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Understanding Thai Attitudes Toward Individuals with Physical Disabilities: Outcome of an International Adaptive Sports Training Program

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UNDERSTANDING THAI ATTITUDES TOWARD INDIVIDUALS WITH PHYSICAL DISABILITIES: OUTCOME OF AN INTERNATIONAL ADAPTIVE SPORTS TRAINING PROGRAM

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
Parks, Recreation and Tourism Management

by
Elizabeth Atwood Murphy
August 2018

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ABSTRACT

The purpose of the study was to examine the impact of an international adaptive sports training program on attitudes towards individuals with physical disabilities. Participants (n=37), either college students or professors at the Institute of Physical Education in Chiang Mai, Thailand, were involved in an international adaptive sports training program provided by the U.S. Department of State. The Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) was used to measure attitudes before and after exposure to the international adaptive sports training program. A one-way ANOVA and descriptive statistics were utilized to compare participant scores across time, and explore demographic information. Findings indicated that there were no significant changes in attitudes upon exposure to and experience with adaptive sports and individuals with disabilities. While adaptive sports benefit the participant physically, emotionally, cognitively, and psychologically, adaptive sports can also serve as a vehicle to combat society’s negative attitudes. However, more work is needed in developing an appropriate tool to evaluate such programs in order to achieve attitude changes.
DEDICATION

To my family, Jay, Kim, Emily, and Amelia Murphy—Thank you for providing me with constant love, support and reassurance necessary to not only complete this task, but all of my life endeavors. Thank you for challenging me to be the best version of myself and pushing me to smell every rose. Your belief in my abilities to overcome obstacles has been beyond encouraging, and I cannot thank you enough for molding me into the person and professional that I am today. I love you all.
ACKNOWLEDGEMENTS

To my fellow 4+1 cohort, Natalie Montoya, Brooke Beidler, and Charity Hubbard—Thank you for being my team throughout these past few years. I speak on behalf of all of us that our motivation for each other helped keep our eyes forward. Working alongside of you all has been nothing short of a pleasure.

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To my committee members, Dr. Brent Hawkins, Dr. Brandi Crowe, and Dr. Lauren Duffy, and Clemson University Recreational Therapy professors, Dr. Marieke Van Puymbroeck and Dr. Stephen Lewis—Thank you for pouring a tremendous amount of knowledge into me these past few years. I appreciate the time and effort you have spent ensuring my success. I am genuinely thankful for each and every one of you. You have truly made an impact on my life.

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To my committee chair, Dr. Jasmine Townsend—Thank you for constantly believing in me even when I didn’t believe in myself. Acknowledging my strengths and trusting my abilities to carry out different projects and roles has been beyond meaningful in my career. Getting to know you personally has allowed me to strive towards the person that I want to become. Thank you for your continuous mentorship—I am forever grateful.

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To Clemson University—Thank you for the best five years of my life. The opportunities, relationships, and memories that you have given me will forever hold a special place in my heart. There truly is something in these hills. Go Tigers!
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Chapter 1

INTRODUCTION

In the World Report on Disability (2011), it is estimated that more than one billion people have a disability, which represents approximately 15% of the world’s population (World Health Organization, 2011). The Americans with Disabilities Act (1990) defines disability as “a physical or mental impairment that substantially limits one or more major life activities” (para 1).

Throughout history, people with disabilities have continuously been mistreated and have experienced a significant amount of discrimination. In primitive times, individuals with disabilities were thought to possess evil spirits and in order to get rid of the disability, the evil spirit had to be driven out. In the Middle Ages, people viewed disability as superstition and a result of witchcraft (Waughfield, 2002). Asylums were then created to torture, starve, flog, and administer bloodletting to rid them of their disabilities. As time progressed and the Renaissance period came about, there was a decline in beliefs of evil spirits causing disability. However, asylums continued to be utilized with individuals with disabilities in order to protect society well into the 20th century (Waughfield, 2002). Society experienced a shift throughout the 18th and 19th centuries when hospitals were used to treat individuals with disabilities in order for them to reach a goal of returning to society (Waughfield, 2002).

Legislation in the United States

In more recent times, legislation in the United States has increasingly focused on addressing the needs of individuals with disabilities, and the treatment towards
individuals with disabilities has become more humane, although not without its own challenges. The Civil Rights Act of 1964 prohibits discrimination based on race, ethnicity, religion, gender, and national origin. This law attempted to put an end to unequal application of voter registration requirements, as well as racial segregation in the workplace, schools, and by facilities that serve the general public (Chambers, 2008). Although this act did not address individuals with disabilities, it was a step in the right direction. The first piece of legislation that was explicitly for individuals with disabilities was the Architectural Barriers Act of 1968. This law provided equal environmental access for all people, including those with disabilities, and worked to remove physical accessibility barriers in federal spaces and facilities (United States Access Board, 2004). In 1973, the Rehabilitation Act became law, stating that individuals with disability shall not be excluded from participation in, or denied benefits of, any program or activity receiving federal financial assistance. Additionally, the Rehabilitation Act provided equal access to employment, technology, transportation, and structural facilities for people with disabilities (Sherr & Babovich, 1997).

One of the most influential pieces of legislation for individuals with disabilities is the Americans with Disabilities Act (ADA) of 1990. The ADA is a civil rights law that bans discrimination based on disability, and guarantees equal opportunity for people with disabilities in public accommodations and facilities, various modes of transportation, local and state government services, and employment (United States Access Board, 2004). Even though there is legislation that guarantees equal rights and opportunities for individuals with disabilities, they continue to experience discrimination, thus being
stripped of their rights. Individuals with disabilities continue to be perceived as inferior throughout society globally, which results in feelings of rejection, fear, and discomfort (Krahe & Altwasser, 2006).

**Legislation in Thailand**

Similar to the United States, Thailand has various laws to protect the rights of individuals with disabilities; however, the first piece of Thai legislation specific to individuals with disabilities did not exist until 1991 (Kachondham, 2010). Disabilities Thailand (DTH) is a national organization recognized under the Persons with Disabilities Empowerment Act of 2011 that promotes disability advocacy and policy. DTH exists to help improve the overall development and quality of life for individuals with disabilities (Disabilities Thailand, 2016). In 1999, the National Education Act was created to provide a set of regulations and measures to ensure equal educational opportunities for children with disabilities (Kachondham, 2010). In addition to serving individuals with disabilities, there are also laws that protect and serve caregivers through rights to health care, education, employment, information access, and other benefits (Disabilities Thailand, 2016). In regard to accessibility, there are many existing laws in Thailand stating that individuals with disabilities must be allowed access to and benefit from public transportation, physical environments, buildings, communication technology, and other public services. However, only 28% of government facilities in Thailand have adhered to accessibility laws by providing parking spaces, accessible toilets, ramps, information, and signals for those with disabilities (Disabilities Thailand, 2016). Thus, even though
legislation exists, similar to the United States, discrimination towards individuals with disabilities is still present in Thai society.

In order to offset negative attitudes of individuals with disabilities in any country, it is important to create opportunities that allow these attitudes to be changed, and one such way is through sport. Similar to sport for able-bodied individuals, adaptive sports has the potential to provide various benefits that enhance athletes’ overall quality of life and wellbeing, while serving as a useful tool to achieve and maintain health. Today’s ideology of achievement of health for individuals with disabilities is essential (Wilhite & Shank, 2009), and can be achieved using a variety of methods, one of which is adaptive sports. Additionally, through adaptive sport, harsh attitudes of individuals with disabilities can be altered and stigmatized identities can be redefined (Lundberg, Taniguchi, McCormick, & Tibbs, 2001).

The Adaptive Sports for Social Change (ASSC) program provided comprehensive educational experiences over the course of six days regarding adaptive sports program design, sports skills progressions and teaching methodologies to a group of Thai college students studying Physical Education and their professors in an effort to create an opportunity for social change and allow individuals with disabilities to become more involved in their community. Changing society’s attitudes about people with disabilities can promote inclusion and further acceptance individuals with of disability by society (Findler, Vilchinsky, & Werner, 2007). This study aimed to determine the impact of an international adaptive sport training program on the attitudes of the participants towards individuals with disabilities.
Definition of Terms

The following terms are defined to clarify their use in the study:

1. *Adaptive Sport:* any modification of a given sport to accommodate the varying ability levels of an individual with a disability (Lundberg et al., 2001).


3. *Attitudes:* a combination of beliefs and feelings that predispose a person to behave a certain way (Noe, 2010).

4. *Culture:* the collective mental programming of the human mind which distinguishes one group of people from another (G. Hofstede, 1991).

5. *Disability:* a physical or mental impairment that substantially limits one or more major life activities (ADA, 1990).


7. *MAS:* Multidimensional Attitudes Scale Toward Persons with Disabilities; used as a tool to measure attitudes towards people with disabilities.
Chapter 2
LITERATURE REVIEW

Attitudes Towards Disability

Individuals with disabilities have not always been treated well by broader society, and often experience discrimination and bullying (Lu & Kim, 2017). An attitude is “a combination of beliefs and feelings that predispose a person to behave a certain way” (Noe 2010, p. 549). Attitudes towards individuals with disabilities are influenced by a variety of factors including, but not limited to stigma, ignorance, neglect, superstition, and communication barriers (UNICEF, 2012). These factors have generally result in attitudes that are negative towards individuals with disabilities.

There is a vast body of literature discussing society’s attitudes towards individuals with disabilities. Negative attitudes create societal stigmas and discriminations that are hard to overcome (Krahe & Altwasser, 2006). For example, Westernized societies tend to desire physical perfection and high functioning individuals, and imperfections (i.e., disabilities) do not typically align with these preferences (Barnes, 1996). Media outlets tend to present individuals with a disability in a demeaning way, showing that they are suffering, sick, and seeking help (Ruffner, 1990). Thus, individuals without disabilities may tend to avoid interactions with individuals with disabilities because they are scared and unsure of how to interact with them. Individuals without disabilities tend to primarily notice an individual’s impairments, as opposed to the individuals themselves. As a result, individuals without disabilities feel uncomfortable during interactions with individuals with disabilities, and limit their conversations accordingly (Krahe & Altwasser, 2006; L1,
Employers are also not as likely to recruit individuals with disabilities, and if an individual discloses their disability, they are more inclined to experience discrimination in the hiring process, their salary, and professional recognition (Johnson & Joshi, 2014; Ragins, 2008).

Many people are unaware of their attitudes towards individuals with disabilities, which often leads to “stereotypical thinking, generalization of certain characteristics and attributes to persons with similar conditions and even to all persons with disabilities” (Antonak & Livneh, 2000, p. 221). Even health professionals have been found to have negative attitudes towards individuals with disabilities (Tervo, Palmer, & Redinius, 2004). These attitudes lead to misconceptions about achievement and personality, as well as mistreatment (Krahe & Altwasser, 2006). Accordingly, negative societal attitudes often lead to decreases in self-esteem, as well as feelings of helplessness and pessimism among individuals with disabilities (Tervo et al., 2004).

While the majority of literature suggests that attitudes towards individuals with disabilities are predominantly negative, positive attitudes exist as well, and can be influenced by education (Tervo et al., 2004), gender (Vilchinsky, Werner, & Findler, 2010), age (Dachez, Ndobo, & Ameline, 2015), income level, and level of acquaintance with an individual with a disability (Parasuram, 2006). Individuals who are frequently in contact with an individual with a disability tend to also have more positive attitudes. Additionally, providing formal instruction and structured experiences, as well as interventions where people are exposed to or interact with individuals with disabilities reduces negative attitudes (J. Campbell, Gilmore, & Cuskelly, 2003; Krahe & Altwasser,
In this regard, it has been suggested that individuals without disabilities participating in an intervention only need two 90-minute sessions with an individual with a disability to create sustained and significant attitude change towards disability (Krahe & Altwasser, 2006).

Disability is not understood universally and individuals with disabilities continue to be perceived differently by different societies and cultures, thus it is important to discuss the cultural construction of disability (Meekosha, 2011; Meyer, 2010); however, the current literature on Thai attitudes towards individuals with disabilities is sparse. Cross-cultural studies of attitudes towards individuals with disabilities are necessary to understand how individuals are treated across diverse geographical regions or countries (Stevens et al., 2013). Cultural differences are also a major factor that influences attitudes towards individuals in a society, especially those with disabilities. The following sections will review the concepts of ableism and Hofstede’s Cultural Dimensions Theory as an intercultural framework to understand Thai attitudes towards individuals with disabilities, and will discuss the use of adaptive sports to further influence and potentially change attitudes.

**Ableism**

Beliefs are gained throughout the social environments and experiences that individuals are exposed to and have collected throughout life (Hofstede, Hofstede, & Minkov, 2010). This idea extends to able-bodied individuals, who learn to view people with disabilities as *less than*, and think of disability as negative and tragic (Campbell,
2008; Hehir, 2007). This concept is referred to as ableism. According to Wolbring (2008),

Ableism is a set of beliefs, processes and practices that produce—based on abilities one exhibits or values—a particular understanding of oneself, one’s body and one’s relationship with others of humanity, other species and the environment, and includes how one is judged by others (p. 252).

Ableism has the ability to influence social cohesion, relationships among social groups, and their environments, both individually and throughout a country (Wolbring, 2008). Ableism reflects dynamics of social groups, as ableism is “deeply and subliminally embedded within culture” (Campbell, 2008, p. 153). This concept enables individuals with disabilities to feel pushed “beyond and outside society” (Imrie, 1996, p. 398). This type of behavior can lead to discrimination, and make the world seem inaccessible and unwelcoming for individuals with disabilities (Hehir, 2007). Therefore, ableism is the driving force of discrimination, and can be seen throughout various cultures, including Thailand; although, it is important to understand the context and influence of culture on attitudes as well.

**Hofstede’s Cultural Dimensions Theory**

According to Geert Hofstede (1991) culture is defined as, “the collective mental programming of the human mind which distinguishes one group of people from another” (p. 5). Individual’s beliefs are gained throughout the social environments and experiences that individuals are exposed to and have collected throughout life. Therefore, “culture is learned, not innate” (Hofstede, Hofstede, & Minkov, 2010, p. 6).
Hofstede’s Cultural Dimensions Theory (G. Hofstede, 1980) can be used to understand cultural influences on societal attitudes in Thailand across six dimensions: 1) individualism-collectivism, 2) power distance, 3) masculinity-femininity, 4) uncertainty avoidance 5) Confucian dynamism (or long-term/short-term orientation), and 6) indulgence vs. restraint (Stanimir, 2014). Not only does Hofstede’s framework allow further understanding about a country based on their scores alone, it also provides a means for comparing cultural differences. Since cultural theories are still being developed, culture can be seen as complicated, so it is important to understand intercultural challenges by addressing culture based off of scores for each dimension, which can range between 0 (low) and 100 (high), with 50 being the mid-range threshold (Niffenegger, Kulviwat, & Engchanil, 2006). It is important to consider, however, that Hofstede’s dimensions are not representative of attitudes towards disability. Rather, attitudes towards disability may be conceptualized from the scores or explained by cultural components, beliefs, and values.

Table 1

Hofstede’s Cultural Dimensions for Thailand

<table>
<thead>
<tr>
<th>Country</th>
<th>IDV</th>
<th>PDI</th>
<th>MAS</th>
<th>UAI</th>
<th>CONDYN</th>
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<td>Thailand</td>
<td>20</td>
<td>64</td>
<td>34</td>
<td>64</td>
<td>56</td>
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Note. IDV = individualism; PDI = power distance; MAS = masculinity; UAI = uncertainty avoidance; CONDYN = long-term orientation (or Confucian dynamism) (Scores range from 0 = low, 100 = high)

The following sections will discuss each domain individually, and how it may contribute to an understanding of societal attitudes towards individuals with disabilities in the United States and Thailand, since disability can be shaped by societal and cultural expectations and norms (Meyer, 2010).

**Individualism-Collectivism.** The Individualism-Collectivism dimension of Hofstede’s theory is perhaps the most important dimension when determining cultural differences in social behavior (Triandis, 1990). This dimension identifies the extent to which individuals in society are integrated into groups and the extent to which the interests of an individual takes precedent over the interest of a group (G. Hofstede, 2001). Individualistic societies tend to prefer loose-knit social frameworks, while collectivist societies tend to prefer tight-knit social frameworks (Manchiah & Zhao, 2012). Thailand’s score (20) suggests that Thailand is a highly collectivistic culture (see Table 1). Individuals with disabilities are more likely to experience segregation from communities in collectivistic societies, unlike in individualistic cultures where they would be more integrated (Meyer, 2010); therefore, these scores indicate that individuals with disabilities in Thailand would tend to be less integrated into their communities. The spreading of negative attitudes towards individuals in certain groups occurs more frequently in collectivist cultures than in individualistic cultures, and can result in shunning and avoiding those individuals (Meyer, 2010). Collectivist cultures also tend to have less wealth and are not likely to be exposed to advances in modern medicine that provide scientific explanations for disability (Westbook, Legge, & Pennay, 1993). In Thailand, traditional medicine is typically preferred as it coincides with Buddhist beliefs.
(dominant religion), even though the government has made efforts to utilize modern medicine by building new hospitals, especially in rural areas (Sermsri, 1989). Without a more scientific understanding of how various disabilities and health conditions occur, it is likely that the reliance on traditional medicine negatively contributes to Thai society’s attitudes towards individuals with disabilities.

**Power Distance.** The power distance dimension of Hofstede’s theoretical framework measures the basis of societal inequality, and can be defined as “the degree to which inequality among people in the population of a culture is considered normal” (Niffenegger et al., 2006, p. 406). This dimension explains how varying levels of power leads to the unequal treatment of individuals in society, which is important to examine when determining the impact of cultural differences on disability. For example, in a rehabilitation setting, rehabilitation specialists are more knowledgeable than the client and can be perceived as having more power, which can potentially lead to individual with a disability to feel disempowered (Zea, Quezada, & Belgrave, 1994). It was discovered that negative attitudes towards individuals with disabilities are more present in societies that have relatively low power distance scores (Westbook et al., 1993). Thailand’s score for this dimension (64) leans toward the higher end of the spectrum, suggesting that positive attitudes towards individuals with disabilities may, perhaps, be present.

**Masculinity-Femininity.** The masculinity-femininity dimension of Hofstede’s theory pertains to the division of emotional roles between men and women (G Hofstede, 2011) and “manifests through the division of roles within a society” (Niffenegger et al., 2006, p. 406). Thailand’s score (34) for this dimension suggests that Thailand is a
feminine society (see Table 1). Individuals with disabilities in Thailand are often shown pity and sympathy throughout society, which is in line with a more feminine approach (Naemiratch & Manderson, 2009). The fact that Thai’s value harmony in their social relationships may persuade people to believe that individuals with disabilities would be accepted in society; however, threats to the harmonious balance (perhaps an individual’s disability) may create resistance throughout the social group (Hallinger & Kantamara, 2000).

Uncertainty Avoidance. The uncertainty avoidance dimension of Hofstede’s theory pertains to society’s tolerance for ambiguity, and their ability to handle the stress of an unknown future (G. Hofstede, 2011). When cultures score low in the uncertainty avoidance dimension, attitudes towards disability are often more positive (Murphy, 2013; Westbrook et al., 1993). Thailand’s score (64) for this dimension suggests that Thai society prefers to avoid uncertainty and ambiguity (see Table 1). A recent study discovered that when members of high uncertainty-avoidance cultures encountered an individual with a disability, the individual without the disability limited their conversations in order to reduce uncertainty (Li, 2016). Thailand’s high level of uncertainty avoidance reflects their urge to conform to group rules and traditions. They also seek stability, so any change (perhaps an individual with a disability) can be disruptive (Hallinger & Kantamara, 2000).

Confucian Dynamism. This dimension, which is also known as Pragmatic vs. Normative or Long-term vs. Short-term Orientation, refers to the extent in which a society focuses on long-term goals and traditions (Manchiah & Zhao, 2012). Thailand’s
Normative societies emphasize the importance of values and rights, in the sense that a dominant set of values and rights is preferred over others. With Buddhism being the predominant religion in Thailand, they are taught to be merciful towards the weak and give money to individuals with disabilities (Disabilities Thailand, 2016). This action may be considered a good, societal deed, but it can also give rise to societal stigmas. Thus, their dominant set of religious values in Thailand give rise to stigma towards individuals with disabilities.

**Indulgence vs. Restraint.** The indulgence vs. restraint dimension on Hofstede’s theory focuses on the control to gratify basic human desires and impulses in order to have an enjoyable life (G Hofstede, 2011). The ability and the extent to which members of society can control acting on those desires is indicative of whether or not they are categorized as indulgent or restrained. Strong control of their urges reflects restraint, whereas weak control reflects indulgence (G Hofstede, 2011). Thailand’s neutral score (45) for this dimension indicates that a preference cannot be determined. Indulgence vs. Restraint has recently been added to Hofstede’s dimensions and there is a limited amount of research exploring this dimension and its characteristics.

The broader Thai society often views individuals with disabilities as a burden on their families and communities. These individuals are generally not allowed to make their own decisions, are confined to a bed, and live under less than ideal conditions that exclude them from being active members of their communities (Disabilities Thailand, 2016). Essentially, they are being denied their basic human rights simply because they have disability and live in a society that is generally unaccepting of their differences.
In conclusion, some of the dimensions and cultural domains suggest that members of Thai society are fairly accepting of individuals with disabilities, while other dimensions suggest perspectives or treatment of individuals with disabilities is negative. Individuals with disabilities in Thailand are largely out of the public eye, have few opportunities for growth, and are commonly stereotyped because of their disability. Therefore, opportunities to be present in society and engage with people could potentially change their status in society in order to offset these negative attitudes. Adaptive sport may be one such opportunity.

**Adaptive Sport**

Adaptive sport is defined as “any modification of a given sport or recreation activity to accommodate the varying ability levels of an individual with a disability” (Lundberg et al., 2001, p. 206). Providing specialized sporting equipment and adaptations to meet the needs of athletes with disabilities will allow as much independent participation as possible for the athlete (Lundberg et al., 2001). Adaptive sport is one of the most common modalities used by recreational therapists, and is utilized as rehabilitation for both adults and children with physical disabilities (DePauw & Gavron, 2005; Kinney, Kinney, & Witman, 2004). Thus, as the therapeutic use of sports has continued to expand, researchers have found that adaptive sports provide a multitude of benefits that can be obtained through participation.

**Benefits of Adaptive Sport.** Adaptive sport allows individuals with disabilities to positively influence their overall health and quality of life. Research has found that participation in adaptive sports has resulted in individuals with disabilities feeling as
though they are admired for their abilities, rather than being stared at for them (Lundberg et al., 2001). The benefits of adaptive sports are apparent in all life domains (Groff, Lundberg, & Zabriskie, 2009). Physical benefits include faster motor responses (Reina, Moreno, & Sanz, 2007), increased aerobic and anaerobic fitness (Goosey-Tolfrey, 2005), decreased body fat, and higher lung capacity (Wells & Hooker, 1990). Psychological and emotional benefits include confidence in skills, overcoming distressing thoughts, strong resiliency, less negative affect, and more positive affect, thus, creating higher levels of psychological wellbeing (Greenwood, Dzewaltowski, & French, 1990; Hawkins, Cory, & Crowe, 2011; Martin, 2008). Cognitive benefits include increased competence judgements, self-efficacy, and the mastery of various experiences (Martin, 2013). Lastly, social benefits include increased friendships, social integration and social bonding (Martin, 2013). These social benefits foster opportunities for individuals with disabilities to gain a sense of normalcy and an athletic identity (Lundberg et al., 2001; Zabriskie, Lundberg, & Groff, 2005). While research on adaptive sports and its beneficial impacts on participants is well established and widely recognized, research on the influence of adaptive sports on attitudes of broader society is sparse.

**Influence of Adaptive Sports on Attitudes Towards Individuals with Disabilities**

While adaptive sport participation has the potential to impact an individual with a disability, it also has the potential to have positive impacts on society as a whole. Wilhite and Shank (2009) investigate the promotion of adaptive sport participation as a mechanism of health achievement. One subject reported that adaptive sport opportunities have provided learning experiences that have raised public awareness about the
capabilities of individuals with disabilities. Furthermore, it can lead to the increase of social networks, improved self-perception, and the sense of normalcy—despite societal stigmas (Wilhite & Shank, 2009). Adaptive sports provide individuals with disabilities a chance to achieve psychosocial well-being, health, and quality of life benefits (Forber-Pratt, 2015), but what impacts do adaptive sports have on societal attitudes towards disability?

Exclusion is a main issue that individuals with disabilities experience around the world, as they constantly experience environmental and attitudinal barriers that hinder participation in society (Brittian & Wolff, 2015; Devine et al., 2017). However, there is a growing body of evidence that shows that sport has been utilized as a vehicle to improve challenges faced by individuals with disabilities and change societal attitudes and stereotypes of disability (Forber-Pratt, 2015). Through adaptive sport, individuals with disabilities have been able to further engage in their communities and make an impact on local, national and international media, which have further impacted societal attitudes as to what individuals with disabilities are capable of, both athletically and non-athletically (Forber-Pratt, 2015).

Adaptive sport fosters positive social environments that promotes inclusion for individuals with and without disabilities, thus challenging negative attitudes towards disability (Devine et al., 2017). This inclusion allows these individuals to experience a bond through a common activity and a chance for individuals without disabilities to value the time spent with individuals with disabilities (Forber-Pratt, 2015; Wilhite, Devine, & Goldenberg, 1999).
After being exposed to adaptive sport, parents of children with disabilities are more hopeful of what their child can achieve, not only through sports, but through other aspects of life as well (Devine et al., 2017). Exposure to adaptive sports and people with disabilities have revolutionized minds of those without disabilities that now embrace an I can attitude, which have taken on a whole meaning (Forber-Pratt, 2015). When individuals with disabilities participate in adaptive sport, those without disabilities tend to value and respect them by referring to them as stars, view them as role models, and become more aware of various topics related to disability including health risk factors and their rights as individuals with disabilities (Forber-Pratt, 2015; Lopes, 2015). For example, people in Ghana used to think that if they were friends with an individual who has a disability, they, or their child, could get a disability. However, after being exposed to individuals who participate in adaptive sport, attitudes changed and they considered athletes with disabilities as friends, even allowing their sons and daughters to marry them (Forber-Pratt, 2015).

Adaptive sports provide opportunities to combat negative attitudes, challenge traditional views of disability, and promote empowerment (Ashton-Shaeffer, Gibson, Autry, & Hanson, 2001; Brittain, 2004; Huang & Brittain, 2006). It is evidenced that “sport is not simply entertainment, but a contested terrain where larger social struggles are played out and social injustices can be either challenged or reinforced” (Fisher, Butryn, & Roper, 2003, p. 395). Congruently, this can be reflected of adaptive sports. Since sport is universally popular (Devine et al., 2017), individuals with disabilities’ participation in sport enables them to not only draw attention to their country’s social
injustices, but also raises awareness of access to sport, equality and other disability-related issues at an international level (Forber-Pratt, 2015). Thus, adaptive sport has the potential to be a powerful, transformative tool that assists in improving the status of disability and changing negative attitudes towards disability.

**Sport Diplomacy**

One potential step in creating social change is to use sport as a mechanism to alter attitudes (Ladda, 2014). In recent years, efforts have been made to promote sport as a means for social development in various disadvantaged communities throughout the world. International and national government and non-government organizations have utilized sport to conduct programs throughout various communities. For example, Right to Play, Olympic Solidarity, Kicking AIDS Out, and Playing for Peace are amongst a variety of organizations funded by different entities that exist to create humanitarian relief, develop sports programing, broaden social development, and promote post-war reconciliation (Kidd, 2008). Sports Diplomacy, an organization funded by the U.S. Department of State’s Bureau of Education and Cultural Affairs, exists to do as such. By utilizing the universal passion of sport, Sports Diplomacy has become an important aspect in building and strengthening international relationships. By providing sport exchanges, increased dialogue and cultural understanding around the world can be facilitated (“Bureau of Educational and Cultural Affairs,” n.d.). Sport Diplomacy allows individuals to further understand the importance of opportunities, and of being inclusive with those opportunities. These opportunities foster education about equality in order to build a respectful culture (Ladda, 2014).
The United Nation’s Convention on the Rights of Persons with Disabilities (CRPD) and Sport for Development and Peace International Working Group exist to serve individuals with disabilities. For example, the United Nation’s CRPD has an article addressing the rights for individuals with disabilities to have equal access and participation in leisure, recreation and sport (Rasmussen & Lewis, 2007). Sport for Development and Peace International Working Group provides recommendations to governments on how sport can be used as a tool for communications to improve health care access to individuals with disabilities (Mojtahedi & Katsui, 2018). Additionally, these recommendations suggest a means to develop, benefit, and empower, individuals with disabilities while reducing stigma associated with disability. However, although these organizations exist to allow individuals from different cultures, backgrounds, and ability levels to participate in sport, individuals with disabilities often see sport as a “second class right” and continue to face discrimination (Mojtahedi & Katsui, 2018, p. 40).

**Summary**

Society’s negative attitudes towards individuals with disabilities creates discrimination, stigma, and stereotypes. Adaptive sports not only benefit individuals with disabilities, but it also serves as a potential mechanism in changing society’s traditional views of disability. Non-government and government organizations use sport to combat a variety of societal issues throughout the world. Thus, this study exists to examine the impact of an international adaptive sport training program on college students and professor’s attitudes towards individuals with physical disabilities.
Chapter 3

METHODS

This study used a quasi-experimental pre-test, post-test design to examine the changes in college student’s and professor’s attitudes towards people with disabilities as a result of participation in an international adaptive sports training program at the Institute of Physical Education Chiang Mai (IPE) in Chiang Mai, Thailand.

International Adaptive Sport Training Program

In March 2018, a six-day international adaptive sport training program was held in Chiang Mai, Thailand. The training consisted of two phases: The first phase had eight sport specific U.S. coaches and assistant coaches training approximately 50 physical education students and professors from the IPE in four adaptive sports (aquatics, goalball, soccer, and wheelchair tennis) over the course of four days. The second phase had approximately 50 individuals with disabilities from the local schools for individuals with disabilities attend a two-day sports skill development camp led by the IPE physical education students and professors under the direct supervision of the U.S. coaches. The large majority of these individuals had a physical impairment, while the others had a visual impairment. The two-day skill development camp consisted of the same four sports as were taught in phase one.

Study Site

This study occurred in Chiang Mai, a city in northern Thailand. The school in which the adaptive sport training program and study took place was the Institute of Physical Education (IPE), which is one of 17 IPE campuses around Thailand. Out of all
of the IPE campuses in Thailand, only one offers adaptive sport as part of the curriculum (not the study site).

**Selection of Subjects**

Upon IRB approval, participants in the study included Thai undergraduate college students studying Physical Education and some of their professors. Thirty-seven participants from the IPE participated in this study. The students attending the IPE were current, registered students studying Physical Education. The professors were current employees of the IPE. The participants of the ASSC program were invited to the program by representatives of the IPE, separate from the study. However, study participants were invited by the researcher at the start of the program during registration. A consent form was attached to the participant’s survey packets.

**Instrumentation**

The study utilized the 22-item Multidimensional Attitudes Scale Toward Persons with Disabilities (Findler et al., 2007) to measure student and professor attitudes towards individuals with disabilities. Participants were asked to react to a social scenario vignette that describe a casual interaction in a coffee shop between “Joseph” or “Michelle” and a person who was either using or not using a wheelchair (Vilchinsky et al., 2010). The IPE participants were randomly given questionnaires referring to Joseph or Michelle, respectively. In approximately half of the questionnaires, the target person is a man, and in the other half, a woman. Additionally, the participants were asked to read the vignette and then respond to each item, indicating the degree to which they believed the item accurately reflected the way the person in the story (Joseph or Michelle) would feel,
think, or behave in that situation. The items are organized into five factors (negative emotions, interpersonal stress, calm, positive cognitions, and distancing behaviors). Responses were marked on a 5-point Likert scale, ranging from 1 (not at all) to 5 (very much).

Measuring attitudes towards disability is not a simple task, as the concept of attitudes is complex. Thus, it has been suggested that researchers utilize scales that have a multidimensional approach, such as the MAS (Antonak & Livneh, 2000). The MAS measures individual’s cognitions, emotions, and behaviors, and has been used to explore attitudes towards disability with other cultures and has been validated across different countries (i.e., France, South Korea, Spain, Israel), thus making it appropriate to utilize in Thailand. An American professional interpreter translated the MAS to Thai for this study. However, due to a limited amount of resources, the researcher was not able to complete a back-translation.

In addition to the MAS, a series of demographic questions were also asked. The demographics were as follows: age, gender, whether they were raised in a rural or urban area, if they were currently employed (and if so, how many hours per week), how many years of school they had completed at IPE, if they had a disability (and if so, what is the disability), if they have a family member with a disability, and their level of interaction with someone with a disability on a daily basis (daily, weekly, monthly, yearly, never).

Data Collection Procedures

Upon approval from IRB, IPE students and professors completed the Thai MAS on paper during registration at the start of the international adaptive sport training
program, and then again at closing ceremonies six days later. In total, 37 IPE students and professors completed the MAS twice.

**Specific Aims, Hypothesis, and Data Analysis**

The data were analyzed using a one-way ANOVA and descriptive statistics in the Statistical Package for the Social Sciences (SPSS), version 25. Scores were calculated by reverse coding eight items and taking the average of the items in each factor, creating five separate scores (i.e. negative emotions, interpersonal stress, calm, positive cognitions, distancing behaviors) (see Table 2). Higher scores indicated “more distancing behaviors, more positive cognitions, more negative emotions, more interpersonal stress, and more calmness” (Vilchinsky et al., 2010, p. 166).

A series of independent sample t-tests were used to compare participant scores between those who had a Michelle survey and those who had a Joseph survey. Descriptive statistics were calculated on all demographic data and outcome scores.

- **Specific Aim 1:** To examine the impact of an international adaptive sport training program on college student’s and professor’s (majoring in and teaching Physical Education) attitudes towards individuals with physical disabilities.

- **Null Hypothesis 1:** Attitudes towards individuals with disabilities will not change as a result of the adaptive sports training program.

- **Analysis Plan for Aim 1:** Perform a one-way ANOVA to compare participant scores on the MAS before and after the adaptive sports training program.
Chapter 4

MANUSCRIPT

Understanding Attitudes Toward Individuals with Disabilities: Outcome of an International Adaptive Sports Training Program

This article will be submitted to:

Journal of Sport for Development

Abstract

The purpose of the study was to examine the impact of an international adaptive sports training program on attitudes towards individuals with physical disabilities. Participants (n=37), either college students or professors at the Institute of Physical Education in Chiang Mai, Thailand, were involved in an international adaptive sports training program provided by the U.S. Department of State. The Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) was used to measure attitudes before and after exposure to the international adaptive sports training program. A one-way ANOVA and descriptive statistics were utilized to compare participant scores across time, and explore demographic information. Findings indicated that there were no significant changes in attitudes upon exposure to and experience with adaptive sports and individuals with disabilities. While adaptive sports benefit the participant physically, emotionally, cognitively, and psychologically, adaptive sports can also serve as a vehicle to combat society’s negative attitudes. However, more work is needed in developing an appropriate tool to evaluate such programs in order to achieve attitude changes.

Keywords: adaptive sport, disability, attitudes, Thailand, physical education
INTRODUCTION

In the World Report on Disability, it is estimated that more than one billion people have some form of disability, which represents about 15% of the world’s population (World Health Organization, 2011). The Americans with Disabilities Act (1990) defines disability as “a physical or mental impairment that substantially limits one or more major life activities” (para 1).

Throughout history, people with disabilities have continuously been mistreated and have experienced a significant amount of discrimination. In primitive times, individuals with disabilities were thought to possess evil spirits and in order to get rid of the disability, the evil spirit had to be driven out. In the Middle Ages, people viewed disability as superstition and a result of witchcraft (Waughfield, 2002). Asylums were then created to torture, starve, flog, and administer bloodletting. As time progressed and the Renaissance period came about, there was a decline in beliefs of evil spirits. However, asylums continued to be utilized in order to protect society (Waughfield, 2002). Society experienced a shift throughout the 18th and 19th centuries when hospitals were used to treat individuals with disabilities in order for them to reach a goal of returning to society (Waughfield, 2002).

In more recent times, legislation in the United States began has increasingly focused on addressing the needs of individuals with disabilities, and the treatment towards individuals with disabilities has become more humane, although not without its own challenges. The Civil Rights Act of 1964 prohibits discrimination based on race, ethnicity, religion, gender, and national origin. This law attempted to put an end to
unequal application of voter registration requirements, as well as racial segregation in the workplace, schools, and by facilities that serve the general public (Chambers, 2008). Although this act did not address individuals with disabilities, it was a step in the right direction. The first piece of legislation that was explicitly for individuals with disabilities was the Architectural Barriers Act of 1968. This law provided equal environmental access for all people, including those with disabilities, and worked to remove physical accessibility barriers in federal spaces and facilities (United States Access Board, 2004). In 1973, the Rehabilitation Act became law, stating that individuals with disability shall not be excluded from participation in, or denied benefits of, any program or activity receiving federal financial assistance. Additionally, it provides equal access for people with disabilities through the removal of architectural, employment, technology, and transportation barriers (Sherr & Babovich, 1997).

One of the most influential pieces of legislation for individuals with disabilities is the Americans with Disabilities Act (ADA) of 1990. The ADA is a civil rights law that bans discrimination based on disability, and guarantees equal opportunity for people with disabilities in public accommodations and facilities, various modes of transportation, local and state government services, and employment (United States Access Board, 2004). Even though there is legislation that guarantees equal rights and opportunities for individuals with disabilities, they continue to experience discrimination, thus being stripped of their rights. Individuals with disabilities continue to be perceived as inferior throughout society, which results in feelings of rejection, fear, and discomfort (Krahe & Altwasser, 2006).
Similar to the United States, Thailand has various laws to protect the rights of individuals with disabilities; however, the first piece of Thai legislation specific to individuals with disabilities did not exist until 1991 (Kachondham, 2010). Disabilities Thailand (DTH) is recognized under the Persons with Disabilities Empowerment Act of 2011 and promotes disability advocacy and policy. DTH exists to help improve the overall development and quality of life for individuals with disabilities (Disabilities Thailand, 2016). In 1999, the National Education Act was created to provide a set of regulations and measures to ensure equal educational opportunities for children with disabilities (Kachondham, 2010). In addition to serving individuals with disabilities, there are also laws that protect and serve caregivers through rights to health care, education, employment, information access, and other benefits (Disabilities Thailand, 2016). In regard to accessibility, there are many existing laws in Thailand stating that individuals with disabilities must be allowed access to and benefit from public transportation, physical environments, buildings, communication technology, and other public services. However, only 28% of government facilities have adhered to accessibility laws by providing parking spaces, accessible toilets, ramps, information, and signals for those with disabilities (Disabilities Thailand, 2016). Thus, even though legislation exists, similar to the United States, discrimination towards individuals with disabilities is still present in Thai society.

In order to offset negative attitudes of individuals with disabilities in any country, it is important to create opportunities that allow these attitudes to be changed. Similar to sport for able-bodied individuals, adaptive sports provide various benefits that enhance
the athlete’s overall quality of life and wellbeing. Today’s ideology of achievement of health for individuals with disabilities is essential (Wilhite & Shank, 2009), and can be achieved using a variety of methods, one of which is adaptive sports. Participation in adaptive sports allow individuals with disabilities to obtain benefits to enhance their overall quality of life and wellbeing and serve as a useful tool to achieve and maintain health. Additionally, through adaptive sport, harsh attitudes of individuals with disabilities can be altered and stigmatized identities can be redefined (Lundberg et al., 2001).

This study aimed to determine the impact of an international adaptive sport training program on the attitudes of the participants towards individuals with disabilities. The Adaptive Sports for Social Change (ASSC) program provided comprehensive educational experiences regarding adaptive sports program design, sports skills progressions and teaching methodologies to a group of Thai college students studying Physical Education and their professors in order to create a social change and allow individuals with disabilities to become more involved in their community. Changing society’s attitudes about people with disabilities can promote inclusion and further acceptance of disability by society (Findler et al., 2007).

**LITERATURE REVIEW**

**Attitudes Towards Disability**

Individuals with disabilities have not always been treated well by broader society, and often experience discrimination and bullying (Lu & Kim, 2017). An attitude is “a combination of beliefs and feelings that predispose a person to behave a certain way”
Attitudes towards individuals with disabilities are influenced by a variety of factors including, but not limited to stigma, ignorance, neglect, superstition, and communication barriers (UNICEF, 2012). These particular factors may generally result in attitudes that are negative towards individuals with disabilities.

There is a vast body of literature discussing society’s attitudes towards individuals with disabilities. Negative attitudes create societal stigmas and discriminations that are hard to overcome (Krahe & Altwasser, 2006). For example, Westernized societies tend to desire physical perfection and high functioning individuals, and imperfections (i.e., disabilities) do not typically align with these preferences (Barnes, 1996). Media outlets tend to present individuals with a disability in a demeaning way, showing that they are suffering, sick, and seeking help (Ruffner, 1990). Thus, individuals without disabilities may tend to avoid interactions with individuals with disabilities because they are scared and unsure of how to interact with them. They tend to primarily notice the impairments, as opposed to the individuals themselves, feel uncomfortable during interactions, and limit their conversations accordingly (Krahe & Altwasser, 2006; Ll, 2016). Employers are also not as likely to recruit individuals with disabilities, and if an individual discloses their disability, they are more inclined to experience discrimination in the hiring process, their salary, and professional recognition (Johnson & Joshi, 2014; Ragins, 2008).

Many people are unaware of their attitudes towards individuals with disabilities, which often leads to “stereotypical thinking, generalization of certain characteristics and attributes to persons with similar conditions and even to all persons with disabilities” (Antonak & Livneh, 2000). Even health professionals have been found to have negative
attitudes (Tervo et al., 2004). These attitudes lead to misconceptions about achievement and personality, as well as mistreatment (Krahe & Altwasser, 2006). Accordingly, negative societal attitudes often lead to decreases in self-esteem, as well as feelings of helplessness and pessimism among individuals with disabilities (Tervo et al., 2004).

While the majority of literature suggests that attitudes towards individuals with disabilities are predominantly negative, positive attitudes exist as well, and can be influenced by education (Tervo et al., 2004), gender (Vilchinsky et al., 2010), age (Dachez et al., 2015), income level, and level of acquaintance with an individual with a disability (Parasuram, 2006). Individuals who are frequently in contact with an individual with a disability tend to have more positive attitudes. Additionally, providing formal instruction and structured experiences, as well as interventions where people are exposed to disability and gain first-hand experience lessens negative attitudes (J. Campbell et al., 2003; Krahe & Altwasser, 2006). It has also been discovered that individuals without disabilities participating in an intervention only need two 90-minute sessions with an individual with a disability to create sustained and significant attitude change (Krahe & Altwasser, 2006).

Disability is not understood universally and individuals with disabilities continue to be perceived differently by different societies and cultures, thus it is important to discuss the cultural construction of disability (Meekosha, 2011; Meyer, 2010); however, the current literature on Thai attitudes towards individuals with disabilities is sparse. Cross-cultural studies of attitudes towards individuals with disabilities are necessary in understanding how individuals are treated across diverse geographical regions or
countries (Stevens et al., 2013). Cultural differences are also a major factor that influences attitudes towards individuals in a society, especially those with disabilities.

**Ableism**

Beliefs are gained throughout the social environments and experiences that individuals are exposed to and have collected throughout life (Hofstede, Hofstede, & Minkov, 2010). This idea extends to able-bodied individuals, who learn to view people with disabilities as *less than*, and think of disability as negative and tragic (Campbell, 2008; Hehir, 2007). This concept is referred to as ableism. According to Wolbring (2008),

> Ableism is a set of beliefs, processes and practices that produce—based on abilities one exhibits or values—a particular understanding of oneself, one’s body and one’s relationship with others of humanity, other species and the environment, and includes how one is judged by others (p. 252).

Ableism has the ability to influence social cohesion, relationships among social groups, and their environments, both individually and throughout a country (Wolbring, 2008). Ableism reflects dynamics of social groups, as ableism is “deeply and subliminally embedded within culture” (Campbell, 2008, p. 153). This concept enables individuals with disabilities to feel pushed “beyond and outside society” (Imrie, 1996, p. 398). This type of behavior can lead to discrimination, and make the world seem inaccessible and unwelcoming for individuals with disabilities (Hehir, 2007). Therefore, ableism is the driving force of discrimination, and can be seen throughout various cultures, including
Thailand; although, it is important to understand the context and influence of culture on attitudes as well.

**Hofstede’s Cultural Dimensions Theory**

According to Geert Hofstede (1991) culture is defined as, “the collective mental programming of the human mind which distinguishes one group of people from another” (p. 5). Individual’s beliefs are gained throughout the social environments and experiences that individuals are exposed to and have collected throughout life. Therefore, “culture is learned, not innate” (Hofstede, Hofstede, & Minkov, 2010, p. 6).

Hofstede’s Cultural Dimensions Theory (G. Hofstede, 1980) can be used to understand cultural influences on societal attitudes in Thailand across six dimensions: 1) individualism-collectivism, 2) power distance, 3) masculinity-femininity, 4) uncertainty avoidance 5) Confucian dynamism (or long-term/short-term orientation), and 6) indulgence vs. restraint (Stanimir, 2014). Not only does Hofstede’s framework allow further understanding about a country based on their scores alone, it also provides a means for comparing cultural differences. Since cultural theories are still being developed, culture can be seen as complicated, so it is important to understand intercultural challenges by addressing culture based off of scores for each dimension, which can range between 0 (low) and 100 (high), with 50 being the mid-range threshold (Niffenegger, Kulviwat, & Engchanil, 2006). It is important to consider, however, that Hofstede’s dimensions are not representative of attitudes towards disability. Rather, attitudes towards disability may be conceptualized from the scores or explained by cultural components, beliefs, and values.
Table 1

Hofstede’s Cultural Dimensions for Thailand

<table>
<thead>
<tr>
<th>Country</th>
<th>IDV</th>
<th>PDI</th>
<th>MAS</th>
<th>UAI</th>
<th>CONDYN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>20</td>
<td>64</td>
<td>34</td>
<td>64</td>
<td>56</td>
</tr>
</tbody>
</table>

Note. IDV = individualism; PDI = power distance; MAS = masculinity; UAI = uncertainty avoidance; CONDYN = long-term orientation (or Confucian dynamism) (Scores range from 0 = low, 100 = high)


The following sections will discuss each domain individually, and how it may contribute to an understanding of societal attitudes towards individuals with disabilities in the United States and Thailand, since disability can be shaped by societal and cultural expectations and norms (Meyer, 2010).

**Individualism-Collectivism.** The Individualism-Collectivism dimension of Hofstede’s theory is perhaps the most important dimension when determining cultural differences in social behavior (Triandis, 1990). This dimension identifies the extent to which individuals in society are integrated into groups and the extent to which the interests of an individual takes precedent over the interest of a group (G. Hofstede, 2001). Thailand’s score (20) suggests that Thailand is a highly collectivistic culture (see Table 1). Individuals with disabilities are more likely to experience segregation from communities in collectivistic societies, unlike in individualistic cultures where they would be more integrated (Meyer, 2010); therefore, these scores indicate that individuals with disabilities in Thailand would tend to be less integrated into their communities.
**Power Distance.** The power distance dimension of Hofstede’s theoretical framework measures the basis of societal inequality (Niffenegger et al., 2006, p. 406). This dimension explains how varying levels of power leads to the unequal treatment of individuals in society, which is important to examine when determining the impact of cultural differences on disability. It was discovered that negative attitudes towards individuals with disabilities are more present in societies that have relatively low power distance scores (Westbook et al., 1993). Thailand’s score for this dimension (64) leans toward the higher end of the spectrum, suggesting that positive attitudes towards individuals with disabilities may, perhaps, be present.

**Masculinity-Femininity.** The masculinity-femininity dimension of Hofstede’s theory pertains to the division of emotional roles between men and women (G Hofstede, 2011) and “manifests through the division of roles within a society” (Niffenegger et al., 2006, p. 406). Thailand’s score (34) for this dimension suggests that Thailand is a feminine society (see Table 1). Individuals with disabilities in Thailand are often shown pity and sympathy throughout society, which is in line with a more feminine approach (Naemiratch & Manderson, 2009). The fact that Thai’s value harmony in their social relationships may persuade people to believe that individuals with disabilities would be accepted in society; however, threats to the harmonious balance (perhaps an individual’s disability) may create resistance throughout the social group (Hallinger & Kantamara, 2000).

**Uncertainty Avoidance.** The uncertainty avoidance dimension of Hofstede’s theory pertains to society’s tolerance for ambiguity, and their ability to handle the stress
of an unknown future (G. Hofstede, 2011). When cultures score low in the uncertainty avoidance dimension, attitudes towards disability are often more positive (Murphy, 2013; Westbrook et al., 1993). Thailand’s score (64) for this dimension suggests that Thai society prefers to avoid uncertainty and ambiguity (see Table 1). A recent study discovered that when members of high uncertainty-avoidance cultures encountered an individual with a disability, the individual without the disability limited their conversations in order to reduce uncertainty (Li, 2016). Members of Thai society also seek stability, so any change (perhaps an individual with a disability) can be disruptive (Hallinger & Kantamara, 2000).

Confucian Dynamism. This dimension, which is also known as Pragmatic vs. Normative or Long-term vs. Short-term Orientation, refers to the extent in which a society focuses on long-term goals and traditions (Manchiah & Zhao, 2012). Thailand’s score (56) is suggestive of a normative society (see Table 1). Normative societies emphasize the importance of values and rights, in the sense that a dominant set of values and rights is preferred over others. With Buddhism being the predominant religion in Thailand, they are taught to be merciful towards the weak and give money to individuals with disabilities (Disabilities Thailand, 2016). This action may be considered a good, societal deed, but it can also give rise to societal stigmas. Thus, their dominant set of religious values in Thailand give rise to stigma towards individuals with disabilities.

Indulgence vs. Restraint. The indulgence vs. restraint dimension on Hofstede’s theory focuses on the control to gratify basic human desires and impulses in order to have an enjoyable life (G Hofstede, 2011). The ability and the extent to which members of
society can control acting on those desires is indicative of whether or not they are categorized as indulgent or restrained. Strong control of their urges reflects restraint, whereas weak control reflects indulgence (G Hofstede, 2011). Thailand’s neutral score (45) for this dimension indicates that a preference cannot be determined. Indulgence vs. Restraint has recently been added to Hofstede’s dimensions and there is a limited amount of research exploring this dimension and its characteristics.

The broader Thai society often views individuals with disabilities as a burden on their families and communities. These individuals are generally not allowed to make their own decisions, are confined to a bed, and live under less than ideal conditions that exclude them from being active members of their communities (Disabilities Thailand, 2016). Essentially, they are being denied their basic human rights simply because they have disability and live in a society that is generally unaccepting of their differences.

In conclusion, some of the dimensions and cultural domains suggest that members of Thai society are fairly accepting of individuals with disabilities, while other dimensions suggest perspectives or treatment of individuals with disabilities is negative. Individuals with disabilities in Thailand are largely out of the public eye, have few opportunities for growth, and are commonly stereotyped because of their disability. Therefore, opportunities to be present in society and engage with people could potentially change their status in society in order to offset these negative attitudes. Adaptive sport may be one such opportunity.

Adaptive Sport
Adaptive sport is defined as “any modification of a given sport or recreation activity to accommodate the varying ability levels of an individual with a disability” (Lundberg et al., 2001). Providing specialized sporting equipment and adaptations to meet the needs and varying ability levels of athletes with disabilities will allow as much independent participation as possible for the athlete (Lundberg et al., 2001). Today, adaptive sport is one of the most common modalities used by recreational therapists, and is utilized as rehabilitation for both adults and children with physical disabilities (DePauw & Gavron, 2005; Kinney et al., 2004). Thus, while the therapeutic use of sports continues to expand, many researchers have found that adaptive sports provide a multitude of benefits that can be obtained through participation.

**Benefits of Adaptive Sport.** Adaptive sport allows individuals with disabilities to positively influence their overall health and quality of life. Research has found that participation in adaptive sports has resulted in individuals with disabilities feeling as though they are admired for their abilities, rather than being stared at for them (Lundberg et al., 2001). The benefits of adaptive sports are apparent in all life domains (Groff et al., 2009). Physical benefits include faster motor responses (Reina et al., 2007), increased aerobic and anaerobic fitness (Goosey-Tolfrey, 2005), decreased body fat, and higher lung capacity (Wells & Hooker, 1990). Psychological and emotional benefits include confidence in skills, overcoming distressing thoughts, strong resiliency, less negative affect, and more positive affect, thus, creating higher levels of psychological wellbeing (Greenwood et al., 1990; Martin, 2008). Cognitive benefits include increased competence judgements, self-efficacy, and the mastery of various experiences (Martin, 2013). Lastly,
social benefits include increased friendships, social integration and social bonding (Martin, 2013). These social benefits foster opportunities for individuals with disabilities to gain a sense of normalcy and an athletic identity (Lundberg et al., 2001; Zabriskie et al., 2005). While research on adaptive sports and its beneficial impacts on participants is well established and widely recognized, research on the influence of adaptive sports on attitudes of broader society is sparse.

**Influence of Adaptive Sports on Attitudes Towards Individuals with Disabilities**

While adaptive sport participation has the potential to impact an individual with a disability, it also has the potential to have positive impacts on society as a whole. Wilhite and Shank (2009) investigate the promotion of adaptive sport participation as a mechanism of health achievement. One subject reported that adaptive sport opportunities have provided learning experiences that have raised public awareness about the capabilities of individuals with disabilities. Furthermore, it can lead to the increase of social networks, improved self-perception, and the sense of normalcy—despite societal stigmas (Wilhite & Shank, 2009). Adaptive sports provide individuals with disabilities a chance to achieve psychosocial well-being, health, and quality of life benefits (Forber-Pratt, 2015), but what impacts do adaptive sports have on societal attitudes towards disability?

As previously mentioned, adaptive sport allows individuals with disabilities to change how they view themselves, while also changing the ways that others view disability (Lundberg et al., 2001). A main issue that individuals with disabilities experience around the world is being excluded from the rest of society, as they constantly
experience environmental and attitudinal barriers that hinder participation in society (Brittian & Wolff, 2015; Devine et al., 2017). However, there is a growing body of evidence that shows that sport has been utilized as a vehicle to improve challenges faced by individuals with disabilities and change societal attitudes and stereotypes of disability (Forber-Pratt, 2015). Through adaptive sport, individuals with disabilities have been able to further engage in their communities and make an impact on local, national and international media, which have further impacted societal attitudes as to what individuals with disabilities are capable of, both athletically and non-athletically (Forber-Pratt, 2015).

Adaptive sport fosters positive social environments that promotes inclusion for individuals with and without disabilities, thus challenging negative attitudes towards disability (Devine et al., 2017). This inclusion allows these individuals to experience a bond through a common activity and a chance for individuals without disabilities to value the time spent with individuals with disabilities (Forber-Pratt, 2015; Wilhite et al., 1999).

After being exposed to adaptive sport, parents of children with disabilities are more hopeful of what their child can achieve, not only through sports, but through other aspects of life as well (Devine et al., 2017). Exposure to adaptive sports and people with disabilities have revolutionized minds of those without disabilities that now embrace an *I can* attitude, which have taken on a whole meaning (Forber-Pratt, 2015). When individuals with disabilities participate in adaptive sport, those without disabilities tend to value and respect them by referring to them as stars, view them as role models, and become more aware of various topics related to disability including health risk factors and their rights as individuals with disabilities (Forber-Pratt, 2015; Lopes, 2015). For
example, people in Ghana used to think that if they were friends with an individual who has a disability, they, or their child, could get a disability. However, after being exposed to individuals who participate in adaptive sport, attitudes changed and they considered athletes with disabilities as friends, even allowing their sons and daughters to marry them (Forber-Pratt, 2015).

Adaptive sports provide opportunities to combat negative attitudes, challenge traditional views of disability, and promote empowerment (Ashton-Shaeffer et al., 2001; Brittain, 2004; Huang & Brittain, 2006). It is evidenced that “sport is not simply entertainment, but a contested terrain where larger social struggles are played out and social injustices can be either challenged or reinforced” (Fisher et al., 2003). Congruently, this can be reflected of adaptive sports. Since sport is universally popular (Devine et al., 2017), individuals with disabilities’ participation in sport enables them to not only draw attention to their country’s social injustices, but also raises awareness of access to sport, equality and other disability-related issues at an international level (Forber-Pratt, 2015). Thus, adaptive sport has the potential to be a powerful, transformative tool that assists in improving the status of disability and changing negative attitudes towards disability.

**Sport Diplomacy**

One potential step in creating social change is to use sport as a mechanism to alter attitudes (Ladda, 2014). In recent years, efforts have been made to promote sport as a means for social development in various disadvantaged communities throughout the world. International and national government and non-government organizations have
utilized sport to conduct programs throughout various communities. Organizations including Right to Play, Olympic Solidarity, Kicking AIDS Out, and Playing for Peace are amongst a variety of organizations funded by different entities that exist to create humanitarian relief, sports development, broad social development, and post-war reconciliation (Kidd, 2008). Sports Diplomacy, an organization funded by the U.S. Department of State’s Bureau of Education and Cultural Affairs, exists to do as such. By utilizing the universal passion of sport, Sports Diplomacy has become an important aspect in building and strengthening international relationships. By providing sport exchanges, it allows an increase cultural understanding and increase dialogue around the world (“Bureau of Educational and Cultural Affairs,” n.d.). Sport diplomacy allows individuals to develop a further understanding of the importance of opportunities, and of being inclusive with those opportunities. These opportunities foster education about equality in order to build a respectful culture (Ladda, 2014).

The United Nation’s Convention on the Rights of Persons with Disabilities (CRPD) and Sport for Development and Peace International Working Group exist to serve individuals with disabilities. For example, the UN’s CRPD has an article addressing the rights for individuals with disabilities to have equal access and participation in leisure, recreation and sport (Rasmussen & Lewis, 2007). Sport for Development and Peace International Working Group provides recommendations to governments on how sport can be used as a tool for communications to improve health care access to individuals with disabilities (Mojtahedi & Katsui, 2018). Additionally, these recommendations suggest a means to develop, benefit, and empower, individuals with
disabilities while reducing stigma associated with disability. However, although these organizations exist to allow individuals from different cultures, backgrounds, and ability levels to participate in sport, individuals with disabilities often see sport as a “second class right” and continue to face discrimination (Mojtahedi & Katsui, 2018, p. 40).

**Summary**

Society’s negative attitudes towards individuals with disabilities creates discrimination, stigma, and stereotypes. Adaptive sports not only benefit individuals with disabilities, but it also serves as a potential mechanism in changing society’s traditional views of disability. Non-government and government organizations use sport to combat a variety of societal issues throughout the world. Thus, this study exists to examine the impact of an international adaptive sport training program on college students and professor’s attitudes towards individuals with physical disabilities.

**METHODS**

This study used a longitudinal, quasi-experimental design to examine the changes in college student’s and professor’s attitudes towards people with disabilities as a result of participation in an international adaptive sports training program at the Institute of Physical Education Chiang Mai (IPE) in Chiang Mai, Thailand.

**International Adaptive Sport Training Program**

In March 2018, a 6-day international adaptive sport training program was held in Chiang Mai, Thailand. This program, Adaptive Sports for Social Change, was funded through the U.S. Department of State’s Bureau of Education and Cultural Affairs’ Sports Diplomacy division. The training consisted of two phases: The first phase had eight sport
specific U.S. coaches and assistant coaches training approximately 50 physical education students and professors from the IPE in four adaptive sports (aquatics, goalball, soccer, and wheelchair tennis) over the course of four days. The second phase had approximately 50 individuals with disabilities (consisting of individuals from the Chiang Mai Wheelchair Sportsmen’s Club and the Northern Thailand School for the Blind) attend a two-day sports skill development camp led by the IPE physical education students and professors under the direct supervision of the U.S. coaches. The two-day skill development camp consisted of the same four sports as were taught in phase one.

**Selection of Subjects**

Participants in the study included Thai undergraduate college students studying Physical Education and some of their professors. The students attending the IPE were current, registered students studying Physical Education. The professors were current employees of the IPE.

**Instrumentation**

The study utilized the 22-item Multidimensional Attitudes Scale Toward Persons with Disabilities (Findler et al., 2007) to measure student and professor attitudes towards individuals with disabilities. Participants were asked to react to a social scenario vignette that describe a casual interaction in a coffee shop between “Joseph” or “Michelle” and a person who was either using or not using a wheelchair (Vilchinsky et al., 2010). The IPE participants were randomly given questionnaires referring to Joseph or Michelle, respectively. In approximately half of the questionnaires, the target person is a man, and in the other half, a woman. Additionally, the participants were asked to read the vignette
and then respond to each item, indicating the degree to which they believed the item accurately reflected the way the person in the story (Joseph or Michelle) would feel, think, or behave in that situation. The items are organized into five factors (negative emotions, interpersonal stress, calm, positive cognitions, and distancing behaviors). Responses were marked on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*very much*).

Measuring attitudes towards disability is not a simple task, as the concept of attitudes is complex. Thus, it has been suggested that researchers utilize scales that have a multidimensional approach, such as the MAS (Antonak & Livneh, 2000). The MAS has been used to explore attitudes towards disability with other cultures and has been validated across different countries (i.e., France, South Korea, Spain, Israel), thus making it appropriate to utilize in Thailand. An American professional interpreter translated the MAS to Thai for this study. However, due to a limited amount of resources, the researcher was not able to complete a back-translation.

In addition to the MAS, a series of demographic questions was also asked. The demographics were as follows: age, gender, whether they were raised in a rural or urban area, if they were currently employed (and if so, how many hours per week), how many years of school they had completed at IPE, if they had a disability (and if so, what is the disability), if they have a family member with a disability, and their level of interaction with someone with a disability on a daily basis (daily, weekly, monthly, yearly, never).

**Data Collection Procedures**
In this study, IPE students and professors completed the Thai MAS on paper during registration at the start of the international adaptive sport training program, and then again at closing ceremonies six days later. In total, 37 IPE students and professors completed the MAS.

**Analysis**

The data were analyzed using the Statistical Package for the Social Sciences (SPSS), version 25, and checked for missing data, data input errors, and outliers. No outliers were present, however, there was a case that had somewhat extreme scores. After removing this case from the dataset and analyzing the data without it, it showed no significant impact, therefore it was kept in the dataset. A series of 8 individual mean replacements were calculated for missing data based on the average of the other participant’s scores for that particular item. Eight participants completed only the pre-test, while another eight completed only the post-test. These scores for only one-time point were kept in the dataset.

MAS scores were calculated for each time point by reverse coding eight items and taking the average of the items in each factor, for a total of 5 factors (i.e. negative emotions, interpersonal stress, calm, positive cognitions, distancing behaviors; see Table 2). Higher scores indicate “more distancing behaviors, more positive cognitions, more negative emotions, more interpersonal stress, and more calmness” (Vilchinsky et al., 2010, p. 166).

A series of independent sample t-tests were used to compare participant scores between those who had a Michelle survey and those who had a Joseph survey. No
statistically significant differences were found (negative emotions: \( t(27) = .003; p = .998 \); stress: \( t(27) = .138; p = .891 \); calm: \( t(27) = - .907; .373 \); positive cognitions: \( t(27) = - 1.117; p = .274 \); distancing behaviors: \( t(26) = -.509; p = .615 \) ), so the data was treated as one sample. A one-way ANOVA was then used to compare participant scores on the MAS across time. A paired samples t-test was the preferred analysis, however, the sample size was small and given the amount of missing data present, it was felt a one-way ANOVA would allow for the use of all data, even though it unpaired participants responses. Descriptive statistics were calculated on all demographic data and outcome scores.

RESULTS

Twenty-one participants completed both the pre and post-test surveys, while eight completed the pre-test only, and another eight completed the post-test only. The final sample consisted of 37 participants (male = 82.8%, female = 17.2%), with an average age of 24.89 years (SD = 5.77). Most were raised in a rural area (82.8%), most were not currently employed (65.5%), most did not have a disability (96.6%), nor did most of them have a family member with disability (89.7%). Most participants had some interaction with an individual with a disability, but the amount varied (never= 28.6%, daily = 7.1%, weekly 14.3%, monthly = 32.1%, yearly = 17.9%). Five participants were professors at the IPC, while the remaining participants were students. Table 2 presents descriptive statistics for each of the five MAS factors.
As indicated in Table 2, all of the domain scores (except interpersonal stress which remained the same) indicate that the participants had more negative emotion, less calmness, less positive cognitions, and more distancing behaviors after the end of the adaptive sports training program than they did at the start of the program. Results from the one-way ANOVA, however, indicated that there were no statistically significant differences between the pre and post-test scores on the attitude domains (negative emotions: $F_{1,56} = .020, p = .889$; interpersonal stress: $F_{1,56} = .000, p = .997$; calm: $F_{1,56} = .089, p = .767$; positive cognitions: $F_{1,56} = .307, p = .582$; distancing behaviors: $F_{1,55} = .202, p = .655$).

<table>
<thead>
<tr>
<th>Table 2: Descriptive Statistics for MAS Factors</th>
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<tr>
<td><strong>Negative Emotions</strong></td>
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<td>Post</td>
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<td>Total</td>
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<td><strong>Interpersonal Stress</strong></td>
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<td>Pre</td>
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<td>Total</td>
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<td><strong>Calm</strong></td>
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<tr>
<td>Pre</td>
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<tr>
<td>Post</td>
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<tr>
<td>Total</td>
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<tr>
<td><strong>Positive Cognitions</strong></td>
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<td>Pre</td>
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<td>Post</td>
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<tr>
<td>Total</td>
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<tr>
<td><strong>Distancing Behaviors</strong></td>
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<tr>
<td>Pre</td>
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<tr>
<td>Post</td>
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<tr>
<td>Total</td>
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</tbody>
</table>
DISCUSSION

The purpose of this study was to examine the impact of an international adaptive sport training program on college student’s and professor’s attitudes towards individuals with physical disabilities. Findings indicated that there were no significant differences across all five factors of the MAS across two time points. In other words, participant attitudes did not change as a result of the adaptive sport training. Some attitudes and behaviors worsened, but not significantly, as scores changed by less than half of a point. There are a variety of reasons for this potential lack of change, including issues with program design and measurement.

Program Design Considerations

A growing body of literature exists concluding that adaptive sports can change negative attitudes towards individuals with disabilities (Forber-Pratt, 2015; Wilhite et al., 1999). A key feature of programs that have impacted attitudes is formal instruction and discussion about broad disability issues, as opposed to activity involvement (Campbell, Gilmore, & Cuskelly, 2003; Krahe & Altwasser, 2006). Krahe and Altwasser (2006) discovered that individuals without disabilities participating in an intervention needed two 90-minute sessions with an individual with a disability to create sustained and significant attitude change. Their two sessions consisted of seven different discussion topics including discussing personal experiences with individuals with disabilities, labeling, history of treatment, interactions, and eliminating stereotypic conceptions about individuals with disabilities. While the adaptive sport program in this study provided direct interaction with individuals with disabilities, it lacked the aspect of discussion that
was the focus of Krahe and Altwasser’s intervention. Perhaps those discussions prompted deeper thinking about individuals with disabilities and their daily experiences; therefore, their participants were more aware of individuals with disabilities and their experiences, and thus, their attitudes were impacted more significantly.

Campbell, Gilmore, and Cuskelly (2003) discovered that fieldwork experiences and information-based instruction can raise awareness of disability and inclusion, which can lead to changes in attitude toward individuals with disabilities. Their study examined student teachers and their views on inclusive education, atypical development, disability, and individual differences (J. Campbell et al., 2003). Over the course of a 13-week semester, the participants were provided with both formal instruction and fieldwork experiences. While the ASSC program provided both fieldwork experiences and formal instruction, it occurred over the course of six days, rather than a full semester. And while the formal instruction the participants received was important to their ability to implement adaptive sports on their own, it was specific to the sport skills and did not include instruction about broader disability issues, potentially limiting the overall impact on attitudes.

**Measurement Considerations**

The MAS is a relatively new instrument (created in 2007) that has been tested in other countries, but has yet to be fully developed and finalized. It is an indirect measure of attitude, meaning that survey respondents project their attitudes, behaviors, and thoughts towards individuals with disabilities onto the subjects in the social scenario (Joseph or Michelle), and were not informed that their attitudes were being measured (see
Antonak & Livneh, 1988, Antonak & Livneh, 2000, and Findler, Vilchinsky & Werner, 2007 for discussions of projection on surveys). Additionally, the measure may have reflected Thai society’s views of disability, rather than their own views. While the literature surrounding the MAS has reported this to be a useful way of measuring attitudes while trying to reduce the possibility of socially desirable responses (Findler, Vilchinsky, & Werner, 2007), it is possible that the indirect measure was inappropriate in this instance.

Cultural differences may have contributed to measurement issues with the MAS as well. Although the coffee shop scenario in the MAS was identified as appropriate by someone with extensive knowledge of the Thai culture, it is possible that the scenario was not culturally appropriate for the rural area of Thailand in which this program and study took place. Additionally, survey respondents may not have had much experience completing surveys prior to this study, which could have contributed to misunderstandings while completing the survey. Additionally, although the MAS was translated from English to Thai by a professional translator, back-translation was not performed due to limited resources; therefore, it is possible that translation issues contributed to measurement issues. Finally, the MAS had never been used to measure change in attitudes before and after participation in a program (i.e., pre-post testing) prior to this study, and the absence of significant changes may reflect a lack of sensitivity in its ability to measure changing attitudes.

Also, while both the Krahe and Altwasser study (2006) and the current study administered surveys prior to and upon completion of the intervention, Krahe and
Altwasser conducted a three-month follow-up survey as well. The results of their study showed significant changes from the baseline measurement to the follow-up measure. The current study did not conduct a long-term follow-up measure; therefore, it is not possible to determine if changes in attitudes occurred over time, after participants had an opportunity to process and reflect on their experience. Lastly, since the context of the social scenario (i.e. Joseph or Michelle in a coffee shop having an encounter with someone in a wheelchair) did not match the context of the intervention, it may have contributed to a misunderstanding of how to respond to the MAS items.

**Recommendations for Future Research**

There are a number of recommendations for future research regarding changing attitudes towards individuals with disabilities through adaptive sport. First, it should be noted that the small sample size of 37, and the presence of missing data across the time points, may have contributed to an inability to measure change in attitudes, thus it is suggested that future studies involve a larger sample size. Future researchers should utilize a multidimensional measure of attitudes in research of this nature; however, measurement issues identified specific to the MAS should be taken into consideration before using it for data collection in future studies. It is also recommended to use a mixed-method approach by implementing interviews to gain a deeper understanding of the impacts of an international adaptive sports training program on attitudes. Lastly, it is encouraged to conduct a longer follow-up (third data point) in future studies.

**CONCLUSION**
Society’s negative attitudes towards individuals with disabilities creates discrimination, stigma, and stereotypes. It is important that individuals with disabilities have access to their communities, and a first step in facilitating that access is by fostering positive societal attitudes. A mechanism to achieve this is to provide adaptive sport opportunities. Non-government and government organizations utilize adaptive sports to combat a variety of societal issues throughout the world, including disability discrimination. While adaptive sports benefit the participant physically, emotionally, cognitively, and psychologically, adaptive sports has the potential to also serve as a vehicle to combat society’s negative attitudes, although not shown through this study for a variety of reasons. It is recommended to incorporate more formal instruction/discussion focused on broader disability issues, which will allow the individual to get a deeper understanding of individuals with disabilities and their everyday encounters. More work is needed in developing an appropriate tool to evaluate such programs in order to achieve attitude changes.
Chapter 5

CONCLUSION

Individuals with disabilities have been mistreated and have experienced a significant amount of discrimination throughout history. Recently, disability legislation has appeared throughout the world and has increasingly focused on addressing the needs of individuals with disabilities. While treatment towards individuals with disabilities has become more ethical, individuals with disabilities often experience a series of challenges because of society’s negative views of disability. Adaptive sports not only have a multitude of physical, psychological, emotional, and cognitive benefits for individuals with disabilities, but they also have the potential to be a vehicle of change in society’s outdated views of disability.

The purpose of this study was to examine the impact of an international adaptive sport training program on college students and professor’s attitudes towards individuals with physical disabilities. While the null hypothesis (attitudes towards individuals with disabilities would not change as a result of participation in the ASSC program) was confirmed, perhaps the reasoning of this was not because of the program, but the cultural and instrument issues. The contributions and practical implications for the findings of this study have direct implications on how to conduct research on attitudes upon exposure to an international adaptive sport training program.

While this study did not evaluate the implementation aspect of the adaptive sport program, there are a number of program elements that are necessary to consider for future research on these types of programs. Throughout the entirety of the program, there were a
series of language barriers that existed. Although language barriers may not be avoided, it is important to be aware of them. This not only was an issue that was presented in the translation of the MAS in the study, but it also impacted various aspects of the program (i.e. program preparation, implementation of the program, survey distribution, instructions, etc.). It is also beneficial to ensure that the program is carried out with a partnering organization that will guarantee continued programming with the knowledge and resources given to them. This continuation of the program will result in a lasting impact of adaptive sports on societal attitudes.

Aside from the various aspects above, it is extremely important to consider the length of the program. It seems that it takes more than a 6-day program to change an attitude completely. An individual may be able to slightly alter their perception on something (i.e. individuals with disabilities) within 6-days due to getting more information about a specific topic (i.e. adaptive sports) and gaining new experiences. However, complete attitude change most likely occurs when participants have direct and continuous interactions with individuals with a disability, rather than obtaining information on what activities people with disabilities take part in.

Additionally, if the individuals with disabilities were in attendance throughout the entire 6-days of the program, the likelihood of having greater attitude change would possibly increase. Thus, it is recommended that future studies regarding attitude changes towards people with disabilities incorporates constant exposure to individuals with disabilities, rather than just two days. Also, similar to Krahe and Altwasser’s study (2006), it is also recommended to incorporate more formal instruction/discussion focused
on broader disability issues, which will allow the individual to get a deeper understanding of individuals with disabilities and their everyday encounters.

During the last two days of the 6-day program, many IPE participants experienced positive moments that could have potentially created lasting attitude change towards individuals with disabilities due to the adaptive sports program. For instance, when the individuals with disabilities arrived on day five of the program, the IPE participants seemed to only discuss sport-related tasks and kept them at a distance, perhaps, showing signs of being uncomfortable. The IPE participants also seemed reluctant to transfer the individuals with disabilities to and from their wheelchairs. However, on day six, after participating in the program, the IPE participants began interacting with the individuals with disabilities more and making casual conversations, rather than sport-related conversations. They also seemed more comfortable transferring the individuals with disabilities to and from their wheelchairs.

On another occasion, one of the participants with a disability expressed feelings of being free after the first day of programs. When word got around about this individual, the IPE participants seemed to be more motivated to serve the participants, both within the context of the program and beyond it. Additionally, on the last day of the program, some of the IPE participants expressed that they will strive to incorporate adaptive sports into their current and future teachings. Lastly, after the conclusion of the program, one of the IPE participants contacted one of the U.S. coaches through social media stating that they applied for a job serving people with disabilities and now has a new creative mindset for working with individuals both with and without disabilities.
In conclusion, this study demonstrated not only the importance of having in-depth discussions about disability and discrimination to supplement skills training, but also the need for an appropriate instrument to accurately measure and reflect the experiences gained from an international adaptive sports training program.
References


https://doi.org/10.1016/S0005-7967(02)00184-5


APPENDICES

Appendix A: English Multidimensional Attitudes Scale (MAS)
Appendix B: Thai Multidimensional Attitudes Scale (MAS)
Appendix C: English IRB Approved Consent Form
Appendix D: Thai IRB Approved Consent Form
Appendix A

Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS - English)

Imagine the following situation:

Joseph/Michelle goes out for lunch with some friends to a coffee shop. A person in a wheelchair, with whom Joseph/Michelle is not acquainted, enters the coffee shop and joins the group. Joseph/Michelle is introduced to the person in the wheelchair, and shortly thereafter, everyone else leaves with only Joseph/Michelle and the person in the wheelchair remaining alone together at the table. Joseph/Michelle has 15 minutes to wait for their ride. Try to imagine the situation.

People experience a variety of emotions when they are involved in such a situation. This question contains a list of possible emotions which may arise before, during, and/or after such a situation.

Please rate the likelihood that Joseph/Michelle would feel:

<table>
<thead>
<tr>
<th></th>
<th>Not At All (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>Very Much (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Guilt</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Pity</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Rejection</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Upset</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Tension</td>
<td>○</td>
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<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Stress</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Shyness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Alertness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
</tbody>
</table>
People experience a variety of cognitions (thoughts) when they are involved in such a situation. Following is a list of possible thoughts that may arise before, during, and/or after such a situation.

Please rate the likelihood that Joseph/Michelle would think:

<table>
<thead>
<tr>
<th>Thought</th>
<th>Not At All (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>Very Much (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[He/she] seems to be an interesting person.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>[He/she] looks like an OK person.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I enjoy meeting new people.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>We may get along really well.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>[He/she] looks friendly.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
</tbody>
</table>

People experience a variety of behaviors when they are involved in such a situation. Following is a list of possible behaviors that may arise before, during, and/or after such a situation.

Please rate the likelihood that Joseph/Michelle would behave in the following manner:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Not At All (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>Very Much (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get out.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Move away.  

Move to another table.  

Find an excuse to leave.  

Dwell on reading the newspaper or talking on a cell phone.

Demographic Items

Please read and answer the following questions:

1. What is your age?  ____ Years

2. What is your gender?  ____ Male  ____ Female

3. Were you raised in an urban or rural area?  ____ Rural  ____ Urban

4. Are you currently employed?  ____ Yes  ____ No  
   If yes, how many hours do you work per week?  ____ Hours/Week

5. How many years of school have you completed at IPECM?  ____ Years

6. Do you have any type of disability?  ____ Yes  ____ No  
   If yes, what is your disability? ________________________________

7. Do you have a family member with a disability?  ____ Yes  ____ No

8. How often do you interact with someone with a disability?  
   ____ Daily  ____ Weekly  ____ Monthly  ____ Yearly  ____ Never
Appendix B

Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS - Thai)

จินตนาการสถานการณ์ดังต่อไปนี้:

มิชลออกไปรับประทานอาหารกลางวันกับเพื่อน ๆ ที่ร้านกาแฟแห่งหนึ่ง
มีคนคนหนึ่งที่มิชลไปรู้จักนั่งริมขอบพื้นที่ร้านภายในร้านมื้อและเขารวมกับกลุ่ม
มิชลดูแนวให้รู้จักกับคนที่นั่งริมขอบ และหลังจากนั้นไม่นาน ๆ ค่ำคืนมึงได้ออกจากร้าน
เหลือแต่มิชลกับคนที่นั่งริมขอบยุ่งเหยิงฝั่งทิศตะวันตก มิชลมีเวลาอีก 15 นาทีที่จะรอให้เพื่อนมารับ
ลองพยายามนึกภาพสถานการณ์

ผู้คนมักจะประสบกับความหลากหลายของอารมณ์เมื่อพวกเขาต้องเผชิญกับสถานการณ์ต่างๆ ว่า
ล่าทีนี้ประสบเหตุการณ์ของอารมณ์ที่เป็นไปได้ซึ่งอาจเกิดขึ้นก่อน ระหว่าง
และ/หรือหลังจากสถานการณ์นั้น

โปรดให้คะแนนความเป็นไปได้ที่มีจีนจะรู้สึก:

<table>
<thead>
<tr>
<th></th>
<th>ไม่แน่นอน (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>แน่นอนมาก (5)</th>
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<tbody>
<tr>
<td>อารมณ์ซึมเศร้า</td>
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<td>การไม่ยอมรับ</td>
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<td>○</td>
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<tr>
<td>ความเศร้าสลด</td>
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ผู้คุมมักจะประสบกับความหลากหลายของการวิวัฒนาการ (ความคิด)
เมื่อพวกเขาต้องเผชิญกับสถานการณ์ต่างๆ
สิ่งนี้วินิจฉัยความคิดที่เป็นไปได้ชัดเจนมากขึ้นก่อน ระหว่าง
และ/หรือหลังจากสถานการณ์นั้น

โปรดให้คะแนนความคิดเป็นไปได้ที่มีชัดเจนคิด:

| [เข้า/ออก]  | ไม่เห็นหนอน (1) | (2) | (3) | (4) | เห็นหนอนมาก (5) |
| [เข้า/ออก]  | ดูเป็นคนที่น่าสนใจ | ○   | ○   | ○   | ○              |
| [เข้า/ออก]  | ดูเป็นคนใช้ได้ | ○   | ○   | ○   | ○              |
| ข้าพเจ้าสมบูรณ์กับการพิมพ์ตีน | ○   | ○   | ○   | ○   | ○              |
| เราอาจจะเข้ากันได้ชัดมาก ๆ | ○   | ○   | ○   | ○   | ○              |

ผู้คุมมักจะประสบกับความหลากหลายของการพิจารณาเมื่อพวกเขาต้องเผชิญกับสถานการณ์ต่างๆ
สิ่งนี้วินิจฉัยการพิจารณาที่เป็นไปได้ชัดเจนมากขึ้นก่อน ระหว่าง และ/หรือหลังจากสถานการณ์นั้น

โปรดให้คะแนนความคิดเป็นไปได้ที่มีชัดเจนการพิจารณาดังต่อไปนี้:
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<th>(4)</th>
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</table>

สถิติประชากร
โปรดอ่านและตอบคำถามดังต่อไปนี้:

9. คุณอายุเท่าไหร่ _____ ปี

10. เพศ _____ ชาย _____ หญิง

11. คุณเคยเป็นหนี้เมื่อวานหรือช่วงที่ _____ ล้านน. _____ ล้าน

12. บังคับบุคคลที่ทำงานหรือไม่ _____ ใช่ _____ ไม่

หากใช้ คุณทำงานกี่ชั่วโมงต่อสัปดาห์ _____ ชั่วโมง/สัปดาห์

13. คุณสำเร็จการศึกษากัปตันปีที่ IPECM? _____ ปี

14. คุณมีความพิการใด ๆ หรือไม่ _____ ใช่ _____ ไม่

หากใช้ คุณมีความพิการใด _____________________________

15. คุณมีสามัคคีครอบครัวที่มีความพิการหรือไม่ _____ ใช่ _____ ไม่

16. คุณมีปฏิสัมพันธ์กับคนที่มีความพิการบ่อยเพียงใด?
รายวัน รายสัปดาห์ รายเดือน รายปี ไม่เคย
Appendix C

English IRB Approved Consent Form

Information about Being in a Research Study
Clemson University

Adaptive Sports for Social Change

Description of the Study and Your Part in It

Dr. Jasmine Townsend, Dr. Lauren Duffy and Elizabeth Murphy are inviting you to take part in a research study. Jasmine and Lauren are both Assistant Professors at Clemson University, and Elizabeth is a graduate student at Clemson University, running this study with the help of Dr. Townsend and Dr. Duffy. The purpose of this research is to understand the change in attitudes towards disability following participation in an international adaptive sports training program and perform an evaluation on the program (knowledge and skill acquisition and participant satisfaction). This study, and the Adaptive Sport for Social Change (ASSC) program as a whole, could change society's perceptions about people with disabilities.

Your part in the study will be to complete a survey about attitudes towards people with disabilities two times. It will take you about 20-25 minutes to complete the survey each time.

Risks and Discomforts

We do not know of any risks or discomforts to you in this research study.

Possible Benefits

While there are no direct benefits of participation in this study, you may help contribute to a broader understanding of whether or not adaptive sport programs impact attitudes about people with disabilities. Additionally, by performing a program evaluation, we can determine the subjective outcomes of the program.

Protection of Privacy and Confidentiality

While there is no way to guarantee complete confidentiality of your data, we will do our best to protect your responses. Your information will be kept on a secure, password protected laptop in a locked room. Other than recording your name at the beginning of the study in order to match your two surveys together, your name will not be matched with any of your responses. As soon as you complete your last survey, we will assign your packet a number, and your name will be deleted from all records. The results of this
study may be published in scientific journals, professional publications, or educational presentations; however, no individual participant will be identified.

Choosing to Be in the Study

You may choose not to take part in this study at all, and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study, or to stop taking part in the study.

Contact Information

If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at +001 864-656-0636 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the ORC’s toll-free number, +001 866-297-3071. The Clemson IRB is a group of people who independently review research. The Clemson IRB will not be able to answer some study-specific questions. However, you may contact the Clemson IRB if the research staff cannot be reached or if you wish to speak with someone other than the research staff.

If you have any study related questions or if any problems arise, please contact Dr. Jasmine Townsend at Clemson University at +001 864-656-2198 or Dr. Lauren Duffy at +001 704-213-2099.

Consent

By participating in the study, you indicate that you have read the information written above, are at least 18 years of age, been allowed to ask any questions, and are voluntarily choosing to take part in this research. You do not give up any legal rights by taking part in this research study.
Appendix D

Thai IRB Approved Consent Form

ข้อมูลเกี่ยวกับการเป็นส่วนหนึ่งของการศึกษาวิจัย มหาวิทยาลัยเคลมสัน

ถึงการปรับตัวเพื่อการปฏิรูปทางสังคม

คำอธิบายการศึกษาวิจัยและบทบาทของคุณ

ดร.แอนน์ เทมเมอร์ และอลิซเบ็ธ คอร์นเวล
ขอขอบคุณคุณให้ข้อมูลเพื่อเป็นส่วนหนึ่งของการศึกษาวิจัย
ทั้งนี้จะมีการเรียกคุณร่วมจัดการระดับชุมชนที่มหาวิทยาลัยเคลมสัน
และอลิซเบ็ธซึ่งเป็นนักศึกษาระดับปริญญาตรีที่มหาวิทยาลัยเคลมสัน
เป็นคนดำเนินการวิจัยนี้โดยได้รับความช่วยเหลือจากดร.ทอมัส ชัฟฟ์ และคร.อัครินท์
การวิจัยครั้งนี้มีจุดมุ่งหมายเพื่อทำความเข้าใจเกี่ยวกับการเปลี่ยนแปลงที่สำคัญต่อความพิการ โดยมีส่วนร่วมใน
โครงการการศึกษาเพื่อให้ข้อมูลเพื่อใช้ในการปฏิรูปทางสังคมและประเมินผลโครงการ (การได้รับความรู้และทักษะ
และความมั่นใจของผู้เข้าร่วม) การศึกษาวิจัยครั้งนี้และโครงการที่เกี่ยวข้องปรับหน่วยเพื่อการปฏิรูปทางสังคม
(ASCC) โดยรวมอาจสามารถเปลี่ยนแปลงการรับรู้ของกลุ่มเป้าหมายของสังคมเกี่ยวกับบุคคลที่มีความพิการ

บทบาทของคุณในการศึกษาพฤติกรรมการท่าทางสังคมที่เกี่ยวกับที่สำคัญต่อการเป็นจานวนของกลุ่ม
ชั้นแต่ละช่วงจะใช้วิธีการ 20-25 นาทีในการท่าทางสังคม

ความเสี่ยงและความรู้สึกไม่สบาย

เรารักษาความเสี่ยงหรือความรู้สึกไม่สบายที่เกิดจากการศึกษาวิจัยนี้
ผลประโยชน์ที่เป็นไปได้

ในขณะที่ไม่มีผลประโยชน์ใดๆตรงจากการมีส่วนร่วมในโครงการนี้
คุณอาจมีส่วนร่วมในทางที่กำหนดอยู่ในโปรแกรมการวิจัยของ Upstate South Carolina ที่ Clemson IRB ที่จะมีผลประโยชน์ที่เป็นไปได้แต่กันตามระเบียบที่กำหนดไว้

การผู้ชุมครองความเป็นส่วนตัวและการรักษาความลับ

เนื่องจากไม่มีวิธีใดในการรับประกันความลับของข้อมูลของคุณอย่างสมบูรณ์
เพราะพยายามป้องกันภัยที่สูงที่สุดที่คุณจะได้รับในองค์ประกอบของข้อมูล
ข้อมูลของคุณจะถูกปกป้องไว้ในเปลี่ยนที่ไม่มีการเข้าถึงข้อมูลที่มีผลดีและเก็บไว้ในที่ที่ถูกล็อก
นอกเหนือจากการบันทึกข้อมูลของคุณคุณจะรับทราบการศึกษาวิจัย เพื่อให้คุณทราบว่ามีการรักษาข้อมูลของคุณ
ข้อมูลของคุณจะถูกเก็บด้วยวิธีที่มีผลดีและเก็บไว้ในที่ที่ถูกล็อก
เราได้กำหนดข้อมูลไว้ให้แก่กลุ่มข้อมูลของคุณ และข้อมูลของคุณจะถูกบังคับจากที่ที่ที่ถูกล็อก
ผลการศึกษาที่นี้อาจได้รับการจัดพิมพ์ในหนังสือวิทยาศาสตร์สิ่งที่มีระดับมืออาชีพ
หรืองานนำเสนอเพื่อการศึกษาแต่ไม่มีการระบุผู้มีส่วนร่วมใด ๆ

การเลือกที่จะเป็นส่วนหนึ่งของการศึกษาวิจัย

คุณอาจเลือกที่จะไม่เข้าร่วมการศึกษาวิจัย และคุณอาจเลือกที่จะมีส่วนร่วมได้ตลอดเวลา
คุณจะไม่ถูกบังคับว่าคุณจะไม่เข้าร่วมการศึกษาหรือมีส่วนร่วมการศึกษานั้น

ข้อมูลติดต่อ

หากคุณมีคำถามหรือข้อสงสัยเกี่ยวกับสิทธิของคุณในการศึกษาวิจัยนี้
กรุณาติดต่อสำนักงานการปฏิบัติตามมาตรฐานการวิจัยแห่งมหาวิทยาลัยเคิมสัน (ORC) ที่หมายเลข +001 864-656-0636 หรือ irb@clemson.edu หากคุณอยู่นอกเคิมสัน Upstate South Carolina
โปรแกรมการศึกษาวิจัยของ ORC +001 866-297-3071 Clemson IRB ที่กองทุนอธิบดีที่ตรวจสอบงานวิจัย
Clemson IRB จะไม่สามารถตอบคำถามเฉพาะทางบางคำถามที่เกี่ยวกับการศึกษาวิจัยได้
อย่างไรก็ตามคุณสามารถติดต่อ Clemson IRB ได้หากไม่สามารถติดต่อเจ้าหน้าที่ฝ่ายวิจัยได้
หรือถ้าคุณต้องการให้คุณบันทึกลงอีนี่ที่ไม่ใช่กลุ่มที่มีผลที่ดี

หากคุณมีคำถามใด ๆ เช่นเกี่ยวกับการศึกษาวิจัย หรือหากมีปัญหาใด ๆ กรุณาติดต่อดร.แจสิณี ทาวน์เซนด์ ที่มหาวิทยาลัย เคลมสันที่หมายเลข +001 864-656-2198 หรือผ่านอีเมลที่ที่มาเลย์ +001 704-213-2099

ความยินยอม

โดยการเข้าร่วมการศึกษานี้ คุณได้แสดงให้เห็นว่าคุณได้อ่านข้อมูลที่ขึ้นข้างล่าง และคุณมีอายุอย่างน้อย 18 ปีและได้รับอนุญาตให้เข้าร่วมการวิจัยนี้โดยสมัครใจ คุณไม่ได้ละสิทธิที่คุณ ตามกฎหมายโดยการมีส่วนร่วมในการศึกษาวิจัยนี้