

Understanding Motivations for Participation in Adaptive Sports

by

Nickolas Pryor

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Graduate Supervisory Committee:

Dale Larsen, Chair
Eric Legg
Gus LaZear

ARIZONA STATE UNIVERSITY

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ABSTRACT

Participation in competitive sports by athletes who are physically disabled has increased dramatically in recent decades. Given this growth in participation, sports for disabled athletes represents a worthy area of exploration. The purpose of this research is to further understand what motivates people and athletes with physical impairments to partake in adaptive recreation and sport. This study will explore motivations for participation in adaptive sport within theoretical lenses of Achievement Goal Theory (AGT), Self-Determination Theory (SDT) and the Five-Factor Model by Omar-Fauzee and colleagues (2010). In addition, this study examined the relationship between motives with sense of community and life satisfaction. Seventy-one participants completed the online survey regarding the questions of interest. In order to determine if different motivations or achievement goals predicted sense of community, life satisfaction and psychological well-being, five regression models were tested. Descriptive statistics were utilized to assess the strongest motivators. Within the five-factor model, interest represented the strongest motivator followed by competency. Within the SDT framework, relatedness emerged as the strongest motivation factor. When AGT was tested, individuals with disabilities were found to be more task-oriented than ego-oriented. This indicates that people that participate in adaptive athletics value social connections, sense of freedom and developing their knowledge for sport-specific activity.

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CHAPTER 1

INTRODUCTION/RATIONALE

Participation in competitive sports by athletes who are physically disabled has increased dramatically in recent decades. According to the International Paralympic Committee (2017), athlete participation has increased 11-fold, from less than 400 individuals in 1964 to over 4,300 in the 2016 Rio Summer games. Additional research also supports the substantial growth of sports programs (i.e., wheelchair rugby, goalball, wheelchair basketball) around the world for the individual who is physically disabled (Disabled World, 2018). Given this growth in participation, sports for disabled athletes represent a worthy area of exploration.

Active living is an important goal for individuals with disabilities and participating in sports represents one way to remain active. Research supports the need, benefits, and importance of active living for individuals with disabilities (Wilhite & Shank, 2009). Physical gains acquired through active involvement in sports are well-documented (Blinde & Taub 1999, Winnick & Poretta, 2016). The benefits of participating in adaptive sport also goes beyond just the physical aspect. Living an active lifestyle develops physical skills that can help people with disabilities be more independent in school, work, leisure, and many other aspects of life (Anderson & Heyne, 2010; Devine & Koch, 2003; Sable, Craig, & Lee, 2000).

Despite the noted benefits of active living, people with disabilities are not engaging in the recommended amount of physical activity. The U.S. Centers for Disease Control and Prevention's recommended amount of physical activity for the general population of adults is 150 minutes of moderate to intense aerobic activity weekly (U.S.

Department of Health and Human Services, Centers for Disease Control and Prevention, 2008). However, data from Healthy People 2020 reports that 57% of adults with disabilities reported no physical activity compared with 35% of people without disabilities (HealthyPeople.gov, 2016). Approximately 12% of adults aged 18-64 years have a disability, and nearly one half are inactive, creating a disparity in the participation rates in leisure time physical activity (LTPA) for persons with disabilities (Carroll, et. al., 2014). Thus, a need to increase physical activity among individuals with disabilities is apparent.

Given this gap, it is essential to explore why individuals are not participating. Many individuals may not participate because they lack self-confidence, are unaware of resources, or are scared of what society may think of them. People with disabilities are often defined solely by their disability and belittled, sidelined and pitied. In many cases, they are viewed as incompetent and limited in their ability to be independent and successful (Martin, 2013). People also may not participate because they do not have the means financially. For example, sports equipment such as a wheelchair basketball chair can cost upwards of \$5,000. Lastly, people with disabilities may not participate because they personally do not have the time, the transportation, or do not have support from their family and/or friends.

In addition to insufficient physical activity, many individuals with disabilities have inequities in several key areas which has resulted in poor health, limited community participation, and reduced quality of life (National Council on Disability, 2004). According to the National Council on Disability (NCD), there are eight key areas of life where persons with disabilities lag or are somewhat far behind peers without disabilities.

These areas are education, employment, income, health care, transportation, entertainment and socializing, political participation and life satisfaction. These eight areas are interconnected, thus when an individual lags in one area, it risks creating a domino effect and an individual then lags in multiple areas. This also impacts means for travel, entertainment and socializing, and the political process (Zabriskie, Lundberg and Groff, 2005). With this in mind, the result is that half as many of people with physical disabilities (33%) say that they are “very satisfied with their life in general” as compared to 67% of individuals without disabilities (NOD, 2004).

Diener (2018) suggests that most people are happy as long as they find rewarding activities in which to be involved. In addition to the physical benefit, sport participation may be another activity which can lead to happiness. To increase participation, it is necessary to understand why individuals participate. According to Weinberg and Gould (2007), the dominant motives for involvement in sports are physical fitness, fun and friendship. The athletes who are involved directly or indirectly in sports could achieve inner satisfaction and fun while competing amongst each other (Omar-Fauzee, Yusof, and Zizzi, 2009). The existence of intrinsic and extrinsic motivation is pertinent in sport because it could be a cause to improve on one’s performance (Jarvis, 2006). In this context, sport acts as a mold of one’s health, emotion, physical and attitude.

While there has been a great deal of research focused on overall motivations stemming from Deci and Ryan’s work, there is limited research on the specific population of athletes with physical disabilities. Therefore, the purpose of this research is to further understand what motivates people and athletes with physical impairments or disabilities to participate in recreation and sport. This study will explore and try to find

what the biggest motivator for this demographic is by looking at the motivation theories of Maslow, Achievement Goal Theory and Self-Determination Theory. In order to better understand this niche population, it is important to provide an overview of the history of adaptive sports and its increasing interest in recent years.

CHAPTER 2

LITERATURE REVIEW

Disabled Sports History and Paralympics

Due to the rise of U.S. Paralympics and disabled sport, many facilities and programs for disabled athletes are emerging throughout the country (e.g., Ability360 in Phoenix, Turnstone in Fort Wayne, IN and Lakeshore in Birmingham, AL). Before the Paralympics, disabled sport participation was only practiced in the field of clinical rehabilitation (McCann, 1996). In 1943, the British government asked Ludwig Guttmann to start the National Spinal Injuries Centre at Stoke Mandeville Hospital in Buckinghamshire. The facility opened in 1944 and Guttmann was chosen as its director and introduced sport participation. Guttmann assumed that sport was a major technique of therapy for injured military personnel helping them build strength and self-respect. He then organized the first Stoke Mandeville Games for disabled persons on July 28th, 1948, the same day they started the London 1948 Summer Olympics (Gold & Gold, 2007).

By 1952, more than 130 international competitors had entered the Stoke Mandeville Games (Gold & Gold, 2007). As the annual event continued to grow, the attitude and efforts by all those participating started to sway the organizers of the Olympic Games and members of the worldwide community. Guttmann's vision of global games for individuals with spinal cord injuries was recognized and the first Paralympic games were held following the Rome Olympics in 1960. All 400 participants were spinal injured. Now the Paralympics games include athletes with amputations, visual impairments, those in wheelchairs, and cerebral palsy.

Despite this initial growth, disabled athletics still lacked appropriate administrative structure. Activities that have been categorized as sport must be organized and managed. Hence, laws or rules and regulations needed to be universally aligned. In addition, many athletes with disabilities tend to adopt a new sport for competition and apply themselves to learn new techniques, skills and approaches to pursue high levels of competition (Asken, 1991). The International Paralympic Committee is doing that by giving a platform to athletes with disabilities to compete with others who have the same physical limitations. This difficulty has been managed to an extent through the athlete classification system, designed to create fair competition by grouping athletes together with similar range of performance potential (McCann, 1984).

Sports participation by the disabled has served as a vivid illustration of success and achievement to the public at large, which are very aware of what athletic accomplishment means in physical and psychological terms (McCann, 1984). This system has given disabled athletes an opportunity to compete with people all over the world. It is allowing athletes to achieve more personally, as well as socially, while being beside other athletes with similar physical characteristics.

Benefits

Researchers have demonstrated that participating in sports as a person with a disability may lead to physiological, cognitive and social benefits. Physically, research indicates people with disabilities have fewer days of pain, depression, anxiety, sleeplessness, and can increase their life expectancy (Krause & Kjorsvig, 1992). More recently, research has considered the impact of sport on psychological well-being.

Generally, research suggests that individuals with disabilities that are physically active are more adjusted and more satisfied with life (Krause & Kjorsvig, 1992). In addition, sport participation for athletes with disabilities links with an increase in self-confidence, social skills, solving problems and reduction in stress and anxiety (Collingwood and Willet, 1971).

Sport participation may be especially beneficial in increasing self-esteem, as feeling confident is a key factor that leads to increased motivation. For instance, existing research indicates that individuals with disabilities often view sport as a means of asserting competence as well as to reify a focus on ability rather than disability (Sherill, 1986; D'Eloia & Price, 2018). Similarly, additional research points towards demonstrating skill or competence and bringing oneself in contact with others as primary reasons to participate in sport (Page, O'Connor, & Peterson, 2001). Further, participation in sport may be an important source of self-esteem, while also providing opportunities to gain feelings of self-efficiency (Taub, Blinde, and Greer, 1999) and affirms one's identity (Groff and Kleiber, 2001.).

Socially, competing in sports may be an effective way to interact with others and increase feelings of social competence. According to Ryan, Beaver, Jackson, McCann and Messner (1976), sport and recreation provide persons who are disabled with the impetus to attain or to reestablish self-esteem. In a study by Sloedefalke, Balke, Ryan, and Gale (1969), university students who were disabled and in a physical activity program not only improved their physiological functioning, but also significantly improved their self-esteem. Also, Valliant, Bezzubyk, Daley, and Asu (1985) found that

disabled athletic groups had higher self-esteem, were better educated, more satisfied with life, and happier than the non-athletes with a disability.

In addition, Hamel (1992) stated most researchers agree that sport can serve as a means of social mobility for individuals with disabilities. Competitive and recreational sports are an effective means of getting persons who are disabled out and into the community (Grainger, 1978; Guttman, 1976; Monnazzi, 1982). By taking part in sporting events, individuals with physical limitations may acquire a sense of group belongingness (Ankenbrand, 1972). Individuals also recognize that the success they enjoy while participating can help change previous negative stereotypes. The social nature of many physical activities and team sports leads to increased social integration, social bonding, and friendships (Martin, 2013). For example, children with cerebral palsy (CP) and Spina Bifida who participated in an after-school program remarked on the importance of being able to connect with other youth who had disabilities (Martin, 2013). Connecting with other youth with disabilities contributed to a feeling of freedom in allowing them to be themselves (Groff and Kleiber, 2001).

Sense of Community

A noteworthy benefit that individuals may receive from participation is sense of community (SOC). In 1986, McMillan and Chavis presented a theory of psychological sense of community that represents one of the first attempts to provide a theoretical foundation for understanding SOC. They defined sense of community as "...a feeling that members have of belonging, a feeling, that members matter to one another and to the group, and a shared faith that member's needs will be met through their commitment to

be together (p. 9)". This model presented four parts of SOC – membership, influence, (reinforcement) integration and fulfillment of needs, and shared emotional connection. Membership refers to the feeling of belonging and emotional safety created by being a member of an integrated whole that has group boundaries and emotional security. Influence refers to the bidirectional need for the group to exert influence on its members to feel they have some control and influence within the community, as well as the power of the community to exert influence over its members. Reinforcement, or integration and fulfillment of needs refers to the common needs, goals, beliefs, and values that meet both the individual and collective needs. Shared emotional connection refers to the bonds that develop over time through positive interaction, shared experiences, and collective history of the group (Goodwin, Johnston, Gustafson, & Elliott 2009). The importance of sense of community is based on two assumptions: (1) that participatory processes for solutions may be mobilized and (2) that a sense of community contributes to quality of life, encourages individual well-being, and facilitates social relations (Prezza & Costantini, 1998).

Sarason (1974) stated that there was nothing as destructive to the psychological sense of community as segregating people with disabilities, as it promoted feelings of rejection and loss of belonging. The struggle to maintain and identify within the majority culture is in contrast to the common exchange and support that occurs within a minority community when the members can influence the group through recognized mutual respect. This can lead to the construction of a positive identity, defending against isolation, and reversing the stigma (Fisher & Sonn, 1999; Taub, Blinde, & Greer, 1999; Pretty, Andrewes, & Collett, 1994; Ville, Crost, Ravaud & Group, 2003).

Previous research suggests that SOC is relevant to participation in sports for athletes with disabilities. In a study of quadriplegic wheelchair rugby players by Goodwin, Gustafon, and Thurmeier (2009) found the dimensions of a psychological sense of community were evident in the experiences of the athletes within the context of wheelchair rugby. The athletes found membership with a community of people with common interests, a shared understanding of their disability, camaraderie on and off the court, and a bond that made it okay to be a quad for themselves and their immediate families. The study also found that participation with this group decreased feelings of isolation, and affective investment in their sport were evident through a sharing of ties with others (Godwin, et. al., 2009).

Given the numerous potential benefits of participating in sport for individuals with disabilities, it is important to examine motivational approaches. Several theories offer guidance related to motivation. The next section will briefly discuss these.

Motivation

Drastic growth over the last half-century in participation in disabled sports presents a need to better understand athlete motives for participation. Motivation is more than just why we do what we do. The term is so broadly used that a lot of researchers have argued the term is worn-out and indefinite. Pinder (1984) claimed that there are almost as many definitions as there are theorists. However, in the contemporary motivation research, because the term is so unclear, the solution has been to abandon the term and use descriptions of cognitive processes such as self-regulation or other self-systems that affect motivation, motivational processes such as striving for personal goals

or goal setting, and emotional processes (Roberts & Treasure 2018). Yet the important assumption agreed upon by most contemporary theorists is that motivation is not an entity but a process (e.g., Maehr & Braskamp, 1986). Motivation is typically defined as the process that influences the initiation, direction, magnitude, perseverance, continuation, and quality of goal-directed behavior (Maehr & Zusho, 2009).

Several motivational theories may be useful to explain the benefits of participation in sport for disabled athletes. Below, I outline three specific theoretical approaches that may enhance our understanding of motivations of athletes who participate in disabled sports. One approach suggests that there are five factors that influence participation of individuals with disability in sports: 1) fun, 2) support, 3) fitness, 4) reward, and 5) reduction of stress. (Omar-Fauzee, Mohd-Ali, Geok & Ibrahim, 2010). Second, I discuss achievement goal theory, and finally look at self-determination theory.

Maslow's Hierarchy of Needs

Before examining specific motivational theories that are used in this study, it is worthwhile to briefly outline Maslow's foundational theory of hierarchy of needs. This is one of the earliest attempts at understanding motivation. Maslow (1943) stated that people are motivated to achieve certain needs. When one need is fulfilled, a person seeks to fulfill the next one, and so on. The original and most common version of Maslow's hierarchy of needs (1943, 1954) includes five motivational needs, as shown in the pyramid form.

The five-stage model can be divided into basic (or deficiency) needs (e.g. physiological, safety, love, and esteem) and growth needs (self-actualization).

The deficiency or basic needs are said to motivate people when they are unmet. Also, the need to fulfill such needs will become stronger the longer they are denied. According to Maslow, one must satisfy lower level basic needs before progressing on to meet higher level growth needs. Once these needs have been reasonably satisfied, one may be able to reach the highest-level called self-actualization.

It is important to note that Maslow's five stage model has been expanded to include cognitive and aesthetic needs and later transcendence needs in 1970. These are growth needs, or higher order needs. Maslow referred to them as the being needs, because they are about being the most that you can be.

Achievement Goal Theory AGT

One contemporary social cognitive approach to the study of motivation is Achievement Goal Theory (AGT) (Ames, 1984, Dweck and Legget, 1988, Elliot and Dweck, 1988, Nicholls, 1984). This theory suggests that there are two goal perspectives operating in achievement-related situations that are associated with how people define their success and judge their competence. One goal perspective, task involvement, means success is defined with respect to learning, mastering the task, or personal improvement. The second goal perspective, ego-involvement, means that an individual's response to an objective situation stems from beating others and perceived competence is assumed to be the norm. In this case, a person feels satisfaction when success is achieved via the demonstration of superior ability (White and Duda, 1993). AGT assumes that personal

goals serve as an organizing principle influencing the meaning of an activity and individual's responses to achievement experiences (Nicholls, 1989). People become motivated, or demotivated, through assessments of their competencies within the achievement context and meaning of the context to themselves. The individual develops personal goals within any achievement context, and these personal goals give meaning to achievement striving and energize following action (Roberts & Treasure, 2018).

AGT suggests three major explanatory constructs: states of goal achievement, goal involvement orientation and motivational climate. Achievement goal orientation is what makes an individual task-involved or ego-involved. When we refer to the individual differences between people to be task or ego involved, task orientation and ego orientation are used. It is assumed that individuals are predisposed to act in an ego-involved or task-involved manner. Goal orientations are mental plans that are relatively enduring, which helps organize and interpret information. Thus, being task-oriented or ego-oriented refers to the inclination of the individual to be task or ego involved. One key quality of achievement goal orientations is that it is orthogonal, meaning task and ego orientations are independent, which in turn exemplifies that an individual can be high or low in each or both orientations at the same time (Roberts & Treasure, 2018).

Self-Determination Theory (SDT)

Self-determination theory is an increasingly popular theory of human motivation in exercise and sport psychology. Its popularity stems primarily from the fact that it explains a wide variety of phenomena based on very few principles related to the three basic psychological needs of competence, autonomy, and relatedness (Chatzisarantis &

Hagger, 2009). Competence is the need to be effective in dealing with your environment. Autonomy is the need to control the course of their lives. Lastly, relatedness is the need to have close, affectionate relationships with others.

According to SDT (Deci and Ryan, 2000), individuals participate in various life domains, such as sports, to satisfy basic psychological needs. As people satisfy these needs through sports or leisure, they invest personal commitment to the activity, which in turn contributes to self-determination.

SDT is an approach to human motivation and personality that uses traditional empirical methods while employing an organismic metatheory that highlights the importance of human's evolved inner resources for personality development and behavioral self-regulation (Ryan, Kuhl, & Deci, 1997). With respect to the organismic argument, SDT considers humans to be growth-oriented organisms who actively seek optimal tasks and new experiences to master and integrate (Deci & Ryan, 2002). Within SDT, the perfect example of human growth tendencies is called intrinsic motivation, a construct that is held to be inseparably intertwined with the notion of active and spontaneous activity (Deci & Ryan, 1991). People who are intrinsically motivated are fully self-regulated, engage in activities out of interest, experience sense of choice, and function without the help of external rewards (Deci & Ryan, 1985, 2000.)

This brings us to the first mini theory of SDT, cognitive evaluation theory (CET) (Deci, Cascio & Krussell, 1975; Deci & Ryan, 1985). This theory was developed to identify empirical findings regarding how various external events enhance or diminish intrinsic motivation. The theory considers factors such as rewards, feedback, evaluations,

and ways of communicating as they affect the actor's interest, enjoyment, and free persistence in activities (Standage & Ryan, 2012).

This leads to the discussion that in sport and activity, an individual can be intrinsically or extrinsically motivated. Unlike intrinsic motivation, where behaviors are engaged for inherent satisfaction, extrinsic motivation refers to behaviors that are characterized by an individual's goal of action being governed by some separable outcome (Standage & Ryan, 2012). This means the individual is looking for approval, a reward, or avoiding punishment.

CHAPTER 3

METHODS

This is a quantitative study using a cross-sectional design to address the primary research questions. It used an online questionnaire asking demographics, what sports individuals participate in and how much time they spend participating. In addition to those questions, the study used five scales that assess reasons for participation, achievement goal theory, self-determination theory, sense of community and life satisfaction.

The target audience for this study was individuals with physical impairments 18 years of age and older who participate in sport and recreation. The survey link was sent directly from the lead researcher to personal contacts involved in adaptive sports for disbursement. These organizations include Challenged Athletes Foundation, Ability360, National Wheelchair Basketball Association, Slanted Light, I AM ADAPTIVE, and Adaptive Sports USA.

Seventy-one completed surveys were collected over 6 weeks of collection.

Reasons for Participation

First, the Motives for Physical Activities Measure – Revised (MPAM-R) was used from Ryan, Frederick, Lipes, Rubio & Sheldon, (1997). The MPAM-R uses 30 items on a 7-point Likert-type scale to measure the strength of five motives for participating in physical activities. The five motives are: (1) Fitness, (2) Appearance, (3) Competence, (4) Social, (5) Interest/Enjoyment. Example of statements include “Because I want to maintain my physical strength to live a healthy life”, “Because I want to look or

maintain weight, so I look better”, and “Because I enjoy spending time with others doing this activity”. Responses ranged from 1 (not at all true to me) to 7 (very true for me). Based on the 30 items, a mean summary score was created for each motive. For Interest/Enjoyment the results were ($M = 6.37$; $SD = .56$), Competence ($M = 6.15$; $SD = .76$), Appearance ($M = 4.79$; $SD = 1.22$), Fitness ($M = 6.11$; $SD = .92$), and Social ($M = 4.96$; $SD = 1.11$). The summary scores were found to be normally distributed for Interest/Enjoyment (skewness = $-.51$; kurtosis = $-.86$) and Appearance (skewness = $-.52$; kurtosis = $.75$). The summary scores were found to be problematic for Competence (skewness = $-.95$; kurtosis = $.88$), Fitness (skewness = -1.5 ; kurtosis = 3.0) and Social (skewness = $-.99$; kurtosis = 1.9). This measure was found to have high reliability for all motives. Interest/Enjoyment ($\alpha = .82$), Competence ($\alpha = .87$), Appearance ($\alpha = .89$), Fitness ($\alpha = .90$), and Social ($\alpha = .83$).

Achievement Goal Theory

Second, the Perception of Success Questionnaire (PSQ) was utilized by Treasure & Roberts (1994). The PSQ uses 12 items on a 5-point Likert-type scale to measure an individual’s achievement goal orientation and determine whether they are task or ego oriented. Examples of statements include. “I succeed at something I could not do before”, “I accomplish something others cannot do”, and “I perform to the best of my ability”. Responses ranged from 1 (Strongly Agree), C (Neutral), to D (Strongly Disagree). Based on the 12 items a summary, a mean summary score was created for both, Ego ($M = 3.08$; $SD = .96$) and Task ($M = 4.64$; $SD = .43$). The summary score was found to be normally distributed for Ego (skewness = $-.22$; kurtosis = $-.69$) and

problematic for Task (skewness = -1.53; kurtosis = 3.12). Both measures were found have high reliability, Ego ($a = .90$) and Task ($a = .77$).

Self Determination Theory

The Basic Psychological Needs Satisfaction (BPNS) Scale (Deci & Ryan, 2000; Gagne, 2003) uses 21 items on a 7-point Likert-type scale to assess the degree to which people feel satisfaction of three needs; Autonomy, Competence and Relatedness. Examples of questions are, “I feel like I am free to decide for myself how to live my life”, “In my life I do not get much of a chance to show how capable I am”, and “I consider the people I regularly interact with to be my friends.” Responses ranged from 1 (not at all true) to 7 (very true). Based on the 21 Items, a mean summary was created from each category; Autonomy ($M = 5.23$; $SD = .79$), Competence ($M = 5.23$; $SD = .86$), and Relatedness ($M = 4.79$, $SD = .78$). The summary score was found to be normally distributed for all; Autonomy (skewness = -.66; kurtosis = 1.61), Competence (skewness = -.14; kurtosis = -.65) and Relatedness (skewness = -.35; kurtosis = -.35). Autonomy ($a = .63$), Competence ($a = .68$) were found to have acceptable reliability, where Relatedness ($a = .80$) had a high reliability.

Sense of Community

Brief Sense of Community Scale (Peterson, Speer & McMillan, 2008) is an 8 item 5-point Likert-type scale that was developed to represent the sense of community dimensions of needs fulfillment, group membership, influence, and shared emotional connection. Examples of statements include, “People in this sport community are good at

influencing others”, “Participating in sports help me fulfill my needs”, and “I have a say in what goes on in this sport community”. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). Based on the 8 items, a mean summary was created ($M = 4.03$; $SD = .76$). The summary score was found to be problematically distributed (skewness = $-.96$; kurtosis = $.90$) and this measure was found to have high reliability ($\alpha = .89$).

Life Satisfaction

Satisfaction of Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) is a 5 item 7-point Likert-type scale designed to measure global cognitive judgments of one’s life satisfaction. Examples of questions include, “If I could live my life over, I would change almost nothing”, “So far I have gotten the important things I want in life”, and “The conditions in my life are excellent. Responses ranged from 1 (strongly disagree) to 7 (strongly agree). Based on the 5 items, a mean summary was created ($M = 4.79$; $SD = 1.32$). The summary score was found to be normally distributed (skewness = $-.87$; kurtosis = $-.02$) and this measure was found to have high reliability ($\alpha = .86$).

CHAPTER 4

RESULTS

Descriptive Statistics

Demographics

Of the 71 participants, 53.5% were male and 39.4% were female. 7% did not answer the question.

Table 1

Gender

Gender	Frequency	Percent
Male	38	53.5%
Female	28	39.4%

The age range for this population is 18-64 years old, and the majority was 18-29 years old (39.4%), followed close behind by 30-49-year olds (36.6%).

Table 2

Age

Age	Frequency	Percent
18-29 years old	28	39.4%
30-49 years old	26	36.6%
49-64 years old	12	16.9%
Did Not Answer	5	7%

Ethnicity

The majority of participants identified as being white (81.8%). The “other” category had written in answers such as Mediterranean, Indiana and Latino. A second question was asked if Hispanic, Latino or Spanish origin? Four participants replied “yes”.

Table 3

Ethnicity	Frequency	Percent
Asian	2	2.8%
Black or African American	4	5.6%
Native Hawaiian or other Pacific Islander	2	2.8%
White	54	81.8%
Other	4	5.6%
Did Not Answer	5	7.0%
Hispanic, Latino or Spanish Origin?	Frequency	Percent
Yes	4	5.6%
No	62	87.3%
Did Not Answer	5	7.0%

Physical Disability

Participants with spinal cord injuries were the highest represented disability group with 39.4%. The “other” category had 25.4%. This category included write in answers such as Ehlers-Danlos Syndrome, Erb’s Palsy and Transverse Myelitis. Amputees made up 19.7% of participants.

Table 4

Disability	Frequency	Percent
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Amputee	14	19.7%
Visual Impairment	3	4.2%
Spinal Cord Injury	28	39.4%
Cerebral Palsy	1	1.4%
Spina Bifida	2	2.8%
Muscular Dystrophy	3	4.2%
TBI	1	1.4%
MS	0	0.0%
Other	18	25.4%
Did Not Answer	1	1.4%

Employment Status

Only 22.5% of the participants were employed full time, and 21.1% were part time. 18.3% were students. Seven percent reported that they are unable to work.

Table 5

Employment	Frequency	Percent
Full Time	16	22.5%
Part Time	15	21.1%
Unemployed and looking	7	9.9%
Unemployed and not looking	1	1.4%

Student	13	18.3%
Retired	3	4.2%
Homemaker	1	1.4%
Self-employed	5	7.0%
Unable to work	5	7.0%
Did Not Answer	5	7.0%

Education

Approximately one-quarter of people said they have had some sort of college education and over one-third indicated being a college graduate. Only 1 person reported only having some high school.

Table 6

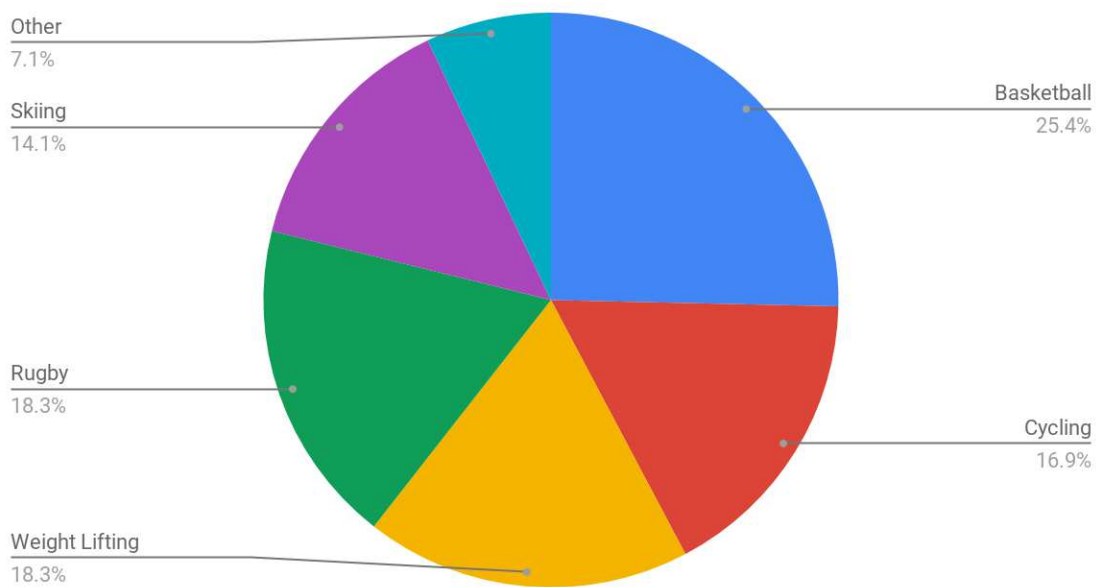
Education	Frequency	Percent
some high school	1	1.4%
high school graduate	4	5.6%
some college	18	25.4%
trade/tech/vocational training	5	7.0%
college graduate	24	33.8%
some post grad work	3	4.2%
post graduate degree	11	15.5%
Did Not Answer	5	7%

Sports and Activities Participation

The survey asked two questions about what activities and sports the population participated in. The population answered with over 40 different sports and activities. The top sports were Basketball (25.4%), Rugby (18.3%), Weightlifting (18.3%), Cycling (16.9%), and Skiing (14.1%). The “other” categories included sports and activities such as kayaking, snowboarding, surfing, archery, badminton, hiking, yoga, rock climbing and many more.

Figure 1

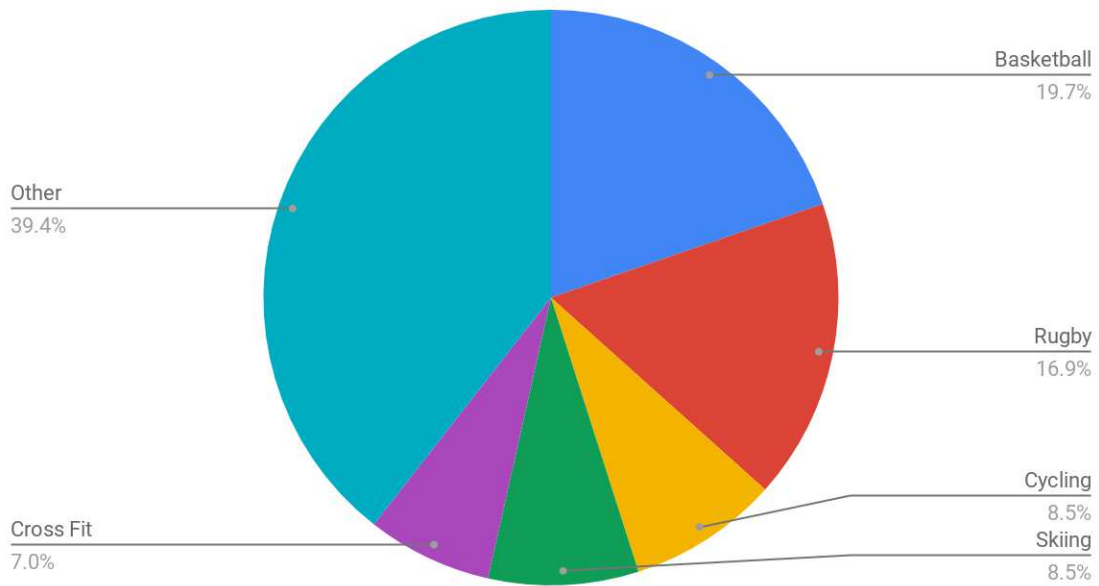
Overall Top Sports Participated In



The top five primary sports played were Basketball, Rugby, Cycling, Skiing, and CrossFit. The “other” category included activities such as tennis, soccer, track and field, shooting and Zumba.

Figure 2

Top Primary Sport Participation



Motivation Factors

Of the five different categories the highest factor in motivation for this sample was Interest/Enjoyment ($M = 6.37$, $SD = .56$), meaning that they simply compete or participate because they enjoy the activity. Competence ($M = 6.15$, $SD = .76$) was the second highest motivator. Fitness ($M = 6.11$, $SD = .92$) was close behind. The lowest two were Social ($M = 4.96$, $SD = 1.11$) and Appearance ($M = 4.79$, $SD = 1.22$).

Figure 3

Motivation Factors

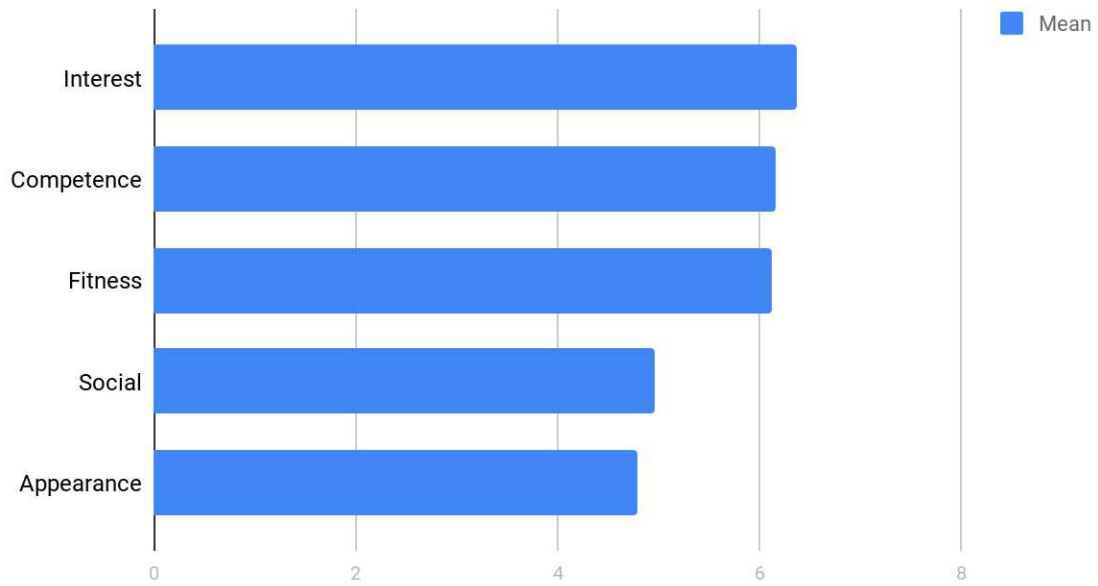
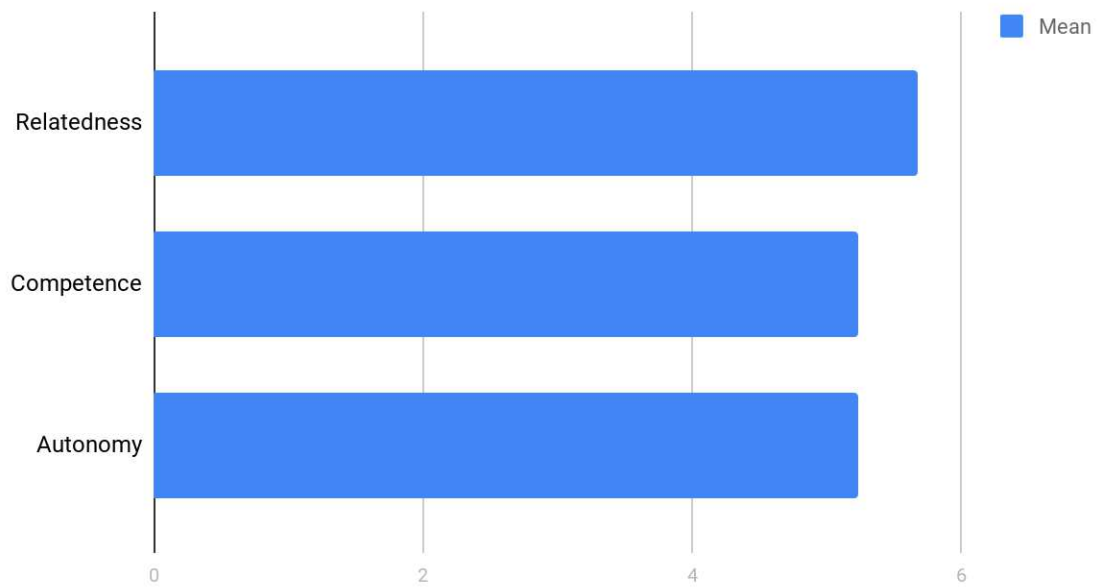


Figure 4

Basic Psychological Needs



All three variables had means between 5-6, which is somewhat true to true with respect to their feelings of relatedness, competence and autonomy. Relatedness ($M = 5.67$, $SD = .78$) was the highest with Competence ($M = 5.23$, $SD = .86$) and Autonomy ($M = 5.23$, $SD = .79$) closely behind.

Data Analysis

In order to determine if different motivations or achievement goals predicted sense of community, life satisfaction and psychological well-being, five regression models were tested. In model one, the five motivations (interest, appearance, fitness, competence, and social) and the two achievement goals (task, and ego) were entered as the predictor variables, and sense of community was entered as the outcome variable. The overall model was significant ($p=.018$) and explained 24% of the total variance. However, further probing indicated that none of the predictor variables remained significant.

In the second model, the five motivations (interest, appearance, fitness, competence, and social) and the two achievement goals (task, and ego) were entered as the predictor variables, and self-determination was entered as the outcome variable. The overall model was significant ($p=.046$) and explained 11% of the total variance. However, further probing indicated that none of the predictor variables remained significant.

In model three, the five motivations (interest, appearance, fitness, competence, and social) and the two achievement goals (task, and ego) were entered as the predictor variables, and relatedness was entered as the outcome variable. The overall model was

significant ($p=.021$) and explained 22% of the total variance. However, further probing indicated that none of the predictor variables remained significant.

In model four, the five motivations (interest, appearance, fitness, competence, and social) and the two achievement goals (task, and ego) were entered as the predictor variables, and autonomy was entered as the outcome variable. The overall model was not significant ($p=.583$). No further probing was needed.

In the final and fifth model, the five motivations (interest, appearance, fitness, competence, and social) and the two achievement goals (task, and ego) were entered as the predictor variables, and life satisfaction was entered as the outcome variable. The overall model was not significant ($p=.958$)

CHAPTER 5

DISCUSSION AND CONCLUSION

Discussion

The purpose of this study was to examine motives for participation for athletes with disabilities and the relationship between motives, sense of community and life satisfaction. Over the last half-century, adaptive sports have garnered a great deal of attention for its ability to bridge the gap between the disabled community and sports participation. Although the existing literature includes a substantial amount of research related to the physical, psychological, and social benefits of active living for persons with disabilities, there is very little existing research to as why these athletes participate. Further, there is limited research investigating the relation of motives to desired outcomes, particularly as it pertains to individuals with disabilities. By targeting perceived motivations and benefits experienced by disabled athletes this study increases awareness of adaptive sports education, programming, and outcomes. This research also furthers our knowledge of motivations and benefits with respect to the disabled sports within frameworks of Self-Determination Theory (SDT), Achievement Goal Theory (AGT), and Sense of Community.

SDT

The theoretical framework for this study uses SDT and AGT in order to explore different factors that affect the motivations for and benefits from participation in sport by disabled athletes. Deci & Ryan (2017, pg. 3) argue that SDT is:

“...centrally concerned with the social conditions that facilitate or hinder human flourishing. The theory examines how biological, social, and cultural conditions either enhance or undermine the inherent human capacities for psychological growth, engagement and wellness, both in general and in specific domains and endeavors.”

For athletes in the disabled sports community, individuals may be limited due to a wide variety of factors that contribute to their overall health and well-being. Increasing awareness of and participation in adaptive sports programming serves to improve the biological, social, and cultural conditions for people with disabilities. It also can broaden their human capacity for psychological growth, engagement and wellness by increasing autonomy, relatedness, and competence, the three tenets of SDT. (Deci & Ryan, 1985: 2017).

Participants in this study rated all three of these factors, autonomy, relatedness, and competence, as being very important in terms of their participation in sport. This indicates that people that participate in adaptive athletics value social connections, sense of freedom and developing their knowledge for sport-specific activity. Interestingly, when looking at the components of SDT, relatedness emerged as the strongest motivator, followed by competence. In other words, people were motivated by relationships with others. This is closely related to the fact that adaptive sport brings athletes in contact with similar individuals giving them a sense of belongingness. The findings support the previous work of Goodwin and his colleagues (2009), who stated disabled athletes found importance in the connection of shared understanding and camaraderie with their peers.

Based on the Reasons for Participation's 5-factor model, interest was the strongest reason for participation, followed by competence. In other words, the strongest reason for participation was an interest in the activity followed by a desire to prove others that they could do the task at hand. These findings match the study in 2010 by Omar-Fauzee, et.al, which evidenced having fun and showing skills as the top two themes when examining disabled athletes' motivations. It is also closely related to existing research that states that playing a sport affirms competence and lets the individual focus on what they can do rather than what they cannot (Asken, 1991).

Surprisingly, in contrast, when looking at the 5-factor model, the social factor emerged as the second lowest motivation factor for this group. The research focuses on the importance of the social aspect, but this study shows that it is not necessarily why these athletes are competing. Relatedness goes beyond simply being social because it implies having a connection with others, and/or the environment in which people engage in sport.

Although rugby and basketball emerged as top sports participated in in this study, it is interesting to note that out of the top 5, they were the only team sports. Looking further into what sports athletes participated in, the majority were also solo sports or activities. This could be reasoning to why relatedness was ranked high and the social factor was low. When an individual is participating in a solo activity, they are relating to the environment and not with other people.

AGT

AGT states that striving for achievement is energized by personal or socially valued goals (Roberts & Treasure, 2018 pg. 212). In the adaptive sports context, this means people are motivated by goals that have a value to self and community. In terms of achievement goal-theory, athletes in the study scored higher on task-orientation than ego-orientation. Task-oriented individuals are people who want to learn to master the activity and focus on personal improvement. Whereas ego-oriented individuals are participating in the activity to prove they are better than others. This community is a group that values and engages in collaborating more than competing. The community is no stranger to adapting to inherent challenges that often require working together to accomplish goals rather than proving dominance

Specific to the relationship between motivations and outcomes (sense of community and life satisfaction), results suggest no significant relationships between any of the independent variables (task orientation, ego orientation, competence, autonomy, or relatedness) and either sense of community or life satisfaction.

Implications for practice

Results from this study lead to several practical implications. Below, I provide several ideas related to the specific factors that emerged as the strongest motivators. Considering the influx of interest in disabled athletics in America over the last half-century, these implications serve to be useful for all recreation facilitators, and particularly those who work closely with people with disabilities.

Interest

The strongest overall motivator found was interest. People with physical disabilities are motivated because they simply enjoy doing the activity. This implies that those who are participating are intrinsically motivated. People who are intrinsically motivated are fully self-regulated, engage in activities out of interest, experience a sense of volition, and function without the external rewards or constraints (Deci & Ryan, 1985, 2000). Therefore, individuals with disabilities are intrinsically motivated to participate because the activity or game itself is rewarding and worthwhile. It is therefore important for people in the field of adaptive sports to better understand how to motivate athletes intrinsically. This could be by simply receiving positive verbal reinforcement or letting the athlete choose the activity or sport in which they participate. Individuals with disabilities feel a sense of control not always experienced in life when given the opportunity to select their own activities (Mactavish & Searle, 1992).

Deci determined that external rewards would decrease intrinsic motivation (1971). In contrast to intrinsic motivation, extrinsic motivation is more complex and refers to behaviors that are characterized by an individual's goal of action being governed by some separable outcome (e.g., seeking approval, obtaining a tangible reward or outcome, avoiding punishment) (Roberts & Treasure, 2018). When we use external rewards as motivators, such as money for scoring twenty points in a match or a punishment for not coming in first place, facilitators are taking away the reason the individual is participating in the first place. In the disability community, it far too common for parents and coaches to reward participating in athletics or exercise with extrinsic motivators. This can be problematic because then the individual expects that reward when participating. When they do not get the reward that they are so used to getting they tend to lose interest, quit

or become burned out. With that, the individual becomes sedentary and becomes a part of the statistic of inactive people with a disability. As a community, by understanding the differences between intrinsic and extrinsic motivation we can prevent that scenario from happening.

Competence

What other people think matters, and this study sheds light on how athletes value the competence gained from the sports they participate in. It is very empowering to be able to show you are capable in a world where you are defined by what you can and cannot do. Competence refers to the need to apply, test and improve one's ability to perform (Deci, 1975). That motivation may be to prove someone wrong or do something someone didn't think you could do. Studies within SDT have offered a number of provisions for competence that can be applied, including providing challenge (e.g., Deci, 1975; Harter, 1974), positive feedback (e.g., Ryan, 1982; Vallerand & Reid, 1984), promoting task – involvement (e.g., Ryan, et. al., 1991), and structure (Grolnick & Seal, 2008; Markland, Ryan, Tobin, & Rollnick, 2005).

When facilitating an activity, it should be clearly defined and appropriate for the individual's capabilities. People will feel most competent when they can develop and assess their abilities. However, there has to be a happy medium. If the task is too easy, the participant will become bored and uninterested in the activity, and if the task is too hard it could provoke anxiety and nervousness (Deci & Ryan, 2002). To keep the balance it is important that the facilitator should carefully assist in realistic goal setting and screen

the participant's progress to support the ongoing provision of challenging, yet attainable, tasks (Roberts & Treasure, 2018).

Relatedness

According to Ryan (1995), relatedness is defined by a feeling of connection to an environment and/or other human beings, being helpful to others and being helped by others. In this study, relatedness was valued highest of the three SDT basic needs. This shows that adaptive athletes are highly motivated by the connection with other athletes, their coaches, their family, and friends. Because of this connection with others, it promotes well-being and a positive attitude towards physical activity.

Facilitators of adaptive recreation and sport should look for ways to gain trust and respect with their participants. It is important to show enthusiasm and curiosity in their interests, while never passing judgement. By doing so, it allows the participant to feel cared for and important in the association.

Because family is so tightly incorporated in this relatedness theme, it is important to treat parents and siblings in the same positive and caring manner. They are devoting their time and energy, as well, to show support of the athlete. When parents show commitment and dedication, their involvement is more likely to facilitate relatedness and, in turn, the internalization of exercise-related values and behavioral regulations (Roberts & Treasure, 2018).

Task-Orientation

It is key to note that in this study individuals were more task-oriented than ego-oriented. Therefore, it is important to develop and understand what factors contribute in getting or keeping an individual task-involved. Task-oriented individuals are looking for personal improvement and to learn about the task at hand and master it. Facilitators will need to challenge individuals. Stay away from games or activities that promote beating others or rewards one person over another. Encourage rooting for others and celebrating others success’.

Many researchers and experts recommend individual goal setting. Individual goal setting is a way to structure and organize an individual’s focus and direction. One of the most highly suggested models is by Gould (1986), who created a goal staircase to structure goal setting. It focuses on using short term goals as stepping stones towards attaining long-term goals. The initial step is the current skill set of the individual and is followed by several short-term goals that increase in proficiency. These short-term goals are for instant progress and motivation to work harder towards their long-term goal. For example, if an individual’s long-term goal is to push a marathon, start the staircase with showing up to practice. Then increase the short-term goals to showing up to practice a couple of days a week and then every day. Increase distances along the way that test the individual but doesn’t push them too hard that they become injured or too sore. By the end of the staircase they have mastered their short-term goals to meet their long-term goal to push a marathon.

Limitations and Recommendations for Future Research

There are several limitations of this study. Since the study was an online questionnaire, the results were restricted to only those who were forwarded the email from associated adaptive sports programs. Also, being an online questionnaire, many questions were not answered, and some samples had to be thrown out or were deemed unable to use. The sample size (71) is also a concern. Initially, higher numbers were expected, but did not get the reach and support from outside organizations that was hoped for. Therefore, recommendations for future research include a larger sample size in hopes to find what motivation factors can predict sense of community, life satisfaction and psychological well-being.

Other recommendations for further research would be to continue to look at how much of the total population knows about programs in their own communities that offer adaptive sports and recreation. Also, suggestions include continuing to study satisfaction of life with this specific population.

Other suggestions include doing the same study with different adaptive sports organizations that represent a single sport and seeing if there are any differences in motivation for participation between different sports. For example, this study could be done with the United States Quad Rugby Association's athletes and then again with the United States Track and Field program's athletes. The two then could be compared with one another to see if there are any differences in how the groups are motivated.

Conclusion

Overall, this study is evidence for the adaptive sports community to keep distributing the message that there are programs and resources out there that exist and are

designed specifically for people with disabilities. If half of the disabled population is inactive, then perhaps many individuals do not know of the resources out there that exist to help keep them active. There are countless adaptive activities that they could enjoy (i.e., swim classes, dance, darts, pool, basketball) that they may have considered outside the realm of possibilities in participating in before.

This study sheds light on how participation in sport for individuals with disabilities contributes to interest, competence, fitness, relatedness, and autonomy. Athletes with disabilities tend to be more intrinsically motivated and task-oriented. This means that the athletes that are participating in adaptive sports are self-regulated, enjoy the activities they participate in and are motivated to improve personally by mastering the sport.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD EXEMPTION



EXEMPTION GRANTED

Walter Legg
Community Resources and Development, School of
602/496-1057
Eric.Legg@asu.edu

Dear Walter Legg:

On 2/6/2018 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Understanding motivations for participation in adaptive sport
Investigator:	Walter Legg
IRB ID:	STUDY00007621
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none">• NP Consent Script.pdf, Category: Consent Form;• Questionnaire, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);• v3_Recruitment Form (1).pdf, Category: Recruitment Materials;• v2_IRB Protocol (1).docx, Category: IRB Protocol;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 2/6/2018.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

APPENDIX B
RECRUITMENT LETTER

Title of research study: **Motivation in Adaptive Sport: What Drives Individuals to Participate?**

Investigator: Nickolas Pryor

Why am I being invited to take part in a research study?

We invite you to take part in a research study because we want to know what motivates you, as a person with a physical limitation, to participate in sport competition and recreation.

Why is this research being done?

Participation in adaptive sports is at an all-time high and I want to know what motivates these individuals to participate.

How long will the research last?

We expect that individuals will spend 15 minutes participating in the proposed activities.

How many people will be studied?

We expect about 400 people will participate in this research study.

What happens if I say yes, but I change my mind later?

You can leave the research at any time it will not be held against you.

What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study records, to people who have a need to review this information. We cannot promise complete secrecy. The results of this study may be used in reports, presentations or publications but your name will not be used.

All information will be stored on an encrypted ASU computer.

Who can I talk to?

If you have any questions concerning the research study, please contact me at ntpryor@asu.edu or 480-404-2679 or my committee chair, Eric Legg at eric.legg@asu.edu or 602-596-1057 (o). If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

APPENDIX C
STUDY QUESTIONNAIRE

Part 1

1. What is your gender?

Male
Female
Non-binary
Prefer not to say

2. What is your physical disability?

amputee
visually impaired
spinal cord injury
cerebral palsy
spina bifida
muscular dystrophy
TBI
MS
Other:

3. What is your age?

18-29 years old
30-49 years old
50-64 years old
65 years and over

4. What is the highest level of education you have completed?

some high school
high school graduate
some college
trade/technical/vocational training
college graduate
some postgraduate work
post graduate degree

5. What is your current employment status?

Employed full time (40 or more hours per week)
Employed part time (up to 39 hours per week)
Unemployed and currently looking for work
Unemployed and not currently looking for work
Student
Retired
Homemaker
Self-employed
Unable to work

6. What sports do you participate in on a regular basis? (open ended)

7. On average, approximately how many hours a week do you participate in each sport? (open ended)

Part 2

The following is a list of reasons why people engage in physical activities, sports and exercise. Keeping in mind your primary physical activity/sport, respond to each question (using the scale given), on the basis of how true that response is for you.

1 – not very true for me 2 3 4 5 6 7 – very true to me

- 1. Because I want to be physically fit.
- 2. Because it's fun.
- 3. Because I like engaging in activities which physically challenge me.
- 4. Because I want to obtain new skills.
- 5. Because I want to look or maintain weight so I look better.
- 6. Because I want to be with my friends.
- 7. Because I like to do this activity.
- 8. Because I want to improve existing skills.
- 9. Because I like the challenge.
- 10. Because I want to define my muscles so I look better.
- 11. Because it makes me happy.
- 12. Because I want to keep up my current skill level.
- 13. Because I want to have more energy
- 14. Because I like activities which are physically challenging.
- 15. Because I like to be with others who are interested in this activity.
- 16. Because I want to improve my cardiovascular fitness.
- 17. Because I want to improve my appearance.
- 18. Because I think it's interesting.
- 19. Because I want to maintain my physical strength to live a healthy life.
- 20. Because I want to be attractive to others.
- 21. Because I want to meet new people.
- 22. Because I enjoy this activity.
- 23. Because I want to maintain my physical health and well-being.
- 24. Because I want to improve my body shape.
- 25. Because I want to get better at my activity.
- 26. Because I find this activity stimulating.
- 27. Because I will feel physically unattractive if I don't.
- 28. Because my friends want me to.
- 29. Because I like the excitement of participation.
- 30. Because I enjoy spending time with others doing this activity.

Part 3

Please rate your level of agreement with the following statements. Please be honest.
There are no right or wrong answers.

A- Strongly Agree B C - Neutral D E - Strongly disagree

WHEN PLAYING SPORT, I FEEL MOST SUCCESSFUL WHEN:

- I beat other people
- I am clearly superior
- I am the best
- I work hard
- I show clear personal improvement
- I outperform my opponents
- I reach a goal
- I overcome difficulties
- I reach personal goals
- I win
- I show other people I am the best
- I perform to the best of my ability

Part 4

Please read each of the following items carefully, thinking about how it relates to your life, and then indicate how true it is for you. Use the following scale to respond:

1 2 3 4 5 6 7

not at all somewhat very true true true

1. I feel like I am free to decide for myself how to live my life.
2. I really like the people I interact with.
3. Often, I do not feel very competent.
4. I feel pressured in my life.
5. People I know tell me I am good at what I do.
6. I get along with people I come into contact with.
7. I pretty much keep to myself and don't have a lot of social contacts.
8. I generally feel free to express my ideas and opinions.
9. I consider the people I regularly interact with to be my friends.
10. I have been able to learn interesting new skills recently.
11. In my daily life, I frequently have to do what I am told.
12. People in my life care about me.
13. Most days I feel a sense of accomplishment from what I do.
14. People I interact with on a daily basis tend to take my feelings into consideration.
15. In my life I do not get much of a chance to show how capable I am.

16. There are not many people that I am close to.
17. I feel like I can pretty much be myself in my daily situations.
18. The people I interact with regularly do not seem to like me much.
19. I often do not feel very capable.
20. There is not much opportunity for me to decide for myself how to do things in my daily life.
21. People are generally pretty friendly towards me.

Part 5

When thinking about your participation in sports, and the community of people you interact with as a result of this participation, please rate your agreement with the following items:

A- Strongly Agree B C - Neutral D E - Strongly disagree

1. I can get what I need through participation in sport
2. Participating in sport helps me fulfill my needs
3. I feel like I am a member of this sport community.
4. I belong in this sport community.
5. I have a say about what goes on in this sport community.
6. People in this sport community are good at influencing each other.
7. I feel connected to people in this community.
8. I have a good bond with others in this community.

Part 6

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the line preceding that item. Please be open and honest in your responding.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree or Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 = Strongly Agree

- _____ 1. In most ways my life is close to my ideal.
- _____ 2. The conditions of my life are excellent.
- _____ 3. I am satisfied with life.
- _____ 4. So far I have gotten the important things I want in life.
- _____ 5. If I could live my life over, I would change almost nothing.

APPENDIX D
CONSENT FORM

The following language will be provided at the beginning of the initial online questionnaire.

Motivation in Adaptive Sport: What Drives Individuals to Participate?

I am a graduate student in the School of Community Resources & Development at Arizona State University. I am conducting a research study to examine why individuals with physical limitations participate in sport and recreation.

I am inviting your participation, which will involve completing an online survey that will take approximately 15 minutes to complete. Completion of this survey will be done independently, at your own time and convenience. You have the right not to answer any question, and to stop participation at any time. Must be 18 or older to participate.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty.

All collected data will be anonymous. Participants will be given a unique identifying number in order to track responses across questionnaires. However, identifying numbers will not be connected to any personally identifying information. No one will be able to connect your responses to the questions. Further, once submitted, all information will be stored on an encrypted ASU computer. Results from this study may be used in future presentations, and publications; however, your name will not be associated with those publications.

If you have any questions concerning the research study, please contact me at ntpryor@asu.edu of 480-404-2679 or my committee chair, Eric Legg at eric.legg@asu.edu or 602-596-1057 (o). If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the study.

By clicking continue below you are agreeing to participate.