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A Phenomenological Study: Experiences of Resilience in Athletes With a Disability

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A PHENOMENOLOGICAL STUDY: EXPERIENCES OF RESILIENCE IN
ATHLETES WITH A DISABILITY

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To the Dean of the College of Nursing and Health Sciences:

I am submitting herewith a thesis written by Briana Salter entitled “A Phenomenological Study: Experiences of Resilience in Athletes with a Disability.” I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science with a major in Sport, Exercise, and Performance Psychology.

Dr. Duncan Simpson, Thesis Committee Chair

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ABSTRACT

There is a lack of research in how individuals with an acquired physical disability experience resilience. The primary purpose of this study was to investigate how these athletes describe and explain their personal experience of resilience. A total of five in-depth phenomenological interviews were conducted with athletes with an acquired physical disability (4 male; 1 female), ranging in age from 26-54 ($M = 39.2$, $SD = 12.3$), and representing a variety of sports (i.e., powerlifting, CrossFit, surfing, sled hockey, wheelchair basketball, rowing, triathlon, and integrative dance) to determine their experience of resilience. Qualitative analysis revealed a final thematic structure of 5 major themes. The results provide an understanding of the definition of resilience; the role sport played in their resilience, social support, reasons for resilience, and how the athletes see abilities over limitations. Finally, practical implications are discussed for athletes, coaches, mental performance coaches, as well as other helping professions.

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TABLE OF CONTENTS

CHAPTER I.....	1
Introduction.....	1
Statement of the Problem.....	8
Purpose.....	8
Significance	8
Operational Definitions.....	9
Assumptions.....	10
Research Question.....	10
CHAPTER II.....	11
Literature Review.....	11
Introduction.....	11
Resilience Definitions & Models.....	11
Measuring Resilience	17
Resilient Populations.....	20
Resilience in Sport.....	26
Disability.....	30
Resilience and Disability.....	31
Resilient Athletes with Disability.....	31
CHAPTER III.....	34
Methods.....	34
Methodology.....	34
Phenomenology.....	34

Disability Theory.....	35
Participants.....	36
Procedures.....	36
Exploring Researcher Bias.....	36
Selection of Participants.....	37
Data Collection.....	38
Data Analysis.....	39
Developing and Confirming Thematic Structure.....	39
CHAPTER IV.....	42
References Chapters 1-3.....	42
CHAPTER V.....	52
Manuscript.....	52
Abstract.....	52
Introduction.....	52
Methods.....	59
Participants.....	59
Procedures.....	59
Exploring Researcher Bias.....	60
Data Collection.....	60
Data Analysis.....	61
Developing and Confirming Thematic Structure.....	62
Results.....	63
Choice.....	63

Moving Forward.....	64
Negative to Positive.....	65
Different Roads, Same Destination.....	65
Role of Sport.....	67
Purpose.....	67
Recovery.....	68
Coping.....	69
Wholeness.....	69
Community.....	70
Social Support.....	70
Out of Sport.....	71
Within Sport.....	73
Reasons for Resilience.....	75
Family.....	75
Proving Others and Self Wrong.....	76
Inspiration.....	77
Helping Others.....	79
Abilities Over Limitations.....	81
Ability.....	81
Adapting.....	82
Goals.....	83
Discussion.....	84
Recommendations.....	87

Athletes.....	88
Coaches.....	88
Sport Psychology Professionals.....	88
Helping Professionals.....	89
Limitations & Future Research.....	89
References.....	91
APPENDIX.....	99
Appendix A.....	99
Appendix B.....	101

LIST OF TABLES

Table 1.

Athlete Demographic Information.....96

Table 2.

Major and Sub-Themes of Athletes with an Acquired Physical Disability's Experiences
of Resilience and Representative Meaning Unit.....97

CHAPTER I

INTRODUCTION

Resilience in the general sense refers to the ability of an object to spring back and return to its original state after being bent, stretched or compressed (Strumpfer, 1999). Previous literature regarding resilience shows various definitions of the term as proposed by research psychologists (Fletcher & Sarkar, 2013). Resilience was originally considered an individual characteristic, but research has found that it is developed and sustained as a product of an individual's culture along with their social and political background (Arrington & Wilson, 2000; Gilligan, 2004; Luthar, 2003). In line with this research Masten, Best, and Garnezy (1990) defined resilience as a “process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 426). This definition of resilience has been widely accepted in the field of psychology and has guided much of the resilience research. Resilience is often mistaken for mental toughness or grit, however; research conducted on these two concepts has revealed that they are quite different from resilience. Jones, Hanton and Connaughton (2002) defined mental toughness as

“having the natural or developed psychological edge that enables you to: generally cope better than your opponents with the many demands that sport places on a performer...be more consistent and better than your opponents in remaining determined, focused, confidence, and in control under pressure” (p. 209).

Jones and colleagues (2002) concluded that mental toughness was either innate or developed from experience over some years and provided sport performers an advantage

over opponents due to their high self-regulatory skills. Different from resilience and mental toughness is grit. Grit is defined as “perseverance and passion for long term goals” (Duckworth, Peterson, Matthews & Kelly, 2007). Duckworth et al. (2007) explain that individuals who possess grit relentlessly work towards challenges while maintaining their effort and interest for years in the face of adversity, failure and progress plateaus. Mental toughness is different from resilience in that individuals who are resilient adapt to adversity while individuals who are mentally tough have the coping resources to outperform their opponent. A resilient individual may be mentally tough, however, someone who is mentally tough may not be resilient. Grit is the persistent pursuit of a goal, which is much different than having the resources to outperform an opponent or adapting to adversity because setting and reaching goals is a skill separate from that of coping and adapting.

Extensive research to define resilience has determined the following components as essential in measuring resilience: adversity, positive adaptation, and protective factors (Connor & Davidson, 2003; Luthar, Cicchetti, & Becker, 2000; Luthar & Zelazo, 2003, Masten & Obradovic, 2006; Rutter, 1987). According to Luthar and Cicchetti (2000), adversity “typically encompasses negative life circumstance that are known to be statistically associated with adjustment difficulties” (p. 585). Fletcher and Sarkar (2013) believed that this definition depicted adversity as an inability to cope and did not include the daily stressors that most individuals face. Both daily stressors and negative life circumstances should be considered when examining the etiology of adversity. This is specifically important in the sports context where athletes experience many daily stressors such as a lack of preparation and difficulties in their relationships (Thelwell,

Weston, & Greenless, 2007), finances and prolonged travel (Fletcher & Hanton, 2003) as well as trouble balancing work and inflexible work hours (Noblet & Gifford, 2002).

Related to the notion of stress, coping, and resilience is the term positive adaptation, which has been defined in resilience research on children and adolescents regarding meeting social, behavioral, and educational milestones that correspond to their stage of development (Masten, 2001). Specifically, Luthar and Zelazo (2003) defined positive adaptation as “[adaptation] that ... is substantially better than what would be expected given exposure to the risk circumstance being studied” (p. 515). Adaptation was further defined in the sport context as “the athlete’s ability and capacity to act and react competently to stressors perceived as significant in a sport context by restoring internal sense of emotional and psychological balance” (Schinke et al., 2012, p. 181). This ability to react to stress and return to psychological balance became an increasing area of study as researchers wanted to understand what factors or characteristics these individuals possessed that allowed them to adapt. Protective factors are “influences that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes to a maladaptive outcome” (Rutter, 1985, p. 600). These influences were termed protective factors after resilience research found several characteristics of individuals that protected them from the stress that they encountered (Garmezy, 1991; Luthar, 2006). Resilience researchers have identified numerous protective factors including extraversion (Campbell-Sills, Cohan, & Stein, 2006), self-efficacy (Gu & Day, 2007), hope (Horton & Wallander, 2001), and social support (Brown, 2008). These three components (i.e., adversity, positive adaptation, protective factors) though they may be termed differently, can be seen in nearly all resilience research.

Research that has been conducted has primarily examined the protective factors or qualities possessed by resilient individuals. Kumpfer (1999) discovered several protective factors that she called “internal resilience factors”; these factors were spiritual or motivational characteristics, cognitive competencies, behavioral/social competencies, emotional stability and management, and physical well-being competencies. Years later, Fletcher and Sarkar (2012) discovered several psychological factors, similar to Kumpfer’s (1999) findings, which allowed Olympic champions to succeed in the face of adversity. These factors consisted of having a positive personality, confidence, focus, and perceived social support. Other psychological qualities have been found in the resilience literature such as hardiness (Kobasa, Maddi, & Kahn, 1982), dispositional optimism (Scheier & Carver, 1985), as well as high self-perceptions of physical endurance in athletes (Mummery, Schofield, & Perry, 2004). Hobfoll and colleagues (2007) identified appraisal, coping, and emotion regulation processes as being helpful in protecting individuals from stress.

Yi, Smith, and Vitaliano (2005) found resilient female athletes used problem-focused coping, seeking social support, and minimizing the threat of stressful life events to adapt to stress while the non-resilient athletes chose to avoid life stress and blamed others. High levels of physical self-concept have also been found in elite swimmers who display performance resilience; however, they reported lower levels of social support compared to their less resilient counterparts (Mummery, Schofield, & Perry, 2004). Positive self-concept has been recognized as being a controlling variable of resilience (Garmezy, 1987).

The examination of individuals' experiences of adversity has also become a popular area of research within the resilience literature. Among the factors or qualities of resilient individuals listed above, experiencing adversity has shown to predict better outcomes (i.e., lower global distress, lower self-rated functional impairment, fewer posttraumatic stress symptoms, greater life satisfaction) for individuals compared to individuals who have experienced little or no adversity (Seery, 2011; Seery, Holman, & Silver, 2010). Furthermore, adversity assisted Olympians in reaching optimal performance as it has allowed them to overcome a variety of stressors (Sarkar, Fletcher, & Brown, 2015).

Resilience research has been conducted in a variety of populations from physically abused children (Holmes, Yoon, Voith, Kobulsky, & Steigerwald, 2015), childhood sexual abuse survivors (Crete & Singh, 2015), nurses (Hart, Brannan, & Chesnay, 2014), nursing students (Stephens, 2015), military service members (Gomez & Heer, 2015; Hammermeister, Pickering, McGraw, & Ohlson, 2012), individuals with a physical disability (Salick & Auerbach, 2006), athletes (Fletcher & Sarkar, 2012; Sarkar, Fletcher, & Brown, 2015), as well as athletes with physical disabilities (Cardoso & Sacomori, 2014; Machida, Irwin, & Feltz, 2013).

Despite this variety of participant populations, resilience research has been particularly popular in the sport context due to the demands of the competitive environment (Sarkar & Fletcher, 2013; Subhan & Ijaz, 2012). Both disability and sport are popular topics within the resilience literature; therefore, it is no surprise that researchers have now begun examining resilience with the context of athletes with disabilities. Salick and Auerbach (2006) conducted semi-structured interviews with 10

individuals with visible impairments from chronic illness or serious injury. The data was analyzed using a grounded theory approach in which the researchers developed a stage model of trauma and recovery. This model was characterized by five stages, (a) apprehension, (b) diagnosis and devastation, (c) choosing to go on, (d) building a way of life, and (e) integration of the trauma and expansion of the self. The participants expressed apprehension as a sense that something was wrong, relief when gaining an understanding of their disability, and then an inability to psychologically process the trauma. Diagnosis and devastation was characterized by a loss of the physical self, strong feelings of hopelessness and withdrawal from the social world. Next, choosing to go on was marked by finding inner strength to take control of their lives, making a conscious decision to not miss out on life, developing a plan of action, and identifying ways to get around. Furthermore, building a way of life was described as reclaiming the physical body through sports or other physical expression, creating a support system of people who understand, finding personal meaning, locating hope and utilizing humor to cope with the less than tolerable circumstances. Finally, integration of the trauma and expansion of the self referred to moving forward or coming to terms with their disability, giving something back by using their experience to contribute to their community, gained empathy from their experience, and an increased sense of purpose and finding new meanings as well as goals for their life. Salick and Auerbach (2006) noted that even though the participants moved through these stages they often revisit previous stages as a part of their ongoing adaptation to disability.

While researching resilience in athletes with spinal cord injuries, Machida and her colleagues (2013) adopted the Resiliency Model developed by Richardson and colleagues

(1990) to examine the process in athletes with disability as well as gain a better understanding of the role of sport in overcoming disability. They found that sport played a large role in their resilience process by gaining social support and social interaction from teammates as well as opportunities to find confidence through success. It appears that sport may play an important role in the development of resilient outcomes within the disabled athlete population yet only approximately 16% of the individuals with disabilities in the U.S. participate in Paralympic sport (Paralympic Sport Club, 2014).

According to the World Health Organization (WHO), 15% of the world's population experiences some form of disability (2014). In the United States alone, roughly 12% of people of all ages have a disability (5 Council For Disability Awareness, 2013). These numbers will continue to increase as the population ages and the rates of chronic illness rise (WHO, 2014). The WHO (2011) stated that “disability is the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interactions between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)” (p. 4). This way of looking at disability is a “bio-psycho-social model” as it reflects the interactions between health conditions and contextual factors by doing so disability is no longer a quality of the individual (WHO, 2011). Individuals who have experienced physical disability often experience psychological and psychosocial challenges such as anxiety and depression (Craig, Hancock, Dickson, & Chang, 1997) as well as disconnection from the social world (Graham, Kremer, & Wheeler, 2008). Despite the many challenges that individuals with disabilities face, many thrive in the face of their adversity. Previous research (Fletcher & Sarkar, 2013; Hart, Brannan, Chesnay, 2014; Mummery, Schofield,

& Perry, 2004) has identified the factors that allow individuals to overcome adverse circumstances; however, there is a lack of research on these individuals' experience resilience.

Statement of the Problem

Resilience has been shown to be a significant determinant of overcoming adversity in a variety of populations (e.g., children, nursing, military personnel, etc.) and has been emphasized in the context of sport (Subhan & Ijaz, 2012). Many athletes experience adversity regularly due to competition, in addition, individuals who have experienced physical disability as a result of an injury or disease have been studied to determine how they have grown from their experience (Salick & Auerbach, 2006). As the world's disability population continues to increase (WHO, 2014) and the disability sport arena continues to grow, an understanding of how these individuals experience resilience is crucial. However, there is a paucity of literature examining the experience of resilience in athletes with a disability. Obtaining a clear understanding of this experience will allow for future research directions and aid those who work with these athletes to enhance their experience of resilience.

Purpose

The purpose of this research was to investigate how athletes with a physical disability describe and explain their personal experience of resilience.

Significance

Previous research has identified characteristics that contribute to the success of individuals overcoming adversity from trauma and physical disability (Salick & Auerbach, 2006; White, Driver, & Warren, 2008) as well as the process in which

individuals with physical disabilities go through during their experience of resilience (Machida, Irwin, & Feltz, 2013). Machida and colleagues (2013) were able to demonstrate the vital role that sports played for individuals who have sustained physical trauma and suggest that sport may aid psychosocial recovery for individuals with physical disability. Machida and colleagues (2013) used a phenomenological approach to examine only individuals who had spinal cord injuries in which they only interviewed men.

Previous research has so far failed to comprehensively address how athletes experience resilience, the phenomenological approach being employed for this study will aid in the development of themes that reflect the lived experience of the participants. These themes may help athletes as well as those working with the athletes to understand resilience and aid in eliminating the barriers to becoming resilient. Also, recruiting both male and female participants may improve comprehensive knowledge of resilience in athletes with disabilities. Overall, this study aimed to gain a better understanding of the phenomenon of resilience as it related to athletes with a disability

Operational Definitions

Resilience- “process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (Masten, Best, & Garnezy, 1990, p. 426).

Disability- “the umbrella term for impairments, activity limitations, and participation restrictions, referring to the negative aspects of the interactions between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors)” (WHO, 2011)

Physical Disability- “a physical condition that significantly interferes with at least one major life activity of an individual... including anatomical loss or musculoskeletal, neurological, respiratory or cardiovascular impairment”

(PACER Center, 2014, p. 1)

Acquired disability- Disability as a result of an accident or disease after birth

(PACER Center, 2014)

Assumptions

It was assumed that the participants being interviewed would be honest in their responses and provide an understanding of their experience of resilience as an athlete with a disability. Due to the nature of sport and disability, it was assumed that all participants have experienced resilience.

Research Question

The research question inquired was: How do athletes with a disability experience resilience?

CHAPTER II

LITERATURE REVIEW

Introduction

The following review will begin by examining the various definitions of resilience as well as models of resilience. Next, the review will address the instruments developed to measure resilience quantitatively. Subsequently, the review will cover the different populations that have been examined in the resilience research literature. The following section will discuss the disability literature as it relates to resilience. Finally, the review will address athletes with disabilities and resilience.

Resilience Definitions & Models

Psychological resilience is important for a variety of populations from nurses (Hart, Brannan, & Chesnay, 2014), trauma survivors (Westphal & Bonanno, 2007), adolescents from unfavorable backgrounds (Holmes et al., 2015), military service men and women (Gomez & Heer, 2015) and many others; however, it has been found to be exceptionally important in the sport population (Subhan & Ijaz, 2012). Resilience refers to the ability of an object to spring back and return to its original state after being bent, stretched, or compressed (Strumpfer, 1999). Previous literature regarding resilience shows various definitions of the term as proposed by research psychologists (Fletcher & Sarkar, 2013). Luthar, Cicchetti, and Becker (2000) defined resilience as “a dynamic process encompassing positive adaptation within the context of significant adversity” (p. 585). Connor and Davidson (2003) defined it in the sport context as “the personal qualities that enables one to thrive in the face of adversity” (p. 76). These are only two of the many definitions of resilience; however, the most widely accepted definition in the

field of psychology is that of Masten, Best, and Garmezy (1990) who defined resilience as a “process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 426).

The construct of resilience has been operationalized in a variety of ways; however, a majority of the definitions encompass adversity and positive adaptation. These two concepts, adversity, and positive adaptation, have gained an increasing amount of attention in the resilience literature since being introduced by Luthar and colleagues (Luthar, 2006, Luthar & Cicchetti, 2000, Luthar, et al., 2000). Despite most researchers agreeing that adversity and positive adaptation must be evident for resilience to occur, researchers have questioned the construct of resilience due to inconsistencies in the definition of these terms (Bodin & Winman, 2004). Moving forward it is important to have an understanding of adversity and positive adaptation as they relate to resilience.

Adversity, as defined by Luthar and Cicchetti, 2000), “typically encompasses negative life circumstances that are known to be statistically associated with adjustment difficulties” (p. 585). This definition closely aligns itself with the notion of risk whereas other researchers have taken a more lenient approach to defining adversity as any hardship and suffering that is linked to difficulty, misfortune, or trauma (Jackson, Fritko & Edenborough, 2007). Sameroff and Rosenblum (2006) have made a strong case for examining positive adaptation of daily stressors and highly taxing events. Davis, Luecken, and Lemery-Chalfant (2009b) concur “for most of us, the adversities we encounter do not constitute major disaster but rather are more modest disruptions that are embedded in our everyday lives” (p. 1638). The variety of definitions makes it important

for researchers to clearly state their definition and justification for its use before beginning the research process (Luthar, et al., 2000).

The second concept, positive adaptation, is defined by Luthar and Cicchetti (2000) as “behaviorally manifested social competence, or success at meeting stage-salient developmental task” (p. 585). For positive adaptation to be demonstrated, the indicators being used to characterize the concept need to be appropriate to the adversity being examined, according to the conditions and criteria being used (Luthar, 2006). Fletcher and Sarkar (2013) explained this further stating that an indicator for children, for example, may be achieving academic success; whereas for military personnel, it may be having an absence of psychiatric symptoms. The criteria used to examine positive adaptation should be determined by the adversity being experienced and whether the individual needs to exhibit exceptional or average levels of competence. In addition to these factors, it is important to consider an individual’s sociocultural context in order to understand how the population being examined defines it.

In addition to adversity and positive adaptation gaining attention in the resilience research literature, protective factors have made significant contributions in assessing resilience (Sarkar & Fletcher, 2013). Rutter (1985) defined protective factors as “influences that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes to a maladaptive outcome” (p. 600). Garmezy (1991) studied a group of resilient young people to uncover characteristics that helped them flourish in adversity. He identified many resilient qualities in which he organized in three themes, (a) dispositional attributes of the individual, (b) family cohesion and warmth, and (c) the availability and use of social support.

Adversity, positive adaptation and protective factors have not only assisted in defining resilience and with the study and research regarding resilience, but they have also aided in the development of models of resilience. These three concepts can be seen in many different models of resilience in a variety of contexts. Models of resilience were developed to understand how qualities that allowed individuals to become resilient were acquired as well as the process of resilience.

One of the early models of resilience is the Resiliency Model (Richardson, Neiger, Jensen, & Kumpfer, 1990). According to Richardson and his colleagues, individuals acquire resilience qualities through a process that starts with “biopsychospiritual homeostasis.” Individuals in this state experience a comfort zone that is characterized by an “adapted state of mind, body, and spirit” (Richardson, 2002, p. 311). Individuals develop resilient qualities through previous disruptions that allowed them to cope; however, experiencing a life event for the first time or an event in which they have not obtained the ability to adapt can disrupt their balance (Richardson, 2002). Richardson and his colleagues (1990) suggested that these disruptions interact with an individual’s biopsychospiritual protective factors as well as their support. These interactions lead the individual to “reintegrate” in one of four ways. In the Resiliency Model, individuals can (a) reintegrate resiliently, (b) return to biopsychospiritual homeostasis, (c) reintegrate with the loss, or (d) dysfunctional reintegration.

Reintegrating resiliently was considered to be the most adaptive outcome as individuals experience personal growth and develop stronger resilient qualities for future adversity, after disruption (Richardson et al., 1990). Individuals who return to biopsychospiritual homeostasis experience relief from the disruption; however, they fail

to grow from the experience and therefore have no protection from this type of disruption in the future. In the third form of reintegration, individuals reintegrate but lose some of the qualities that allow them to adapt (i.e., their hope to overcome) due to the demands of the disruption. The last form, dysfunctional integration, occurs when individuals participate in destructive behaviors (i.e., alcohol or drug abuse) to deal with their life disruptions. According to Richardson and colleagues (1990), whichever form of reintegration an individual experiences it is “a function of individual skills and traits” (p. 37).

Galli and Vealey (2008) developed the Conceptual Model of Sport Resilience by using the Resiliency Model (Richardson et al., 1990). In this conceptual model, adversity, sociocultural influences, and personal resources were factors that athletes described as being at the center of their resilience process. Athletes first experienced adversity and then became agitated, which is characterized by unpleasant emotions, mental struggles, cognitive, and behavioral coping strategies. Adversity and agitation are influenced by their social, cultural, and structural supports (sociocultural influences) as well as achievement motivation, personality characteristics, and their love of the sport (personal resources). These factors lead them to positive outcomes such as learning, gaining a new perspective, motivation to help others, strength, and the realization of their support. This model supports the general psychology models of resilience, which propose that cognitive appraisals and coping strategies facilitate a relationship between personal and environmental resources and psychological outcomes of adversity (Park & Fenster, 2004; Shaefer & Moos, 1992). Galli and Vealey (2008) noted that their development of the model had some limitations. First, they only interviewed their 10 participants one time.

Because they only used 10 participants, the researchers suggested conducting confirmatory studies to test the utility of the model. Second, the participants included individuals who had been removed from their adversity for some time as well as individuals who were still experiencing adversity. Therefore, some recall bias may have been experienced by the individuals no longer dealing with their adversity. Finally, a majority of the participants had successfully overcome their adversity and experience personal growth, which only touches one of the four types of reintegration in the Resiliency Model. Therefore, Galli and Vealey (2008) suggested that future research look at individuals in all four types of reintegration. The one strength of this model is that it is specific to athletes, making it the first of its kind.

Fletcher and Sarkar (2012) added to the models of resilience literature after conducting grounded theory research on Olympic champions. Their model suggests that psychological factors (positive personality, motivation, confidence, focus, and perceived social support) influence the athletes' challenge appraisal and metacognitions to protect them from the potentially negative effects of stressors. These processes foster facilitative responses that allow athletes to take actions that lead them to optimal sport performance. The strength of this model is the elite athlete participants who exhibited many characteristics related to gender, age, experience, sport, and culture. This was also the first study to demonstrate and examine the exact role that psychological factors play in the stress-resilience-performance relationship. However, due to the reflective nature of participant responses, the study's accuracy may have been compromised; participants may have had skewed perceptions of their resilience during their Olympic experience. The validity of the model is also of concern due to the linear stage framework within the

structure; looking at resilience regarding parallel, multiple processes may present an ecologically valid conceptualization rather than the sequential, unitary method.

Measuring Resilience

Wagnild and Young (1990) developed the Resilience Scale (RS) from a qualitative study of 24 women who had successfully adjusted following a major loss. The successful adjustment was evident from their involvement in a senior center along with a mid to high level of morale and self-report. The researchers identified five themes that they felt constituted resilience: (a) equanimity, (b) self-reliance, (c) existential aloneness, (d) perseverance, and (e) meaningfulness. The 25-item scale using a 7-point Likert scale was developed using the themes listed above. The RS was used in studies with graduate students (Cooley, 1990), mothers returning to work after their first child (Killien & Jarret, 1993), residents in public housing (Wagnild & Young, 1991), as well as caregivers of spouses with Alzheimer's disease (Wagnild & Young, 1991). These studies support internal consistency, test-retest reliability, along with construct and concurrent validity. Despite the previous studies supporting both reliability and validity, Wagnild and Young (1993) later conducted a psychometric evaluation of the RS with 810 senior citizens. A factor analysis identified two sub-themes, personal competence and acceptance of self and life. During the development of the scale, items were selected based on their reflection of resilience definitions and resilient individuals creating a priori content validity. Concurrent validity was established with the high correlation of the RS with the valid measures of the different constructs of resilience and resilience outcomes such as depression, life satisfaction, morale, and health. This instrument was shown to have multiple applications as it had been used for both men and women, across a variety of age

groups as well as ethnic groups. Limitations of the RS, according to Wagnild and Young (1991), included the need for refinement of the response format, piloting of the negatively worded items, and analyzing differences between male and females in regards to resilience due to the interviews only being conducted with women in the development of the RS.

The Resilience Scale for Adults was developed to measure the presence of factors that protect and promote resilience in adults (Friborg, Hjembal, Rosenvinge, & Martinussen, 2003). The original scale consisted of 45-items and was later condensed to 37-items with five themes or subscales: (a) personal competence, (b) social competence, (c) family coherence, (d) social support, and (e) personal structure. To determine reliability and validity, the researchers used patients from an adult psychiatric outpatient clinic ($n = 59$) as well as a group of randomly selected controls ($n = 128$). The internal consistency of the contrasting scales revealed adequate psychometric properties, and the internal consistency of the subscales ranged from 0.67 to 0.90. In addition, test-retest correlations proved to be satisfactory for all subscales ranging from 0.69 to 0.84 ($p < 0.01$). Friborg and colleagues (2003) reported that the RSA's construct validity was high and discriminate validity was shown by differential correlations between the RSA and its contrasting scales. The researchers further stated that the scale is valid and reliable when applied to the field of health and clinical psychology to assess the presence of protective factors that allow individuals regain and maintain mental health. Friborg, et al. (2003) identified their sample as a limitation as they selected a random sample due to the difficulty of finding a sample that successfully adapted and dealt with long-term stress and problems.

Connor and Davidson (2003) took a different approach to developing an instrument by looking at resilience as a measure of successful stress-coping ability. The goal of the Connor-Davidson Resilience Scale (CD-RISC) was to develop a valid and reliable measure that would quantify resilience, create values of reference for resilience in the general population as well as assess the ability to modify resilience in response to pharmacological treatment in clinical populations. The 25-item scale uses a 5-point Likert scale to assess responses of how the individual has felt over the past month. Individuals' score can range from 0-100, the higher scores reflected greater resilience while lower scores reflected less significant resilience over the past month. Connor and Davidson (2003) tested the psychometric properties of the instrument using multiple samples including the general population ($n = 577$), primary care outpatients ($n = 139$), psychiatric outpatients in a private practice ($n = 43$), subjects in a study on generalized anxiety disorder ($n = 25$), and subjects in two clinical trials on post-traumatic stress disorder ($n = 22$, $n = 22$). The last group was only used for partial comparisons all other groups totaled to 806 individuals. A factor analysis indicated 5 subscales that Connor and Davison (2003) identified as the main factors of resilience: (a) competence, high standards, and tenacity; (b) trust in one's instincts and tolerance of negative emotion; (c) positive acceptance of change, including the ability to maintain secure relationships; (d) control over one's life; and (e) sense of spirituality. The CD-RISC has demonstrated strong reliability, validity and psychometric properties with a Cronbach's alpha for the full scale at 0.89 and item-total correlation range from 0.30 to 0.70 (Connor & Davidson, 2003). This scale has notable limitations as it focuses solely on the resilient qualities at the individual levels, lacks evidence for the selection and inclusion of some items, was

developed and used in clinical settings and has extensive overlap of the concept of coping (Ahern, Kiehl, Sole, & Byers, 2006; Sarkar & Fletcher, 2013).

Subhan and Ijaz (2012) developed the Resilience Scale for Athletes (RSA) for measuring athletes' resilience during competition. It includes 27-items measured on a 4-point rating scale (i.e., extremely, to some extent, very little, and not at all). An exploratory factor analysis identified three factors of the scale, self-determination, physical toughness, and emotional control and maturity. The self-determination factor refers to remaining focused and attentive, making decisions, completing tasks, possessing self-confidence, gaining support from coach and spiritual beliefs. Physical toughness consists of preparedness, completion of training, and taking care of health. The final factors, emotional control, and maturity, are comprised of controlling emotions and using emotions appropriately during competition. The RSA had the high internal consistency of .80 and concurrent validity of .44 with the Indigenous Resilience Scale. Limitations of the scale include the use of all male, Pakistani participants, and lack of recognition in the resilience literature.

The instruments discussed above have been shown to be valid and reliable; however, they are only a few of the many instruments developed to measure resilience. These instruments used a variety of populations to examine resilience; and, with the increase in resilience research, the populations have continued to vary.

Resilient Populations

Marginalized youth populations dominate much of the resilience literature (Goodkind, Hess, Gorman, & Parker, 2012; Holmes et al., 2015; Masten, Best, & Garmezy, 1990; Resnick et al., 1997). Masten et al., (1990) reviewed resilience research

of high-risk children with positive outcomes and children who sustained competence under stress. The review revealed that an individual's psychological development is safeguarded and that any long-lasting consequences of adversity are related to natural damage or severe interference of the normative protective processes rooted in the caregiving system (Masten, Best, & Garmezy, 1990). Masten and colleagues (1990) also found that children were more likely to recover successfully when they had positive relationships with a competent adult, were able to learn quickly, solve problems, and perceived themselves as competent in many areas. Therefore, children who experience adversity early in life are less likely to adapt and develop protective factors analogous to their adversity.

Resnick et al. (1997) conducted interviews with 12,118 adolescents ranging from grades 7 through 12 from 80 high schools and their feeder middle schools. Their objective was to identify risk and protective factors at different levels including school, family, and individual as they interact with four domains of health and morbidity, which included emotional health, violence, substance use, and sexuality. The results revealed that parent-family connectedness and perceived school connectedness were protective factors against emotional distress, suicidal thoughts and behaviors, violence, use of cigarettes, alcohol and marijuana, as well as the age of sexual debut. These results provided support to health and social service providers, educators, parents, and others trying to eliminate risk factors and promote protective factors in adolescents.

Goodkind et al. (2012) continued research with another marginalized group of adolescents, Diné (Navajo) youth. The researchers conducted 74 ethnographic interviews with 37 Diné youth, parents, and grandparents to understand how these individuals were

resilient and survived despite a long history of trauma and structural stressors. Goodkind and colleagues found that the Diné youth were resilient and survived their current stressors of poverty and violence and provided implications interventions through revitalizing their traditional knowledge, as many of the youth were unfamiliar with the trauma experienced by their ancestors. They also included Diné culturally based healing practices and way to educate throughout the generations. Also, they offered strategies to influence social change and eradicate social inequalities.

As mentioned before, children from unfavorable backgrounds have dominated the resilience research as many positively adapted in the face of adversity. Holmes and colleagues (2015) set out to identify protective factors that allowed children to adapt and express a normal range of aggressive behavior despite their experience of being physically abused. The participants in this study included 1,207 children ranging in age from 4 to 10 years old. Participants were gathered from the National Survey of Child and Adolescent Well-Being and data was collected through interviews with children, caregivers, teachers and child protective services caseworkers. Holmes et al. (2015) found that are children internalizing well-being, expressing pro-social behavior, and the well-being of caregivers was more likely to express aggression in the normative range. They added that the individual characteristics of the child play a larger role in resilience than his or her relationships and environment.

The resilience researchers have also examined resilience in different occupational contexts. Two occupations that have been examined are nursing and military personnel. Hart et al. (2014) conducted an integrative review of the resilience research on nurses between 1990 and 2011. A total of 462 research articles were found in the initial search.

However, only seven studies met the research criteria identified by Hart and her colleagues. Of the seven studies, four of them took a qualitative approach all being phenomenology with the exception of one being ethnography. The first study, Ablett and Jones (2007) had a sample of 10 hospice nurses, all females except one. Participants were interviewed, and the data revealed themes related to the concepts of hardiness and sense of coherence, these factors influenced much of the nurses' to start and continue work in hospice care as well as their attitudes towards their work and life. The nurses communicated a high level of commitment and sense of meaning and purpose of their work. Ablett and Jones (2007) findings suggest that these interpersonal factors may contribute to the nurses being resilient and moderate the effects of stress working in hospice care.

Hodges, Keeley, and Troyan (2008) took a step back and looked at a group of 11 baccalaureate-prepared nurses practicing in acute care settings to examine resilience in the professional setting as well as develop strategies to support resilience and the longevity of the nursing career. The results revealed a process of evolving resilience in which these new nurses spent the majority of their time learning their role within the social structure; they gained confidence in their skills and relationships with positive experiences as well as identifying discrepancies between their ideas of professional nursing and their experience of this. Three themes from the results were learning the milieu, discerning fit, and moving through. Learning the milieu referred to the nurses learning the culture through understanding other people as well as their formal and informal roles. Discerning fit was described as getting a good sense of the discrepancies between their ideas of the profession and the reality of their experiences. In addition, this

theme was about nurses gaining an understanding of their identity as a professional nurse. The final theme identified was moving through, the nurses explained this as the turning point in which they realize they are self-sufficient. They further clarify that as they become self-sufficient, they develop coping strategies that allow them to continue thriving; they were able to identify individuals who would be a resource for learning as well as those whom they should avoid. Hodges et al. (2008) identified that critical reflection and reconciliation were strategies used to enhance resilience in this group of nurses. Overall, Hart and colleagues (2014) review of resilience in nurses provided information regarding the concept of resilience and identified factors that contribute to the need for resilience in the nursing profession as well as strategies to build resilience in the hopes of recruiting and retaining nurses.

Researchers Kornhaber and Wilson (2011) conducted research with seven nurses working in a burn unit to examine the concept of building resilience as a response to adversity. The findings from their phenomenological inquiry revealed six categories of building resilience as a means of coping with adversity; they are toughening up, natural selection, emotional toughness, coping with the challenges, regrouping and recharging, and emotional detachment. The participant responses demonstrated how building resilience is essential for burn unit nurses to sustain the emotional trauma of working with patients with significant burn injuries. Kornhaber and Wilson (2011) suggested that building resilience should be included in the education of both nursing students as well as experienced nurses.

Nursing is only one of the occupations receiving attention in the resilience literature. The military has dedicated a variety of resources to understand and build

resilience for their personnel. Hammermeister et al. (2012) conducted research with 351 Stryker Brigade soldiers who had been previously deployed at least once to determine if psychological resilience mediated the relationship between sport-related psychological skills and indicators of posttraumatic stress disorder (PTSD). The findings revealed that perceived psychological resilience fully mediated the relationship between planning/preparation and PTSD, sport-related psychological skills and PTSD, and the fear/failure/focus factors and PTSD. It is suggested that planning and preparation act as a protective factor that allows individuals to be committed to their duty in the expected and unexpected difficulties of military service. The findings revealed that individuals who were able to manage their energy through relaxation and activation skills (sport-related psychological skills) perceived themselves as being more resilient and presented fewer symptoms of PTSD. Also, the findings revealed that individuals who do not fear the dangers related to their job or making mistakes and do not experience concentration problems are more likely to perceive themselves as resilient and subsequently are less susceptible to PTSD. Hammermeister and colleagues (2012) suggested that these sport-related psychological skills may influence the development of perceived psychological resilience and therefore the susceptibility of PTSD.

Simmons and Yoder (2013) added to the military resilience literature as they examined resilience as it related to military service members through the concept analysis from Walker and Avant (2005). The results revealed attributes that characterized psychological resilience, adaptive coping, personal control, hardiness and social support. Adaptive coping referred to the ability to adjust to change as it occurs, moving through the adverse situation and then learning from it. Personal control was described as

believing that one has control over their destiny and the things that affect their lives, which assists in overcoming adversity. Hardiness alluded to the personal characteristics that allowed soldiers to maintain mental health despite adverse circumstances, such as commitment, control, and challenge (Kobasa, Maddi, & Kahn, 1982). Social support was described as the help provided to service members from the individuals that lift them up in times of need. Precursors for resilience were also identified in the research as adverse life events including serious accidents, previous deployments in which death was witnessed as well as combat involvement (Simmons & Yoder, 2013). Overall, this study identified that more resilient individuals had career and personal success as well as fewer mental health symptoms while their less resilient counterparts participated in high-risk behaviors and had increased mental health symptoms. This research assists caregivers, nurses, and other individuals in the lives of service members with the ability to assess and seek appropriate care for service members.

Resilience in Sport

Much like the children and occupations research discussed above, resilience gained popularity in the sport context. Sport psychology researchers began studying the internal and external qualities possessed by individuals who experienced positive outcomes despite the presence of adversity these inquiries were considered “first wave” resilience according to Richardson (2002). First wave qualities that were found to be important for athletes were obtaining proper social support (Rees & Hardy, 2000), exhibiting mental toughness (Bull, Shambrook, & James, 2005), and the use of effective coping strategies (Thelwell, Weston, & Greenless, 2007).

Rees and Hardy (2000) interviewed 10 high-level sports performers regarding their experiences of social support in which they found four dimensions of social support that related to both sport-specific social support and social support that did not directly relate to sport. The dimensions found were emotional, esteem, informational, and tangible support. Emotional support was described as individuals who listened to the sports performer and provided general help by “being there” and “bouncing ideas off of” (Rees & Hardy, 2000). Esteem support was characterized by how individuals helped sport performers deal with “nerves” and doubts regarding competition, injuries, and getting out of performance slumps. Informational support was recognized as help with the loss of confidence, performance catastrophes, and interpersonal problems. In contrast, tangible support was provided when sport performers were in need of help during stressful events such as injury, alleviating pressure and supporting efforts to concentrate as well as reducing worries about funding. Finally, social support was determined to be invaluable to sport performers and therefore an important first wave quality of resilience.

Bull et al. (2005) conducted research to gain a better understanding of mental toughness as well as how it was developed in English cricketers. The study was conducted using 12 participants who were voted mentally tough by English cricket coaches. The findings identified the cricketers’ environment played a large role in developing tough character, attitudes, and thinking. These findings suggest that for a performer to be considered mentally tough consistently their environment, character, attitude, and thinking must be interacting.

In addition to social support and mental toughness as first wave qualities, Thelwell et al. (2007) examined sources of stress and coping strategies of 9 male

professional cricket batters through semi-structured interviews. The findings revealed 25 different aspects for sources of stress, which included insecurity, importance of game, communication issues, personal life, being in the press, and others. In addition, 23 themes for coping strategies emerged such as using self-talk for motivation, self-talk for focus, using imagery, relaxation techniques, and many others. These findings are congruent with previous literature; however, Thelwell and colleagues emphasized the importance of practitioners understanding the specific demands of the sport they are working with.

Despite the many studies that have identified the qualities of resilient individuals, Richardson (2002) suggested that research move toward discovering how resilient qualities were acquired; he considered this “second wave” resiliency. A multidimensional conceptualization of resilience consisting of three dimensions: (a) resistance, (b) recovery, and (c) reconfiguration are helpful in understanding second wave resiliency (Lepore & Revenson, 2006). Lepore and Revenson described resistance as being undisturbed by adversity while recovery is being disturbed by the adversity and resuming to pre-stress functionality. Reconfiguration goes one-step further as the individual is disturbed by the adversity, returns to pre-stress functioning, and then adopts a new view of the world due to the adversity experienced.

Mummary et al. (2004) conducted research to identify if and how self-concept, social support, and coping style acted as protective factors against the potentially adverse effects of negative performance in sport. The participants included 272 swimmers ranging in age from 12 to 18 years of age and data was collected using the Athletic Coping Skills Inventory, the Multidimensional Scale of Perceived Social Support, and the Physical Self-Description Questionnaire to measure self-concept. The findings revealed

that resilient performers had higher self-perceptions of their physical endurance but possessed lower perceptions of perceived social support from significant others. Also, those who performed successfully initially had higher scores of coping with adversity and peaking under pressure. These findings suggest that high concept of physical endurance, positive self-perceptions for peaking under pressure, and coping with adversity, as well as a level of independence from social support are significant factors for performance in swimming (Mummery et al., 2004).

In contrast to Mummery and colleagues (2004) findings, Yi, Smith, and Vitaliano (2004) found that in their sample of 404 female high school athletes, the more resilient they were, the more social support they sought out. Furthermore, the resilient athletes favored problem-focused coping while their less resilient counterparts used avoidance and blamed others for their problems. Therefore, Yi et al. (2004) suggested that employing certain coping strategies may contribute to resilience in the face of adverse life events.

Nezhad and Besharat (2010) investigated the influence of resilience and hardiness on sport achievement and mental health with 139 athletes. The study was conducted with the use of quantitative measures of resilience, hardiness and mental health taken by the athletes. Coaches of the athletes rated the athlete's achievements using a quantitative scale specified by the researchers. The results revealed that both resilience and hardiness are positively associated with sport achievement and psychological well-being; however, it was negatively associated with psychological distress. Furthermore, the researchers concluded that resilience and hardiness could predict athletes' changes in sport achievement as well as mental health (Nezhad & Besharat, 2010). These results are in

congruence with the findings of Mummery et al. (2004) in which resilient swimmers were more likely to achieve successful performance than those who were less resilient.

Disability

Over the course of the last few decades, the disabled people's movement (BCDOP, 1997) along with social and health science researchers (McConachie, Colver, Forsyth, Jarvis & Parkinson, 2006) have distinguished social and physical barriers that play a role in disability. During this time, a shift from the medical model to the social model of disability took place. People were no longer being identified as disabled by the view of their bodies but by society instead (Thomas, 1999). The medical and social models are frequently presented as being two separate entities. However, Thomas (1999) suggests that disability should not be considered only medical or only social because individuals with a disability experience many difficulties due to their health condition. To provide balance to different aspects of disability, the International Classification of Functioning, Disability and Health (ICF) embraced a conceptual framework that understands disability as an interaction between health conditions and contextual factors (17). This framework is a bio-psycho-social model in which both the medical and social model is taken into consideration. From this framework the World Health Organization (2011) adopted the following definition of disability: "Disability is an umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)" (p. 4). By defining disability as an interaction, it is no longer assigned as a quality possessed by the individual.

Resilience and Disability

Disability is often analyzed using a risk perspective in which disability is depicted regarding the negative consequences the disability has on an individual's well-being. Porcelli, Ungar, Liebenberg, and Trépanier (2014) chose to use an ecological, strength-based approach when studying physically disabled youth in order to emphasize the opportunities that their environment offers. To do this they chose to look at disability through (micro)mobilities, "everyday patterns of independent, assisted, and contextualized movements within social spaces and physical places (Porcelli et al., 2014, p. 863). In this study of youth with impaired vision and hearing, the results revealed three patterns of (micro)mobility that allowed them to cope with their disability which contributed to their resilience. These three patterns were (a) independent versus assisted movement, (b) movement changes depending on the quality of space and place being navigated, and (c) body movements as a form of (micro)mobility. The patterns allowed the individuals to navigate their psychological, social and physical resources to experience life as a typical youth.

Resilience has a complex interaction between physical determinants and psychological characteristics, which can be seen in the study discussed above with youth; this same complex interaction is seen in adults with a physical disability. Hayter and Dorstyn (2014) found that adults with spina bifida who were functionally independent were more resilient than those who had experienced more medical co-morbidities. Also, those who possessed high self-esteem and self-compassion were more resilient.

Resilient Athletes with Disability

Individuals who lose their physical abilities are faced with the ultimate challenge

of adapting to a new way of life. Many rehabilitation programs and medical professionals encourage individuals to participate in sport as a way of treating injuries. The Wounded Warrior Project is one of the largest organizations that have developed sport programs for wounded veterans to assist in the recovery of these individuals (Wounded Warrior Project, 2011). Research has shown that physical activity and sport participation can improve physical health (Jones, Legge, & Goulding, 2002; Nash, 2005) as well as psychological health of individuals with disabilities from reducing stress (Latimer, Martin, Hicks, & McCartney, 2004) and improving mood management (Graham, Kremer, & Wheeler, 2008). Machida and colleagues (2013) wanted to add to this literature by examining the resilience process and the role of sport in this process with individuals who have spinal cord injuries. Through phenomenological interviews they were able to identify seven categories: (a) pre-existing factors and experiences, (b) disturbance/disturbing emotions, (c) multiple sources and types of support, (d) special opportunities and experiences, (e) various behavioral and cognitive coping strategies, (f) motivation to adapt, and (g) gains from the resilience process. A secondary analysis to determine the role of the sport within the resilience process revealed that sport created an invaluable source of social support from teammates. Teammates had been through similar experience making them relatable and giving them a safe environment to interact with one another. Sport also gave the participants in the study opportunities to learn and practice coping skills that influenced their resilience process. Overall, sport created normality in their lives.

Cardoso and Sacomori (2014) added to the resilience literature in the context of athletes with a disability by evaluating resilience in 208 athletes both male and female

with a physical disability. The physical disabilities represented in this study are spinal cord injury, amputation, myelomenigocele, cerebral palsy, polio, congenital malformation, muscular dystrophy, spinal amyotrophy, juvenile rheumatoid arthritis, total hip prosthesis, ehlers danlos syndrome, larzen syndrome, and dwarfism. The findings revealed mean scores that represented moderate resilience in both men and women. Participants with spinal cord injuries and myelomenigocele had higher resilience scores while those with amputations and polio achieved intermediate scores and finally, participants with cerebral palsy obtained the lowest resilience scores of all participants. Overall, these individuals' scores were significantly lower than those reported in the previous literature of the general population thus there is potential for developing resilience within athletes with disability context (Cardoso & Sacomori, 2014).

CHAPTER III

METHODS

This qualitative study was designed to discover how athletes with a physical disability describe their experience of resilience. The goal was to uncover each participant's distinct experience of resilience. Phenomenological interviews were conducted with each participant to gain an understanding of their thoughts, feelings, and behaviors within their experience of resilience. This chapter will examine the following: (a) methodology, (b) participants, and (c) procedures.

Methodology

A phenomenological approach was selected for this study in order to gain a first-person description and understanding of the human experience (Thomas & Pollio, 2002; Thompson, Locander & Pollio, 1989) of resilience.

Phenomenology. Creswell (2013) stated that phenomenology is employed when seeking comprehension of the meaning of a phenomenon as the lived experience of several individuals. Before adopting and discussing the approach further, it is critical to understand the philosophical presuppositions. Phenomenology assumes three things (a) consciousness is an essential component to human life, (b) there is intentionality of consciousness, and that (c) consciousness is temporal (McPhail, 1995). According to McPhail (1995), consciousness includes imagination, remembrance, perception, and logical forms that play a large role in the conveying significance of an experience to the human being. The intentionality of this consciousness is holistic in that the subjective and objective world is no different from one another. Husserl (1931), a German mathematician and developer of phenomenology, explained that reality is how both

subjects and objects appear in an individuals' consciousness. In taking a phenomenological approach, the researcher suspended themselves from their pre-existing beliefs of a phenomenon to obtain a thorough understanding of the phenomenon at a much deeper level (Thomas & Pollio, 2002). This suspension of all judgments is what Husserl (1931) called "epoche." By doing so, the researcher allowed for a new understanding of the participants' consciousness of the phenomenon. This approach put the participant in the "expert" role and guided the researcher, giving the individual the opportunity to speak openly about their experience and the researcher the opportunity to discover a wide-range of themes.

Disability Theory. This study used disability theory as an interpretative framework to see resilience through a disability interpretive lens. Original disability research examined the meaning of inclusion for parents, teachers, schools, and school administrators who had and/or worked with children with disabilities (Mertens, 2009, 2010). Initial disability research was developed from the medical model in which the focus was on the biological factors of the disability and the response by the medical community; research later moved towards the environmental response to individuals with a disability (Mertens, 2003). Research has since moved to a sociocultural model of disability in which the focus has shifted to the social factors rather than the biological ones in furthering comprehension of disability (Mertens, 2009). At the time of this shift, the disability community insisted that disability research is in the control of the individuals with a disability; however, Sullivan (2009) suggested that the disability community works together with nondisabled researchers to reach social justice. By adopting a disability interpretive lens for this research, this traditionally silenced,

marginalized population has been given the opportunity to be heard and has created opportunities for new findings and recommendations for the future.

Participants

Purposeful convenience and criterion sampling was used in this study, to ensure information-rich cases. In addition to convenience sampling, there was inclusion criteria in which individuals were required to meet in order to participate. The inclusion criteria for this study were as follows: (a) an individual with an acquired physical disability in absence of cognitive disability, traumatic brain injury and/or mental health disorders, (b) 18 years of age or older, (c) have participated in competitive or recreational sport for at least a year, and (d) have experienced resilience (i.e., adversity, positive adaptation, protective factors). In addition to meeting the qualifications above, participants had to volunteer to participate and sign informed consent. Polkinghorne (1989) suggest obtaining 5 to 25 participants that have experienced the phenomenon in question to achieve “saturation”. Reaching “saturation” occurs once there are no longer any new themes in the data.

Procedures

The procedures used in this study were those recommended by Thomas and Pollio (2002) for conducting existential phenomenological research. The components of their research procedure include *Exploring Researcher Bias*, *Selection of Co-Participants*, *Data Collection*, *Data Analysis and Developing/Confirming Thematic Structure*. These components are explained in further detail below.

Exploring researcher bias. When conducting phenomenological research, the researcher seeks a first-person description of an experience; however, to gain this

description, the researcher must detach themselves from their pre-existing beliefs regarding the topic under investigation (Thomas & Pollio, 2002). One way to do this is through a bracketing interview. Bracketing was introduced by Husserl (1931) to describe the process by which researchers suspend their “natural attitudes” of daily life; the term is now used to explain researchers’ pursuit to detach themselves from the theories, knowledge, and assumptions they have regarding a phenomenon of interest (Thomas & Pollio, 2002). By suspending pre-existing beliefs, the researcher eliminates some of the biases that may reveal themselves throughout the research process. Dale (1996) notes that total bracketing or elimination of all assumptions is not possible; however, consciousness, rather than the absence of assumptions, is crucial in phenomenological reduction. The researcher participated in a bracketing interview conducted by an expert qualitative researcher; this allowed the researcher to freely examine the phenomenon of resilience from the experiences of the participants.

Selection of Participants. Once gaining approval from the Institutional Review Board, participant recruitment began. The researcher contacted local adaptive sport teams and organizations via email to explain the purpose of the research and the inclusion criteria to gain access to participants. If they were interested in participating, they were given the researchers contact information to discuss the project in further detail. Individuals who volunteered to participate were put through a screening process by the lead researcher to confirm that they met the specific inclusion criteria. Once participants were cleared and selected, they were informed of the interview process and time commitment (approximately 90 minutes) required for participation in the study. At this time, they signed informed consent to participate that ensured their identity as well as the

data collected from their interviews, would remain confidential throughout the research process. To keep participants confidential, the researcher kept all data in a locked file only accessible by a password set by the researcher. Due to the nature of the research, the data collected was personal and sensitive therefore each participant was assigned a pseudonym to ensure that information could not be linked back to the individual.

Data collection. A demographics questionnaire was provided to participants before the interview via email to obtain information regarding their age, gender, ethnicity, level of education, nature of acquired disability, age at the time of onset and how the disability was acquired. This information provided the researcher with background knowledge of the participants as well as their disability. The interview process began by first arranging a meeting time for each participant either in person, by phone or through video chat. Before starting the interview, researcher would review informed consent and confidentiality. In congruence with phenomenological interviews, the research question for this study was open-ended to allow for a wide range of descriptive responses from the participants (Valle, King, & Halling, 1989). For the purpose of this study, participants were asked to respond to the following questions:

1. How do you define resilience?
2. “When you think of your experience of resilience what stands out for you?”

These questions were pilot tested before the interview to determine if there were any flaws, limitations or other weaknesses within the interview design (Kvale, 2007). The pilot test would allow the researcher to refine the research questions before implementation of the study. After gaining a response, the interview took a circular

format whereby the direction of the interview was determined by the participant (Thompson, Locander, & Pollio, 1989). Subsequent questions were asked for clarification, dissection of metaphors, and/or to gain more examples of the phenomenon; this ensured understanding and ensured nothing was overlooked (Becker, 2009).

Data Analysis. Each interview was recorded in real time for the purposes of transcribing them for later analysis. Once the data was transcribed, the participants were given their transcription for the opportunity to make corrections, clarify their experience and/or add additional information before approving the transcript for analysis. This was done to improve the accuracy of the transcript before analysis. Following their feedback and approval of the material, an interpretative research group made up of the committee chair, and fellow students with experience in phenomenological procedures at Barry University reviewed the transcripts and assisted in the analysis of the data. According to Thompson and Pollio (2002), an interpretative research group is vital to maintaining the thoroughness of phenomenological research methods. The members of this group signed a third-party confidentiality form before aiding in the analysis of transcriptions. One member of the group read the transcripts aloud while the rest of the group, including the researcher, would pause the reader to interpret the dialogue and discuss themes. The members of the group were provided copies of the transcript and encouraged to take notes as well as write down ideas for themes. The transcripts were collected by the researcher at the end of further analysis of the themes.

Developing/confirming thematic structure. Following the interpretive process of Thomas and Pollio (2002) the researcher met the interpretive research group and provided the interview transcripts; during this meeting, the researcher read the

participants part while a designated member of the group read the interviewers part. Throughout the reading members of the group would stop the readers to identify any words or phrases that they found significant. These significant words and phrases were “meaning units” that were later used to identify themes (Côté, Salmela, Baria, & Russell, 1993). Meaning units were discussed amongst the group to analyze meaning and significance. To identify themes, the researcher would reflect upon specific words, the meaning behind them and their relationship to the participant’s story as a whole. After the group analyzed the transcript in its entirety, the researcher would record the group’s discussion and summarization of themes. Once the transcripts were read completely and themes developed, the next phase of the interpretive process began. During this phase, the group broadened their search for more general terms and found similarities across the interviews to describe themes. After thematic descriptions were discovered the interpretive group decided whether the individual text supported these descriptions and gave a transparent description of the participant’s experience of resilience. Examining each transcript individually and across all of them allowed the researcher to identify the ways that one experience is similar to others as well as giving a variety of experiences (Thomas & Pollio, 2002). Themes were described using the participant’s words and phrases to capture their experience as closely as possible. The global themes then lead to the development of the thematic structure. The structure of the phenomenon revealed the commonalities between the diverse experiences of the participants (Valle et al., 1989). The researcher thematized the data and proposed the themes with specific support from the transcripts. The interpretive research group examined the themes to help the researcher choose the most information-rich themes to describe the phenomenon. The

final phase of the process was returning the findings to the participants to gain feedback to determine whether the description offered an accurate portrayal of the experience. This final phase was important to the validity of the study. To ensure validity the researcher provided an accurate, detailed account of the phenomenon that can be seen in the same way that it was seen by the researcher whether the reader agreed or not (Giorgi, 1971). According to Dale (1996), the researcher can ensure the focus of the study and therefore validate it by keeping a methodological log that chronicles the researcher's thoughts throughout the research process. The researcher did this by keeping field notes throughout the research process to safeguard the data from any personal biases regarding the phenomenon of resilience as well as ensuring the focus of the study remained on the experience as the participants lived it. These notes included observations of the participants' body language, moods, and attitudes as well any other relevant information (Mack, Woodsong, MacQueen, Guest, & Namey, 2005). In addition, the researcher described the physical setting, unusual events, and the researcher's own reactions as suggested by Thomas and Pollio (2002).

CHAPTER IV

REFERENCES CHAPTERS I-III

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CHAPTER V**MANUSCRIPT****A Phenomenological Study: Experiences of Resilience in Athletes with a Disability**

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There is a lack of research in how individuals with an acquired physical disability experience resilience. The primary purpose of this study was to investigate how these athletes describe and explain their personal experience of resilience. A total of five in-depth phenomenological interviews were conducted with athletes with an acquired physical disability (4 male; 1 female), ranging in age from 26-54 ($M = 39.2$, $SD = 12.3$), and representing a variety of sports (i.e., powerlifting, CrossFit, surfing, sled hockey, wheelchair basketball, rowing, triathlon, and integrative dance) to determine their experience of resilience. Qualitative analysis revealed a final thematic structure of five major themes: *Choice, Role of Sport, Social Support, Reasons for Resilience*, and *Abilities Over Limitations*. Finally, practical implications are discussed for athletes, coaches, mental performance coaches, as well as other helping professions.

Keywords: resilience, disability, social support, athlete

Resilience in the general sense refers to the ability of an object to spring back and return to its original state after being bent, stretched, or compressed (Strumpfer, 1999). Resilience was originally considered an individual characteristic, but research has found that it is developed and sustained as a product of an individual's culture along with their social and political background (Arrington & Wilson, 2000; Gilligan, 2004; Luthar & Zelazo, 2003). In line with this research Masten, Best, and Garmezy (1990) defined

resilience as a “process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 426). This definition of resilience has been widely accepted in the field of psychology and has guided much of the resilience research.

Extensive research to define resilience has determined the following components as essential in measuring resilience: adversity, positive adaptation, and protective factors (Luthar, Cicchetti, & Becker, 2000; Connor & Davidson, 2003; Luthar & Zelazo, 2003, Masten & Obradovic, 2006; Rutter, 1987). According to Luthar and Cicchetti (2000), adversity “typically encompasses negative life circumstance that are known to be statistically associated with adjustment difficulties” (p. 585). Fletcher and Sarkar (2013) believed that this definition depicted adversity as an inability to cope and did not include the daily stressors that most individuals face. Both daily stressors and negative life circumstances should be considered when examining the etiology of adversity. This is specifically important in the sport context where athletes experience many daily stressors such as a lack of preparation and difficulties in their relationships (Thelwell, Weston, & Greenless, 2007), finances and prolonged travel (Fletcher & Hanton, 2003), as well as trouble balancing work and inflexible work hours (Noblet & Gifford, 2002).

Related to the notion of stress, coping, and resilience is the term positive adaptation, which has been defined in resilience research on children and adolescents regarding meeting social, behavioral, and educational milestones that correspond to their stage of development (Masten, 2001). Specifically, Luthar and Zelazo (2003) defined positive adaptation as “[adaptation] that ... is substantially better than what would be expected given exposure to the risk circumstance being studied” (p. 515). Adaptation was

further defined in the sport context as “the athlete’s ability and capacity to act and react competently to stressors perceived as significant in a sport context by restoring internal sense of emotional and psychological balance” (Schinke et al., 2012, p. 181). This ability to react to stress and return to psychological balance became an increasing area of study as researchers wanted to understand what factors or characteristics these individuals possessed that allowed them to adapt. Protective factors are “influences that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes to a maladaptive outcome” (Rutter, 1985, p. 600). These influences were termed protective factors after resilience research highlighted several characteristics of individuals that protected them from the stress that they encountered (Garmezy, 1991; Luthar, 2006). Resilience researchers have identified numerous protective factors including extraversion (Campbell-Sills, Cohan, & Stein, 2006), self-efficacy (Gu & Day, 2007), hope (Horton & Wallander, 2001), and social support (Brown, 2008). These three components (i.e., adversity, positive adaptation, protective factors) though they may be termed differently, can be seen in nearly all resilience research.

Research that has been conducted has primarily examined the protective factors or qualities possessed by resilient individuals. Kumpfer (1999) discovered several protective factors that she called “internal resilience factors”; these factors were spiritual or motivational characteristics, cognitive competencies, behavioral/social competencies, emotional stability and management, and physical well-being competencies. Years later, Fletcher and Sarkar (2012) discovered several psychological factors, similar to Kumpfer’s (1999) findings, which allowed Olympic champions to succeed in the face of adversity. These factors consisted of having a positive personality, confidence, focus, and

perceived social support. Other psychological qualities have been found in the resilience literature such as hardiness (Kobasa, Maddi, & Kahn, 1982), dispositional optimism (Scheier & Carver, 1985), as well as high self-perceptions of physical endurance in athletes (Mummery, Schofield, & Perry, 2004). Hobfoll and colleagues (2007) identified appraisal, coping, and emotion regulation processes as being helpful in protecting individuals from stress.

These three components of resilience are seen in many of the resilience models developed to understand how individuals acquired the qualities that allowed them to be resilient as well as the process of resilience. Richardson and colleagues (1990) developed the Resiliency Model which depicts a process of resilience as well as how individuals acquire qualities of resilience. This model suggests that when one's biopsychospiritual homeostasis is disrupted due to adversity they reintegrate in one of four ways. First, they may reintegrate resiliently experiencing personal growth and strengthened protective factors. Second, homeostatic reintegration will provide the individual with relief but without protection for future adversity. Third, the individual may reintegrate maladaptively in which they lose protective factors and hope to overcome the adversity. Finally, dysfunctional reintegration leads to destructive behaviors as a way of coping with adversity. The model highlights that individuals strengthen and acquire protective factors when adversity interacts with the individuals biopsychospiritual protective factors.

Galli and Vealey (2008) later developed the Conceptual Model of Resilience specific to athletes. The model highlights the role in which sociocultural influences and personal resources mediate the athlete's resilience. It is suggested that when an athlete faces adversity they experience agitation but with the help of social support, their love of

sport, achievement motivation and personality characteristics, the athlete may experience positive outcomes such as learning from the adversity, motivation to help others, and/or a new perspective. The three components of resilience are clear throughout this model and highlight the qualities of resilient athletes.

The examination of individuals' experiences of adversity has also become a popular area of research within the resilience literature. Among the factors or qualities of resilient individuals listed above, experiencing adversity has shown to predict better outcomes (i.e., lower global distress, lower self-rated functional impairment, fewer posttraumatic stress symptoms, greater life satisfaction) for individuals compared to individuals who have experienced little or no adversity (Seery, Holman, & Silver, 2010; Seery, 2011). Furthermore, adversity assisted Olympians in reaching optimal performance as it has allowed them to overcome a variety of stressors (Sarkar, Fletcher, & Brown, 2015).

Despite a variety of participant populations, resilience research has been particularly popular in the sport context due to the demands of the competitive environment (Sarkar & Fletcher, 2013; Subhan & Ijaz, 2012). Both disability and sport are popular topics within the resilience literature; therefore, it is no surprise that researchers have now begun examining resilience within the context of athletes with disabilities. Salick and Auerbach (2006) examined the process of recovery and posttraumatic growth in individuals with disabilities from traumatic injuries or chronic illness, from this they developed a stage model of trauma and recovery. This model was characterized by five stages, (a) apprehension, (b) diagnosis and devastation, (c) choosing to go on, (d) building a way of life, and (e) integration of the trauma and expansion of the

self. Salick and Auerbach (2006) noted that even though the participants moved through these stages they often revisit previous stages as a part of their ongoing adaptation to disability.

While researching resilience in athletes with spinal cord injuries, Machida and her colleagues (2013) used the Resiliency Model developed by Richardson and colleagues (1990) to examine the resilience process in athletes with a disability as well as gain a better understanding of the role of sport in overcoming disability. The study revealed that sport played a large role in the individuals' resilience process as they gained social support and social interaction from teammates as well as opportunities to find confidence through success. The study however, did have limitations as it only examined athletes with spinal cord injuries and all played rugby. Additionally, the study did not examine the athlete's experience of resilience but rather their process of resilience. Overall, it appears that sport plays an important role in the development of resilient outcomes within the disabled athlete population yet only approximately 16% of the individuals with disabilities in the U.S. participate in Paralympic sport (Paralympic Sport Club, 2014).

According to the World Health Organization (WHO), 15% of the world's population experiences some form of disability (2014). In the United States alone, roughly 12% of people of all ages have a disability (5 Council For Disability Awareness, 2013). These numbers will continue to increase as the population ages and the rates of chronic illness rise (WHO, 2014). The WHO (2011) stated that "disability is the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interactions between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)" (p. 4). This way

of looking at disability is a “bio-psycho-social model” as it reflects the interactions between health conditions and contextual factors by doing so disability is no longer a quality of the individual (WHO, 2011). Individuals who have experienced physical disability often experience psychological and psychosocial challenges such as anxiety and depression (Craig, Hancock, Dickson, & Chang, 1997) as well as disconnection from the social world (Graham, Kremer, & Wheeler, 2008). Despite the many challenges that individuals with disabilities face, many thrive in the face of their adversity.

Resilience has been shown to be a significant determinant of overcoming adversity in a variety of populations (e.g., children, nursing, military personnel, etc.) and has been emphasized in the context of sport (Subhan & Ijaz, 2012). Research has identified the characteristics that contribute to the success of individuals overcoming adversity from trauma and physical disability (Salick & Auerbach, 2006; White, Driver, & Warren, 2008) as well as the process in which individuals with physical disabilities go through during their experience of resilience (Machida, Irwin, & Feltz, 2013). In addition, Machida and colleagues (2013) investigated the vital role that sports played for individuals who have sustained physical trauma and suggest that sport may aid psychosocial recovery for individuals with physical disability. Research thus far has identified the contributing characteristics of success in overcoming adversity of trauma and physical disability, the process of resilience in individuals with physical disabilities, and the role of sport in that process, however, there is a lack of research on how these individuals experience resilience. As the world’s disability population continues to increase (WHO, 2014) and the disability sport arena continues to grow, an understanding of how these individuals experience resilience is crucial. This study aimed to examine the

experience of resilience as it was lived by athletes with acquired physical disabilities.

Methods

Participants

This study purposively recruited athletes with an acquired physical disability to take part in an in-depth phenomenological interview to gain a first-person description and understanding of the human experience (Thompson, Locander & Pollio, 1989; Thomas & Pollio, 2002) of resilience. Recruitment letters were sent out to many local adaptive sport clubs, sport organizations, and sport professionals working with athletes with disabilities.

The final sample of participants in the present study consisted of athletes ($N = 5$; see Table 1) who met the following inclusion criteria: an acquired physical disability in absence of cognitive disability, traumatic brain injury and/or mental health disorders, 18 years of age or older, have participated in competitive or recreational sport for at least a year, and have experienced resilience (i.e., adversity, positive adaptation, protective factors). A total of four participants were excluded after contacting the researcher and not meeting the inclusion criteria for participation. The athletes in this study were assigned pseudonyms for purposes of protecting their identity. Their ages ranged from 26-54 ($M = 39.2$, $SD = 12.3$) and represented a wide range of sports, including both team and individual sports (e.g., powerlifting, surfing, sled hockey).

Procedures

The procedures in this study were those recommended by Thomas and Pollio (2002) for conducting existential phenomenological research. The components of their research procedure include: *Exploring Researcher Bias*, *Selection of Co-Participants*, *Data Collection*, *Data Analysis*, and *Developing/Confirming Thematic Structure*.

Exploring researcher bias. For the present study, the primary author, who conducted all the interviews participated in a phenomenological bracketing interview. This allowed her to detach herself from the theories, knowledge and assumptions of the phenomenon of resilience and how it is experienced by athletes with a disability. Also, field notes were used before, during, and after each interview. These field notes safeguarded the data from any personal biases regarding the phenomenon of resilience as well as ensured the focus of the study remained on the experience as the participants lived it. These notes included observations of the participants' body language, moods, and attitudes as well any other relevant information (Mack, Woodsong, MacQueen, Guest, & Namey, 2005). In addition, the researcher described the physical setting, unusual events, and the researcher's own reactions as suggested by Thomas and Pollio (2002).

Data Collection. Prior to data collection, the researcher received approval from the Institutional Review Board (IRB) for the Protection of Human Subjects that the research aligned with IRB guidelines. All participants were required to sign a consent form and complete a demographics form which was sent and returned via email. Upon completion of the documents mentioned above, a date for the interview was confirmed. Interviews were conducted via FaceTime and Skype due to large geographical distances between the researcher and participants. Before starting each interview, the researcher provided clarification of consent and confidentiality. Interviews ranged from 34-90 ($M = 58.6$, $SD = 20.2$) minutes in length.

In congruence with phenomenological interviews, the research questions for this study were open ended to allow for a wide range of descriptive responses from the

participants (Valle, King, & Halling, 1989). For the present study, participants were asked to respond to the following questions; “How do you define resilience?” and “When you think of your experience of resilience, what stands out for you?” Based on participant responses, subsequent questions were asked for clarification and to obtain more examples of their experience. Participants were also periodically asked if they had anything else to share to avoid overlooking any part of their experience of the phenomenon being investigated.

Upon completion of the interviews each audio file was transcribed verbatim by the primary author. To ensure confidentiality, a pseudonym was assigned to each participant and any identifiable information was removed from the transcripts. Participants were provided a copy of their transcription and were asked to read it for accuracy. Of the participants who responded ($n = 5$) only one asked for the removal of part of their transcript prior to analysis. This process gave each participant the opportunity to make changes to the data adding validity to the research.

Data Analysis. The transcribed interviews were then analyzed by an interpretative research group made up of the second author and students with experience in phenomenological procedures. This group was vital to maintaining the thoroughness of phenomenological research methods (Thomas & Pollio, 2002). All members of the interpretive research group signed a third-party confidentiality form before aiding in the analysis of transcriptions. The interpretative research group helped the researcher develop a thematic structure from the data collected. The transcripts were read aloud with pauses from both the group and the primary researcher to discuss meaning units and themes that emerged. Throughout the interpretive process, the group members helped

ensure that the original text supported all meaning units and themes. Once subthemes were identified from each participant's transcript, general themes were developed by making comparisons across all five transcripts.

Developing and Confirming Thematic Structure. The analysis followed Thomas and Pollio (2002)'s suggestions to develop thematic structure by identifying meaning units taken verbatim from transcriptions to develop subthemes and finally major themes. During the reading of the transcripts, the primary researcher and the members of the interpretative research group highlighted key statements or keywords that were later compiled to form a list of significant meaning units. The identified meaning units depicted how these athletes experienced resilience. Next, similar meaning units were grouped together to form larger subthemes. Subthemes were then grouped to form major themes. Through the development of the major themes, both a textural and structural description of the phenomenon was revealed.

After analysis, it was vital to provide the participants the opportunity to review the preliminary results, including the thematic structure. Those participants who responded ($n = 2$) to provide feedback did not offer any additional information and/or changes to their transcripts. As for the other three participants, the researcher was not aware of the reasoning behind the participants not confirming the results. It was concluded that the themes accurately represented their experience of resilience and the thematic structure was finalized when agreement between the researcher, participants, and original data was achieved.

Finally, validity and reliability was ensured by allowing the participants to share their experience in their own words as well as the researchers use of follow up questions

for clarification and further explanation. Participants were also given opportunities to review their transcripts and the results throughout data analysis. The interpretative research group kept the researcher honest by testing the strength of themes and often opposing them. Additionally, the final thematic structure was developed with the use of the participants' own language from direct quotes and descriptions of the phenomenon.

Results

The purpose of the present study was to examine the experience of resilience as it was lived by athletes with an acquired physical disability. The interviews engaged the athletes in exploring their experience of resilience, allowing them to share personal stories and insights on disability and sport. Qualitative analysis of the transcripts revealed 180 meaning units that were further grouped into sub-themes and major themes. The final thematic structure revealed five major themes portraying the participants' experience of resilience as an athlete with an acquired physical disability: *Choice, Role of Sport, Social Support, Reasons for Resilience, and Abilities over Limitations*.

The themes are further discussed separately but it is important to note their interconnectedness to gain full comprehension of the athletes' experience. A detailed display of the thematic structure with the major themes, subthemes, and representative meaning units are shown in Table 2. Also, sample quotes are provided to demonstrate how the themes were generated from the participants' statements.

Choice

When participants were asked to define and describe resilience in their terms before discussing their experience of the phenomenon, each used similar words and phrases. It was then that *Choice* emerged as a key part of each of the athletes' overall

experience of resilience. Their defections and descriptions of resilience were further broken down into the following sub-themes: *Moving Forward*, *Negative to Positive*, and *Different Roads, Same Destination*.

Moving Forward. The vast majority of the athletes experienced a time in their life, after disability, that they were faced with a major decision about how they wanted to live their life. Sarah explained

[after disability] it's you at the crossroads deciding what you want to do. Do you want to play the left road, the woe is me road, I can't do this, life is over, everything is awful, I'm disgusting... or are you going to play the right road, where you can be like I don't care, life is not over, I'm going to live it, I'm going to have a good time, I'm going to do all the things that I should be doing anyway. And that's your choice but you have to make that choice, you're at that crossroads.

Sarah was able to accept her disability and recognize that she had a choice in what would happen next. From a young age, she chose to be resilient in every aspect of her life.

James further explained resilience stating, "everyone experiences some type of adversity and they have to be resilient... no matter how many barriers or how much adversity you face... you continue forward." In addition to making a choice and continuing forward, Daniel shared his view of resilience as the ability to "bounce back" and further related it to his disability by stating "be able to get up off your ass and start walking again." This speaks to Daniel's choice to learn how to walk with his prosthetic and get back to the mobility he once had.

Negative to Positive. Acquiring a disability is life changing and is often thought of as a negative but being resilient sheds new light on what it means to have a disability. Mark shared that being resilient was “taking a negative experience and turning it into something positive.” The athletes in this study have truly taken their experience of acquiring a disability as well as being resilient and turned it into something much greater. James identified ways that his disability has positively impacted his life, for instance, he received government assistance to attend college and complete a degree. He shared further, “people who don't have disabilities...may get a little bit bitter at us but really it’s like you have to think about it... do you really want to switch places with me? And the answer is unequivocally, no”; this speaks to the societal norm that disability is a negative experience.

Different Road, Same Destination. The athletes chose to be resilient and find the positive in their experiences but this was not an easy task for several of them. As Sarah provided a more descriptive definition stating that resilience is:

understanding that there are many roads to one destination and sometimes roads might be closed down for construction but reality is that you can find another way. So sometimes resilience is just not giving up just because one road is closed... there might be 4 or 5 other roads that are open that you can take you just have to maybe work a little hard to find them... or it might take you a little bit longer but you’re still going to get to that end goal where you wanted to be in the first place.

Sarah acquired her disability early on in life and experienced many road blocks trying to adapt to ensure that she could participate and be around other people but each time she

chose to find another road to reach the end goal. Daniel also spoke to his experience of taking different roads stating:

It's tough, life's not really a bed of roses, what I've found through life is that the easy path is normally the worst path to take. The body, the human psyche is not designed for a life of ease, you know, we got to be challenged, we got to be pressured.

Disability is tough and it rarely allows individuals to take the easy road if they are looking to gain a full life after disability. In addition to Sarah and Daniel's experiences, Victor shared his thoughts on defining resilience and applied it to his experience with disability:

Resilience isn't about the outcome it's just the ability to keep going no matter what. For instance, when I first ended up injured I had no function on right side at all and people said you should give up, you're never going to walk again so why bother so it took 5 to 6 years to get to where I'm at and I did a lot of it on my own because I just don't believe that you can give up because if you give up you might as well wait in a corner until you die, which could be forever and that is more miserable than fighting back and with fighting back, it may not be the greatest life but it's still a life worth living.

Victor recognized that for some people giving up may seem like the easier road but it was not the road he chose. He wanted to continue to live his life to the best of his ability, and he did just that by fighting to regain function and get back to doing the things that he loved such as dancing. Choosing the road of resilience, despite the roadblocks, was the right road for him because it ultimately lead him to live a fulfilling life. Resilience may

seem like the natural response for these individuals, but there are many aspects of their life that contribute to their experience of resilience.

Role of Sport

Role of Sport emerged as one of the major themes of these athletes' experience of resilience. This theme encompassed the athletes' descriptions of their experience participating in sport and included the following sub-themes: *Purpose, Recovery, Coping, Confidence, Wholeness, and Community*.

Purpose. Several participants expressed that sport provided them with a new sense of purpose after acquiring their disability as it gave them something to look forward to and strive for. Victor shared how sport changed his life and the role it played in his resilience process:

Sport, first of all, has given me a purpose because, you know, when you end up paralyzed from injury, from anything, you try to figure out what you're meant to do because you had one life before being disabled and in a chair and everything and now this is a whole new ballpark and a new life. So, you're adapting in life so when this happens, when these new things come to you it's an adaption to the point where it gives you a purpose because not only are you doing the sport but you're inspiring others.

Sport gave Victor a purpose after his injury, and it has continued to give him a purpose as he participates in swimming, dance, and rowing along with cycling and adaptive rock climbing in his spare time. He's also found purpose in using sport to inspire and encourage others to participate and fight back against any adversity they may be facing.

Recovery. Sport has proven to be therapeutic and life changing for some individuals as it can improve both physical and psychological health. Participating in sport can reduce levels of stress and improve mood which can impact an individual with disability drastically. Mark highlighted the physical and psychological impact that sport had played in his recovery:

Honestly, I really think adaptive sports, particularly hockey has really been key to my recovery... both from the amputation and then also from the heart surgery. I don't really know what I would do if I didn't have those outlets now... physically its taxing, mentally it is really depressing when you're disabled, and you can't participate... and then to just have those chains taken off of you was really... it was just huge.

Sport freed Mark from the chains that were his disability, it had always held him back as a child, and when sport became a possibility, his life was forever changed. He further describes his first experience with sled hockey and the effect it had on him:

So, they sent me out on a sled by the side boards and I'll never forget this experience... they got me all strapped into the sled and they pushed me away from the boards so now I'm just gliding along backwards on the ice... and it was like time slowed down, the whole got dead quiet and I just started laughing because it was so remarkable to me, it was like floating. It was just... It was the most incredible thing that I've really felt. It was so freeing, mentally and physically and I've been hooked on it ever since.

Mark's first experience with sled hockey was so profound he currently travels to play with several different teams. Sport has certainly played a major role in his recovery from running a 5K in physical therapy to playing wheelchair basketball and now sled hockey.

Coping. Acquiring a disability is often confusing and difficult to understand leaving individuals with a lot of question marks. Growing up James did not have the opportunity to participate in organized sport through his school system but when he turned eighteen and could make his own decisions, he was determined to participate. James, like Mark, used sport to overcome the challenges he faced:

Sports helped me cope... [they were] the vehicle to help me move forward past all these things [depression and abuse] and working out, training and getting physically fit... it's important cause I didn't like to feel like I was being taken advantage of and so I felt like if I were in shape I wouldn't maybe be taken advantage of as easily.

Sport provided James with opportunities to build himself up and get away from the some of the negative experiences in his life. Using sport to redirect his attention and focus allowed him to pursue his fitness and personal goals.

Wholeness. This sub-theme describes how sport positively impacted these individuals despite the depressing and challenging nature of disability. Mark explained the profound impact that sport has had on him,

I guess it's that feeling that I get from sports that I don't get anywhere else... of total wholeness, of completion... I'm not encumbered by any physical limitations that I've got. I can go out and be the athlete that I want to be... Sports, as a

disabled person, like I said earlier it gives me an opportunity to forget the physical limitations that I've got and to be part of something greater.

Mark went on to discuss how when he hits the ice there is no conversation about his disability, his teammates expect him to show up and be best that he can be. When acquiring a disability an individual often feels as though they have lost a part of who they are and in the process often feel abnormal, this feeling of “total wholeness” speaks to the feeling of normalcy that many individuals seek after disability.

Community. The athletes emphasized the important role that individuals in their sport community played in their ability to be resilient. As mentioned before, Sarah wanted to participate in sport as a child to be around the other children and this still holds true even as an adult. Sarah shared how participating in CrossFit helped her become resilient:

It's definitely given me the confidence in my abilities as an individual... sports in general has kind of tried to keep the playing field level for me... if I am constantly active I'm obviously getting the confidence in my abilities to be able to do something that is part of the team, but I'm also getting that community and that social interaction that allows me to feel like I am a part of something.

Both Mark and Sarah mentioned how sport gave them opportunities to be a part of “something greater” and provided “community and social interaction,” these are qualities that all human beings seek in life and they are no different. Despite their disabilities, these athletes found purpose, strength, comfort, and support from their sport.

Social Support

The initial stories shared by the participants once being asked about their experience of resilience were about the people closest to them. They focused on how they depended on these individuals, and how these individuals helped them over time. These stories lead to the major theme *Social Support* that revealed two subthemes: *Out of Sport* and *Within Sport*.

Out of Sport. The athletes all spoke about the individuals who supported them after acquiring their disability, such as friends and family. These individuals provided both emotional and instrumental support (i.e., empathy, love, tangible aid). Daniel shared how he had to depend on others after acquiring his disability:

Before I had my leg amputated you know I walked around I did things, when I had my leg amputated you know I was in a situation where I had to depend on people... I don't really like having to depend on people. [I had to depend on] mainly my family, my wife, my kids... to do things for me that I would normally do like cut the grass. It's kind of hard to carry something from the kitchen counter to table or to the couch or what have you when you're having to utilize a walker or crutches... not only do you not have your legs; you don't have your hands neither.

Daniel's story provided a demonstration of how difficult daily tasks could be and how he had to lean on his family for emotional support. In addition, Daniel described how he had to rely on his family for instrumental support, "I was sole support for my family financially, for my wife and family, and I have 3 kids. My wife had to go to work, which that hurt. That wasn't a good thing for me, mentally." Daniel struggled with the idea of not being able to provide for his family in the way that he was able to prior to his

disability but with their support both emotionally and instrumentally, he was able to beat his depression and get back to work.

Despite the challenges and the depression often associated with disability, each participant recalled the person or people that helped them find their strength to pursue a full life. Sarah described how her parents supported her:

I'm very blessed to have the family that I was given by God... I definitely learned resilience through them and the struggle of having a child with cancer and how they figured it out. I really applaud my parents for sticking together; that really made me understand that you don't give up on anything just because it's hard or just because you're frustrated or just because you're angry. You work to make it work. So, I think their marriage is definitely a testament to my resilience. When I was going through cancer and chemotherapy... my mom had to quit her job and take care of me because that's what she had to do and she wanted to do and I was her child but that left us one income short so my dad picked up two extra jobs, part time jobs, to ensure that we had a roof over our head, a car that was running, and food on our table. And I might not have had like extravagant Christmas', most of my stuff was bought through dollar general, 99 cent stores stuff which was fine. I didn't care but my parents always loved me no matter what the dollar sign.

Sarah's parents supported her in a way that ensured her needs were met all while showing and teaching her how to be resilient in their own way. This is similar to the story that James shared about his mother and how she supported him through his struggles:

When I was 8 or 9 years-old there was a procedure that had to be done and essentially what they did was they took my hamstrings, and they put them in my hips and they took my hips, in my hamstrings, and then they broke my femurs, and they rotated them from in to out. It was rough... And I was not comfortable with it... I was in a wheelchair for a while, and I was in a hospital bed for a while. I had casts all the way from my feet to my hips. Then I had to relearn how to walk again and when I mean relearn it's like its literally like I put my hands on my mom's hands and we walk down the hallway, and it felt like it was sprinting downhill every time I took a step and it throbbed and it ached, and it was terrible. But we kept doing it, and it sucked it really sucked but I am where I am today because of that operation and because of what my mom did.

Within Sport. Participating in sport comes with many advantages, as mentioned before, it can improve mood and reduce stress but it can also provide invaluable sources of social support. Several athletes shared how different individuals in their sport community had supported them throughout their lives. Sarah shared how different individuals supported her in her resilience:

Resilience can often be changed by whatever is going on around you and having positive mentors, coaches, parents, cheerleaders, friends around me has increased that resilience effectiveness because if I have coaches working with me to try and help me learn how to do something like running... I didn't learn how to run on my own I learned how to run because the PE teacher stayed late with me one day and ran next to me showing me the mechanics...but it takes some time to see it in action and really working and having someone giving you guidance as to what

you might try in order for you to be effective in what you're trying to accomplish. I believe that coaches are not just telling you how to do something effectively but they're also telling you... "you can do it" and then on top of it really the comradery of teammates that are building you up and cheering you on and making you feel like you're a part of something outside of yourself it's what makes you work harder.

Sarah's experience with her physical education teacher provided her with informational support. This informational support came in the form of educating Sarah the mechanics of running. She also shared how she received guidance from coaches as well, this speaks to the use of informational support. Also, Sarah explained how her coaches and teammates supported her emotionally by cheering her on.

Mark also received informational support after acquiring his disability. He shared his experience with a physical therapist:

It took 10 months with me going to physical therapy 2 or 3 times a week and then working my ass off at home. I would work on the exercises and the stuff that we had done in physical therapy for 2 or 3 hours at night.

The physical therapist got Mark back to walking and eventually even running with the use of his prosthetic. She provided him with the information needed to gain strength and function of his leg through different exercises which he mentioned he would do both during his session as well as at home. Also, Mark spoke to the social support that he gained from participating in sport:

When you've got a good team, when you've got a good sports system around you... it sort of becomes circular in nature where you sort of build on each other's

successes. You know, you see somebody got out in excel and then they help you, they pull you along or encourage you to be better than you thought you could be.

And that to me, is really powerful.

Mark's teammates were able to encourage him and push him in ways that he had not experienced before sport. These athletes faced obstacles and challenges that most people cannot imagine and yet, they found ways to overcome and succeed in sport and life. Their journey is no easy fete, but they have many reasons to be resilient.

Reasons for Resilience

Over the course of the interviews, the participants shared a variety of reasons for why they persisted in the face of adversity thus emerged the fourth major theme, *Reasons for Resilience*. This major theme revealed three sub-themes: *Family, Proving Others and Self Wrong, and Helping Others*.

Family. The clear majority of participants shared stories about how their family was a big source of support during their times of need and thus many of them chose to be resilient for them. Daniel describes how his family was the reason he chose to be resilient:

I went through a big dark depression, right, I'm a fire sprinkler fitter by trade... I didn't realize at the time but being a fire sprinkler fitter defined me. Whenever I lost that... that wasn't good. Basically, I had planned for suicide. So, my plan was... I was going to go out here to the road out here, there's a lot of car lots, I was going to wait for one of those car haulers, loaded down with automobiles, you know, coming fast on down the road, and I was going to wait until they got close enough to where I knew that they couldn't stop and I'd just fall out in front

of them, get run over... And then the more I thought about that, I thought you know... it would be my luck I would get run over, get all busted up and survive... then they [my family] would have to put up with that [being paralyzed, confined to a wheelchair].

Daniel could not bear to see his family go through any more struggle at his expense, even at his lowest moments, he chose his family. Family has a big impact on these athletes as they have been there from the beginning of the acquired disability but certainly one's reasons for remaining resilient can change. Sarah shared her current reasons for resilience:

My daughters are my biggest audience. I'm around them all the time. I have a 3-year-old, and an 18-month-old and motherhood has been the biggest challenge, and although they are my inspiration to stay resilient, I didn't always have that in my life, so I came up with other reasons why resilience was so important.

Proving Others and Self Wrong. Many of the athletes shared stories of how others doubted their abilities to overcome and push past many of their limitations once acquiring their disability. As mentioned above, Sarah's children are her source of inspiration to remain resilient but she didn't always have that. Here she explains her reasons for being resilient in her early years:

I think the initial reason was proving my dad wrong. He told me that I probably couldn't do those things [wrestling, softball] because I was an amputee, it made me want to do them that much more to prove him wrong. I am a very social person. I really like being around other individuals because I feel like they recharge my batteries and the social aspect and the team aspect was probably my

second reason... Somewhere in there is that wanting to be around other people sometimes I had to be able to do what they were doing. So, if they were all playing street hockey, I had to learn how to play street hockey in order for me to hang out too.

Sarah wanted to be a part of something bigger, and sport allowed her to be a part of a team while proving her dad wrong all at the same time and now she continues to be resilient for her daughters. It was important for Sarah to add that being resilient was not always about other people, “I need to prove it to me. I need to love on me for a little bit. I need to prove that I can do this for me and that I'm able, capable, believable, and just strong.” She continues to prove her ability and strength time and time again with her participation in CrossFit and her role as a mother.

Similar to Sarah's initial reasons for being resilient, James took it upon himself to prove others wrong:

A lot of people didn't think I would make it through college. They thought that I needed to be a homebody and really I needed to get the hell out of the house. You have to understand that there are different levels of capability within disabilities... so not to take anything away from others but my potential, my abilities, my capabilities meant that I had to do something more with what I was given.

James certainly proved others wrong, and he took his abilities and did “more” with them.

Inspiration. This sub-theme emerged as the athletes shared their stories about how they were inspirational to those around them, sometimes unbeknownst to them.

James has not only completed college but has participated in nearly a dozen different

sports to prove others wrong but he has made waves in the world of social media to inspire and encourage others. He explained:

It's crazy how adaptive athletes inspire people...I'm developing this brand on Instagram and on social media and really kind of blowing it up in a way where I'm becoming a public image. And I don't mind becoming a public image because a lot of adaptive athletes, they don't want [that]. They're okay with becoming beasts and there are a lot of beasts out there and what I mean... they're like ridiculous, what they have done is ridiculous but they don't broadcast it... why don't you broadcast it? Because if you broadcast it then people are going to get on it because... we inspire people

Sarah and James strived to prove others wrong and in turn became resilient role models to those around them. However, they were not the only athletes hoping to make a difference; many of the participants mentioned how over the course of their experience they had hoped to inspire others. Daniel shared:

I'd like to think someone could see some one-legged, fat, old, man doing powerlifting and say to themselves 'hey if he can do that, I can get off the couch and go do something', it doesn't have to be powerlifting but... do something.

Mark learned, in conversation with his pastor, the impact he was having by simply, "trying to do what I do [read scripture from the bible to his whole congregation]". He explained this impact by sharing,

Evidently [reading to the group] has provided people in our church a lot of inspiration that I don't let the disabilities that I've got get in the way or interfere with my church activities or the things that I do and that [the pastor has] been

talked to by a number of people at different levels of ability in the church, that now suddenly feel like they can do things now too, that that aspect of their church life isn't completely closed off.

Just as Mark was able to inspire others in his church community, Victor shared how he uses his daily activities to inspire others:

Some people in chairs hate [being the source of others' inspiration], but you know what, if I can inspire someone to not just sit on their butt or to not let something drag them down then let me just do it. For instance, some people just find it inspiring that I can drive and I can take my chair in and out of the car and if that can inspire someone to not be lazy or to not let something bother them then you know what? I'll be the inspiration because it doesn't bother me.

Being an inspiration to others allowed Victor to feel like he can give back and help others. Sport provided these athletes with the opportunities and tools they needed to demonstrate their resilience and even inspire others to do the same.

Helping Others. Throughout their resilience process many of the participants reached a point where they felt they had learned a great deal about themselves and this process that they could help others in similar situations. Many of the athletes took it upon themselves to find ways of helping others. In Daniel's case, after his amputation he tried searching for people to talk to and came up empty but wanted to make sure that anyone else going through similar situations in his community did not feel alone. He explains:

I'm actually a certified peer visitor for an amputee coalition. I'll talk to someone all day as long as I feel that they might be listening and getting help from what I'm saying...I talked to a young kid not too long ago whose best friend shot him

in the leg and he lost his leg... And you know, I'm talking to him and everything I told this kid he kept saying "yeah I know, yeah I know, yeah, I know" and after a few "yeah I know, I'm fine".... Finally, I said listen dude I'm telling you, you don't know but you will know. And here's my card and if you want to talk, you know, I'm here but you think you know but you're still lying in bed... you don't know yet. It's a sad time... but I've talked to him since then and you know, he's done pretty good.

As a peer visitor Daniel gave back to his community and aided in the recovery of others by providing insight from his own experience. He further shared that the benefit of being a peer visitor was, "the joy of hopefully helping someone else out". Like Daniel, Sarah spent time with individuals who had recently become amputees:

Helping others is also kind of part of my resilience... whenever I've come to a point where I then can turn around and help someone else through their battle, I feel like not only is that God's purpose through me but I also feel that I'm allowing what I have learned and how my hard work in being resilient can hopefully allow someone to open their mind to possibilities and so I think that exceeds me in a way where I've been a volunteer social worker at many hospitals where I worked with teens and young adults who've just become amputees.

Sarah's work as a volunteer social worker provided her with an opportunity to use her experience in a positive way. She saw this as part of her purpose and it in turn inspired her to continue choosing resilience. *Helping Others* appeared to have a significant effect on the participants' experience of resilience. Being able to understand someone and show them that there is life after their disability is a major part of recovery

for these individuals and they often make it look easy but disability is not always what it seems. These athletes faced challenges daily, and the limitations can seem overwhelming at times, but they have all found ways to highlight their abilities.

Abilities Over Limitations

The final theme that came about for these athletes experience of resilience was *Abilities Over Limitations*. This theme involved the participants change in perceptions of their abilities. This major theme included three sub-themes: *Ability*, *Adapting*, and *Goals*.

Ability. While many of the participant's stories began with the challenges and limitations experienced due to their disability, sport provided them an opportunity to realize their endless abilities. Mark shared his thoughts on the abilities of individuals with a disability stating:

Regardless of our disability or frankly at this point, I'd almost rather describe it as ability... we have the ability to do really anything that you [someone with an able body] can do, again it goes back to that discussion of I can do anything that you can do I just go about it differently.

Sarah shared similar beliefs about her own abilities:

I had so many people who downgraded me as an individual because of my quote unquote disability and reality was that I could do anything that any able bodied person could do. I just had to find a different way of doing it.

This perspective speaks to the resilience of individuals with a disability and how they are capable to of achieving the same things as an able bodied individual. Many of the participants shared how they rarely saw themselves as being disabled, for example, James explained how he takes control of his ability:

There's a specific realistic way that I know how I look when I walk and if I am walking straight ahead and I see a glass door with sliding doors where you can see someone walking... I don't look at that glass door because I don't see myself walking that way... because if you were to see how I walked you could tell that it's very rigid so I don't see myself that way. In my head, I see myself walking exactly like you do. So, when I do a slow-motion video on my Instagram I think I'm looking and walking like a badass, okay but in reality what I'm looking like is some funky, weird looking dude who has no idea what he's doing right, that's what it looks like but that's not how I perceive myself in my head. I don't give my disability the satisfaction of knowing that it's controlling me. I control it!

These athletes' experiences highlight the way in which individuals with a disability adapt to their environment as well as how their perception of disability is different from that of other people.

Adapting. In order to interact with their environment many of the participants had to learn to adapt. Victor shared in the simplest terms, "if you can't do exactly what everybody else does, you find ways around it and do what your body allows you to do." This not only speaks to adapting but to ability in the sense that one must know their abilities and adapt to situations based upon those abilities.

In many of the participants' experiences, there were ways in which their environment had already been adapted for them but as a young amputee Sarah had to be creative. She shared how she's learned to adapt over the course of her life despite not always being able to do things the way that everyone else around her was doing them:

For me to roller blade back in the day, I would get a knee pad, and I would flip it backwards... Did it look a little strange? Yeah, sure but at the same time, I was doing the same thing that anybody else was doing. Sometimes I have to remind myself that I might not look like everybody else and I might not do it how everybody else does it but I can adapt to the same form of muscle movements, exercise, or sport by coming up with a MacGyver'd way of doing it and sometimes that MacGyver'd way has already been placed for me by someone who has gone through that experience or it might be where I just got to turn turn the screws on the brain a little bit to think "alright, how can I do this physically, mentally, in order for me to accomplish the same task".

Adaptation is key for these individuals to discover their abilities and whether the adaptation already exists or they create a new way of doing things the athletes were always prepared to push their limits to be able to participate.

Goals. Several participants shared how they were able to break down the barriers of their limitations to discover new abilities by setting goals. After disability, it can be difficult for these individuals to see all of the things they are capable of but with the help of those around them they can quickly discover their new abilities. For example, Mark, who never had the opportunity to participate in sport until the age of 47, described a conversation he had with his physical therapist regarding his goals post-therapy;

I would like to do a 5k, do a 10k, maybe half marathon or marathon, if I'm at all capable of doing that. And so, while I was still in PT, I actually ran my first 5k so there again it was... you have this goal in front of you, it's been impossible for you to attain all of your life and then suddenly you have the ability to go do it. My

time wasn't great, but by virtue of the fact that I was able to do it and be successful at it, I was pretty excited about that.

Mark did not just reach a goal that day during physical therapy, but he recognized his abilities, especially those he did not have before his amputation. In addition, Sarah set goals and though she often doubted if she could reach them she challenged herself regularly. She shared a story about agreeing to row a 10K:

I had no idea if I was going to row a 10k, sometimes I feel like I want to just heave rowing 800 meters but because I did that all of my other workouts, I have confidence in myself that I can do it. When I hit that 10K mark and I made it in 51 minutes, it might not be the fastest time but I did it under an hour and I was super proud of that. I never... I never rowed a 10k in my life, so I knew that I was capable. And that aspect of being capable really adds to everything else in your life. I saw the challenge, I wanted to give up at certain points, but I kept plugging along, and I made it.

Sarah did not let her doubt get in the way of her abilities, she put herself in a situation to push her limits and reach new milestones in her CrossFit journey. Disability can easily make life seem impossible, but with the help of sport and social support from friends and family, individuals can find a new meaning in life allowing them to live a very full and inspiring life.

Discussion

The purpose of the current study was to examine the phenomenon of resilience as it is experienced by athletes with an acquired physical disability. The results of the in-depth phenomenological interviews with five athletes with an acquired disability revealed

five major themes that characterize these athletes' experience of resilience: *Choice*, *Role of Sport*, *Social Support*, *Reasons for Resilience*, and *Abilities Over Limitations*. One significant finding that emerged in this study was the perception of resilience being a choice. At the start of an athlete's experience of resilience after acquiring a disability is the *Choice* which involved choosing to be resilient or choosing to let the disability get the best of them. Furthermore, the participants would choose to move forward, turn the negative experiences into positive ones, and accept that there are several ways to achieve one goal. Next was the *Role of Sport*, where the participants highlighted the different ways in which sport had provided for them. As the athletes continued to speak about their resilience they shared their sources of *Social Support*, identifying the individuals who had helped them along the way. Next was their *Reasons for Resilience*, this theme involved the different elements that had inspired or pushed these athletes to become and remain resilient. Finally, *Abilities Over Limitations* was the final aspect of the athletes' experience of resilience and it is an important aspect as it involves the acceptance of their abilities as well as their perceptions of their abilities. These five major themes are all interconnected and must be read in conjunction with one another.

The present study revealed some new findings that are not discussed in previous research. Although resilience has been studied extensively it is often seen as a product of adversity, protective factors and positive adaptation however, the athletes in the current study believed at the time they acquired their disability they had a choice to either let their disability define them and keep them from doing things that they loved to do or to continue living life to the best of their ability. This choice suggests that resilience is an option, a choice to be made by the individual experiencing adversity rather than a product

of extenuating circumstances. By choosing to be resilient these individuals were able to move forward after disability, find new purpose, as well as set and achieve new goals

Further, they highlighted the role sport played in their resilience. Sport provided the participants with a sense wholeness and community which was also highlighted by Machida and Colleagues (2013) when examining the role that sport played in the resilience proves of individuals with spinal cord injuries. This examination revealed that sport provided social support and normality in the lives of these individuals much like the current studies athletes' experiences of feeling whole while participating because there is no need to talk about the disability and being around other people while participating gives them a new community. Additionally, the results of the current study add that sport provided a sense of purpose after disability by giving them something to look forward to, strive for and achieve.

Social support was a major theme in the current study and appears to be a major theme across all disability and sport research (Brown, 2008; Kumpfer, 1999; Yi, Smith, and Vitaliano, 2005). Rees and Hardy (2000)'s research highlighted the multidimensional nature of athletes' experience of social support. The four dimensions are emotional, esteem, informational and tangible support. Athletes in the current study like those in Rees and Hardy (2000)'s sought emotional and tangible support such as comfort and assistance from friends and family members while seeking esteem and informational support, encouragements and advice from individuals like a physical therapists or coaches. Social support is a key part of the resilience experience as these individuals often become their reasons to be resilient.

In addition to the athletes' social support, the current study highlights how

helping others and giving back impacts the athletes' effort to remain resilient. The participants shared how providing mentorship to other individuals overcoming disability and other forms of adversity allowed them to share their experience which was therapeutic. In addition to helping others, many of the athletes found being an inspiration to others satisfying. Despite recent discussion around disability and Stella Young (2014)'s term inspiration porn, which she describes as a way in which non-disabled individuals objectify disabled individuals for the purpose of inspiration or motivation, the current study's participants are accepting of being an inspiration to those without disabilities. Young's overall message was to normalize disability as the athletes in this study also seek to do by educating the public by sharing their stories both in daily interactions and via social media as well as living their life to its fullest.

The present study also highlights the clear choice that the athletes made to discover and challenge their abilities despite their initial limitations this connects with the choice that they made to be resilient. When the athletes made the choice to be resilient they knew that they would face adversity and adapted in order to achieve their goals. These athletes regularly put themselves to the test whether it is signing up for competition or trying new sports; they are constantly striving to break down their limitations and strengthen their abilities.

Overall, the current study was able to conclude many of the same key themes of previous resilience and disability research. The stages of resilience, as well as the characteristics and experience that are highlighted; social support, sport, adaptation; are keys to athlete success after disability.

Recommendations

The results of this study offer several practical implications for athletes, coaches, sport psychology professionals, and other helping professionals involved in sport. The following recommendations are based on the findings of the present study and suggest possible strategies for the various individuals that have an impact on the experience of resilience for athletes with a disability. Although it is unlikely that these recommendations will provide immediate effects, they may help improve the overall experience of resilience for athletes with a disability.

Athletes. Athletes should consider the following:

- Choose to be resilient at the onset of the acquired disability.
- Seek sport/activities that provide opportunities to test abilities.
- Seek social support both outside of sport and within sport environment.
- Help others through mentoring and education, using own experience of resilience after disability.

Coaches. For coaches working with athletes with disabilities, recommendations include:

- Provide athletes with emotional and informational social support by encouraging athletes as well as providing advice and guidance for sport.
- Promote a community/environment of acceptance and adaptability.
- Help athletes set and achieve realistic goals.

Sport Psychology Professionals. Recommendations for sport psychology professionals working with athletes with physical disabilities or adaptive sport coaches include:

- Provide social support to athletes throughout their resilience process

- Promote the athlete's abilities rather than limitations.
- Aid in the process of setting and achieving goals.

Helping Professionals. Based on the results of the current study, individuals working alongside athletes with disabilities such as physical therapists, prosthetists, counselors, and clinical psychologists should consider the following recommendations:

- Provide athletes the necessary social support within area of expertise.
- Remain positive and highlight successes throughout recovery.

Limitations and Future Directions

While findings from the present study offer additional insights into the experience of resilience in athletes with a disability, limitations should be noted. First, there was a small sample size and a total of four participants were excluded after not meeting the inclusion criteria for participation. As with all interview techniques, a self-report bias may exist as the athletes may have shared information that would depict an ideal case of resilience rather than the reality of their experience despite being encouraged to speak freely. Additionally, given that the study was qualitative, the results are representative of the current participants and not generalizable to all athletes with a disability. Despite the limitations of the current study, the results complement and extend upon previous research regarding resilience and athletes with a disability.

Based on the results of the current study, future research should examine the perception of resilience as a choice, the role of helping others as a way of continuing to be resilient, and being a source of inspiration for others. Future research should also consider taking a case study approach to gain full insight into one person's experience or a narrative reflection approach with several participants as a way to uncover the

experience of resilience that requires the participants to reflect on the past from their present., Future research should attempt to examine resilience in youth athletes with a disability as several youth sport organizations were interested in the current study but excluded. Additionally, different types of disability should be examined as the current study excluded individuals with a traumatic brain injury and its prevalence is on the rise. As the results of previous research and the current study suggest, social support plays a large role in the experience of resilience, therefore, the different types of social support should be examined to determine the role they each play in the process of resilience for athletes with a disability. Additionally, participating in a team sport versus individual sport may provide different insights into the overall experience of resilience.

Recommendations for future research include; spending time entering the culture, recruitment of more participants, and developing a semi-structured interview guide. It is crucial that resilience research continue in this population to aid in the understanding of the phenomenon as well as the education and development of rehabilitation and sport programs.

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Table 1

Athlete Demographic Information

Pseudonym	Age	Age of Acquired Disability	Gender	Ethnicity	Disability	Sport(s)
Daniel	54	49	Male	White/Non-Hispanic	Above Knee Amputation	Powerlifting
Sarah	36	8	Female	White/Non-Hispanic	Disarticulation Amputation (Left)	CrossFit
James	26	Birth (Diagnosed at 6 months)	Male	Hispanic	Cerebral Palsy	Surfing
Mark	50	47	Male	White/Non-Hispanic	Below Knee Amputation (Left)	Sled Hockey, Wheelchair Basketball, Rowing, Triathlon
Victor	30	23	Male	White/Non-Hispanic	Hemiplegia (Right Side)	(Swim), Integrative Dance

Table 2

Major and Sub-Themes of Athletes with an Acquired Physical Disability's Experiences of Resilience and Representative Meaning Units

Major Themes	Sub-Themes	Representative Meaning Unit
Choice	Moving Forward	Fight, continue
	Negative to Positive	Overcome, bounce back
	Different Road, Same Destination	Struggle, challenge
Role of Sport	Purpose	Life before and after, new life, meant to do
	Recovery	Freeing, relief
	Coping	Taken advantage of, depression, abuse
	Wholeness	Normal,
	Community	Be around others, something greater, people
Social Support	Out of Sport	Wife, daughters, parents, church
	Within Sport	Coach, mentor, physical therapist
Reasons for Resilience	Family	Daughters, parents, children
	Proving Others and Self Wrong	Downgraded, doubt, homebody

	Inspiration	Facebook, Instagram, inspire
	Helping Others	God's purpose, giving back, therapeutic
Abilities Over Limitations	Ability	Capable, able, strong, independence
	Adapting	Different, strange, new way
	Goals	First time, possible

APPENDIX A

Barry University Informed Consent

Your participation in a research project is requested. The title of the study is “A Phenomenological Study: Experiences of Resilience in Athletes with a Disability”. The research is being conducted by Briana Salter, a student in the Sport and Exercise Sciences department at Barry University, and is seeking information that will be useful in the field of Sport, Exercise and Performance Psychology. The aims of the research are to gain a better understanding of the phenomenon of resilience as it relates to athletes with a disability. In accordance with these aims, the following procedures will be used: demographics form and phenomenological interview. We anticipate the number of participants to be 50.

If you decide to participate in this research, you will be asked to do the following: Complete a demographic questionnaire (approximately 20 minutes) and participate in a phenomenological interview (approximately 90 minutes). The total time of participation is approximately 110 minutes.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects.

There are no known risks for participation in this study. Although there are no direct benefits to you, your participation in this study may help our understanding of resilience, as it is experienced by athletes with disabilities.

As a research participant, information you provide will be held in confidence to the extent permitted by law. As this project involves the use of Skype: to prevent others from eavesdropping on communications and to prevent impersonation or loss of personal information, Skype issues everyone a "digital certificate" which is an electronic credential that can be used to establish the identity of a Skype user, wherever that user may be located. Further, Skype uses well-known standards-based encryption algorithms to protect Skype users' communications from falling into the hands of hackers and criminals. In so doing, Skype helps ensure user's privacy as well as the integrity of the data being sent from one user to another. If you have further concerns regarding Skype privacy, please consult the Skype privacy policy. To ensure confidentiality, the researcher will establish a separate Skype account for this research project only. After each communication, the researcher will delete the conversation history. Once this is done, the conversation cannot be recovered. The researcher will record interview using a digital voice recorder for the purpose of verbatim transcription.

As a research participant, information you provide will be held in confidence to the extent permitted by law. Any published results of the research will refer to group averages only and no names will be used in the study. Data will be kept in a locked file in the researcher's office. The audio files from each interview as well as the transcribed interviews will be stored on a password-protected computer only accessible by the primary researcher. Your signed consent form will be kept separate from the data. All data will be destroyed after 5 years from the completion of the research.

If you have any questions or concerns regarding the study or your participation in the

study, you may contact me, Briana Salter, at (440) 522-9695, my supervisor, Dr. Duncan Simpson, at (865) 323-1086 or DSimpson@barry.edu, or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or BCook@barry.edu. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent

I acknowledge that I have been informed of the nature and purposes of this experiment by Briana Salter and that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this experiment.

Signature of Participant

Date

Researcher

Date

Witness

Date

(Witness signature is required only if research involves pregnant women, children, other vulnerable populations, or if more than minimal risk is present.)

APPENDIX B**BARRY UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL****Barry University**

Division of Academic Affairs

Institutional Review Board
11300 NE 2nd Avenue, Miami, FL 33161
P: 305.899.3020 or 1.800.756.6000, ext. 3020
F: 305.899.3026
www.barry.edu

Research with Human Subjects
Protocol Review

Date: February 23, 2016

Protocol Number: 160122

Title: A Phenomenological Study: Experiences of Resilience in Athletes with a Disability

Approval Date: February 23, 2016

Researcher Name: Ms. Briana Salter
Address: 800 South Park Rd. Apt. 2-32
Hollywood, FL 30021

Faculty Sponsor: Dr. Duncan Simpson

Dear Ms. Salter:

On behalf of the Barry University Institutional Review Board (IRB), I have verified that the specific changes requested by the convened IRB on January 20, 2016, have been made.

It is the IRB's judgment that the rights and welfare of the individuals who may be asked to participate in this study will be respected; that the proposed research, including the process of obtaining informed consent, will be conducted in a manner consistent with requirements and that the potential benefits to participants and to others warrant the risks participants may choose to incur. You may therefore proceed with data collection.

As principal investigator of this protocol, it is your responsibility to make sure that this study is conducted as approved by the IRB. Any modifications to the protocol or consent form, initiated by you or by the sponsor, will require prior approval, which you may request by completing a protocol modification form.

It is a condition of this approval that you report promptly to the IRB any serious, unanticipated adverse events experienced by participants in the course of this research, whether or not they are directly related to the study protocol. These adverse events include, but may not be limited to, any experience that is fatal or immediately life-

threatening, is permanently disabling, requires (or prolongs) inpatient hospitalization, or is a congenital anomaly cancer or overdose.

The approval granted expires on February 1, 2017. Should you wish to maintain this protocol in an active status beyond that date, you will need to provide the IRB with an IRB Application for Continuing Review (Progress Report) summarizing study results to date. The IRB will request a progress report from you approximately three months before the anniversary date of your current approval.

If you have questions about these procedures, or need any additional assistance from the IRB, please call the IRB point of contact, Mrs. Barbara Cook at (305)899-3020 or send an e-mail to fperez@barry.edu. Finally, please review your professional liability insurance to make sure your coverage includes the activities in this study.

Sincerely,



Fernando Perez, PhD
Vice Chair, Institutional Review Board
Barry University
Department of Psychology
11300 NE 2nd Avenue
Miami Shores, FL 33161

Cc: Dr. Duncan Simpson

Note: The investigator will be solely responsible and strictly accountable for any deviation from or failure to follow the research protocol as approved and will hold Barry University harmless from all claims against it arising from said deviation or failure.