically correct." As was stated in the strengths section, the researcher feels confident that true stories were captured and presented as accurately as possible. Another limitation to the study was that only Olympic medal winners were studied, and thus it is not possible to discern the difference between medal winners and non-medal winners. But that was not the intent of this study. The intent here was to study only the lived experience of the Olympic medal winners.

The study was limited by a small sample size as it is very difficult to gain access to athletes of such stature and to coordinate the time to interview them when it does not conflict with their extremely busy training, competition, sponsors and media schedules. Previous qualitative studies on similar populations have used small sample sizes, which made them important but not definitive (Eklund, Gould & Jackson, 1993; Fletcher & Sakar, 2012; Mallet, 2005; Pensgaard & Duda, 2002; Pensgaard & Roberts, 2002). Instead the goal of this research was to set directions for future research. Another limitation is that relationships are constantly evolving so spending more time investigating the participants and doing multiple interviews over time may prove to be more beneficial.

Implications for Future Research

Future research could expand on this study by repeating it with more participants. Obviously this is a challenge as there are only a small number of Olympic medal winners every four years. All of the participants were males, so repeating the study with women who were Olympic medal winners and with female coaches (if any), might provide more insight into any potential gender differences that may exist.

The use of the photographs proved to be very beneficial in getting the participants to discuss and relive actual moments from the Olympic Games. Future research could rely more heavily on the use of photographs or videos or other digital visual representation as a method for interviewing elite athletes about specific moments that happened in competition. Another option would be to have the athletes identify these photos or personally take them, which is known as photovoice methodology. Photovoice is a participatory research strategy commonly implemented in health research as a

mechanism for personal and community change (Wang & Burris, 1994). First introduced as Photo novella by Wang & Burris in 1994, Photovoice has become a methodology that allows individuals to reflect upon the strengths and concerns of their community through using photographs or pictures to tell a story from the perspective of the participant.

Future studies could investigate medal winners and non-medal winners in track and field to attempt to discern any differences. Relationships are always evolving, so future studies could be more longitudinal and attempt to spend more time interacting with the participants to better be able to determine the important aspects of the coach-athlete relationships over time.

Summary

The purpose of this study was to investigate the coach-athlete relationship with Olympic medal winning track and field athletes and their coaches. The research question for this study was "What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?"

These case studies highlighted how the coach-athlete relationship may have the potential to help an athlete win an Olympic medal. There were moments at the Olympic Games where the coaches and athletes relied on the strength of their relationship to control the moment that may have helped lead to winning an Olympic medal. The strength of their relationship was demonstrated with evidence that for these athletes and their coaches the key aspects of their coach-athlete relationship were: creating an autonomy supportive environment, developing a caring relationship, and developing and maintaining mental strength. The findings provided supporting examples that the

coaches and athletes perceived the coach-athlete relationship to have helped in the process of developing an Olympic medal winner.

The findings have the potential to contribute to previous research by providing a better understanding of the coach-athlete relationship of USA track and field athletes in the context of winning a medal at the Olympic Games. This information may help in contributing to the education and preparation of coaches and athletes in the future. The information learned from this study may benefit our finest junior athletes and their coaches in their quest for future Olympic medals.

REFERENCES

Amorose, A. J. (2003). Reflected appraisals and perceived importance of significant others' appraisals as predictors of college athletes' self-perceptions of competence. Research Quarterly for Exercise and Sport, 74, 60–70.

Antonini Philippe, R., & Seiler, R. (2006). Closeness, co-orientation and complementarity in coach–athlete relationships: what male swimmers say about their male coaches. *Psychology of Sport and Exercise*, *7*(2), 159-171.

Aoyagi, M. & Poczwardowski, A. (2012). Expert approaches to sport psychology: applied theories of performance excellence. Morgantown, WV: Fitness Information Technology.

Balague, G. (1999). Understanding identity, value, and meaning when working with elite athletes. *The Sports Psychologist, 13: 89*, *98*.

Bentler, P. M. (1993). EQS: Structural equation program manual. Los Angeles: BMDP Statistical Software.

Bloom, G. A., Durand-Bush, N., Schinke, R. J., & Salmela, J. H. (1998). The importance of mentoring in the development of coaches and athletes. *International Journal of Sport Psychology*, *29*, 267-281.

Bowes, I., & Jones, R. L. (2006). Working at the Edge of Chaos: Understanding Coaching as a Complex, Interpersonal System. *Sport Psychologist*, *20*(2).

Cairo (1995). *Motivation and goal setting.* Shawnee Mission, KS: National Press.

Carless, D., & Douglas, K. (2013). " In the Boat" but" Selling Myself Short": Stories, Narratives, and Identity Development in Elite Sport. *Sport Psychologist*, *27*(1).

Carron, A. V., & Chelladurai, P. (1978). Psychological factors and athletic success: An analysis of coach-athlete interpersonal behavior. *Canadian Journal of Applied Sport Sciences, 3,* 43-50.

Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sports: Development of a leadership scale. *Journal of sport Psychology*, *2*(1).

Cote, J, & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science & Coaching, 4,* 307-323.

Cushion, C. J., Armour, K. M., & Jones, R. L. (2006). Locating the coaching process in practice: models 'for' and 'of' coaching. *Physical Education and Sport Pedagogy*, *11*(01), 83-99.

Dale, G. A. (2000). Distractions and coping strategies of elite decathletes during their most memorable performances. *Sport psychologist*, *14*(1), 17-41.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, *11*(4), 227-268.

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. doi:10.1080/10413200290103473

Eklund, R. C., Gould, D., & Jackson, S. A. (1993). Psychological foundations of Olympic wrestling excellence: Reconciling individual differences and nomothetic characterization. *Journal Of Applied Sport Psychology, 5*(1), 35-47. doi:10.1080/10413209308411303

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology, 84*, 377-389.

Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology Of Sport And Exercise, 13*(5), 669-678. doi:10.1016/j.psychsport.2012.04.007

Frey, M. (2007). College coaches' Experiences with stress-"Problem solvers" have problems, too. *The Sport Psychologist, 21*, 38-57.

Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of applied sport psychology*, *14*(3), 172-204. doi:10.1080/10413200290103482

Gould, D., Eklund, R. C., & Jackson, S. A. (1992). 1988 U.S. Olympic wrestling excellence: I. Mental preparation, precompetitive cognition, and affect. *The Sport Psychologist, 6*(4), 358-382.

Gould, D., Eklund, R. C., & Jackson, S. A. (1992). 1988 U.S. Olympic wrestling excellence: II. Thoughts and affect occurring during competition. *The Sport Psychologist, 6*(4), 383-402.

Gould, D., Finch, L. M., & Jackson, S. A. (1993). Coping strategies used by national champion figure skaters. *Research quarterly for exercise and sport*, *64*(4), 453-468.

Gould, D., Greenleaf, C., Guinan, D., Dieffenbach, K., & McCann, S. (2001). Pursuing performance excellence: Lessons learned from Olympic athletes and coaches. *Journal of Performance Excellence*, *4*, 21-43.

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

Greenleaf, C., Gould, D., & Dieffenbach, K. (2001). Factors influencing Olympic performance: Interviews with Atlanta and Nagano US Olympians. *Journal of Applied Sport Psychology, 13*(2), 154-184. doi:10.1080/104132001753149874

Haberl, P. (2001). Peak Performance at the Olympics: *An in-depth psycho-social case study of the 1998 U.S. Women's Olympic Ice Hockey Team.* Unpublished Doctoral Dissertation. Boston University, Boston, MA.

Haberl, P., & Peterson, K. (2006). Olympic-Size Ethical Dilemmas: Issues and Challenges for Sport Psychology Consultants on the Road and at the Olympic Games. *Ethics & Behavior, 16*(1), 25-40. doi:10.1207/s15327019eb1601_4

Harper, D. (2002). Talking about pictures: a case for photo elicitation. *Visual Studies, 17*(1), 13-26.

Hays, K., Maynard, I., Thomas, O., & Bawden, M. (2007). Sources and Types of Confidence Identified by World Class Sport Performers. *Journal of Applied Sport Psychology, 19*(4), 434-456. doi:10.1080/10413200701599173

Hays, K., Thomas, O., Maynard, I., & Bawden, M. (2009). The role of confidence in world-class sport performance. *Journal of sports sciences*, *27*(11), 1185-1199.

Hollembeak, J., & Amorose, A. J. (2005). Perceived coaching behaviors and college athletes' intrinsic motivation: A test of self-determination theory. *Journal of applied sport psychology*, *17*(1), 20-36.

Johnson, M. (2011). *Gold Rush: What makes an Olympic champion?* London: HarperSport

Jowett, S., & Cockerill, I. M. (2002) Incompatibility in the coach–athlete relationship. In I. M. Cockerill (Ed.), *Solutions in sport psychology*. (pp. 16–31) London: Thompson Learning.

Jowett, S., & Cockerill, I. M. (2003). Olympic medallists' perspective of the athlete–coach relationship. *Psychology of sport and exercise*, *4*(4), 313-331.

Jowett, S., & Gale, E. (2002, July). *An exploratory study into the nature of the coach-athlete relationship in track and field athletics.* Presented at the Annual Conference of the British Association of Sport and Exercise Sciences, Manchester, UK.

Jowett, S, & Meek, G. (2000a). Coach-athlete relationships in married couples: An exploratory content analysis. *The Sport Psychologist, 14*, 157-175.

Jowett, S., & Meek, G. (2000b). Outgrowing the "family" coach-athlete relationship: A case study. In B.A. Carlsson, U. Johnson, & F. Wetterstrand (Eds.), Sport psychology conference in the new millennium: A dynamic research-practice perspective (pp. 200-204). Halmstad: Halmstad University.

Kazdin, A. E. (2011). *Single-case research designs: Methods for clinical and applied settings.* New York: Oxford University Press.

Kerr, G. A., & Stirling, A. E. (2012). Parents' reflections on their child's experiences of emotionally abusive coaching practices. *Journal of Applied Sport Psychology, 24,* 191-206.

Kvale, S. (1996). Interviews: an introduction to qualitative research interviewing. San Diego, CA: SAGE Publications,

Lafrenière, M. A. K., Jowett, S., Vallerand, R. J., & Carbonneau, N. (2011). Passion for coaching and the quality of the coach-athlete relationship: The mediating role of coaching behaviors. *Psychology of Sport and Exercise*, *12*(2), 144-152.

Lafrenière, M. A. K., Jowett, S., Vallerand, R. J., Donahue, E. G., & Lorimer, R. (2008). Passion in sport: on the quality of the coach-athlete relationship. *Journal of Sport & Exercise Psychology, 30*, 541-560.

Littlejohn, S. W., & Foss, K. A. (2010). *Theories of human communication*. Waveland Press.

Mackinnon, A., Jorm, A. F., Christensen, H., Korten, A. E., Jacomb, P. A., & Rodgers, B. (1999). A short form of the positive and negative affect schedule: evaluation of factorial validity and invariance across demographic variables in a community sample. *Personality and Individual Differences, 27*, 405-416.

Mageau, G. A., & Vallerand, R. J. (2003). The coach-athlete relationship: A motivational model. *Journal of sports science*, *21*(11), 883-904.

Mallett, C. J. (2005). Self-Determination Theory: A Case Study of Evidence-Based Coaching. *The Sport Psychologist, 19*(4), 417.

Mallett, C. J., & Hanrahan, S. J. (2004). Elite athletes: why does the 'fire' burn so brightly? *Psychology of Sport and Exercise*, *5*(2), 183-200.

McCann, S. (2008). At the Olympics, everything is a performance issue. *International Journal of Sport and exercise psychology*, *6*(3), 267-276.

McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: a conceptual and empirical topography. *Journal of personality and social psychology*, *82*(1), 112.

McGuire, R., & Balague, G. (1993). Profiling the '92 Olympic track and field team. *American Athletics*, *5*(1), 26-27.

Miles, M.B., & Huberman, A.M. (1994). Qualitative data analysis (2nd ed.). Newbury Park, CA: Sage.

Nicholls, J. G. (1984). Conceptions of ability and achievement motivation. *Research on motivation in education*, *1*, 39-73.

Nichols, J. G., (1989). The competitive ethos and democratic education. Cambride, MA: Harvard University Press

Olusoga, P., Maynard, I., Hays, K., & Butt, J. (2012). Coaching under pressure: A study of Olympic coaches. *Journal of sports sciences*, *30*(3), 229-239.

Orlick, T. (2002). Excelling in the Olympic context. *Journal of Excellence*, *6*, 5-14.

Orlick, T., & Partington, J. (1988). Mental links to excellence. *The Sport Psychologist, 2*(2), 105-130.

Patton, M. Q. (1990). *Qualitative research*. John Wiley & Sons, Ltd.

Pensgaard, A. M., & Duda, J. L. (2002). " If we work hard, we can do it" a tale from an olympic (gold) medallist. *Journal of Applied Sport Psychology*, *14*(3), 219-236. doi:10.1080/10413200290103518

Pensgaard, A. M., & Roberts, G. C. (2002). Elite athletes' experiences of the motivational climate: The coach matters. *Scandinavian Journal of Medicine & Science in Sports*, *12*(1), 54-59.

Poczwardowski, A., Barott, J. E., & Henschen, K. P. (2002). The athlete and coach: Their relationship and its meaning. Results of an interpretive study. *International Journal of Sport Psychology, 33,* 116-140.

Poczwardowski, A., Barott, J. E., & Jowett, S. (2006). Diversifying approaches to research on athlete–coach relationships. *Psychology of Sport and Exercise*, *7*(2), 125-142.

Poczwardowski, A., Barott, J. E., & Peregoy, J. J. (2002). The athlete and coach: Their relationship and its meaning. Methodological concerns and research progress. *International Journal of Sport Psychology*, *33*, 98-115

Portenga, S. T., Aoyagi, M. W., & Statler, T. A. (2012). Consulting on the run: Performance psychology and the preparation of USA track and field athletes for the Olympics. *Journal of Sport Psychology in Action*, *3*(2), 98-108.

Roberts, G. C., Treasure, D. C., & Balague, G. (1998). Achievement goals in sport: The development and validation of the Perception of Success Questionnaire. *Journal of Sports Sciences*, *16*(4), 337-347.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi:10.1037/0003-066X.55.1.68

Ryan, R.M., & Deci, E.L. (2002). Overview of self-determination theory: an organismic dialectical perspective. In E.L. Deci & R.M. Ryan (Eds.), *Handbook on self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.

Sagar, S. S. & Jowett, S. (2012): Communicative Acts in Coach–Athlete Interactions: When Losing Competitions and When Making Mistakes in Training. *Western Journal of Communication, 76*(2), 148-174.

Seifriz, J. J., Duda, J. L., & Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. *Journal of Sport & Exercise Psychology*, *14*(4).

Smith, J. A. (1995). Semi-structured interviewing and qualitative analysis. In J. A. Smith, R. Hare, & L. Van Langenhove (Eds.), Rethinking methods in psychology (pp. 9–26). London, UK: Sage.

Stirling, A. E. (2009). Definition and constituents of maltreatment in sport: establishing a conceptual framework for research practitioners. *British journal of sports medicine*, *43*(14), 1091-1099.

Stirling, A. E., & Kerr, G. A. (2007). Elite female swimmers' experiences of emotional abuse across time. *Journal of Emotional Abuse*, *7*(4), 89-113.

Stirling, A.E., & Kerr, G.A. (2008). Defining and categorizing emotional abuse in sport. *European Journal of Sport Science, 8*, 173–181.

Stirling, A. E., & Kerr, G. A. (2009). Abused athletes' perceptions of the coach-athlete relationship. *Sport in Society*, *12*(2), 227-239.

Stirling, A. E., & Kerr, G. A. (2013). The perceived effects of elite athletes' experiences of emotional abuse in the coach–athlete relationship. *International Journal of Sport and Exercise Psychology*, *11*(1), 87-100.

Taylor, M. K., Gould, D., & Rolo, C. (2008). Performance strategies of US Olympians in practice and competition. *High Ability Studies*, *19*(1), 19-36.

Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., et al. (2003). Les passions de l'âme: on obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85, 756-767.

Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. P. Zanna (Ed.), Advances in Experimental Social Psychology (pp. 271–360). San Diego, CA: Academic Press.

Vealey, R. S., Armstrong, L., Comar, W., & Greenleaf, C. A. (1998). Influence of perceived coaching behaviors on burnout and competitive anxiety in female college athletes. *Journal of Applied Sport Psychology*, *10*(2), 297-318.

Vernacchia, R. A., & Henschen, K. P. (2008). The challenge of consulting with track and field athletes at the Olympic Games. *International Journal of Sport and Exercise Psychology*, *6*(3), 254-266.

Vernacchia, R. A., McGuire, R. T., Reardon, J. P., & Templin, D. P. (2000). Psychosocial characteristics of Olympic track and field athletes. *International Journal of Sport Psychology*, *31*(1), 5-23.

Wang, C., & Burris, M. A. (1994). Empowerment through photo novella: Portraits of participation. *Health Education & Behavior*, *21*(2), 171-186.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Williams, G. C., Grow, V. M., Freedman, Z., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss maintenance. Journal of *Personality and Social Psychology, 70,* 115-126.

Weber, R. P. (1990). Basic content analysis. (2nd ed.). London: Sage.

Wood, A. M., Joseph, S., & Maltby, J. (2009). Gratitude predicts psychological well-being above the Big Five facets. *Personality and Individual Differences*, *46*(4), 443-447.

Wylleman, P. (2000). Interpersonal relationships in sport: Uncharted territory in sport psychology research. *International Journal of Sport Psychology*, *31*, 555-572.

Yin, R. K. (2013). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications, Inc:.

Zuleger, B. (2011). *Leadership Characteristics of Successful NCAA Division I Track and Field Coaches* (Unpublished master's thesis). Western Washington University, Bellingham, WA.

Zuleger, B., Vernacchia, R. (2012). A coach's leadership. *Techniques. Vol. 5, Number 2*, pg. 42-50.

APPENDIX A

Participant Recruitment Email

Dear_____,

We are writing to you as a 2012 Olympic Medalist and as a 2012 Olympic Medalist Coach to invite you to join us in a very exciting research project, intended to glean important and impacting understandings from the experiences of you and your fellow Track and Field Olympic Medal Winners, that will serve to guide American coaches and athletes in the future in their efforts to attain success and more medals at the Olympic and World levels!

USA Track and Field, in collaboration with the research team of Dr. Rick McGuire, Dr. Steve Portenga, Anne Shadle and Brian Zuleger are looking for participants for their research study. You are receiving this invitation because you are an individual Olympic Medal Winner or Coach from the London Games. Your email address was obtained from USA Track and Field.

This study is exclusively about the athletes and their coaches who won individual Olympic Medals. Only the 23 of you succeeded in standing on the Olympic Games Medal Awards Podium! For each of you, your process of preparation and performance delivery worked. We are interested in determining what were the key factors, beyond talent and physical/technical training, that impacted your achieving success and winning your medal(s) at the Olympic Games.

You are the Medal Winners and coaches, and you are the role models for our young junior athletes in their dreaming, and striving and preparing for their chance to stand where you have stood – on the Medal Awards Podium at the Olympic Games! We are specifically and intentionally trying to help that modeling effect to have its greatest impact!

This research is being done with the intention to learn from you, the athletes and the coaches, to develop better understandings. Ultimately, the long-term objective is to create appropriate educational materials to assist coaches and sport leaders in their efforts to teach, coach, develop and support future young athletes in their training and preparations in their pursuit of performance excellence, and culminating in winning even more Olympic Medals.

If you choose to take part in this study, a 60-90 minute interview will take place at your convenience. Anne Shadle and Brian Zuleger will conduct the actual interviews with each of you. The environment for these interviews will take place in a quiet, comfortable and safe setting of your choice. Interviews will be semi-structured and consist of ten

questions. The interviews will be both audio and video recorded.
If you are interested in participating or have any questions about the study, please contact one of the following:

Anne Shadle : AShadle1@gmail.com Phone # 402.250.3301.
Brian Zuleger ZulegerBrian@gmail.com Phone # 608.628.5479
Steve Portenga: Steveportenga@gmail.com Phone # 303.960.5711
Rick McGuire McGuireR@missouri.edu Phone # 573.268.4263

Attached to this email is the informed consent document, which further explains the study. Thank you all for helping us out with this! Looking forward to hearing your personal story in your journey to the Olympic Medal!

Sincerely,

Rick, Steve, Anne, Brian and USA Track & Field.

APPENDIX B

Participant Letter of Consent Form

CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY

INVESTIGATOR'S NAME: Brian Zuleger and Anne Shadle

PROJECT # 1205374

STUDY TITLE: Exploring the Psycho-Emotional Factors and the Coach-athlete relationship Influencing Performance and Achievement in 2012 USA Track and Field Olympic Medal Winners

INTRODUCTION

This consent may contain words that you may not understand. Please ask the investigator or the study staff to explain any words or information that you do not clearly understand.

This is a research study. Research studies include only people who choose to participate. As a study participant you have the right to know about the procedures that will be used in this research study so that you can make the decision whether or not to participate. The information presented here is simply an effort to make you better informed so that you may give or withhold your consent to participate in this research study.

Please take your time to make your decision and discuss it with your family and friends.

You are being asked to take part in this study because you were a medal winner or coach of a medal winner in the Sport of Track and Field in the 2012 Olympic Games in London.

This study is being sponsored by the USA Track and Field Sports Sciences and Coaches Education Committees, along with the University of Missouri's Institute for Positive Coaching.

In order to participate in this study, it will be necessary to give your written consent.

WHY IS THIS STUDY BEING DONE?

Many athletes dreamed and prepared to make the Olympic team and to win an Olympic medal. Only a very few succeeded in standing on the Olympic Games medal awards podium. For these athletes, their process of preparation and performance delivery worked. We are interested in determining what were the key factors, beyond talent and physical/technical training, that impacted their achieving success and winning their medal(s) at the Olympic Games.

We are seeking to understand the influence and impact of specific deliberate practice, preparations, focus, sense of self, core values and beliefs, motivation, commitment, and sense of autonomy on their Olympic medal winning performance.

This research is being done with the intention to learn from these athletes, to develop better understandings, and ultimately to create appropriate educational materials to assist coaches and sport leaders in their efforts to teach, coach, develop and support future young athletes in their training and preparations in their pursuit of performance excellence, and culminating in winning even more Olympic medals.

Furthermore we are seeking to understand the interaction that takes place between coach and athlete and the role the coach plays in the above-mentioned processes.

HOW MANY PEOPLE WILL TAKE PART IN THE STUDY?

Specifically, 24 athletes and their respective coaches as available will be invited to take part in this study. These are the 24 members of the 2012 United States Olympic Track and Field Team who won 25 individual medals in London and their respective coaches as available.

WHAT IS INVOLVED IN THE STUDY?

Each of the 24 medal winners from Track and Field and their coaches as available will be invited to participate in this research project. Those who choose to participate will be scheduled for one on one interviews that will last 60-90 minutes at their convenience. The environment for these interviews will take place in a quiet, comfortable and safe setting of their choice.

Interviews will be semi-structured, utilizing open-ended qualitative questions.

Interviews will last approximate 60-90 minutes, and will be both audio and video recorded. Additional interview sessions will be conducted as indicated.

HOW LONG WILL I BE IN THE STUDY?

Your actual participation in the study will be limited to the 60-90 minute initial interview, and a second interview involving you (athlete/coach) and your (athlete/coach) with the possibility of 1-2 short follow up interviews as indicated as our analysis of the data unfolds. Furthermore there will be observations where the researcher will be observing your interactions with your (coach/athlete). We expect to have all of the interviews completed by December 31, 2013.

You can stop participating at any time.

WHAT ARE THE RISKS OF THE STUDY?

We anticipate minimal, if any, risks or discomforts for the participants. We are asking the

participants to share their preparations and perspectives regarding their experiences leading to and competing or coaching in the 2012 Olympic Games. By their very nature, these experiences with the Olympic Games preparation and competition were very intense, with extreme personal identification and investment. The information shared in the interviews will certainly be personal and potentially sensitive. Thus, there could be potential emotional risks in discussing their challenges and obstacles. But, these risks should be minimal. The interviewer will be a fellow athlete, with whom they are very comfortable. And, most of the participants are experienced in answering these types of questions in public or semi-public settings.

If at any time you are uncomfortable with a question, you are perfectly free to not answer it, or even withdraw from the interview and study.

We anticipate that the participants will enjoy recounting and sharing their Olympic experiences, culminating in winning their Olympic medal or coaching a medal winner.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

If you agree to take part in this study, there may or may not be direct benefits to you. You may expect to benefit from taking part in this research to the extent that you are contributing to the education and preparation of coaches and athletes in the future. We hope and intend that the information learned from this study will benefit our finest junior athletes and their coaches in their quest for future Olympic medal celebrations. You, the 2012 Olympic medal winners and coaches are exactly the role models of success for future athletes and coaches to follow.

WHAT OTHER OPTIONS ARE THERE?

The options essentially are to either choose to participate, or to choose not to participate.

WHAT ABOUT CONFIDENTIALITY?

All data and digitally recorded materials will be held confidential by the research team. It will be stored in locked files in locked offices.

Beyond that, this study has a rather unique feature to it regarding confidentially.

We acknowledge that, having won their Olympic medals in London in 2012 and as their coaches, all of the participants in the study are highly prominent and recognizable individuals. To suggest that these participants' identities would be held confidential would not be realistic.

In fact, and in truth, these participants are potentially ideal role models for young athletes who are dreaming and working to become the Olympic athletes or coaches of the future. The intention of this study is to uncover and to refine important understandings from the experiences of these participating Olympic medal winners and their coaches, and to facilitate the impact and influence of their role as a model for others.

To this end, each participant will have final approval of any aspect of their interviews that they wish to be included in the data that will be retained and analyzed, and to any identifiable information that could be shared in any research report or ensuing educational materials or publications.

WHAT ARE MY RIGHTS AS A PARTICIPANT?

Participation in this study is voluntary. You do not have to participate in this study. If you decide to participate, you can change your mind and drop out of the study at any time. Leaving the study will not result in any penalty to you the participant.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

If you have any questions regarding your rights as a participant in this research and/or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the University of Missouri Campus Institutional Review Board (which is a group of people who review the research studies to protect participants' rights) at (573) 882-9585.

You may ask more questions about the study at any time. For questions about the study contact Dr. Rick McGuire at 573-882-0727 (o) or 573-268-4263 (c) or Anne Shadle at 402-250-3391 or Brian Zuleger at 573-884-4949 (o) or 608-628-5479 (c).

A copy of this consent form will be given to you to keep.

WHERE CAN I GET MORE INFORMATION?

You may get further information regarding the study from the Principle Investigator, Dr. Rick McGuire at McGuireR@missouri.edu or Anne Shadle at ahsb7f@mail.mizzou.edu or from Brian Zuleger at bmz6f4@mail.missouri.edu

---

SIGNATURE

I confirm that the purpose of the research, the study procedures, the possible risks and discomforts as well as potential benefits that I may experience have been explained to me. Alternatives to my participation in the study also have been discussed. I have read this consent form and my questions have been answered. My signature below indicates my willingness to participate in this study.

Participant_____ Date_____

SIGNATURE OF STUDY REPRESENTATIVE

I have explained the purpose of the research, the study procedures, identifying those that are investigational, the possible risks and discomforts as well as potential benefits and

have answered questions regarding the study to the best of my ability.

Study Representative_____ Date_____

APPENDIX C

Interview Schedule Questions

Athlete

1. How does your coach communicate with you in general? In practice? In competition?

2. What makes the coach-athlete relationship work for you guys? Does it work? Elaborate? Bumps? How did they handle them?

3. Research with Olympic Athletes has shown that the coach is important to the athlete in terms of achieving success at the Olympics. What about your coach-athlete relationship allowed you to win a medal in London?

4. What advice would you have for future Olympic hopeful athletes and coaches in terms of the coach-athlete relationship?

5. Can you provide an example of a moment or a challenge where you relied on the strength of the relationship in order to prevail? Elaborate on the strength?

6. What was your experience like in winning a medal at the Olympic Games? How does this compare to other World Championships, Olympic Games, major events?

7. What were some defining moments in your life that led you to your athletic successes, to the Olympic Games, and to here?

8. What challenges were there at the Olympic Trials, from the Trials to the Games, and then at the Games?

9. Can you talk about your preparations for the Games and what really made a difference for you?

10. Let's talk about the Olympic team, Olympic team training camp, Olympic village environment, and competition environment. What were some of the defining moments in that experience? Were there things that were different? Were you able to make it be like normal? Did you have strategies? Talk about these different environments.

11. You are a person and an athlete. What guides you in your life? Core principles, core values about you? Life mission? Could you talk about principles, values, beliefs that you hold?

12. How has life been since the Olympics?

13. What are you looking forward to next?

14. Is there anything else that you would like to say about your Olympic experience?

Interview Schedule Questions
Coach

1. How do you communicate with the athlete in general? In practice? In competition?

2. What makes the coach-athlete relationship work for you guys? Does it work? Elaborate? Bumps? How did they handle them?

3. Research with Olympic Athletes has shown that the coach is important to the athlete in terms of achieving success at the Olympics. What about your coach-athlete relationship allowed the athlete to win a medal in London?

4. What advice would you have for future Olympic hopeful athletes and coaches in terms of the coach-athlete relationship?

5. Can you provide an example of a moment or a challenge where you relied on the strength of the relationship in order to prevail? Elaborate on the strength?

6. What was your experience like in winning a medal at the Olympic Games? How does this compare to other World Championships, Olympic Games, major events?

7. What were some defining moments in your life that led you to your coaching successes, to the Olympic Games, and to here?

8. What challenges were there at the Olympic Trials, from the Trials to the Games, and then at the Games?

9. Can you talk about your preparations for the Games and what really made a difference for you?

10. Let's talk about the Olympic team, Olympic team training camp, Olympic village environment, and competition environment. What were some of the defining moments in that experience? Were there things that were different? Were you able to make it be like normal? Did you have strategies? Talk about these different environments.

11. You are a person and a coach. What guides you in your life? Core principles, core values about you? Life mission? Could you talk about principles, values, beliefs that you hold?

12. How has life been since the Olympics?

13. What are you looking forward to next?

14. Is there anything else that you would like to say about your Olympic experience?

Interview Schedule Questions
Coach-Athlete

1. What makes the coach-athlete relationship work for you guys? Does it work? Elaborate? Bumps? How did they handle them?

2. Research with Olympic Athletes has shown that the coach is important to the athlete in terms of achieving success at the Olympics. What about your coach-athlete relationship allowed you to win a medal in London?

3. What advice would have to future Olympic hopeful athletes and coaches in terms of the coach-athlete relationship?

4. Can you provide an example of a moment or a challenge where you relied on the strength of the relationship in order to prevail?

Any additional follow-up questions based on information from responses in the individual interviews

APPENDIX D

The following table provides brief, individual case analysis examples of direct comments from each participant in case study #1 illustrating their descriptions that may support answering the research question.

Table 4 – Case #1 excerpts reflecting the theme: Autonomy Supportive Environment

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Autonomy Supportive Environment
Jack & Seth	Seth: "Coach's way of communication makes me feel like I have choice in something." Seth: "Coach's knowledge of the event helped me be successful in the Olympics." Jack: "You have to understand in every single event in track and field, what that event is asking you to do in order to be successful. If an athlete looks at you and goes, 'Are you sure?' You give them the scientific principle behind it." Seth: "Our cues are developed around simplicity and when all hell's breaking loose just come back to the basics, come back to what you know, and those kind of, bring you back." Seth: "Open communication I think is really what makes it work for us." Jack: "Make it honest. He will be very honest with me."

The following table provides brief, individual case analysis examples of direct comments from each participant in case study #2 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Autonomy Supportive Environment
Lawrence & Tyler	Tyler: "Part of being a good coach is not giving feedback and letting athletes figure it out. Coach does a really good job of that." Lawrence: "That made our bond, between the coach and athlete even stronger so that we could find ways to continue to make improvements along the way." Lawrence: "Even in the highest pressured situations. It's not about putting on a coaching clinic in the big meets. Anything or any type of talk that goes on, just keeping it simple." Lawrence: "In a training setting you can give out more cues, there can be a lot more verbiage in your commands. As you get closer to competition, that all has to be rehearsed and simplified even in the practice setting." Tyler: "In competition then, it's pretty, it's pretty minimal and simplified. Then, in those moments I can look to him and he can mime the things that we've already spoken about." Tyler: "That's why it's worked for us so well, for so long, because we both respect each other enough to be open and honest. There's no power struggle, there's no egos."

Table 5 – Case #2 excerpts reflecting the theme: Autonomy Supportive Environment

The following table provides brief, individual case analysis examples of direct comments from each participant in case study #3 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Autonomy Supportive Environment
David & Cory	Cory: "Attitude you know reflects leadership, my attitude in a sense is because of how he's led me." Cory: "He's a teacher first and that's what coaching is about. It's been a huge contribution to my success on and off the field of play." David: "I am not going to make those decisions for him. He is making the decision; he is just making it from an informed position." Cory: "He has given me that latitude to make some decisions on my own." Cory: "He said this (hand signals) is how we need to communicate because there will be a time when we are not close and we need to get used to doing it this way. David: "We are and always have been, really, really honest with each other. We pretty much tell it like it is." Cory: "We can speak plainly with each other. We respect each other and we work it out like that."

Table 6 – Case #3 excerpts reflecting the theme: Autonomy Supportive Environment

The following table provides brief, individual case analysis examples of direct comments from each participant in case study #1 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Caring Relationship
Jack & Seth	Seth: "It's not just all at that point. I mean, there's a lot of things throughout a coach and athlete's history that contribute to success." Jack: "Trust has to come not just by saying 'I'm the coach, trust me.' You have to show that. It comes from your knowledge of the skills and events, your integrity and your consistency along the line." Jack: "It's way beyond athletics. You know more athletically ups and downs, the problems you solved, you know, the whole—it's the journey. It's not crossing the line. It's the human—it's like a family outside of family." Jack: "You know why I took this job? Because I thought I was the best guy because I knew that others would put their ego in there and want to play off his success. My ego is not a part of it." Seth: "So that (the world record) was my thanks to him for being such a great coach, such a great guy." Seth: "His picking me up and pushing me toward silver, that was a real big deal as an athlete because eventually, it led to me getting the gold medal. It led to like all the great things in 2012 and beyond."

Table 7 – Case #1 excerpts reflecting the theme: Caring Relationship

The following table provides brief, individual case analysis examples of direct comments from each participant in case study #2 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Caring Relationship
Lawrence & Tyler	Tyler: "In the back of his head he was probably not sure, but he was just with me in that moment. To be there and positive and cool and reassuring, and so in that moment (Javelin at Olympics) that's all we needed." Lawrence: "I mean he knew. It wasn't me telling him, but he was more reassuring me, than I was reassuring him." Tyler: "Trust comes from real life circumstances where you, literally have to trust someone, and everything builds on itself and you can't do that in a season." Tyler: "He wants nothing more in life than for me to be successful and I want nothing more in life than to represent him and everything that I represent to the best of my ability." Lawrence: "It's not about my ego; it's about what is the best thing for him or any other athlete." Tyler: "You should always treat others with kindness and respect. You should always have love for other fellow human beings." Lawrence: "I remember I wasn't even congratulating him, it was more thanking him, for allowing me to be a part of that." Tyler: "I felt nostalgic about everything that it's built up to and where it came from, because in that moment I'm just like, we did it."

Table 8 – Case #2 excerpts reflecting the theme: Caring Relationship

The following table provides brief, individual case analysis examples of direct comments from each participant in case study #3 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Caring Relationship
Cory & David	Cory: "Can I deal with this guy for four years? Can I trust this guy for four years? Can I trust him for two days? So I trust him like I said 100%." David: "The coach-athlete relationship is important, but it is important that it's a healthy relationship. It's about the athlete. It's about showing people that you care about them and not just how talented they are." Cory: "I was like, this is all coach has is me. This is all the United States team has is me. I have to go out here and do it. I felt like I owed it to coach and my teammate (to win a medal)."

Table 9 – Case #3 excerpts reflecting the theme: Caring Relationship

The following table provides brief, individual case analysis examples of direct comments from each participant in case #1 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Mental Strength
Jack & Seth	Jack: "I said, 'Seth, one person can beat you at the Olympic Games. One person.' He said, 'Who?' I said, 'Think about it.' We drove for half an hour. He said, 'Me.' I said, 'Yep. Don't beat yourself. Just get out there and do your thing at the games. It's all over.' And that's what he did." Jack: "I still always believe there's been way more failures as a coach than there are successes, and there always will be." Seth: "Failure is your friend." Jack: "The deal at the trials was not a world record. The whole goal was to make the team and he was very focused throughout." Jack: "The Olympic champion does the fundamentals better than you or I and they do it with a gun held to their head in a high-pressure situation." Seth: "The Olympic moment is not about necessarily what you do then, but what you do leading up 'til then." Jack: "You're both there, you've done all the work, all the preparation technically thought process, everything." Jack: "(Post Olympic Trials) They got out of here, and got into a real quiet environment, and just detoxed, and started our slow build up. We always take rest time. Rest is a critical component, no doubt about it." Jack: "He (athlete) deals with chaos really well." Seth: "It's good to have someone (coach) to go to that you have confidence in that you trust during a time when things can go bad."

Table 10 – Case #1 excerpts reflecting the theme: Mental Strength

The following table provides brief, individual case analysis examples of direct comments from each participant in case #2 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Mental Strength
Lawrence & Tyler	Tyler: (On recovering from injury) "There was never any wavering. It was, we're going to do everything in our power to be ready for London, and I think that's where the confidence comes well that's just where, you need a coach." Lawrence: "The fact that we have seen the lowest of lows, whether it was at the NCAA level, or at the biggest stage of track and field at the Olympics. Had those things not happened, we would not have achieved or had the level of success that he's had." Tyler: "Even for me, like before London, all I wanted to do was make the team. It's a big deal to make the team, so I was like make the team and be healthy and then you'll have a shot to medal in London." Lawrence: "I'm here to do what I've been training to accomplish. Is it the Olympics? Yes, it's the Olympics, but it's still a meet you could just see this aura about him and he just went out there and was about doing his stuff. We did what we needed to and you just knew we were in a good spot." Lawrence: "Not thinking more is always better. What's the least that you can do and still have the greatest result." Tyler: "Not getting caught up in doing a lot of things. Finding time in your training, cause you do need to do something. You can't lock yourself in your room for 12 days leading into a track meet, you'll go nuts."

Table 11 – Case #2 excerpts reflecting the theme: Mental Strength

The following table provides brief, individual case analysis examples of direct comments from each participant in case #3 illustrating their descriptions that may support answering the research question.

What perceived aspects of the coach-athlete relationship helped in the process of developing an Olympic medal winner?	
	Mental Strength
David & Cory	Cory: "I would rather it happen before the games than at the games. Now they know not to make that sort of mistake again. I wasn't freaking out it wasn't that big. You have to promote positivity." Cory: "I am like Fort Knox mentally. I am good to go up here (points to head). I am the guy who's won before I step onto the track. I wasn't going to allow myself to be defeated." Cory: "He's done a great job of teaching me the process of my event. That's definitely been a part of my success." David: "I put so much more stock in the process than I do the outcome. I don't think too much about the results, I am all into the process day to day."

Table 12 – Case #3 excerpts reflecting the theme: Mental Strength

VITA

Brian grew up in Freedom, WI where he played many sports as a youth and took to cross country, basketball and track and field in high school. From 2006-2010 he was a nationally competitive 3-event water skier. He also was the manager for 3 years with the University of Wisconsin-Madison men's track and field team. The team was undefeated in the Big 10 in cross country, indoor and outdoor track and field championships and were 2005 cross country national champions, and 2007 indoor track and field national champions. The team had a 2x national champion in cross country and a 5x national champion in track and field along with 40+ All-Americans, and 19 Academic All-Americans. He also was a volunteer coach with the Western Washington University men's and women's track and field teams for 3 years. The men's team was conference champions in 2010. The team had one male 4x national champion, and three female national champions, 26 All-Americans, 21 Academic All-Americans. He helped coach 7 All-Americans, 4 Academic All-Americans, 24 school record holders, and 16 conference champions. He is currently a volunteer coach with track and field at the University of Missouri where he has worked with cross country, multis, high jump, pole vault, sprints, hurdles, relays, long jump, triple jump and distance events. He also works with the team doing mental strength training for all events.

Brian began his academic career at the University of Wisconsin-Madison studying Kinesiology with a major in Physical Education and minors in secondary health education and adaptive physical education. He received his bachelor's degree in Exercise and Sport Science in 2009 from Western Washington University, where he also received his Master of Science degree in Human Movement and Performance with an emphasis on sport psychology under the direction of Dr. Ralph Vernacchia. He is currently working toward a doctoral degree in Health Education and Promotion with an emphasis in sport psychology at the University of Missouri. He also is a USATF Level 2 coach in the combined events, a certified strength and conditioning specialist with the NSCA and a certified health and fitness specialist with the ACSM.

Brian has spent the last three years plus researching coaching and leadership. Completed Master's thesis: Leadership Characteristics of Successful NCAA Division I Track and Field Head Coaches, which was published in USTFCCA Techniques coaching journal. He has also authored an article for the NSCA as well as a chapter in the book *Winning Kids With Sport*. His dissertation work consists of case studies of Olympic Track and Field medal winning athletes and coaches from the United States, focusing on the coach-athlete relationship. Through the Missouri Institute For Positive Coaching, Brian serves as a member of a team of coaches and educators assisting Dr. McGuire with curriculum development, coaches' education and instruction, and applied sport psychology services to coaches and athletes. He teaches graduate and undergraduate courses in Positive Coaching both online and on campus. He is also a member of the Men4Men Panel dedicated to character education programming for University of Missouri male athletes.