

INTENTIONS OF HIGH SCHOOL TRACK AND FIELD COACHES TO INCLUDE  
ATHLETES WITH PHYSICAL DISABILITIES

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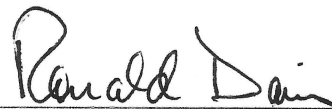
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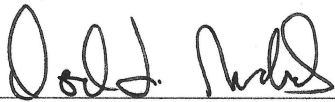
To the Dean of the Graduate School:

I am submitting herewith a dissertation written by Jonna Belanger entitled "Intentions of Texas High School Track and Field Coaches to Include Athletes with Physical Disabilities." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Kinesiology.



Ronald Davis, Ph.D., Major Professor

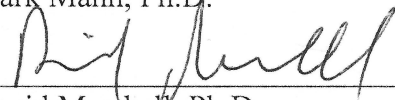
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Dean of the Graduate School

## DEDICATION

For my husband, Joe Belanger, my son Patrick, and my family, thank you for your love, support, and patience.

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## ABSTRACT

JONNA BELANGER

### INTENTIONS OF HIGH SCHOOL TRACK AND FIELD COACHES TO INCLUDE ATHLETES WITH PHYSICAL DISABILITIES

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The purpose of this study was to investigate the beliefs that influenced Texas high school track and field coaches' intentions towards including student athletes with physical disabilities on their high school athletic teams. The direction of the present study was based on changes made by the Texas University Interscholastic League (UIL). During the spring 2014 season UIL added a pilot wheelchair division in track and field. However, Texas high school track and field coaches' intentions towards including athletes with physical disabilities had not been previously assessed. The Coaches' Intentions to Include an Athlete with a Disability survey was designed to specifically assess the constructs of the Theory of Planned Behavior. These constructs include a set of beliefs that lead to behavioral constructs that lead to a person's intention to perform a specific behavior. The survey assessed the coaches' behavioral beliefs and the associated attitude towards the behavior construct, normative beliefs and the associated subjective norm construct, and control beliefs and the associated perceived behavioral control construct.

Head track and field coaches with at least 1 year of coaching experience that were between the ages of 25 to 65 years were asked to participate in the survey. Of the 1162 emails sent 113 survey responses met the inclusion criteria and had enough data to be retained. A multiple stepwise regression revealed that the coaches' attitudes towards inclusion predicted their intention to include a student athlete with a physical disability. Descriptive statistics revealed that the majority of coaches ( $n = 89$ ) demonstrated a positive attitude and high intention towards the inclusion of student athletes with physical disabilities on their high school track and field team. Based on a discriminate function analysis of coaches' behavioral beliefs, coaches with high intentions towards inclusion believed that students with physical disabilities demonstrated a benefit to the overall team by inspiring other athletes and adding diversity to the team.

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## CHAPTER I

### INTRODUCTION

In a historical move, the Texas University Interscholastic League (UIL) amended its Constitution and Contest Rules for Track and Field (2014) to include a wheelchair division. The changes were piloted with a demonstration event at the conclusion of the 2014 season at the State Track and Field Championship. Three events for athletes with physical disabilities were featured; shot put, 100-m, and 400-m. More than 15,000 fans witnessed this inaugural pilot event which included a total of 12 athletes (5 female, 7 male). The Texas UIL plans to continue with a second pilot wheelchair competition at the May 2015 State Track and Field Championship (UIL, 2015).

The changes made by Texas UIL to the Constitution and Contest Rules provided for the first time an opportunity for student athletes with physical disabilities that use a wheelchair for mobility to compete in a traditional sports program with their peers without disabilities. However, the continued success of the wheelchair division is contingent on student athletes with physical disabilities trying out for their high school track and field team, and the high school coaches including the student athletes on their team. Given this contingency, it is important to investigate whether high school coaches will include student athletes with physical disabilities on their track and field team. Experts in adapted physical activity have established that athletes with physical disabilities that participate on sports teams are more successful when the coach has a

positive attitude towards inclusion leading to a high intention to include the athlete with a physical disability (Heinkinaro-Johnansson & Sherrill, 1994; Nixon, 1988).

The success of the wheelchair division is contingent on Texas high school coaches having a positive attitude and a high intention to include a student athlete with a physical disability on their team. Therefore, this investigation was focused on determining Texas high school track and field coaches' intentions towards including student athletes with physical disabilities through the constructs of Theory of Planned Behavior. The following literature was reviewed under these four headings: (a) Legislative Support for Extracurricular Activities, (b) Theoretical Framework, (c) Theory of Planned Behavior and Inclusion in Physical Education, and (d) Coaches Attitudes towards Inclusion.

### **Legislative Support Extracurricular Activities**

Public Law 93-112, the Rehabilitation Act of 1973, Section 504, ensures individuals with disabilities, who are qualified, will not be discriminated against or excluded from federally funded programs or activities due to their disabilities. According to this law, the terms "programs or activities" include interscholastic sports and recreation. In 2008, members of Congress requested a re-evaluation of 1973 Public Law 93-112, entitled the Rehabilitation Act, with specific attention to the law's Section 504.

The re-evaluation was performed by the Government Accountability Office (GAO) in 2009, for the primary purpose of determining how school districts were addressing

physical education and extracurricular athletic opportunities for students with disabilities.

Five key findings emerged from the GAO investigation:

1. Schools were meeting the physical education needs of students with and without disabilities, but many schools reported integrating students with disabilities into general physical education is a challenge.
2. Extracurricular athletic opportunities were found to be considerably lower for students with disabilities when compared to their peers without disabilities.
3. School district personal and state associations felt they lack the training and knowledge that is needed to provide appropriate athletic opportunities for students with disabilities.
4. Little support and guidance was provided by the U.S. Department of Education on providing physical education and extracurricular athletic opportunities for students with disabilities.
5. Further guidance related to the schools' responsibilities was requested of the U.S. Department of Education related to PL 93-112, Section 504 (GAO report, 2010; Arnhold, Young, & Lakowski, 2013).

Congress then turned to the U.S. Department of Education to address the school districts on these findings through the Office of Civil Rights (OCR); the mechanism of notice was a "Dear Colleague Letter" to all Special Education School District Supervisors, and Athletic Directors outlining recommendations for including students with disabilities in extracurricular activities to include athletics and sports. Five main recommendations surfaced in the OCR Dear Colleague Letter (Department of Education: Office of Civil Rights, 2013; Arnhold, Young, & Lakowski, 2013):

1. Schools need to address accessibility and equipment related to physical education and extracurricular athletics.
2. Personnel preparation needs to focus on training of highly qualified adapted physical education teachers and coaches.

3. Physical educators and coaches should utilize teaching styles and stronger behavior management techniques to address the success of students with disabilities.
4. When possible, adaptations to traditional programs or curriculums need to be made to include students with disabilities, or an alternative sports opportunity should be made accessible.
5. Assessment, progress, achievement, and grading strategies should be utilized to meet the needs of students with disabilities; there should be no generalization of performance ability based solely on the students' disability.

The fourth recommendation, which reinforced the original 1973 Rehabilitation Act, stated that one method for meeting the needs of students with disabilities was to provide students with opportunities to participate in traditional interscholastic sports programs. As previously stated the Texas University Interscholastic League (UIL) demonstrated the utility of amending a traditional sports program by including a wheelchair division in the 2014 state Track and Field championships. The inclusion of this pilot wheelchair competition was not meant to be mandated by the UIL, but instead allowed coaches the opportunity to include student athletes with physical disabilities that earned a position on their team.

As stated before the success for the wheelchair program is contingent on the success of the student athletes with physical disabilities, and the success of the student athletes with physical disabilities is contingent on the coaches' beliefs and intentions towards including student athletes with physical disabilities on their team. However, the beliefs and intentions of current Texas high school track and coaches towards the inclusion of a student athlete with physical disabilities on their team had not been assessed.

To address this need, coaches' intentions were established by utilizing the seven constructs of the Theory of Planned Behavior (Ajzen, 2006).

### Theoretical Framework

The Theory of Planned Behavior is a psychological model for explaining motivational influences on behavior and is an extension of the Theory of Reasoned Action (Fishbein & Ajzen, 1975). According to Theory of Planned Behavior, human behavior is guided by three main considerations: (a) behavior belief or beliefs about likely consequences, (b) normative belief or beliefs about normative expectations, and (c) control belief or beliefs about the presence of factors that impede or facilitate performance (Ajzen & Fishbein, 1980). The behavior belief is influenced by the person's attitude towards the behavior, while the normative belief is influenced by their perceived social pressure or subjective norm, and the person's control belief is influenced by their perceived behavioral control.

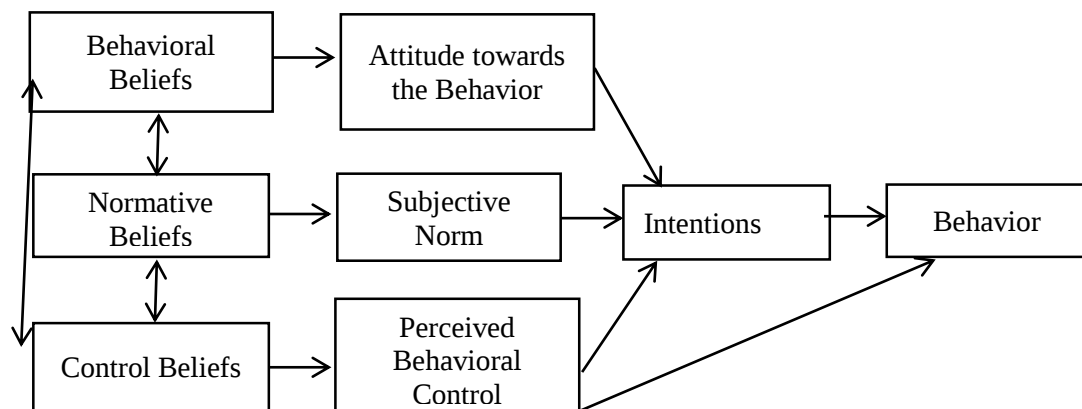


Figure 1. Schematic Representation of the Theory of Planned Behavior Constructs by I. Ajzen, 2006, *Constructing a Theory of Planned Behavior Questionnaire*, p. 1. Copyright 2006 by Icek Ajzen.

Figure 1 shows the schematic representation of the Theory of Planned Behavior constructs (attitude towards behavior, subjective norm, and perceived behavioral control), and how they combine to develop a person's intention to perform the desired behavior (Ajzen & Fishbein, 1980). Given a high degree of actual control, a person with a high intention has been found to actually perform the behavior when the situation arises. Thus, Ajzen (1985) stated that intention to perform a behavior is the immediate antecedent to performing the actual behavior. Therefore, if coaches have the intention to include student athletes with physical disabilities (antecedent) they will perform the actual behavior of including student athletes with physical disabilities on their athletic teams.

However, Ajzen (1985) also clarified that an individual may be limited by volitional control. Thus it is possible that perceived behavioral control, in addition to intention, predicts actual behavior. For coaches, the perceived behavioral control of logistics (i.e., control over transportation, budget, and facility access) may have an equal or greater influence on their behavior than intentions. Specifically, coaches may not wish to address the extra work needed to address the transportation of wheelchair equipment to a track meet and thus elect not to include the student athlete with a physical disability.

In this investigation the Theory of Planned Behavior was used to determine if a coach's intentions (i.e., willingness to include a student athlete with a physical disability on their team) led to a behavior (i.e., including student athletes with physical disabilities on their team) [Ajzen, 2006]. As shown in Figure 1, this investigation used a set of

internal and external belief questions to measure the constructs of behavioral belief (e.g. is it good to include a student athlete with a physical disability?), normative belief (e.g. do you feel others think you should include a student athlete with a physical disability?), and control belief (do you feel that you have the control to include a student athlete with a physical disability?) to predict intentions (Ajzen, 2006). Through the constructs of Theory of Planned Behavior a better understanding of coaches' beliefs and the effects of these beliefs on their intentions was established. In addition, the relationship between the constructs of Theory of Planned Behavior, intentions, and self-reported past behavior was determined.

### **Theory of Planned Behavior and Inclusion in Physical Education**

Theory of Planned Behavior has been used for more than 20 years to determine the attitudes and/or intentions of teachers, pre-service teachers, aquatics instructors, and peers without physical disabilities towards including student/peers with disabilities (targeted behavior) in general physical education (Ammah & Hodge, 2005; Beamer & Yun, 2014; Block & Rizzo, 1995; Casebolt, & Hodge, 2006; Conatser, Block, & Gansneder, 2002; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987; Tripp, 1988). Both qualitative and quantitative measures have been used to determine intentions towards inclusion with these population groups.

The effectiveness of the Theory of Planned Behavior to predict the intentions towards inclusion in general physical education has been well established (Jeong & Block, 2011).

The constructs of attitude, attitude confidence, and intentions have proven to be the best predictor of inclusion in physical educators, aquatic instructors, peers without disabilities, and preservice teachers' behavior (Conatser, Block, & Gansneder, 2002; Jeong & Block, 2011; Theodorski, Bagiatis, & Goudas, 1995). This research has supported the evidence that a teacher's intentions to include a student with a disability can have a direct influence on the success of that student (Rizzo & Vispoel, 1992). Thus, this current investigation sought to determine if attitudes and intentions were also a strong predictor of coaches' behavior of including a student athlete with a physical disability on their track and field team.

### **Coaches Attitudes towards Inclusion**

While the Theory of Planned Behavior has been used to predict coaches intentions towards behaviors such as male and female assistant coaches intentions towards becoming a head coach (Sagas, Cunningham, & Pastore, 2006), it has not been used to predict coaches intentions towards including a student athlete with a physical disability. One study by Rizzo, Bishop, and Tobar (1997) used the Theory of Reasoned Action to ascertain community youth soccer coaches attitudes toward coaching youth players with mild intellectual disabilities. The results of the study showed that coaches reported a slight disagreement in belief about coaching a player with an intellectual disability, but attitudes and intentions demonstrated an agreement towards coaching a player with an intellectual disability. Due to the use of the Theory of Reasoned Action that study lacked the construct of perceived behavioral control currently identified in Theory of Planned

Behavior. Rizzo et al., (1997) suggested that future studies utilize the Theory of Planned Behavior constructs which included the construct of perceived behavioral control.

While Kozub and Porretta (1998) did not utilize the constructs of Theory of Planned Behavior, they did investigate interscholastic coaches' attitudes toward the participation of student athlete athletes with disabilities in general athletic programs. Similar to Rizzo et al., (1997), coaches reported having an overall favorable attitude towards student athletes with disabilities participating in sports.

### **Purpose**

The Theory of Planned Behavior is hypothesized to be effective in predicting coaches' intentions of including student athletes with physical disabilities on their athletic teams. Therefore the purpose of this study was to investigate the beliefs that influenced Texas high school track and field coaches' intentions towards including student athletes with physical disabilities on their high school athletic teams.

### **Definitions**

In order to clarify common terminology of the present study, the following definitions are provided.

Theory of Planned Behavior. An extension of the original Theory of Reasoned Action, Behavioral change theory that postulates that human behavior is guided by three main considerations: (a) behavior belief or beliefs about likely consequences, (b) normative belief or beliefs about normative expectations, and (c) control belief or beliefs about the presence of factors that impede or facilitate performance. The three main constructs are attitude towards a behavior, subject normative, and perceived behavioral control (Ajzen & Fishbein, 1980).

Theory of Reasoned Action. A behavioral change theory that postulates that human behavior is guided by two considerations behavior belief and normative belief. Two main constructs are attitude towards a behavior and subject normative. Theory was extended to the Theory of Planned Behavior (Ajzen & Fishbein, 1970).

Inclusion. for the purpose of this study inclusion in Track and Field was defined as an athlete with a physical disability participating and competing at the same rate as required by the team's code of conduct and/or the same rate as team members without a physical disability (i.e., if team members without disabilities are required to attend all practices the athlete with a physical disability is also required to attend all practices).

Student athlete with a physical disability. Was defined in the survey as a high school athlete with a physical disability that uses a manual wheelchair for mobility, and has high functional ability in his upper body. This description is in accordance with the eligibility required by the Texas University Interscholastic League to compete in the wheelchair division for the 100m, 400m, and shot-put in Track and Field.

Texas University Interscholastic League. Is the largest inter-school organization in the world and provides Texas schools with educational extracurricular academic, athletic, and music contests. UIL provides the constitution and contest rules for all UIL activities that apply to participating schools and students. One of the sports governed under UIL in Texas is track and field (University Interscholastic League, 2014).

### **Limitations and Delimitations**

The present study was carried out with the following limitations and delimitations.

1. Since the study was limited to Texas coaches, it cannot be assumed that the findings apply to all of United States.
2. Since the study was limited to high school track and field coaches' intentions towards inclusion, it cannot be assumed that the findings apply to other sports such as tennis or basketball.
3. In-line with the changes made by Texas UIL, the focus was on athletes with physical disabilities that use a wheelchair for mobility. It cannot be assumed that the findings would apply to other disability types such as visual impairments or intellectual disabilities.
4. Other extraneous variables (e.g. previous contact with an athlete with a physical disability) may have affected the results of the study.
5. No measures were taken to assess participants' response bias towards the inclusion of a student athlete with a physical disability.

## CHAPTER II

### REVIEW OF LITERATURE

The purpose of this study was to investigate the beliefs that influenced Texas high school track and field coaches' intentions towards including student athletes with physical disabilities on their high school athletic teams. This investigation was founded on the constructs of Theory of Planned Behavior. Only the Theory of Reasoned Action has been utilized to determine coaches' attitudes towards the inclusion of an adolescent with a disability on a traditional youth soccer team (Rizzo et al., 1997). The most recent extension of the Theory of Reasoned Action, which is the Theory of Planned Behavior, has not been utilized to determine coaches' intentions towards inclusion.

The Theory of Reasoned Action and the Theory of Planned Behavior have been utilized to predict physical educators' intentions or attitudes towards inclusion of student with disabilities in general physical education. The Theory of Reasoned Action and Theory of Planned Behavior has been proven to predict intentions or attitudes towards the inclusion of a student with a disability in settings such as general physical education and aquatics. In addition, these two theories have been used with population such as general physical educators, pre service physical educators, aquatic instructors, and students without disabilities. The literature reviewed in this chapter will only focus on practicing physical educators' intentions or attitudes towards inclusion as this is the closest equivalent population to practicing coaches (i.e., current targeted population). In the

following paragraphs, literature will be reviewed under these four headings: (a) Evolution of the Theory of Planned Behavior, (b) Use of Theory of Planned Behavior to Predict Intentions towards Inclusion, and (c) Coaches Attitudes towards Inclusion.

### **Evolution of the Theory of Planned Behavior**

Social human behavior research has been centered on the attitude-behavior relationship since the early 1900's (Ajzen & Fishbein, 1980). However, in the 1960s the validity of the attitude-behavior relationship was questioned. Wicker (1969) reviewed 50 studies where both attitudes and behavior were measured and found that "It is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions" (p. 65). While some social psychologists abandoned the use of the attitude-behavior relationship, Ajzen and Fishbein (1970) postulated the error in the relationship was related to measurement of the two variables which prompted a new theory called the Theory of Reasoned Action (Ajzen & Fishbein, 1970). Through the Theory of Reasoned Action, the concept of behavioral intention emerged. Unlike previous research, Ajzen and Fishbein postulated that intentions are the immediate antecedents to a specific behavior.

According to the Theory of Reasoned Action, intentions were made up of a set of beliefs related to attitudes and social pressure. The person's beliefs about the behavior make up their attitudes towards the behavior, and their beliefs about social pressure make up their subjective norms. A reasoned action approach is the process that occurs when a person moves reasonably from their beliefs to intention and then to social behaviors

(Ajzen & Fishbein, 1980). The formulation of the Theory of Reasoned Action shifted the focus of research from an attitude-behavior relationship to an intention-behavior relationship.

With this shift and with appropriate measurement of behavioral intentions, many studies have established the predictive validity of behavioral intentions to account for a large portion of variance in actual behavior. An overall correlation between intention and behavior was reported by Randall and Wolff (1994) as .45, and Sheeran and Orbell (1998) as .44. In addition, a meta-analysis by Sutton (1998) established that the use of the Theory of Reasoned Action and the Theory of Planned Behavior explained an average of between 40 and 50% of the variance in intention and between 19 and 38% of the variance in behavior. This explanation of variance supports the efficacy of utilizing the intention-behavior prediction model of Theory of Reasoned Action or Theory of Planned Behavior. For the purpose of this study, the specific behavior targeted is the inclusion of student athletes with physical disabilities on interscholastic track and field teams by the head coach, and the associated intention to include a student athlete with a physical disability.

As previously stated, the Theory of Reasoned Action is the combination of a person's attitude towards the specific behavior and their subjective norms related to the behavior. However, the Theory of Reasoned Action proved to only be applicable if the person had full volitional control of their actions. Therefore, a person must feel that they have full control over their behavioral decisions such as having sufficient equipment, experience,

or resources (Ajzen, 1985). Often times a person has incomplete volitional control of a social behavior. This posed an issue when attempting to predict behavioral intentions from only the constructs of attitude and subjective norm. With the addition of perceived behavioral control, a meta-analysis by Armitage and Conner (2001) found the Theory of Planned Behavior accounted for 27% of measured behavior and 39% of intentions measured, and perceived behavioral control was found to contribute uniquely to the prediction of behavior. In addition, Armitage and Conner found an average of 6% increase in the ability to predict intention with the addition of perceived behavioral control. Therefore, for the purpose of the present study the Theory of Planned Behavior should be a better predictor of coaches' intentions to include a student athlete with a physical disability on their high school athletic teams than the Theory of Reasoned Action. Due to factors such as having appropriate equipment, accessible facilities, and accessible travel accommodations coaches' intentions could be largely impacted by their perceived behavioral control over these factors.

Extending the Theory of Reasoned Action to the Theory of Planned Behavior and including the construct of perceived behavioral control addressed the issue of incomplete volitional control over a specific behavior (Ajzen, 1985). The Theory of Planned Behavior postulates that intentions are determined by three main constructs: (a) attitude towards that behavior, (b) subjective norm, and (c) perceived behavioral control. Each of the three constructs also has antecedents developed through a person's salient beliefs or

beliefs about their actions. The three types of salient beliefs are: (a) behavioral beliefs, (b) normative beliefs, and (c) control beliefs.

Behavioral beliefs are made up of a person's attitude towards a behavior and the sum of a set of affective and cognitive evaluations of the consequences of the behavior, and form the attitude towards the behavior construct (Fishbein & Ajzen, 1975). A coach may feel that it will benefit the team to include a student athlete with a physical disability (behavioral belief), and that doing something to benefit the team is good (consequence of the behavior). Therefore, the coach believes it is good to include the student athlete (attitude towards the behavior).

Normative beliefs are made up of the extent that a person feels an important person or group of people believes they should perform the behavior and their motivation to comply with that person or group. Normative beliefs are the antecedent to the subjective norm construct. If a coach feels that administrators think a student athlete with a physical disability should be included (normative belief), and the coach behaves according to the administrators request (motivation to comply), the coach will feel it is important to others to include the student athlete with a physical disability (subjective norm).

Control beliefs are made up of a person's perceived power and the perception of control over a particular behavior. Control beliefs are the antecedent to the perceived behavioral control construct. A coach that feels they do not have adequate transportation for a student athlete with a physical disability (control belief), and the coach feels they will not be able to arrange adequate transportation (perception of control), the coach will

feel that adequate transportation will inhibit his/her ability to include the student athlete on the team (perceived behavioral control). It is important to note that perceived behavioral control can be equally as important at predicting actual behavior as a person's intentions is to predicting actual behavior. In addition, Ajzen and Fishbein (1980) state that the weight of the constructs can vary across populations and behavior domains. For an example, most of the literature has found that only attitude and intentions are good predictors of the behavior of including a student with a disability in general physical education (Beamer & Yun, 2014; Block & Rizzo, 1995; Jeong & Block, 2012; Obrušnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1988). This variance makes it vital to re assess each population's intentions towards a specific behavior prior to establishing an intervention. This need supports the purpose of this study to determine the constructs of the Theory of Planned Behavior that predict the intentions of Texas high school track and field coaches towards the inclusion of a student athlete with a physical disability on their team.

### **Theory of Planned Behavior and Intentions towards Inclusion**

Due to the effectiveness of the Theory of Reasoned Action, and now the Theory of Planned Behavior to predict intentions towards social behavior, the two theories have been utilized to predict intentions/attitudes towards students with disabilities in physical education. Rizzo (1983) began the use of the Theory of Reasoned Action in adapted physical education with the development of the Physical Educators Attitudes towards Teaching Handicapped Pupils (PEATH, 1983). A description of the development of the

PEATH, and the means and standard deviations for attitude toward teaching students with disabilities by grade level and condition were reported by Rizzo in 1984.

Elementary school physical educators expressed significantly more favorable attitudes toward children in grades K-3 than children in Grades 4 to 6 and 7 to 8. In addition, the 194 teachers surveyed had more positive attitudes towards students with learning disabilities than students with physical disabilities.

The PEATH was used again by Rizzo and Wright (1988) to examine attitudes of secondary school physical educators ( $N = 136$ ) toward teaching students with learning and physical disabilities. Similar to the elementary school teachers, secondary school teachers reported a significant preference for students with learning disabilities ( $p < .001$ ) over those with physical disabilities. Rizzo and Wright (1988) used the same 136 secondary school physical educators to determine a relationship between teachers' attitude toward teaching individuals with disabilities and seven teacher attributes: (a) gender, (b) teaching experience, (c) coursework in PE, (d) coursework outside of PE, (e) degrees earned, (f) age, and (g) perceived competence. A multiple stepwise regression was used to predict attitude towards teaching individuals with disabilities from the seven teacher attributes. The only observed significant predictor of teachers' attitude was perceived teacher competence ( $p < .001$ ).

In 1991, Rizzo and Vispoel modified the Physical Educator Attitudes towards Teachings Handicapped Pupils (PEATH II) and established construct validity through principal component factor analysis. Included in the PEATH-II were 12 statements about

teaching students with behavioral disorders, mild intellectual disabilities, and learning disabilities, and 8 questions about teachers' attributes: (a) gender, (b) number of years teaching, (c) number of years teaching students with disabilities, (d) coursework in PE, (e) coursework outside of PE, (f) degree earned, (g) age, and (h) perceived competence. The PEATH-II was given to 94 physical educators, and again perceived competence was a significant predictor of attitudes. Data from a repeated measures analysis of variance (ANOVA) and subsequent post hoc comparison tests exhibited teachers held more favorable attitudes towards students with learning disability than students with mild intellectual disabilities and behavior disabilities.

Attitudes and attributes research continued with Block and Rizzo, (1995) using the third revision of the Physical Educators Attitudes towards Teaching Handicapped Pupils. The Physical Educators Attitudes towards Teaching Individuals with Disabilities-III (PEATID-III, 1993) was still based on the construct of Theory of Reasoned Action and did not contain the construct of perceived behavioral control. Public school physical educators ( $n = 150$ ) were assessed on attitudes towards teaching students with severe and profound disabilities in general physical education classes. Results indicated that physical educators were undecided about teaching students with severe disabilities in general physical education, and disagreed with teaching students with profound disabilities. Attributes that resulted in improved or increased attitudes towards teaching students with severe disabilities were quality of teaching experience and previous adapted physical education coursework. Perceived teacher competence and previous course work

in special education were associated with an increase in favorable attitudes towards students with profound disabilities.

In 2008 Obrosnikova, extended Rizzo's research by administering the Physical Educators Attitudes towards Teaching Individuals with Disabilities-III (PEATID-III) to 168 physical educators. United States physical educators were selected using a stratified random sample of 1,931 public schools in a state on the east coast based on education level, socioeconomic status, and geographic area. Principals from 273 selected schools were asked to select a physical educator to complete the survey. The physical educators were asked attribute questions found to be significant in previous studies (Block & Rizzo, 1995; Rizzo & Vispoel, 1991). The attributes were: (a) perceived competence, (b) quality of experience, and (c) amount of adapted physical education course work. To compute the relationship between teachers' beliefs and the attributes a Pearson product-moment correlation was utilized. In addition, a multiple regression analysis was used to predict physical educators' beliefs identified in the PEATID-III (1993).

With a mean score of greater than 3.0 out of 5.0 the physical educators surveyed responded with a more favorable overall attitude teaching children with disabilities in general physical education, and a more favorable attitude towards teaching children with physical disabilities, intellectual disabilities, sensory disabilities, and specific learning disabilities. However, teachers responded with a neutral attitude towards emotional and behavioral disorders. The three variables of perceived competence, quality of experience, and adapted physical education course work accounted for 31% of the variance in overall

physical educators beliefs. In line with previous research (Block & Rizzo, 1995; Rizzo & Vispoel, 1991) perceived competence surfaced as the strongest predictor of physical educators beliefs. While these studies have demonstrated the utility of the Theory of Reasoned Action to predict beliefs of physical educators towards teaching students with disabilities in general physical education they lack the assessment of perceived behavioral control, the third construct added to develop the Theory of Planned Behavior.

To address the use of the Theory of Planned Behavior, Jeong and Block (2012) developed a survey to assess Korean teachers' beliefs and intentions towards students with disabilities. A total of 220 Korean physical educators completed the Teachers' beliefs and intentions towards students with disabilities survey. A multiple stepwise regression was used to determine a relationship between the components of Theory of Planned Behavior, and test the ability of the direct measures of attitude towards behavior, subjective norm, and perceived behavior control to predict intentions. In addition, the multiple stepwise regression was used to test the ability of the indirect measures of behavioral beliefs, normative beliefs, and control beliefs to predict intentions.

The utility of direct measure constructs in the Theory of Planned Behavior to predict intentions in physical educators towards inclusion in general physical education was supported with 35.3% of the variance explained. Similar to previous studies based on the Theory of Reasoned action (Block & Rizzo, 1995; Obrusnikova, 2008; Rizzo & Vispoel, 1991; Rizzo & Wright, 1987) attitude was the highest predictor of intention with 25.9% of the variance explained. However, unlike previous Theory of Reasoned Action

research, Jeong and Block (2012) were able to determine that teachers with positive attitudes and positive subjective norm beliefs had higher perceived control. Indirect measures of beliefs through the Theory of Planned Behavior held high utility to predict intentions of physical educators with 44.3% of the variance explained. The behavioral belief which contributes to a person's attitude towards a behavior was the strongest predictor with 38.1% of the variance explained. As noted with the direct measures of Theory of Planned Behavior, teachers with higher positive responses for the three indirect measures responded with higher intentions. Thus demonstrating that a survey developed using the Theory of Planned Behavior constructs for a specific population (Korean physical educators) towards a specific behavior (inclusion of a student with a disability in general physical education) is effective at predicting intentions and self-reported behavior.

While Jeong and Block (2012) utilized the Theory of Planned Behavior to predict intentions towards inclusion of a student with a disability in general physical education, the study was focused on Korean physical educators. According to Ajzen (2004) beliefs and intentions cannot be assumed to be universal across cultures. Therefore further investigation of the Theory of Planned Behaviors utility to predict United States physical educators' intentions towards the inclusion of a student with a disability in general physical education was needed.

To address this need Beamer and Yun (2014) combined two prominent behavioral theories, the Theory of Planned Behavior and Self-Efficacy Theory (Bandura, 1997) to

determine United States physical educators' beliefs towards including students with autism spectrum disorders in general physical education. To evaluate the constructs of the Theory of Planned Behavior, Beamer and Yun (2014) used the Teachers' Beliefs and Intentions toward Teaching Students with Disabilities (TBITSD; Jeong & Block, 2012), and the Self-efficacy theory constructs were evaluated using the Physical Educators' Self-Efficacy Toward Including Students with Disabilities-Autism (PESEISD-A, version 8.2; Taliaferro, Block, Harris, & Krause, 2011).

A stratified random sample based on geographic region and number of public K-12 schools of 12 randomly selected states resulted in 3,000 public schools. Physical educators from the randomly selected public schools in the 12 states were asked to participate in the study through an online survey database. This resulted in 142 completed surveys from the general physical educators. Participants responded to years of experience teaching, number of undergraduate adapted physical education courses, number of graduate course work in adapted physical education, and perceptions of strength in undergraduate training in adapted physical education. A multiple regression model was used to predict teachers' behaviors from the constructs of the two behavioral theories; Theory of Planned Behavior and Self-Efficacy Theory. Participants reported similar attributes of physical educators from previous literature (Block & Rizzo, 1995; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1983, 1984; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987).

Physical educators surveyed reported a high favorable attitude towards including a student with autism spectrum disorders with a mean score of 6.6 on a 1 to 7 scale. Results from the regression model demonstrated the effectiveness to predict the self-reported behavior of including a student with autism spectrum disorders in general physical education with 19% of the variance explained. However, physical educator only reported three significant attributes; (a) experience, (b) graduate coursework, and (c) perception of quality of undergraduate training. Thus, continuing the support of previous literature that a physical educators beliefs are significantly affected by their previous experience, and an increase in positive beliefs shows an increase in self-reported behavior of including students with disabilities in general physical education.

This extensive research has demonstrated the utility of the Theory of Reasoned Action/Theory of Planned Behavior to predict beliefs and intentions towards including students with disabilities (Beamer & Yun, 2014; Block & Rizzo, 1995; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987). However, according to Ajzen (2004) beliefs cannot be assumed to be the same for every population (teachers or coaches), even if the targeted behavior is similar (including a student with a physical disability). Therefore it is important to establish the utility of coaches' beliefs and intentions towards the including a student with a physical disability.

### **Coaches Attitudes towards Inclusion**

The Theory of Planned Behavior has been used to determine coaches' intentions towards other behaviors such as the intentions of assistant coaches of woman's teams

towards becoming a head coach (Sagas et al., 2006). However, limited research has been published measuring coaches' beliefs towards the inclusion of an athlete with a physical disability on a traditional sports team. One study did utilize the Theory of Reasoned Action to evaluate coaches' attitudes towards the inclusion of a student athlete with an intellectual disability on a traditional soccer team (Rizzo et al., 1997). Additional research has investigated the attitudes and attributes of coaches towards the inclusion of a player with a disability on an integrated interscholastic sports team (Kozub & Porretta, 1998), but without the use of the Theory of Planned Behavior. While additional research and literature has been published on disability sports team coaches' attitudes and attributes, only research focusing on attitudes of coaches for integrated sports teams will be reviewed in the following paragraphs in line with the targeted population of Texas high school track and field coaches.

First, it is important to evaluate the utility of the use of the Theory of Planned Behavior within the targeted population of coaches. Sagas et al., (2006), utilized the constructs of the Theory of Planned Behavior to determine intentions and beliefs of assistant coaches of woman's teams towards becoming a head coach. A random sample of coaches for the four largest team sports in the National Collegiate Athletic Association (NCAA) Division I and Division III were selected to complete a survey based on Theory of Planned Behavior constructs. A total of 710 ( $n = 466$  female coaches,  $n = 244$  male coaches) completed surveys were returned. A regression model stated that the theory

variables predict intentions with 56.9% of the variance explained demonstrating the use of the Theory of Planned Behavior with the targeted population (coaches).

While previous research has not utilized the Theory of Planned Behavior to predict intentions of coaches' to include a student athlete with a disability, Rizzo, et al., (1997) did utilize the Theory of Reasoned Action to investigate youth soccer coaches' attitudes. Rizzo et al., investigated the attitudes of youth soccer coaches towards coaching a player with mild mental retardation. To assess attitudes, the investigators developed a survey instrument based on the Theory of Reasoned Action. The Coaches' Attitudes toward Players with Disabilities (CAP-S; Rizzo & Bishop, 1991). A total of 82 surveys were completed and returned from Southern California youth soccer coaches. Correlations were determined between and among demographic variables for coaches, and a multiple stepwise regression was used to predict beliefs, attitudes, and intentions towards coaching youth with intellectual disabilities (formerly titled mild mental retardation).

Results demonstrated that coaches slightly disagreed with the belief of coaching players with intellectual disabilities on their youth soccer teams. In contrast, their attitudes and intentions reflected an agreement with coaching a player with intellectual disabilities. The attitudes and intentions of the coaches are similar to physical educators (Beamer & Yun, 2014; Block & Rizzo, 1995; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987), but personal beliefs slightly contradict those of physical educators. A positive correlation was found between personal beliefs and attitudes, attitudes and intentions, but coaches felt their subjective

norms would not encourage them to perform the targeted behavior. In contrast, physical educators' responses demonstrated a positive correlation between subjective norm and intentions. Similar to Theory of Reasoned Action research with physical educators (Block & Rizzo, 1995; Obrusnikova, 2008; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987), perceived competence did increase the favorable attitudes of coaches towards coaching a player with intellectual disabilities.

While this investigation demonstrates the utility of the Theory of Reasoned Action to predict coaches' attitudes towards including a student with a disability, and shows similarities between coaches' attitudes and physical educators' attitudes, it lacks the construct of perceived behavioral control. Thus Rizzo et al., (1997) suggested that further investigations should utilized the Theory of Planned Behavior and a broader sample of the population. In addition, this study only investigated the intentions of community coaches' towards an athlete with an intellectual disability. The current study is focused on the inclusion of a student athlete with a physical disability on an interscholastic team based on the changes by the Texas University Interscholastic League.

Kozub and Porretta (1998) investigated interscholastic coaches' attitudes towards integration of adolescents with disabilities. While their study was not based on the constructs of the Theory of Planned Behavior, the research goal was to investigate coaches' attitudes and the attributes that contribute to their attitudes. Kozub and Porretta (1998) constructed The Coaches Attitude toward Integration Questionnaire (CATIQ)

specifically for measuring attitudes towards including adolescents with disabilities in interscholastic programs. Unlike previous literature reviewed (Beamer & Yun, 2014; Block & Rizzo, 1995; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987), a specific disability such as intellectual disabilities, physical disabilities, or behavioral disabilities was not specified.

Kozub and Porretta (1998) utilized a stratified random sample of Midwestern high school athletic association members resulting in 295 head coaches. Coaches were stratified based on geographic location and sport coached. The geographic location was either urban or rural and the sports were football, baseball, softball, soccer, basketball, swimming, tennis, and track and field. Kozub and Porretta (1998) reported they were unable to stratify based on gender because of the significantly higher rates of male coaches ( $n = 249$ ) than female coaches ( $n = 46$ ). A total of 287 completed surveys were used in the data analysis. First, a principal component analysis was used to determine component loadings. This allowed the data to be transformed from a set of correlated variables in to smaller derived sets. Second, Component 1 or support for integration was selected as the criterion variable for a multiple regression analysis. The principal component analysis accounted for 55% of the total variance with six components derived. This resulted in retaining all 23 items from the questionnaire.

The results demonstrated that coaches had a favorable attitude towards the right of the athletes with disabilities to participate. This supports the findings of Rizzo et al., (1997) that coaches have favorable attitudes towards coaching a player with a disability, but may

have slightly negative personal beliefs that are effected by perceived competence. While both studies focused on the attitudes of coaches towards including athletes with disabilities, neither study utilized the Theory of Planned Behavior and the construct of perceived behavioral control. An overwhelming amount of the research reviewed has demonstrated a relationship between attitude towards including a student with a disability and perceived competence of teaching or coaching a student with a disability. Therefore by assessing perceived behavioral control through the constructs of the Theory of Planned Behavior a more in-depth evaluation of coaches' intentions to include student athletes with physical disabilities has been established.

Texas University Interscholastic League's addition of a track and field wheelchair division by provides an opportunity for student athletes with physical disabilities to compete in a traditional sports program with their peers. However, Texas high school coaches must first intend to include a student athlete with a physical disability, and then act on that intention by including the student athlete. With limited research to establish coaches' attitudes towards inclusion (Kozub & Poretta, 1998; Rizzo et. al., 1997), a baseline assessment is needed.

The Theory of Planned Behavior has been established to be effective at predicting behavior from intentions through multiple meta-analysis (Armitage & Conner, 2001; Randall & Wolff, 1994; Sheeran & Orbell, 1998; Sutton, 1998). Both the Theory of Reasoned Action and Theory of Planned Behavior have demonstrated efficacy at predicting intentions towards including students with physical disabilities (targeted

behavior) (Beamer & Yun, 2014; Block & Rizzo, 1995; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987). In addition, the Theory of Planned Behavior has been utilized to predict coaches (targeted population) behavior (Sagas et al., 2006), but has not been used to predict high school coaches intentions towards including student athletes with physical disabilities on their teams. Therefore, a specific survey instrument was designed to meet this population and behavior. The following chapter will outline the method of developing the survey instrument, participant selection, data collection, and data analysis.

## CHAPTER III

### METHOD

#### **Instrumentation Development**

No current survey instruments are designed with the Theory of Planned Behavior constructs to determine beliefs that impact coaches' intentions to include athletes with physical disabilities. The researcher has developed a survey following the Theory of Planned Behavior survey construction steps (Ajzen, 2006) entitled Coaches Intentions to Include Athletes with Disabilities [CIIAD]. Eight qualitative and quantitative methods were used in the survey development process.

Steps 1 through 4 were qualitative, and were used for the purpose of establishing valid belief statements to be used in the final survey. First, a targeted behavior (inclusion of an athlete with a physical disability) and targeted population (Texas high school track and field coaches) were defined (Ajzen, 2006). Second, the salient beliefs of the targeted population were determined with nine free response questions. These nine responses were used to target beliefs about behavioral outcomes, normative references, and control factors related to the targeted behavior (Ajzen, 2006). Third, 26 responses for each of the 9 questions were formulated into themes based on the content analysis of each response. Five external reviewers with a coaching background evaluated the appropriateness of the themes in relation to the targeted behavior.

Fourth, these themes were used to construct the seven point Likert-scale questions for each of the constructs (attitude towards behavior, subjective norm, perceived behavioral norm) [Ajzen, 2006]. Based on theory recommendations, each construct has a set of direct and indirect measurement questions. Direct measure questions were developed from statements recommended by the theory developer (Ajzen, 2006). Indirect measurement questions were based on the salient belief themes obtained from the targeted population. Each construct (attitude, subject norm, perceived behavioral control) has a set of indirect belief statements and each belief statement has a corresponding outcome question. The final survey included 12 demographic questions, 2 intention question, 1 past behavior question, and 42 direct and indirect attitude, subjective norms, and perceived behavioral control questions.

Steps 5 through 8 were quantitative measurements to establishing validity and reliability. In Step 5, face validity was established by a panel of five experts with track and field experience (Frances et al., 2004). The five experts assessed the survey for accuracy, representativeness, clarity, and relevance. In step 6 Aiken's item content-relevance index was used to determine the content relevance or validity of the questions to the theory constructs (Penfield & Giacobbi, 2004). Three experts in survey design and psychosocial behavioral theory used a 5 point Likert-scale to rate the relevance of each question to the constructs. An Aiken's item content-relevance score was calculated for each question. Questions that were not rated as relevant ( $p \geq .75$ ) to the constructs were either eliminated or reworded until all experts were in agreement.

Step 7 and 8 were completed with the data obtained during a pilot study of with 1120 Texas high school track and field coaches. Of the 1120 coaches emailed 108 surveys were completed. A principal component factor analysis was used to determine the reliability and validity for each construct. The questions that were found to be reliable and valid were included on the final survey. A Cronbach's  $\alpha$  reliability analysis (Cronbach, 1951) was used to obtain internal reliability for the constructs of intention, attitude toward behavior, subjective norm, and perceived behavioral control (Cronbach, 1990).

### **Participants**

The inclusion criteria for coaches was the title of head track and field coach (male or female), with at least one year of coaching experience at the high school level, 25 to 65 years of age, and from schools that participate in Texas UIL track and field. A stratified random sample of high school track and field coaches in Texas was used for this study. In order to get a representative sample of Texas track and field coaches, the sample was stratified based on high school competition divisions and geographical regions (Sarndal, Swensson, & Wretman, 2003; Beamer & Yun, 2014). Texas UIL track and field, is made up of six divisions based on size, each division has 4 regions based on location (see Table 1). Each region is made up of 42 to 78 high schools. Using Microsoft excel, 50% of the schools were randomly selected from each of the regions in each division (see Table 1). For each school the emails for the head track and field coaches were retrieved. This resulted in at 1162 coaches with accessible emails from the 6 divisions in Texas.

Table 1

*Stratified Sample Selection*

| Divisions | Regions<br>per<br>Division | # of<br>schools<br>selected<br>per Region | # of<br>Coaches<br>emails<br>retrieved<br>per Region | Total # of<br>Schools<br>Selected in<br>Texas | Total # of<br>Coaches<br>selected in<br>Texas |
|-----------|----------------------------|-------------------------------------------|------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| 1A        | 1                          | 24                                        | 44                                                   | 707                                           | 1162                                          |
|           | 2                          | 28                                        | 50                                                   |                                               |                                               |
|           | 3                          | 26                                        | 38                                                   |                                               |                                               |
|           | 4                          | 27                                        | 39                                                   |                                               |                                               |
| 2A        | 1                          | 26                                        | 49                                                   |                                               |                                               |
|           | 2                          | 29                                        | 46                                                   |                                               |                                               |
|           | 3                          | 27                                        | 36                                                   |                                               |                                               |
|           | 4                          | 28                                        | 45                                                   |                                               |                                               |
| 3A        | 1                          | 29                                        | 55                                                   |                                               |                                               |
|           | 2                          | 26                                        | 46                                                   |                                               |                                               |
|           | 3                          | 31                                        | 54                                                   |                                               |                                               |
|           | 4                          | 26                                        | 47                                                   |                                               |                                               |
| 4A        | 1                          | 21                                        | 28                                                   |                                               |                                               |
|           | 2                          | 23                                        | 42                                                   |                                               |                                               |
|           | 3                          | 27                                        | 44                                                   |                                               |                                               |
|           | 4                          | 27                                        | 51                                                   |                                               |                                               |
| 5A        | 1                          | 31                                        | 47                                                   |                                               |                                               |
|           | 2                          | 33                                        | 52                                                   |                                               |                                               |
|           | 3                          | 33                                        | 58                                                   |                                               |                                               |
|           | 4                          | 36                                        | 61                                                   |                                               |                                               |
| 6A        | 1                          | 35                                        | 51                                                   |                                               |                                               |
|           | 2                          | 39                                        | 56                                                   |                                               |                                               |
|           | 3                          | 36                                        | 61                                                   |                                               |                                               |
|           | 4                          | 39                                        | 62                                                   |                                               |                                               |

Of the 1162 emails send, 50 emails were determined undeliverable due to security settings, or an incorrect email address. A total of 250 coaches started the survey through PsychData, of these 250 coaches, 37 coaches were excluded for not meeting the inclusion

criteria. Of the 213 coaches that met inclusion criteria, 113 coaches completed the entire survey. This met the minimum sample size of 40 coaches to be statistically appropriate as determined through G\*Power analysis for multiple regression (Erdfelder, Faul, & Buchner, 1996).

### **Data Collection**

The Texas Woman's University Internal Review Board approved this study for exempt status based on the following procedures. The Coaches' Intentions to Include Athletes with Disabilities (CIIAD) survey was typed into the online platform, PsychData (PsychData LLC). PsychData provided a direct link to the survey decreasing issues of accessibility for participants. All recruitment of participants was electronic, and utilized the PsychData link to the Coaches' Intentions to Include Athletes with Disabilities (CIIAD) survey. The track and field coaches from selected schools were sent an email with the CIIAD survey link. The coaches' emails were retrieved from a nationwide coaching directory, or from the selected schools' websites. In accordance with recommended electronic survey-research, three emails were sent to the participants (Dillman, Smyth, & Christian, 2009). First an introductory email with a description of the study and the survey link was sent to participants. One week after the initial email, a follow-up email was sent with a thank you and reminder for those that had not completed the survey. The last email was sent 2 weeks after the initial email, and included a thank you for participating along with the survey link for those that had not completed the survey but would like to (Dillman, et al., 2009).

Participants were screened to determine if they met the qualifications for the study using: (a) age (25-65), (b) years of coaching at the high school level (at least 1), and (c) coaching status (currently head coach for track and field). The coaches that did not meet these criteria were redirected to the final page of the survey thanking them for their participation, thus limiting contamination of the data.

Participants were allowed to complete the online survey anonymously at a location of their choice on a computer with internet access. The PsychData link contained directions for the participants to find a private setting that was away from others before completing the survey. Participants were asked to select a personal computer, if possible, and not engage with others in a conversation while completing the survey. In addition, they were asked not to explain the purpose of the study to others while completing the survey.

Total time to complete the survey was an average of 15 min per individual. Each participant was assigned a randomly generated code by PsychData for identification purposes; no names were used. Following survey completion, all randomly generated codes were deleted and/or destroyed. The researcher did not retain documents that connect participant names to survey result.

### **Data Analysis**

Descriptive statistics were used to examine demographic characteristics. Each indirect belief statement was multiplied by its associated outcome variable. For an example, Question 5 was “Having a student athlete like Avery on my track and field team will benefit the team as a whole during the spring 2015 season.” This question was then

multiplied by its outcome variable of “Doing something to benefit the team as a whole is good.” These belief statement composites were then summed to create one composite score for behavioral belief. The process was the same for calculating the normative belief composite score and the control belief composite score. The direct measure questions were also summed to create a composite score for attitude towards the behavior, subjective norm, and perceived behavioral control.

Bivariate correlations were used to assess the association between the indirect measure composite scores and the direct measure composite scores. A multiple stepwise regression analysis was used to identify the direct measure constructs that were the predominate factors in predicting coaches’ intentions to include athletes with physical disabilities on their track and field teams. A discriminate functional analysis was utilized to determine the specific behavioral belief statements that had an impact on level of intention (i.e., low, neutral, or high intention toward including a student athlete with a physical disability). All statistical analyses were conducted using SPSS Version 19.0 (SPSS Inc.).

## CHAPTER IV

### PRESENTATION OF FINDINGS

The purpose of this study was to investigate the beliefs that influenced Texas high school track and field coaches' intentions towards including student athletes with a physical disability on their high school athletic teams. Coaches' beliefs and intentions were measured through the constructs of the Theory of Planned Behavior (Ajzen & Fishbein, 1980) using the Coaches' Intentions towards Including Athletes with Disabilities survey. Results of the study will be reported under the following headings: (a) Description and Demographics of Participants and (b) Analysis of the Data.

Raw data were downloaded from PsychData (PsychData LLC), and inspected for any missing cases. Data that lacked responses to questions associated with the Theory of Planned Behavior were deleted. Data with incomplete responses for demographic data were retained as it did not impact the regression analysis. Negatively worded questions were reverse coded, and all variables were assigned labels.

#### **Description and Demographics of Participants**

Participants in the present study were Texas high school track and field coaches. Table 1 in Chapter 3 provided a breakdown of the coaches in each University Interscholastic League (UIL) region and division that were sent a recruitment email. Only responses from head coaches that identified at least 1 year of experience, and were between the ages of 25 to 65 years were retained. A total of 111 participant responses

were retained. Coaches responded to 13 demographic questions about gender, age, team size, professional preparation, and experience. Table 2 demonstrates the majority of coaches surveyed were males (71%), and three of the respondents opted to not respond to the gender question. The coaches' ages ranged from 25 to 65 years ( $M = 42.8$ ,  $SD = 9.4$ ). The respondents had a wide range of years of experience coaching track and field with the least being 2 years and the most being 44 years ( $M = 15$ ,  $SD = 9.1$ ). A wide range of team sizes were also reported from 8 to 150 student athletes ( $M = 44$ ,  $SD = 29.6$ ).

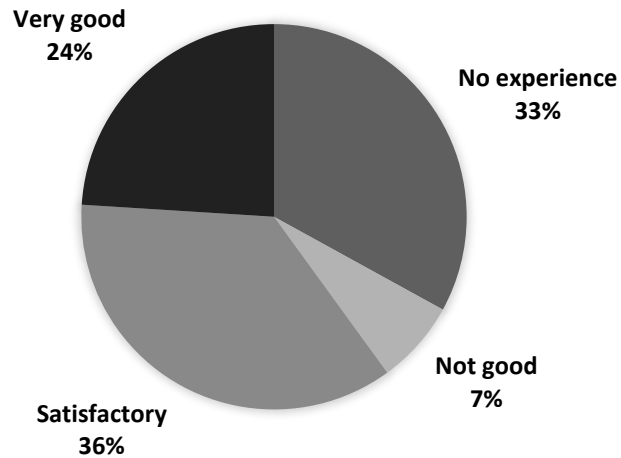
Table 2  
*Demographics Information for Participants*

| Characteristics                                            | Coaches   | Percent |
|------------------------------------------------------------|-----------|---------|
| <u>Gender</u>                                              | $n = 108$ |         |
| Male                                                       | 77        | 71 %    |
| Female                                                     | 31        | 29 %    |
| <u>Age (years)</u>                                         | $n = 111$ |         |
| Mean                                                       | 42.8      |         |
| Range                                                      | 25 to 65  |         |
| <u>Track and Field coaching experience (years)</u>         | $n = 111$ |         |
| Mean                                                       | 15        |         |
| Range                                                      | 2 to 44   |         |
| <u>Team size</u>                                           | $n = 110$ |         |
| Mean                                                       | 44        |         |
| Range                                                      | 8 to 150  |         |
| <u>Disability sports certifications</u>                    | $n = 111$ |         |
| Yes                                                        | 5         | 4.5 %   |
| No                                                         | 106       | 95.5 %  |
| <u>Disability sports course</u>                            | $n = 110$ |         |
| Yes                                                        | 28        | 25.5 %  |
| No                                                         | 83        | 74.5 %  |
| <u>Adapted physical education course</u>                   | $n = 110$ |         |
| Yes                                                        | 68        | 62 %    |
| No                                                         | 43        | 38 %    |
| <u>Coaching experience with athletes with disabilities</u> | $n = 110$ |         |
| Yes                                                        | 61        | 55.5 %  |
| No                                                         | 50        | 44.5 %  |

As noted in Table 2, coaches responded to professional preparation questions. Of the 111 coaches 95.5% ( $n = 106$ ) did not have a disability sports certification. The 4.5% ( $n = 5$ ) that responded as having a disability sports certification incorrectly identified having certifications in Special Education Certification and all level physical education. Less than half of the coaches ( $n = 28$ ) reported taking a course related to disability sports, considerably more coaches ( $n = 68$ ) have had a course in adapted physical education. The number of courses taken in disability sports ranged from 1 to 5 ( $M = 1.6$ ,  $SD = 1.2$ ), and the number of courses taken in adapted physical education ranged from 1 to 6, ( $M = 1.9$ ,  $SD = 1.2$ ).

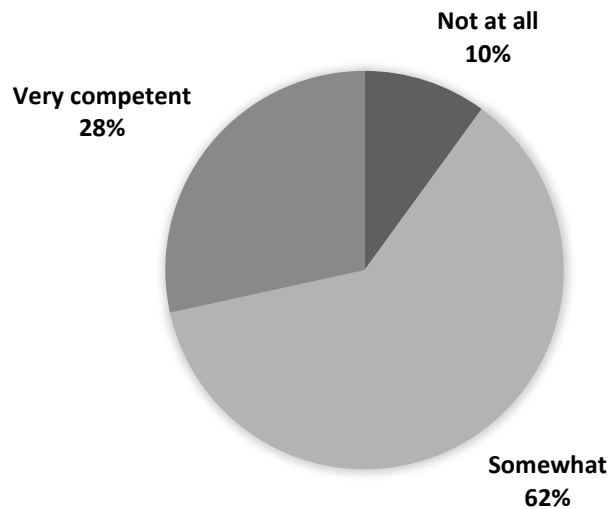
Of the 111 coaches surveyed, 55.5% ( $n = 61$ ) reported having experience coaching athletes with disabilities, and the years of experience ranged from 1 to 30 ( $M = 4.6$ ,  $SD = 5.9$ ). The last section of the demographics asked coaches to report their overall experience and perceived competence with coaching athletes with disabilities. As noted in Figure 2 and Figure 3, the majority of coaches ( $n = 65$ ) reported having a satisfactory or above experience while coaching student athletes with disabilities, and felt they were at least somewhat competent to coach a student athlete with a physical disability ( $n = 98$ ).

## OVERALL EXPERIENCE



*Figure 2.* Texas high school track and field coaches' overall experience coaching student athletes with disabilities.

## PERCIEVED COMPETENCE



*Figure 3.* Texas high school track and field coaches' perceived competence towards coaching student athletes with disabilities.

## Analysis of the Data

To investigate the beliefs that influenced Texas high school track and field coaches' intentions towards including student athletes with physical disabilities on their high school athletic teams' the data were analyzed through an eight step process. A brief outline of the eight steps is provided in Table 3. Detailed descriptions of each step are provided in the following paragraphs

Table 3

### *Data Analysis Process*

- 
1. Internal reliability was checked through Cronbach's  $\alpha$ .
  2. Composite scores were computed for all constructs.
  3. Descriptive statistics were calculated for the seven Theory of Planned Behavior constructs
  4. Two-tailed Pearson correlations were tabulated between indirect belief constructs and corresponding direct constructs, and the direct constructs and intentions.
  5. Multiple stepwise regression was used to determine predictability of each direct measure construct towards intentions.
  6. Discriminant function analysis was used to determine which behavioral beliefs discriminate between coaches' intention levels.
  7. Univariate analysis of variance (ANOVA) was used to determine significant differences between the coaches' intention levels and composite discriminant function variables.
  8. Multivariate analysis of variance (MANOVA) was used to determine which behavioral beliefs were significant between coaches' intention levels.
-

### Internal Reliability

Internal reliability was checked using a Cronbach's  $\alpha$  reliability analysis (Cronbach, 1951). As shown in Table 4, the constructs of attitude toward behavior ( $\alpha = .90$ ) and perceived behavioral control ( $\alpha = .70$ ) demonstrated internal reliability. The subjective norm construct demonstrated no internal reliability ( $\alpha = .19$ ); and no correlation was present. An analysis of skewness was performed, resulting in the questions for subjective norm not being skewed and no outliers were present. The two questions used to assess the subjective norm construct were: (a) "Most people important to me feel that I should include a student athlete with a disability and (b) "I am under social pressure to include a student athlete with a disability. Based on the wording of "social pressure" it is possible the participants viewed that with a negative connotation causing the polar responses. However, only two questions assessed the subjective norm construct both questions were retained for the regression analysis.

Table 4

#### *Reliability Analysis*

| Construct                    | Chronbach $\alpha$ |
|------------------------------|--------------------|
| Attitude Towards Behavior    | .90                |
| Subjective Norm              | .19                |
| Perceived Behavioral Control | .70                |

## Construct Descriptive Statistics

Direct and indirect measures of the theory constructs were assessed using a 1 (strongly disagree) to 7 (strongly agree) scale. Direct measure constructs of attitude towards the behavior and perceived behavioral control were assessed with three questions, while subject normative and intentions were assessed with two questions. The direct measure questions were summed to create a composite score for attitude towards the behavior, subjective norm, perceived behavioral control, and intentions (see Figure 4). The indirect measure constructs of behavioral belief, normative belief, and control belief were assessed with 10 questions each.

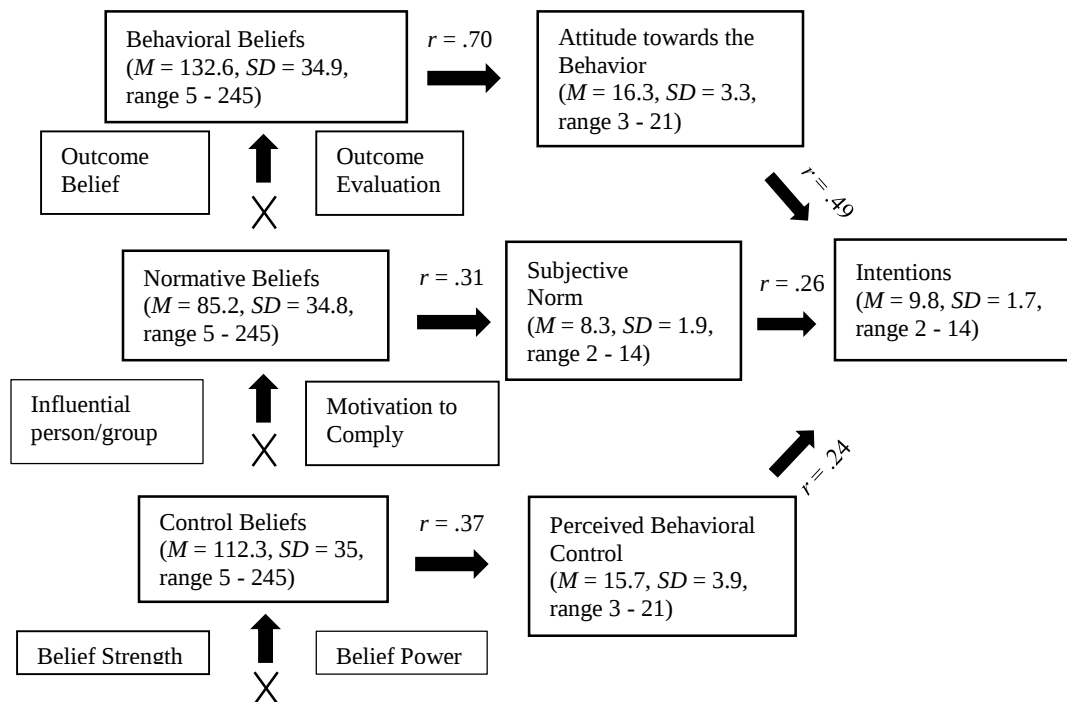


Figure 4. Means, standard deviations, and correlations of Theory of Planned Behavior constructs. All correlations significant at the .05 level. I. Ajzen, 2006, *Constructing a Theory of Planned Behavior Questionnaire*, p. 1. Copyright 2006 by Icek Ajzen.

The behavioral belief construct had five questions to assess the outcome belief. Each outcome belief question had a corresponding outcome evaluation question (10 total questions). As noted in Table 5, the behavioral belief outcome question was multiplied by the corresponding outcome evaluation question. The five behavioral belief sets were summed to create a composite behavioral score (see Figure 4).

Table 5

*Behavioral Belief Construct Scoring*

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formula: | Behavioral belief = $\sum b_i e_i \alpha$ Attitude Towards the Behavior                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Example: | <p>Behavioral belief outcome (i) = benefit to the team</p> <p>Behavioral belief strength (b)</p> <p>Including a student athlete with a physical disability will benefit the team as a whole.</p> <p>Strongly disagree: 1: 2 : 3 : 4 : <u>5</u> : 6 : 7 : Strongly agree</p> <p>Outcome evaluation (e)</p> <p>Doing something to benefit the team as a whole is good.</p> <p>Strongly disagree: 1 : 2 : 3 : 4 : 5 : <u>6</u> : 7 : Strongly agree</p>                                                                                                                                                                                                                                                                                                                                     |
| Scoring: | <ol style="list-style-type: none"> <li>1. Calculate a score for each behavioral belief outcome. According to the formula above, <math>b_i</math> was multiplied by <math>e_i</math>, 30 was score for this belief set (<math>b_i \times e_i = 5 \times 6 = 30</math>)</li> <li>2. Using the same method for the first belief set, calculate a score for the other four belief sets (five total belief sets).</li> <li>3. <math>\Sigma</math> indicates summing the scores for all the belief sets: benefit to the team = 30, inspiration to the team = 25, increased diversity = 35, increased work load = 12, improved self-concept = 16.</li> <li>4. In this example, the overall score for behavioral belief construct is 118 (i.e., <math>30 + 25 + 35 + 12 + 16</math>).</li> </ol> |

The normative belief construct was assessed with five normative belief strength questions. Each normative belief strength question had a corresponding motivation to comply question that assessed how motivated the coach is to complying with the

important person or groups listed in the corresponding normative belief strength question (total of 10 question). The normative belief strength question were multiplied by the corresponding motivation to comply question, and then the five resulting normative belief sets were summed to form a composite normative belief score (see Table 6).

Table 6

*Normative Belief Construct Scoring*

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formula: | Normative belief = $\sum n_i m_i \alpha$ Subjective norm                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Example: | <p>Salient social individual or group (i) = administrators</p> <p>Normative belief strength (n)<br/>My administrators think that I should include a student athlete with a physical disability on my track and field team</p> <p>Strongly disagree: 1 : 2 : 3 : 4 : 5 : 6 : 7 : Strongly agree</p> <p>Motivation to comply (m)<br/>Generally speaking, I would do what my administrators think I should do.</p> <p>Strongly disagree: 1 : 2 : 3 : 4 : 5 : 6 : 7 : Strongly agree</p>                                       |
| Scoring: | <p>Scoring method was the same as the behavioral belief construct</p> <p>1. <math>n_i \times m_i = 2 \times 3 = 6</math></p> <p>2. Assume the five belief sets for normative belief were: administrators = 6, parents of student athletes without disabilities = 12, coaching staff = 9, student athletes without disabilities = 6, parents of student athletes with physical disabilities = 2</p> <p>2. In this example, the overall score for the normative belief set is 35 (i.e., <math>6 + 12 + 9 + 6 + 2</math>)</p> |

The control belief construct was assessed with five control belief strength questions. Each control belief strength questions had a corresponding control belief power question that assessed how much control the coach felt they had to manage the barrier (10 total questions). The control belief strength question was multiplied by the corresponding

control belief power question, and then the five resulting control belief sets were summed to form a composite control belief score (see Table 7).

Table 7

*Control Belief Construct Scoring*

|          |                                                                                                                                                                                                 |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formula: | Control belief = $\sum c_i p_i \propto$ Perceived Behavioral Control                                                                                                                            |
|          | Salient obstacle or barrier (i) = accessible facilities                                                                                                                                         |
|          | Control belief strength (c)                                                                                                                                                                     |
|          | It will be easy to find an accessible facility for a student athlete with a physical disability.                                                                                                |
| Example: | Strongly disagree: 1 : 2 : 3 : <u>4</u> : 5 : 6 : 7 : Strongly agree                                                                                                                            |
|          | Control belief power (p)                                                                                                                                                                        |
|          | I am more likely to include a student athlete with a physical disability if I have an accessible facility.                                                                                      |
|          | Strongly disagree: 1 : 2 : 3 : 4 : 5 : <u>6</u> : 7 : Strongly agree                                                                                                                            |
|          | Scoring method was the same as the behavioral belief construct                                                                                                                                  |
|          | 1. $c_i \times p_i = 6 \times 4 = 24$                                                                                                                                                           |
|          | 2. Assume the five belief sets for normative belief were: facility access = 24, appropriate equipment = 20, travel accommodations = 12, professional preparation = 25, coaching assistants = 30 |
|          | 2. In this example, the overall score for the normative belief set is 111 (i.e., $24 + 20 + 12 + 25 + 30$ )                                                                                     |

After summing the questions for the direct measure constructs (attitude towards behavior, subjective norm, perceived behavioral control), and computing the three indirect measure constructs (behavioral belief, normative belief, control belief) six new composite variables were established (see Figure 4). A composite variable was also established for coaches' intentions. These seven composite variables were utilized for the Pearson correlation and the multiple stepwise regression analysis.

## **Correlations**

After calculating the composite scores, a two-tailed Pearson correlation was conducted to determine a relationship between the Theory of Planned Behavior constructs. The composite score for behavioral belief was correlated with attitude towards behavior, normative belief with subjective norm, and the control belief with perceived behavioral control. The composite scores for the direct measure constructs of attitude towards behavior, subjective norm, and perceived behavioral control were also correlated with the construct of intention. As demonstrated in Figure 4, all correlations were significant at the level of .05 supporting the efficacy of the theory.

## **Multiple Stepwise Regression**

A multiple stepwise regression was utilized to determine the predictability of each direct measure construct (attitude towards behavior, subjective norm, and perceived behavioral control) to intentions. The appropriate assumptions related to multiple stepwise regression were examined, and found to be met by the present study. These assumptions included: (a) outliers, (b) no perfect multicollinearity, (c) homoscedasticity, (d) independent errors, (e) normality distributed error, and (f) linearity (Field, 2009). The intention composite score was entered into the model as the independent variable and the composite scores of each construct were entered as the dependent variables.

Attitude towards the behavior composite variable was found to be fit for prediction. Based on the multiple stepwise regression, the following equation emerged;  $\text{Intention} = 5.68 + 0.25 (\text{Attitude towards the Behavior})$ . This model demonstrates that with a unit change in attitude, intention also increased by 0.25. With an effect size of  $r = 0.49$ , attitudes towards the behavior explained 24% of the variance in coaches' intention towards the inclusion of student athletes with physical disabilities (see Table 8).

Table 8

*Effect of Attitude towards Behavior on Intention*

| Model                                 | <i>b</i> | <i>SE</i> | $\beta$ | <i>t</i> | <i>F</i> | <i>R</i> | $R^2$ |
|---------------------------------------|----------|-----------|---------|----------|----------|----------|-------|
| Attitude Towards Behavior → Intention | .25      | .04       | .49     | 5.87*    | 34.42*   | .49      | .24   |

*Note.* \* $p < .001$ , Dependent variable = intention

### **Discriminant Function Analysis**

A discriminant function analysis was utilized to determine which behavioral beliefs discriminate between the levels of coaches' intentions towards including a student athlete with a physical disability (low, neutral, and high). The normative belief variables and the control belief variables were not utilized in the discriminant function analysis due to the corresponding direct measure construct (subjective norm and perceived behavioral control) not being significant predictors of intentions. The discriminant function analysis creates two new linear composite variables called functions. Two discriminant functions emerged, with the first function accounting for the highest amount of variation between the groups. The first function (benefit to team plus work load) had an eigenvalue of .260

accounted for 90% of the variation (see Table 8). The first through second discriminant function rejected the null hypothesis based on the Wilk's Lamda test statistic

( $\Lambda = .77$ ,  $\chi^2$  (n = 108) = 26.75,  $p < .01$ ). The second discriminate function alone retained the null hypothesis, and only accounted for a very small amount of variation (see Table 9).

Table 9

*Summary of Discriminant Functions*

| Function | Eigenvalue | % variation |
|----------|------------|-------------|
| 1        | .260       | 90.1        |
| 2        | .029       | 9.9         |

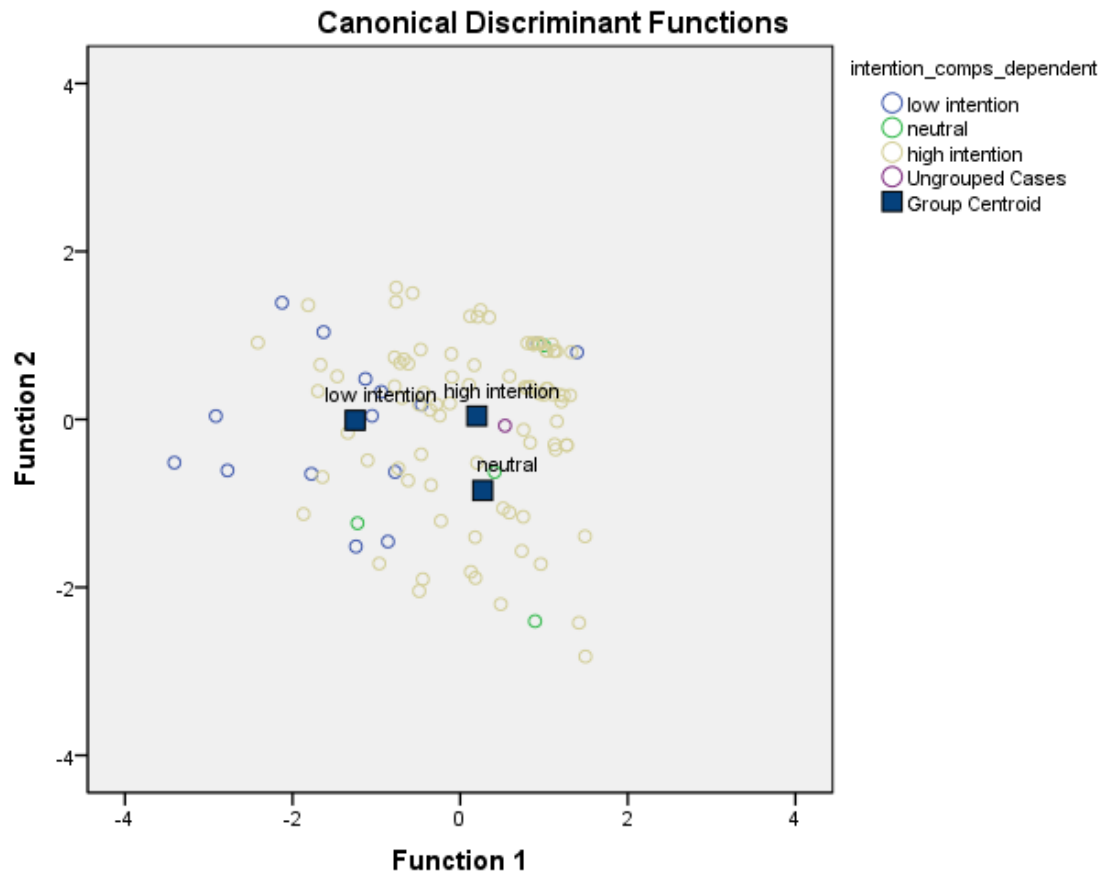
A structure matrix of the discriminant function analysis provided an explanation of the variables that loaded on to each function. As noted in Table 10, the four behavioral beliefs that loaded on the first discriminant function were: (a) overall benefit to the team ( $r = .93$ ), (b), an inspiration to the team ( $r = .60$ ), (c) increase in diversity on the team ( $r = .65$ ), and (d) maintaining current coaching workload ( $r = .44$ ). Throughout the remainder of results this function will be called the *benefit to team plus work load function*. The only belief that loaded on the second discriminant function was belief that inclusion would increase the self-concept of student athletes with physical disabilities ( $r = .94$ ), this function will be called the *increased self-concept function* (see Table 10).

Table 10

*Discriminant Function Structure Matrix*

| Belief set                  | Function 1 ( $r^2$ ) | Function 2 ( $r^2$ ) |
|-----------------------------|----------------------|----------------------|
| Benefit to team             | .93                  | .13                  |
| Inspiration to team         | .60                  | .30                  |
| Increased diversity on team | .65                  | -.09                 |
| Increased work load         | .44                  | .07                  |
| Increased self-concept      | .35                  | .94                  |

Visual inspection of the canonical discriminant functions plot analysis revealed possible differences between the levels of coaches' intentions (see Figure 5). However, visual inspection is not an objective measurement of differences between levels. An exploratory univariate analysis of variance was used to objectively determine if there is a difference between the levels of coaches' intentions (low, neutral, high).



*Figure 5.* Canonical discriminant function plots for Texas high school coaches intentions.

### Univariate Analysis of Variance for Discriminant Functions

Visual inspection of the Canonical discriminant function analysis plots showed possible differences in coaches' intention levels for both function one (benefit to the team plus work load) and function two (self-concept). An exploratory ANOVA was used for each function separately. Function one (benefit to the team plus work load) rejected the null hypothesis (see Table 11). Function two (self-concept) retained the null hypothesis (see Table 11).

Table 11

*Exploratory ANOVAs*

|                                    | <i>F</i> | <i>df</i> | <i>p</i> | <i>r</i> <sup>2</sup> |
|------------------------------------|----------|-----------|----------|-----------------------|
| ANOVA 1- Function one              |          |           |          |                       |
| VI: Levels of coaches intentions   | 13.68    | 2         | < .01    | .21                   |
| DV: Benefit to team plus work load |          |           |          |                       |
| ANOVA 2 – Function two             |          |           |          |                       |
| VI: Levels of coaches intentions   | 1.50     | 2         | .23      | .03                   |
| DV: Self-concept                   |          |           |          |                       |

Note: Alpha was decreased to .025 to protect against inflation of Type 1 error.

Because function one (benefit to team plus work load) rejected the null hypothesis, further evaluation of the differences between coaching levels of intentions was determined with a Bonferroni post hoc test. A significant difference was found between coaches with low intentions and neutral intentions ( $p = .02$ ), and a difference between coaches with low intentions and high intentions ( $p < .001$ ). No difference was found between coaches with neutral intentions and high intentions ( $p > 0.5$ ).

### **Multivariate Analysis of Variance for Behavioral Belief Sets**

To further evaluate the difference between belief sets based on coaches intention levels a MANOVA was utilized. A MANOVA is similar to a discriminant function analysis, however the MANOVA is opposite the discriminant function analysis in that the independent variable is the coaches' intention levels (low, neutral, high), and the individual behavioral belief sets are the dependent variables (benefit to team, inspiration

to team, increased diversity, increased self-concept, and increased work load). The null hypothesis was also rejected with the Wilk's Lamda test statistic ( $\Lambda = 0.77$ ,  $\chi^2$  (n = 108) = 26.75,  $p < .01$ .). To further evaluate the results of the MANOVA five univariate analysis of variances (ANOVA) were interpreted for each of the five behavioral sets. Of the five behavioral belief sets, only benefit to the team ( $p = .001$ ), inspiration to the team ( $p = .008$ ), and increased diversity ( $p = .004$ ) demonstrated a significant difference between coaches' intention levels (see Table 12).

Table 12

*Univariate Tests for Behavioral Belief Sets*

| Dependent Variable     | <i>F</i> | <i>df</i> | <i>p</i> |
|------------------------|----------|-----------|----------|
| Benefit to team        | 11.90    | 2         | .001     |
| Inspiration to team    | 5.01     | 2         | .008     |
| Increased diversity    | 5.82     | 2         | .004     |
| Increased self-concept | 2.96     | 2         | .076     |
| Increased work load    | 2.64     | 2         | .056     |

Note: Due to the use of 5 ANOVA tests, alpha value was decreased to .01 to prevent inflation of Type 1 error.

The pairwise comparisons revealed there was a significant difference between coaches' with low intentions ( $n = 15$ ) and high intentions ( $n = 89$ ) when comparing mean composite scores for benefit to the team, inspiration to the team, and increase in diversity for the team (see Table 13).

Table 13

*Differences in Intentions Based on Behavioral Beliefs*

| Behavioral Belief   | <i>p</i> value | Low Intentions        | High Intention        |
|---------------------|----------------|-----------------------|-----------------------|
| Benefit to team     | $p < .001$     | $M = 16.9, SD = 8.0$  | $M = 25.3, SD = 5.8$  |
| Inspiration to team | .007           | $M = 23.8, SD = 10.6$ | $M = 33.2, SD = 10.9$ |
| Increased diversity | .003           | $M = 25, SD = 13.1$   | $M = 36, SD = 11.2$   |

## CHAPTER V

### SUMMARY, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS FOR FUTURE STUDIES

As previously stated in Chapter 1, the Texas University Interscholastic League (UIL) has added a pilot wheelchair division in track and field. The success of the student athletes with physical disabilities interested in competing in the UIL wheelchair division is contingent on Texas high school coaches having a positive attitude and a high intention to include them on their track and field teams (Heinkinaro-Johnansson & Sherrill, 1994; Nixon 1988).

Previous research that investigated coaches' attitudes and/or intentions towards the inclusion of athletes with disabilities on traditional athletic teams did not use the Theory of Planned Behavior (Kozub & Poretta, 1998; Rizzo, Bishop, & Tobar, 1997). However, the Theory of Planned Behavior has shown utility at predicting physical educators' intentions towards including students with disabilities in general physical education (Ammah & Hodge, 2005; Beamer & Yun, 2014; Block & Rizzo, 1995; Casebolt, & Hodge, 2006; Conatser, Block, & Gansneder, 2002; Dunchane & French, 1998; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987; Tripp, 1988).

Utilizing the constructs of Theory of Planned Behavior, the current investigation was focused on determining Texas high school track and field coaches' beliefs and intentions

towards including student athletes with physical disabilities. The results of this study will be discussed under the following headings: (a) Theory of Planned Behavior Summary, (b) Discussion, (b) Conclusion, and (c) Recommendations for Future Studies

### **Theory of Planned Behavior Summary**

The Theory of Planned Behavior postulates the immediate antecedent to a specific behavior is a person's intention to perform the behavior. As shown in Figure 6, intentions are formed by three main constructs: (a) attitude towards the behavior, (b) subjective norm, and (c) perceived behavioral control. These constructs are developed from a set of beliefs: (a) behavioral beliefs, (b) normative beliefs, and (c) control beliefs, also presented in Figure 6. A brief review of these constructs will be provided in the following paragraphs.

A set of salient beliefs about the outcome of a specific behavior establishes our behavioral beliefs, these behavioral beliefs develop a person's attitude towards the specific behavior. As an example, the behavioral belief that including a student athlete with a physical disability on the track and field team would benefit the team leads to the attitude towards inclusion being good (see Figure 6). A set of salient beliefs about the expectations of important people or groups towards a specific behavior leads to the normative beliefs, which develops a person's subjective norm. As demonstrated in Figure 6, the normative belief that a coaches' administrator feels it is important for them to include a student athlete with a physical disability on their track and field team leads to the belief that most people important to the coach support inclusion. A set of salient

beliefs about possible barriers and obstacles establish a person's control beliefs, which develops a person's perceived behavioral control over the behavior. One identified control belief is that obtaining appropriate equipment for a student athlete with a physical disability to compete in track and field leads to coaches feeling that if they wanted to they could include a student athlete with a physical disability (see Figure 6 "perceived behavioral control").

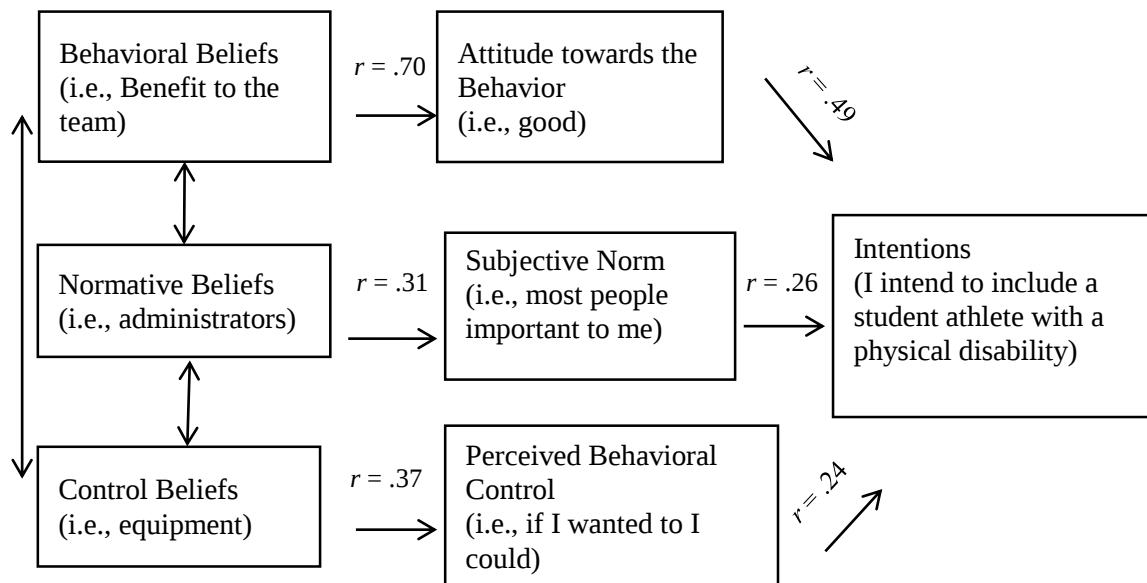


Figure 6. Modified Theory of Planned Behavior schematic representation with examples and correlations by I. Ajzen, 2006, *Constructing a Theory of Planned Behavior Questionnaire*, p. 1. Copyright 2006 by Icek Ajzen.

## Discussion

The constructs can weigh differently on intentions depending on the targeted behavior and population. For an example, researchers utilizing the Theory of Reasoned Action or the Theory of Planned Behavior with physical educators have established that attitude towards the behavior is the most significant predictor of intentions towards the inclusion

of a student with a disability in general physical education (Beamer & Yun, 2014; Block & Rizzo, 1995; Jeong & Block, 2012; Obrusnikova, 2008; Rizzo, 1984, 1985; Rizzo & Vispeol, 1991; Rizzo & Wright, 1987). Similar results were found with the present study, attitude towards the inclusion of a student athlete with a physical disability significantly predicted Texas high school track and field coaches' intentions towards inclusion on their teams. The coaches' surveyed demonstrated a positive attitude towards including a student athlete with a physical disability leading to high intention towards inclusion.

The majority ( $n = 89$ ) of Texas high school track and field coaches responded with high intentions towards inclusion, and they demonstrated a readiness to include a student athlete with a physical disability. Theory of Planned Behavior postulates that a person's intention is the immediate antecedent to the actual behavior (Fishbein & Azjen, 1980). In accordance with the theory, if Texas high school track and field coaches' continue to have the opportunity to include a student athlete with a physical disability they will support inclusion in Texas high school track and field.

A previous research also demonstrated that community soccer coaches' attitudes had an impact on their intentions to include a student athlete with an intellectual disability (Rizzo et. al., 1997). However, Rizzo et al., reported that coaches' personal beliefs slightly disagree with including an athlete with an intellectual disability. In contrast, the results of the present study demonstrated that Texas high school track and field coaches' personal beliefs show an agreement towards including a student athlete with a physical

disability on their team. Further evaluation of coaches' personal beliefs revealed that coaches' with high intentions valued the benefit a student athlete with a physical disability by providing inspiration and diversity to the team. These beliefs (i.e., benefit to the team) further support that coaches' demonstrate that if the opportunities continue (e.g., UIL track and field competition for student athletes with physical disabilities), they will include a student athlete with a physical disability on their track and field team.

One possible reason coaches reported having a positive attitude and high intention could be due to their feeling of perceived competence. The majority of coaches (90%) reported feeling at least somewhat competent to coach a student athlete with a physical disability. However, the coaches' response to professional preparation did not appear to support their response to perceived competence. Only 25.2% of the 111 coaches surveyed have had a disability sports class during their professional preparation. In addition, the five coaches that reported having a disability sports certification, actually reported certifications that were not related to disability sports (e.g., special education). In a qualitative study, Cregan, Bloom, and Reid (2007) found elite swim team coaches learn by trial and error when including an athlete with a disability. Based on the lack of professional preparation, but high perceived competence Texas high school track and field coaches could be following the same trend of learning by trial and error.

This lack of professional preparation has been noted as a national issue. As noted in Chapter 1, the Government Accountability Office (GAO) performed a re-evaluation of 1973 Public Law 93-112, entitled the Rehabilitation Act, at the request of Congress. The

re-evaluation revealed that school district personal and state associations surveyed felt they lacked the training and knowledge required to provide appropriate athletic opportunities for students with physical disabilities (GAO report, 2010). The lack of professional preparation was identified as a source of frustration for the school district personal and state associations. To support the current Texas high school track and field coaches' attitudes and intentions, and prevent possible frustration with inclusion the lack of professional preparation needs to be addressed.

There were some limitations of this investigation: (a) participants were not representative of a larger population because only Texas track and field coaches were surveyed, (b) coaches' were only asked about including a student athlete with a physical disability, (c) no measures were taken to check for participant response bias, and (d) reliability of the subjective norm construct was poor. Texas is the most recent state to add a track and field division for students with physical disabilities in the United States. The present study limited the participants to only Texas coaches to develop initial baseline of a set of coaches that are at a pivotal point of potential behavior change. In addition, to be cohesive with the University Interscholastic League policy coaches were only asked about the inclusion of student athletes with physical disabilities. However, future research should include student athletes with other disabilities. To address the poor reliability within the subjective norm construct, additional direct measure of the subjective norm questions should be added to assess the construct.

In addition, performing a principle component factor analysis with a larger sample size increase the validity and reliability of the survey. A larger sample size will also decrease the likelihood of response bias.

### **Conclusion**

The results from this investigation suggested that the Theory of Planned Behavior is effective at predicting Texas high school track and field coaches' intentions towards including a student athlete with a physical disability on their track and field team. Specifically, the construct of attitude towards the behavior demonstrated the ability to predict coaches' intentions. This provides a baseline for future researchers to foster and increase coaches' intentions towards inclusion.

### **Recommendations for Future Studies**

Based on the current findings and the limitations of this investigation, the following recommendations are suggested for future researchers:

1. Add an additional subjective norm question and revise the current questions to increase reliability of the construct.
2. Validate the survey instrument on a large sample of the population and include coaches across the United States.
3. Establish appropriate follow-up method to check for response bias.
4. Expand survey instrument to include student athletes with disabilities other than physical.
5. Establish a method for measuring actual behavior in order to determine if Coaches' intentions predict the targeted behavior of inclusion.
6. Replicate this study and include measurement of actual behavior and establish interventions for increasing coaches' intentions towards inclusion.

## REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action control: From cognition to behavior* (pp. 11–39). Heidelberg, Germany: Springer.
- Ajzen, I. (2006). Constructing a theory of planned behavior questionnaire: Conceptual and methodological considerations. Retrieved from <http://people.umass.edu/ajzen/pdf/tpb.measurement.pdf>.
- Ajzen, I., & Fishbein, M. (1970). The prediction of behavior from attitudinal and normative variables. *Journal of Experimental Social Psychology*, 6, 466–487.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Ammah, J.A., & Hodge S.R. (2005). Secondary physical education teachers' beliefs and practices in teaching students with severe disabilities. *The High School Journal*, 89(2), 40-54.
- Arnhold, R., Young, L., Lakowski, T. (2013). The historical and legal background leading to the Office of Civil Rights "Dear colleague letter". *Journal of Health, Physical Education, Recreation, and Dance*, 84(8), 20 -23.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40, 471–499.
- Beamer, J.A., & Yun, J. (2014). Physical educators' beliefs and self-reported behaviors toward including students with autism spectrum disorder. *Adapted Physical Activity Quarterly*, 31, 362-376.
- Block, M.E., & Rizzo, T.L. (1995). Attitudes and attributes of physical educators associated with teaching individuals with severe and profound disabilities. *Journal of the Association for Persons with Severe Handicaps*, 20, 80-87.
- Casebolt, K.M., & Hodge, S.R., (2006). Physical education teachers' beliefs on teaching students with disabilities: Case studies in Pennsylvania. *Adapted Physical Activity Quarterly*, 42(6), 730-757.
- Cregan, K., Bloom, G.A. & Reid, G., (2007) Career evolution and knowledge of elite coaches of swimmers with a physical disability. *Research Quarterly for Exercise and Sport*, 78(4), 339-350.

- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Cronbach, L. I. (1990). *Essentials of psychological testing (5th ed.)*. New York: Harper Collins.
- Dillam, D.A., Smyth, J.D., & Christian, L.M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method (3rd ed)*. Hoboken. NJ: John Wiley & Sons.
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers*, 28, 1-11.
- Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. MA: Addison-Wesley.
- Francis, J., Eccles, M. P., Johnston, M., Walker, A. E., Grimshaw, J. M., Foy, R., Kaner, E. F. S., Smith, L., & Bonetti, D. (2004). Constructing questionnaires based on the theory of planned behavior: A manual for health services researchers. *University of Newcastle upon Tyne, UK: Centre for Health Services Research*.
- Jeong, M., & Block, M.E. (2012). Physical education teachers' beliefs and intentions toward teaching students with disabilities. *Research Quarterly for Exercise and Sport*, 82(2), 239–246. doi:10.1080/02701367.2011.10599751
- Kozub, F.M., & Porretta, D. (1998). Interscholastic coaches' attitudes toward integration of adolescents with disabilities. *Adapted Physical Activity Quarterly*, 15(4), 328-341.
- Nixon, H. (1988). Getting over the worry hurdle: Parental encouragement and the sports involvement of visually impaired children and youth. *Adapted Physical Activity Quarterly*, 5, 29-43.
- Obrusnikova, I. (2008). Physical educators' beliefs about teaching children with disabilities. *Perceptual and Motor Skills*, 106(2), 637–644. PubMed doi:10.2466/pms.106.2.637-644
- Penfield, R.D. & Giacobbi, P.R. (2004). Applying score confidence interval to Aiken's item content-relevance index. *Measurement in Physical Education and Exercise Science*, 8(4), 213 -215.
- PsychData [Online survey software]. (2001). State College, PA: LLC. PsychData LLC.

- Randall, D. M., & Wolff, J. A. (1994). The time interval in the intention-behaviour relationship: Meta-analysis. *British Journal of Social Psychology*, 33, 405–418.
- Rehabilitation Act of 1973, Pub. L. No. 93-112, 87 Stat. 355.
- Rizzo, T.L. (1983). Attitudes of physical educators toward teaching handicapped pupils (Doctoral dissertation, University of Illinois at Urbana-Champaign, 1983). University Microfilms International, 8324631.
- Rizzo, T.L. (1984). Attitudes of physical educators toward teaching handicapped pupils. *Adapted Physical Activity Quarterly*, 1(4), 267–274.
- Rizzo, T.L. (1985). Attributes related to teachers' attitudes. *Perceptual and Motor Skills*, 60(3), 739–742. doi:10.2466/pms.1985.60.3.
- Rizzo, T.L. (1993). The physical educators' attitude toward teaching individuals with disabilities-III Survey. Unpublished survey. Available from Terry Rizzo, Dept, of Physical Education, California State University. San Bernardino, CA 92407-2397.
- Rizzo, T.L., & Bishop, P. (1991). Coaches attitudes toward players with disabilities: Soccer (CAP-S). Unpublished survey, California State University, San Bernardino.
- Rizzo, T. L., Bishop, P., & David, T. (1997). Attitudes of soccer coaches toward youth players with mild mental retardation: A pilot study. *Adapted Physical Activity Quarterly*, 14(3), 238-251.
- Rizzo, T.L., & Vizpoel, W.P. (1991). Physical educators' attributes and attitudes toward teaching students with handicaps. *Adapted Physical Activity Quarterly*, 12, 205-216.
- Rizzo, T.L., & Wright, R. G. (1987). Secondary school physical educators' attitudes toward teaching students with handicaps. *Mental Retardation*, 26, 307-309.
- Rizzo, T.L., & Wright, R.G. (1988). Physical educators' attitudes toward teaching students with handicaps. *Mental Retardation*, 26(5), 307–309. PubMed
- Sarndal, C.E., Swensson, B., & Wretman, J. (2003). *Model Assisted Survey Sampling: Springer Series in Statistics*. New York, NY: Springer.
- Sheeran, P., & Orbell, S. (1998). Do intentions predict condom use? Meta-analysis and examination of six moderator variables. *British Journal of Social Psychology*, 37, 231–250.

- SPSS for Windows, 19.0. [Statistical analysis software]. (2010). Chicago, IL; SPSS Inc.
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28(15), 1317-1338.
- Taliaferro, A., Block, M., Harris, N., & Krause, J. (2011). Physical educators' self-efficacy toward including students with disabilities—Autism version 8.2 [unpublished survey instrument].
- Tripp, A. (1988). Comparison of attitudes of regular and adapted physical educators toward disabled individuals. *Perceptual and Motor Skills*, 66, 425-426.
- University Interscholastic League. (2014). Wheelchair division track and field: UIL constitution and contest rules. Retrieved May 20, 2014 from [www.uil texas.org/files/athletics/2014\\_ParaTrack.pdg](http://www.uil texas.org/files/athletics/2014_ParaTrack.pdg)
- U.S. Department of Education. (2011). Creating equal opportunities for children and youth with disabilities to participate in physical education and extracurricular athletics. Retrieved from <http://www.wrightslaw.com/pubs/usdoe.pe.athletics.pdf>
- U.S. Department of Education: Office of Civil Rights. (2013). Dear colleague letter. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201301-504.html>.
- U.S. Government Accountability Office. (2010). Students with disabilities: More information and guidance could improve opportunities in physical education and athletics. Retrieved from [www.gao.gov/assets/310/305770.pdf](http://www.gao.gov/assets/310/305770.pdf).
- Wicker, A.W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. *Journal of Social Issues*, 25 (4), 41-78.

## APPENDIX A

### Coaches' Intentions to Include Athletes with Disabilities Survey

## Coaches' Intentions to Include Athletes with Disabilities

\*1) Please select the range that represents your age in years

☐ less than 25 years old

☐ 25 - 65 years old

☐ greater than 65 years old

Continue ONLY when finished. You will be unable to return or change your answers.

Continue »

\*2) Will you be a head track and field coach during the spring 2015 season?

☐ Yes

☐ No

Continue ONLY when finished. You will be unable to return or change your answers.

Continue »

\*3) Have you been a high school track and field coach for at least 1 year?

☒ Yes

☐ No

Continue ONLY when finished. You will be unable to return or change your answers.

Continue »

**Completing this questionnaire constitutes your informed consent to act as a participant in this study.**

### Introduction

In the questionnaire below please use the 7-point rating scale to identify your answer. You will make select the answer that is most closely associated with your thoughts.

The following is an example:

Track and Field is a physically demanding sport

Strongly disagree

Strongly agree

☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   ☐ 7

If you strongly disagree that "track and field is a physically demanding sport" then you would place your mark as follows:

Track and field is a physically demanding sport:

Strongly disagree

Strongly agree

♦ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   ☐ 6   ☐ 7

Please read the following description of a hypothetical athlete named Avery. After you read the information please respond to the following statements using the rating scale. Mark a response that best describes your **opinion** about coaching an athlete like Avery on your **track and field team**.

At the spring 2015 UIL State Track and Field Championship, qualified student athletes that use a manual wheelchair can compete in 3 exhibition events (400m, 100m, and Shot put). **Avery** is a first year student with a disability that uses a manual wheelchair for mobility. Avery has been a member of a community track and field team for 4 years, has competed at the junior national wheelchair championship for 3 years, and has a national record in the 400m. In addition, Avery is a member of the student council, and a class officer. This student athlete meets UIL eligibility based on academic merit, and will be trying out for your spring 2015 high school track and field team.

**For the purposes of this study, inclusion is defined as:** An athlete with a disability participates and competes at the same rate as required by the team's code of conduct and/or the same rate as team members without a disability (i.e. if team members without disabilities are required to attend all practices the athlete with a disability is also required to attend all practices).

**Section 1: Each question in this section refers to including a student athlete like Avery on your track and field team during the spring 2015 season.**

|     |                                                                                                                                                                |                                |                                         |                               |                                      |                             |                                      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------|--------------------------------------|-----------------------------|--------------------------------------|
| 4)  | If a student athlete like Avery tried out and earned a place on my track and field team it would be my intention to include him during the spring 2015 season. |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 5)  | Including a student athlete like Avery on my track and field team during the spring 2015 season will benefit the team as a whole.                              |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 6)  | Including a student athlete like Avery on my track and field team will inspire other student athletes during the spring 2015 season.                           |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 7)  | A student athlete like Avery will NOT have an increased self-concept from being a part of our track and field team during the spring 2015 season.              |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 8)  | Including a student athlete like Avery on my track and field team will be more work for me as a coach during the spring 2015 season.                           |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 9)  | I will need more professional preparation before I can include a student athlete like Avery on my track and field team during the spring 2015 season.          |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 10) | A student athlete like Avery will NOT increase the diversity of my track and field team during the spring 2015 season.                                         |                                |                                         |                               |                                      |                             |                                      |
|     | <b>Strongly disagree</b>                                                                                                                                       |                                |                                         |                               |                                      |                             | <b>Strongly agree</b>                |
|     | <input type="radio"/> strongly disagree                                                                                                                        | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |

|     |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                        |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11) | My school administrators think that I should include a student athlete like Avery on my track and field team during the spring 2015 season                          | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 12) | Parents of student athletes with disabilities think that I should include a student athlete like Avery on my track and field team during the spring 2015 season     | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 13) | My coaching staff thinks that I should include a student athlete like Avery on my track and field team during the spring 2015 season.                               | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 14) | My student athletes without disabilities think I should include a student athlete like Avery on my track and field team during the spring 2015 season.              | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 15) | Parents of student athletes without disabilities think that I should include a student athlete like Avery on my track and field team during the spring 2015 season. | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 16) | I do NOT have enough assistant coaches to include a student athlete like Avery on my track and field team during the spring 2015 season                             | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 17) | It will NOT be difficult to get appropriate equipment for a student athlete like Avery during the spring 2015 season.                                               | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 18) | It will be easy to arrange travel accommodations to include a student athlete like Avery during the spring 2015 season.                                             | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 19) | It will be difficult to find an accessible facility to include a student athlete like Avery during the spring 2015 season.                                          | <div>Strongly disagree</div> <div> <input type="radio"/> strongly disagree <input type="radio"/> disagree <input type="radio"/> somewhat disagree <input type="radio"/> neutral <input type="radio"/> somewhat agree <input type="radio"/> agree <input type="radio"/> strongly agree </div> <div>Strongly agree</div> |
| 20) | Including Avery on my track and field team this season is:                                                                                                          | <div>Good</div> <div> <input type="radio"/> 7 <input type="radio"/> 6 <input type="radio"/> 5 <input type="radio"/> 4 <input type="radio"/> 3 <input type="radio"/> 2 <input type="radio"/> 1 </div> <div>Bad</div>                                                                                                    |
| 21) | Including Avery on my track and field team this season is:                                                                                                          | <div>Wise</div> <div> <input type="radio"/> 7 <input type="radio"/> 6 <input type="radio"/> 5 <input type="radio"/> 4 <input type="radio"/> 3 <input type="radio"/> 2 <input type="radio"/> 1 </div> <div>Foolish</div>                                                                                                |
| 22) | Including Avery on my track and field team this season is:                                                                                                          | <div>Unsatisfying</div> <div> <input type="radio"/> 7 <input type="radio"/> 6 <input type="radio"/> 5 <input type="radio"/> 4 <input type="radio"/> 3 <input type="radio"/> 2 <input type="radio"/> 1 </div> <div>Satisfying</div>                                                                                     |

|     |                                                                                                                                                       |                                |                                         |                               |                                      |                             |                                      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------|--------------------------------------|-----------------------------|--------------------------------------|
| 23) | Most people who are important to me think that I should include a student athlete like Avery on my track and field team during the spring 2015 season |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 24) | I am under social pressure to include a student athlete like Avery on my track and field team during the spring 2015 season                           |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 25) | If I wanted to, I could include a student athlete like Avery on my track and field team during the spring 2015 season.                                |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 26) | I do NOT have complete control over my ability to include a student athlete like Avery on my track and field team during the spring 2015 season.      |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 27) | It is mostly up to me whether or not I include a student athlete like Avery on my track and field team during the spring 2015 season.                 |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 28) | Having adequate professional preparation to include a student athlete like Avery on my track and field team during the spring 2015 season is good.    |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 29) | Increasing my work load due to including a student athlete like Avery during the spring 2015 season is bad.                                           |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 30) | An increased self-concept for a student athlete like Avery during the 2015 season is good.                                                            |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 31) | Doing something to benefit the team as a whole during the spring 2015 season is good.                                                                 |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 32) | Having a student athlete like Avery inspire other student athletes during the spring 2015 season is NOT good.                                         |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |
| 33) | Increasing diversity on my track and field team during the spring 2015 season is good.                                                                |                                |                                         |                               |                                      |                             |                                      |
|     | Strongly disagree                                                                                                                                     |                                |                                         |                               |                                      |                             | Strongly agree                       |
|     | <input type="radio"/> strongly disagree                                                                                                               | <input type="radio"/> disagree | <input type="radio"/> somewhat disagree | <input type="radio"/> neutral | <input type="radio"/> somewhat agree | <input type="radio"/> agree | <input type="radio"/> strongly agree |

34) I expect to include all student athletes that try out and earn a place on my track and field team during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

35) I am less likely to include a student athlete like Avery on my track and field team if I have enough coaching assistants during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

36) I am more likely to include a student athlete like Avery on my track and field team if I have appropriate equipment for the student during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

37) I am more likely to include a student athlete like Avery on my track and field team if I have appropriate travel accommodations for the student during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

38) I am less likely to include a student athlete like Avery if I have an accessible facility during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

39) Generally speaking, I would do what my administrators think I should do during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

40) Generally speaking, I would do what parents of student athletes with disabilities think I should do during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

41) Generally speaking, I would do what my coaching staff thinks I should do during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

42) Generally speaking, I would do what my student athletes without disabilities think I should do during the spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

43) Generally speaking, I would do what parents of student athletes without disabilities think I should do spring 2015 season.

Strongly disagree      Strongly agree

☐ strongly disagree   ☐ disagree   ☐ somewhat disagree   ☐ neutral   ☐ somewhat agree   ☐ agree   ☐ strongly agree

---

44) How many seasons in the past have you included a student athlete with a physical disability, like Avery, on your track and field team?  
Place # of seasons in the following space:

Section 2: Background information

| Gender                                                                                           |                                                   |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 45) Please identify your gender.                                                                 | --Select-- ▼                                      |
|                                                                                                  |                                                   |
| 46) What is your age?                                                                            | <input type="text"/>                              |
| 47) How many years have you coached track and field                                              | <input type="text"/>                              |
| 48) How many student athletes are on your track and field team?                                  | <input type="text"/>                              |
| 49) What sports do you presently coach?                                                          | <input type="text"/>                              |
| *50) Do you have any disability sports coaching certificates?                                    | --Select-- ▼                                      |
| 51) If yes, list the name(s) of certificate(s)                                                   | <input type="text"/>                              |
| *52) Have you taken any course in disability sports during your professional preparation?        | --Select-- ▼<br>- Yes [Value=1]<br>- No [Value=2] |
| 53) If yes, how many courses?                                                                    | <input type="text"/>                              |
| *54) Have you taken any adapted physical education courses during your professional preparation? | --Select-- ▼<br>- Yes [Value=1]<br>- No [Value=2] |
| 55) If yes, how many courses?                                                                    | <input type="text"/>                              |
| *56) Have you had any experience coaching athletes with disabilities?                            | --Select-- ▼<br>- Yes [Value=1]<br>- No [Value=2] |

57) If yes, how many years have you coached athletes with disabilities?

#### Experience

58) Rate the quality of your experience coaching athletes with disabilities.

--Select-- ▼

- no experience [Value=1]
- not good [Value=2]
- satisfactory [Value=3]
- very good [Value=4]

#### Competency

59) How competent do you feel coaching athletes with disabilities?

--Select-- ▼

- Not at all [Value=1]
- Somewhat [Value=2]
- Very [Value=3]

## Coaches' Intentions to Include Athletes with Disabilities

Completing this questionnaire constitutes your informed consent to act as a participant in this study.

**Thank you for your time and effort!**

If you have any questions regarding this study please contact the primary investigator:

Jonna Belanger

email: [jonnajoy@twu.edu](mailto:jonnajoy@twu.edu)

**For maximum confidentiality, please close this window.**

## APPENDIX B

### Internal Review Board Exemption Letter



**Institutional Review Board**

Office of Research and Sponsored Programs  
P.O. Box 425619, Denton, TX 76204-5619  
940-898-3378  
email: [IRB@twu.edu](mailto:IRB@twu.edu)  
<http://www.twu.edu/irb.html>

DATE: October 2, 2014

TO: Ms. Jonna Belanger  
Department of Kinesiology

FROM: Institutional Review Board - Denton

Re: *Exemption for Intentions of Texas High School Track and Field Coaches to Include Students with Disabilities Within Their Athletic Teams (Protocol #: 17845)*

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Although your protocol has been exempted from further IRB review and your protocol file has been closed, any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any adverse events or unanticipated problems. All forms are located on the IRB website. If you have any questions, please contact the TWU IRB.

cc. Dr. Charlotte Sanborn, Department of Kinesiology  
Dr. Ron Davis, Department of Kinesiology  
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