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THE IMPORTANCE OF LEADERSHIP: AN INVESTIGATION OF EFFECTS OF TRANSFORMATIONAL LEADERSHIP ON MIDDLE SCHOOL STUDENTS INTRINSIC MOTIVATION AND EXPECTANCY-VALUE IN PHYSICAL EDUCATION

Minhyun Kim

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Minhyun Kim

Candidate

Health, Exercise and Sports Sciences

Department

This dissertation is approved, and it is acceptable in quality and form for publication:

Approved by the Dissertation Committee:

Glenn Hushman, Ph.D., Chairperson

Todd Seidler, Ph.D.

Christina Perry, Ph.D.

Hosung So, Ph.D.

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IN PHYSICAL EDUCATION**

By

MINHYUN KIM

B.S., Golf Management and Sport Administration, Kyung Hee University, 2009
M.A., Kinesiology, California State University, San Bernardino, 2012

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

**Doctor of Philosophy
Physical Education, Sports and Exercise Science**

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Dedication

I would like to dedicate this dissertation to my parents, Daejoong Kim and Soonphil Kim and parents-in-law, Dongjin Yoo and Hanhee Lee. I cannot express in words my appreciation for their support in helping me achieve this dream. Their unconditional love, sacrifices, and prayers make everything possible.

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ABSTRACT

The leadership practices exhibited by physical education teachers have been found to have a significant impact on promoting students' learning. The main purpose of this study was to explore: (a) differences on middle school students' perception regarding expectancy-value and intrinsic motivation according to their grade, gender, and ethnicity, (b) the relationship between physical education teachers' transformational leadership and middle school students' expectancy-value and intrinsic motivation. To conduct this study, three questionnaires were employed: transformational teaching questionnaire (Beauchamp et al., 2010), expectancy-value questionnaire (Duncan & Tammen, 1989), and intrinsic motivation index (Eccles & Wigfield, 1995). A total of 295 middle school students participated in this study through a convenience sampling technique, and 262 questionnaires were used for the data analyses. Data collected were analyzed by descriptive, exploratory factor analysis, t-test, ANOVAs, and regression.

The study results showed that generally 6th grade students perceived higher expectancy-value and intrinsic value than 8th grade students. Male students had higher expectancy-value and intrinsic value than female students. However, there was no statistically significant difference among ethnic groups. In addition, according to single regression, transformational leadership had a positive impact on students' expectancy-value and intrinsic motivation. Lastly, based on multiple regression, intellectual stimulation was a common factor that affected students' expectancy-value and intrinsic motivation positively.

The results of the study support the importance of transformational leadership that affects middle school students' intrinsic motivation and expectancy-value in physical education. Thus, it is recommended that physical education teachers be able to understand and display appropriate leadership, in particular transformational leadership.

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Chapter 1

Introduction

Leadership is critically important in many venues, including business, the military, the sports world and school systems, and has the potential to greatly enhance the effectiveness of an organization. Bass (2008, p.25) defined leadership as “An interaction between two or more members of a group that often involves a structuring or restructuring of the situation and of the perceptions and expectations of the members”. In the past several decades, the subject of leadership has been an unprecedented study topic to promote organizational success. Numerous studies have revealed that leadership is a significant factor that creates healthy and successful organizations (Bolman & Deal, 1997; House & Aditya, 1997; Schein, 2004). Additionally, effective leaders play critical roles regarding influence of positive attitude and beliefs among their followers (Davis, 2003; Denison, 1996; Doherty & Chelladurai, 1999; Leithwood & Duke, 1999).

According to Goleman (2004), successful leadership requires a diverse skill set to meet a variety of demands. He posited five key components regarding leadership: self-awareness, self-regulation, motivation, empathy, and social skill. To be self-aware means being able to understand one's own strengths and weaknesses, and knowing how and when to effect change. To be self-regulating means having the ability to control oneself psychologically, emotionally, and biologically. An effective leader can exhibit self-control in the face of unpleasant situations, stress, or failure. This self-control often leads to adherence to moral and ethical principles characteristic of a strong leader. Lastly, motivation is a necessity for leaders who desire to lead followers to maintain interests and achieve their goals. A leader's ability to show empathy means the leader also considers followers'

emotions and feelings in making decisions. It is also a kind of perception that allows a leader to perceive and to treat other people based on their emotional states. Lastly, social skill is the ability to manage relationships by understanding others' goals, needs, motivations, communicating well, and initiating action.

Similar to Goleman's (2004) suggested traits of leaders, Lu (2005) posited three characteristics for strong leaders: direction, influence, and interaction. Applied specifically to teaching, teacher leadership is aimed at influencing students by encouraging them to achieve educational goals (Lu, 2003). Direction relates to the teacher's ability to demonstrate and teach objectives of the learning process, and direct the student to them. Interaction, the social component, is the ability of the teacher-leader to form positive relationships and embrace student diversity, both cultural and in terms of learning ability.

The concept of leadership also has drawn attention as an important concept to enhance the quality of education. Katzenmeyer and Moller (2001) defined teacher leadership as "teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice" (p.5). Another view of leadership from Harris and Mujjs (2003) states "teacher leadership is not a formal role, responsibility or set of tasks, it is more a form of agency where teachers are empowered to lead development work that impacts directly upon the quality of teaching and learning" (p. 40). Gardner (1990) posited that great teachers are ones who know how to teach, as well as to lead students because the holistic approach of education is not only to transcend academic knowledge, but also to help students seek meaning and purpose of life.

Studies indicate that teacher leadership is considered one of the education efficiency features (Bye, Pshkar & Conway, 2007; Cohen & Hill, 2000; Darling-Hammond & Friedlaender, 2008; Donaldson, 2007; Goodlad, 1997). Lastly, teachers should proactively make a positive relationship, as well as ensuring a communication with students; teachers should be available at all times when students need them (Harris, 2003).

Leadership and Educational Reform

As a result of major educational reforms focusing on teachers' effectiveness and abilities to improve students' academic performances, such as *No Child Left Behind*, *Race to the Top*, and *Value Added Model*, the needs for holding schools and teachers educationally accountable have increased dramatically (Burton & Boeder, 2003; Stecher & Kirby, 2004). In response to this overwhelming national and state demand, effective leadership has become an imperative necessity for effective teaching. In fact, studies indicate that teachers have the most impact on students' learning in school (Baba & Ace, 1989; Bolkan & Goodboy, 2009; Harvey, Royal, & Stout, 2003).

Moreover, teacher leadership has an important role in developing positive school cultures, including students' behavior, motivation and achievement (Andrew & Kent, 2007; Bass & Steidlmeier, 1999; Birnbaum, 1989; Politis, 2001). Studies have shown a positive relationship among leadership and teachers' job ownership and responsibility (Phillips, 2003), job satisfaction (Rinehart & Short, 1994), organizational commitment (Hoy, Tartar, & Bliss, 1990; Short, 1994b; Wallace, 1993) and teacher retention (White, 1992).

Leadership in Physical Education

Traditionally, teachers in physical education have been more likely to display an authoritarian style than in any other subject areas (Templin, Woodford & Mullin, 1982). In

addition, as most physical education teachers experience a role conflict as both teacher and coach, it is difficult for them to display effective leadership and teaching styles accordingly (Kwon, Pyun & Kim, 2010). Thus, the importance of leadership should be recognized in physical education as teachers are considered leaders in their own classrooms (Peterson & Cooke, 1983). The leadership practices exhibited by physical education teachers have been found to have a significant impact on promoting students' learning (Chelladurai & Saleh, 1980). Studies supported that physical education teachers play a major role in influencing students' attitudes (Browne, 1992; Luke & Sinclair, 1991), satisfaction, enjoyment and interest in physical education (Carlson, 1995; Sanders & Graham, 1995; Tannehill & Zakrajsek, 1993). More importantly, the current teaching practices of physical education are no longer focusing on simple sports training (Sallis & McKenzie, 1991). The role of physical education is to not only means of education related to teach general knowledge and skills in sports and physical activities, but also to provide a holistic approach of quality of learning health benefits of physical activity, social behavior management and enjoyment (Sallis et al., 1997; Wersch, Trew, & Turner, 1992). As a consequence of the educational changes in physical education, the leadership capacity of each physical education teacher has become more important. Understanding of how to be leaders enables teachers to employ various teaching styles to reach goals and objectives, as well as to motivate students and to enhance classroom management. To summarize, for physical education teachers to create successful programs in complex school environments, the teachers must demonstrate effective leadership skills.

Physical Education in the Middle School

A prime objective of middle school physical education is to augment students' knowledge, develop their fitness, and teach or refine motor skills applicable to a wide range of sports and physical activities such as: individual, team, and outdoor sports, and invasion games, (NASPE, 2004). According to National Association of Sport and Physical Education (2010), high quality middle school physical education employs sequential instruction and encourages maximum participation by students. Effective instructors give specific, practical feedback, use varied teaching styles according to varying student needs, and support cognitive learning. Although there have been efforts to improve middle school physical education, there is a clear decline in student participation in physical education. In part, perhaps due to adolescent self-consciousness, middle school students are prone to judge themselves according to their physical appearance and skill competency. That is, physical skill levels and body image heavily impact students' motivation and participation in physical education (Pate, 1995). Students who are skillful and in good shape are motivated to engage in activities. On the other hand, students hampered by feelings of inadequacy regarding physical skills and body image may avoid participating in activities. Additionally, since middle school students are typically concerned with body shape and changes, they dislike undressing in the locker room (Mohnsen, 2003). This routine, but uncomfortable, event does not help with student motivation.

The adolescent years are universally acknowledged as a transition time for major physical and psychological changes. These changes significantly impact students' attitudes, behavior, and motivation with regard to physical education classes (Ennis, 1999). Particularly, there is a dramatic decrease in interest and enjoyment of physical education (Subramaniam &

Silverman, 2007). The implication is that not all middle school students are uniformly ready to learn and participate in physical education classes.

Theoretical Framework

The theoretical framework for this study is embedded in the concept of transformational leadership, which has gained academic attention across the world since its inception in 1970 (Dorfman & Howell, 1996; Gerstner & Day, 1994; Gibson & Marcoulides, 1995; Yu, Leithwood, & Jantzi, 2002). Numerous studies have been conducted to examine its efficiency in organizations (Bass, 1997; Podsakoff, MacKenzie, & Bommer, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Transformational leadership refers to the ability to influence followers to pursue positive changes in order to accomplish organizational missions or objectives, as well as to build responsibility to transform their attitudes and beliefs (Yukl, 1989). Daft (2008) also posited that transformational leadership is “characterized by the ability to bring about significant change in followers and the organization” (p. 356). Empirical evidence supports the belief that transformational leadership promotes organizational success by enhancing motivation, satisfaction, productivity, and performance. (Bass, 1997; Howell & Avolio, 1993; Krishnan, 2005; Masi & Cooke, 2000). In the context of education, transformational leadership helps increase teaching efficacy (DuFour & Berkey, 1995), resulting in fostering improvement of students’ performances and attitudes (e.g., Harvey, Royal, & Stout, 2003). Transformational leadership is achieved by changing and developing followers based on the high standards and appropriate beliefs of the leader. According to Bass (1990), four factors comprise transformational leadership. Each of the following components includes significant values and encompasses important aspects of transformational leadership: They are: (a) idealized

influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individual consideration. Idealized influence is about being a role model whom followers seek to emulate. Inspirational motivation takes place when leaders encourage their followers by providing a clear mission and vision and by setting higher goals. Intellectual stimulation involves arousing followers' curiosity by employing various methods. Individualized consideration takes place when leaders find and respond to specific followers' needs. Each component includes meaningful values and implies important aspects of transformational leadership.

Problem Statement

Physical education teachers are continually being tasked with creating effective ways to motivate students to participate in life long physical activities (NASPE, 2010) as a population which increasingly elects sedentary activities both in work and play, resulting in high rates of obesity (CDC, 2012). According to the CDC (2012), approximately 17% (12.7 million) of children and adolescents aged 2 to 19 are obese. The Department of Health and Human Services (USDHHS, 2011) recommended that 60 minutes or more of moderate to vigorous- intensity aerobic physical activity should be required for children and adolescents every day. This regular physical activity helps maintain physical health and reduces psychological problems such as depression and anxiety, as well as preventing chronic diseases, including diabetes and cardiovascular diseases (USDHHS, 2011). Thus, physical education that focuses on developing physical skills and fitness for students to participate in a series of activities is important (Sallis et al., 1997; Corbin, 2002).

Many attempts have been imposed in physical education to create better educational environments, such as by employing various curriculum models described by Bunker &

Thorpe, 1982; Graham, 1992; Siedentop, 1994. Considering various teaching styles (Mosston & Ashworth, 1994) and using a valid assessment model, such as PE-Metrics (Hushman, Hushman, & Carbonneau, 2015) have also been investigated. Each of these has some meaningful features to facilitate student learning. However, the perceptions of students toward physical education may be negative due to lack of teaching practices (Fernandez-Balboa, 1993), inappropriate class environments (Williams, 1992) and gender inequity (Lock, Minarik, & Omata, 1999). Particularly, evidence studies have shown that middle school students' motivation has declined as they experience physical and emotional changes (Fredricks & Eccles, 2002). Specifically, due to the increase in middle school students' body awareness, they feel uncomfortable changing clothes around their peers (Ishee & Smith, 2013). Lack of intrinsic motivation such as not liking to move and getting sweaty also hinder them from participating in physical education (Mowling, Brock, Eiler, & Rudisill, 2004).

With this in mind, physical education teachers must be able to create a class environment that encourages students to engage positively. It is necessary to consider that leadership in physical education could be one way to minimize the current problems and maximize the students' participation. Despite the increasing attention on leadership, little empirical research addresses the importance of transformational leadership in physical education. Thus, it is essential to understand and examine the effectiveness of transformational leadership in physical education.

Purpose of the Study

The purpose of this study is to investigate the impact of transformational leadership on students' intrinsic motivation and expectancy-value in physical education among middle school students. Bass and Riggio (2006) state that "transformational leaders motivate others

to do more than they originally intended and often even more than they thought possible... they set more challenging expectations...empower followers and pay attention to their individual needs and personal development” (p. 4). Through quantitative methodology, this research will examine the relationship between each transformational component as it relates to motivation and expectancy-value. These two variables were chosen because they represent students’ success in physical education (Goodboy & Myers, 2008). Furthermore, this study also will investigate the four components of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, individual consideration) in relation to middle school students’ motivation and expectancy value toward physical education.

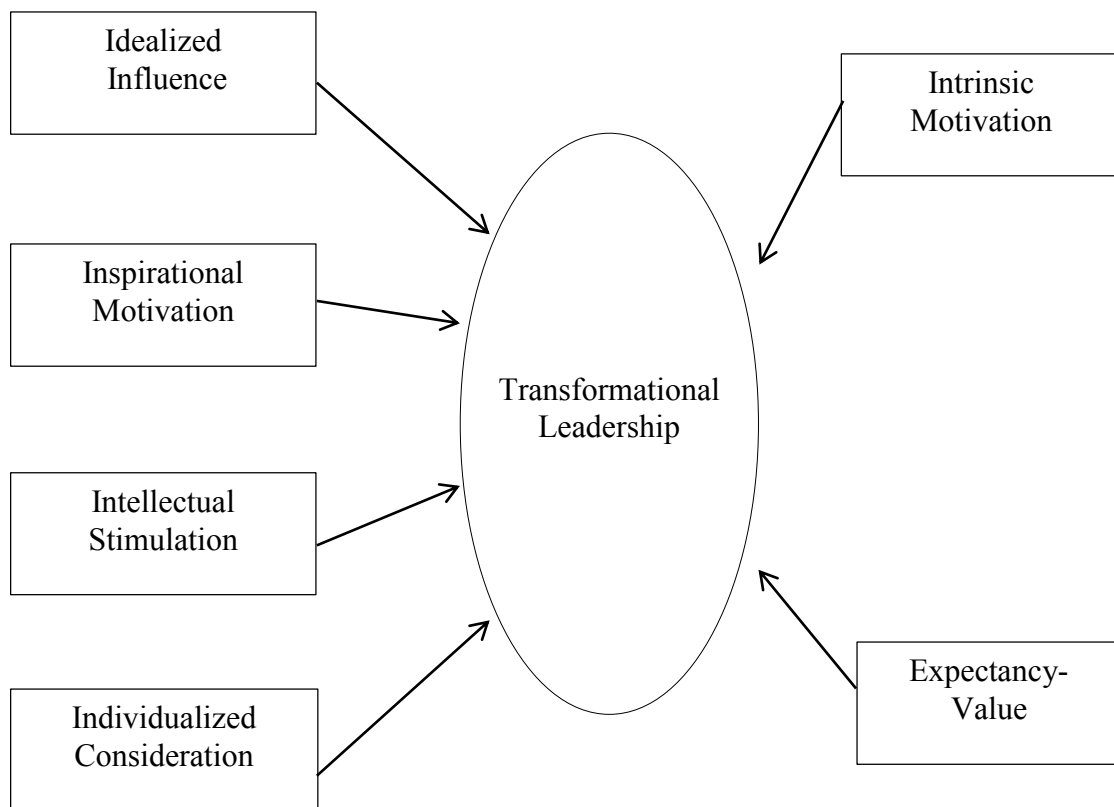


Figure 1. Depiction of model relating transformational leadership with intrinsic motivation and expectancy-value.

Research Questions

1. Does student perception of their teachers' transformational leadership positively associate and correlate with students' motivation in physical education?
 - a. Are there differences in students' perception of their teachers' transformational leadership according to grade, gender, and ethnicity?
 - b. Are there differences in students' motivation according to grade level, gender, and ethnicity?
 - c. To what extent do transformational components impact students' motivation in physical education?
2. Does student perception of their teachers' transformational leadership positively associate and correlate with students' expectancy-value in physical education?
 - a. Are there differences in students' expectancy-value according to grade, gender and ethnicity?
 - b. To what extent do transformational components impact students' expectancy value in physical education?

Assumptions of the Study

This study was based on the following assumptions:

1. It was hypothesized that the instruments applied in this study measured leadership, motivation, and expectancy value validly and reliably.
2. It was hypothesized that participants in this study clearly understood the questionnaires.
3. It was hypothesized that participants in this study responded to decently and honestly to the questionnaires used in the study.

Significance of the Study

Given the facts in the existing literature on transformational leadership in education, it is logical to suggest that investigating the effects of transformational leadership would be meaningful. This study's findings may contribute to the professional field of physical education as it may result in important information about the relationship between transformational leadership and middle school students' motivation and expectancy-value. As middle school students experience puberty's vast changes, they cannot escape its influences on attitudes, motivation, and behavior which affect their lives and studies, including physical education classes (Steinberg & Morris, 2001). One unique contribution of the study lies in providing information about the extent to which transformational leadership impacts middle school students' motivation and expectancy value. Transformational leadership is not just enhancing student outcomes. Examining the impact of transformational leadership may help physical education teachers develop curricula, teaching strategies, and relationships that are effective in creating interesting, enjoyable and meaningful classes.

Limitations of the Study

Factors contributing to the limitations of the study were:

1. Due to the fact this study collected data from a single school district in Albuquerque, New Mexico, the findings would not be generalized. Thus, the findings may not apply to other schools or geographical locations.
2. The study would be limited to the participants' interpretation on all survey items.
3. The study would be limited by varying degrees of physical education teachers' leadership throughout the schools.

4. The convenient sampling of intact groups and associated lack of randomization would be a limitation of the study design.

Definition of Terms

The theoretical and conceptual definitions for terms used in this study are listed as follows:

Charisma: A quality to attract people and inspire loyalty and admiration of large numbers of people or the emotional ability to articulate shared visions and a sense of purpose to subordinates (Bass, 1985a).

Leadership: “The process of influencing the activities of an individual or a group in effort toward goal achievement in a given situation” (Hersey & Blanchard, 1996, p. 83).

Transformational Leadership: “The process of influencing major changes in attitudes and assumptions of organizational members and building commitment for the organization’s mission and objectives” (Yukl, 1989, p. 204).

Individualized Consideration: “Understand and share in the follower’s concerns and developmental needs while treating each follower uniquely. Give personal attention, treats subordinate individually” (Bass, 1990a, p. 22).

Expectancy: How well a person anticipates performing on a given task or activity (Eccles et al., 1983).

Motivation: A person’s desire and drive to accomplish a goal, such as succeeding in school or making good grades, and which is impacted by a variety of individual and contextual experiences (Eccles et al, 1983).

Task Value: The importance a person places on achieving a certain goal or succeeding at a given task, which is impacted by one's cultural and social contexts (Eccles et al., 1983).

Intellectual Stimulation: "The arousal and change in followers of problem awareness and problem-solving of thought and imagination, and of beliefs and values, rather than arousal and change in immediate action" (Bass, 1985, p. 99).

Intrinsic motivation: Defined as the drive to engage in an activity for the activity's inherent interest or enjoyment rather than for outcomes external to the activity (Ryan & Deci, 1985b).

Extrinsic motivation: Defined as the tendency to perform an activity that derives from external or tangible rewards and punishments (Brown, 2007).

Self-regulation: "the energization and guidance of behavior on the basis of integrated awareness, informed by basic needs" (Ryan & Deci, 1985b, p. 47).

Chapter 2

Review of Literature

The purpose of this chapter is to provide and summarize conceptual frameworks related to the variables involved in this study. First, this chapter begins by presenting historical leadership theories such as the trait approach, the behavioral approach, the situational approach, and charismatic approach, as well as providing the theory of transformational leadership. Second, the literature of motivation is explained in education and physical education contexts. Last, expectancy value theory is presented.

Leadership

The term leadership has been used for approximately 200 years (Yukl, 1989; Bass, 1995). Since then, numerous definitions of leadership have been offered to support a successful organization. For example, “Leadership is an influence process that enables managers to get their people to do willingly what must be done, do well what ought to be done” (Cribbin, 1981, p. 13). In addition, “Leadership is interpersonal influence, exercised in situation, and directed, through the communication process, toward the attainment of a specified goal or goals” (Tannenbaum, Wescher, & Massarik, 1961, p. 24). It may be difficult to understand the clear meaning of leadership due to its complexity. However, it is critical to realize that leadership can be interpreted differently based on organizational environments and individual situations (Hughes, Ginnett & Curphy, 2009).

Although leadership is a complicated concept, researchers in leadership also have strived to identify specific leaders’ traits and behaviors that characterize leadership. Yukl (2002) stated the characteristics of leadership include various components such as “traits,

behaviors, influence, interaction patterns, role relationships, and occupation of an administration position” (p. 2).

Many leadership theories and models have been explored (Bass 1985; Bennis & Goldsmith, 1997; Bush & Glover, 2004; Stogdill, 1974; Yukl, 2002; Weindling, 2004; Wren & Dulewicz). Chelladurai (1984) noted, “Many models of leadership have been proposed and tested, and interest and activity in the area continues to grow” (p. 27). The concept of leadership has been changed and modified according to the value of the historical view. The following part is the overview of theoretical approaches to leadership.

Trait approach. In the 1920s and 1930s, Koh (1990) found that leadership research focused on individual innate characteristics, qualities, and capacity that allow people to become natural leaders, which is an example of the trait leadership theory. The trait approach identified various innate characteristics; this approach assumes that leaders are born, not made (Slack & Parent, 2006). Specifically, various characteristics and personal traits were identified as common to good leaders, including intelligence, perseverance, ambition, assertiveness, self-confidence, and independence (Bennis & Nanus, 1985). Slack and Parent (2006) further divided traits into three categories such as: physical appearance (e.g., appearance and age); intellectual qualities (e.g., intelligence, speaking ability and insight); and personality (e.g., emotional stability, dominance and sensitivity). As a result, the original study of leadership simply identified leaders as those who were born with these characteristics (Homer, 1997).

However, despite the fact that much research was conducted to discover leaders’ clear and specific common traits, studies failed to capture consistent traits related to great leaders that differentiate them from non-effective leaders (Stogdill, 1974; Yukl, 1989). Moreover, as

the trait approach ignored the fact that personal traits can be developed by training and education as well as by situational and environment aspects that affect leaders' traits, it was laid to rest (Homer, 1997). In short, in spite of the attempt to find common traits of leaders, every leader possesses a variety of traits (Bennis & Nanus, 1985; Koh, 1990).

Behavioral approach. By the 1940s, in response to criticisms of the trait approach, the leadership theory was introduced, and it centered on the behavioral approach in response to criticisms to the trait approach (Fiedler, 1967). According to Vroom and Yetton (1973), in contrast to the trait approach, individuals can be taught to be leaders by learning leadership behaviors. Additionally, the behavioral theory emphasizes that individuals' behaviors and actual action on the job make them a leader, instead of paying attention to their innate traits (Yuk1, 1989). In an effort to discover primary leaders' behaviors, scholarly work resulted in two components: initiation of structure and consideration (Heilbrunn, 1996). According to Slack (1997), "initiating structure meant the degree to which leaders structure their own work and that of their subordinates to obtain the organization's goals" (p. 292). Consideration is defined as "the extent to which leaders promote camaraderie, mutual tasks, liking, and respect in the relationship between themselves and their subordinates" (Bryman, 1992, p. 5).

The well-known research by Ohio State University and University of Michigan conducted studies of leaders' behavioral approach. Two universities did research simultaneously and obtained similar results. Ohio State's studies also revealed that initiating both structure and consideration is one of the most important components resulting in a positive impact on followers' performance and satisfaction (Slack, 1997). The Michigan study reported that employee-oriented leaders who focused on interpersonal relations derived high job satisfaction from their roles (Robbins, 1986). The two leadership studies revealed

many similarities that emphasized leaders' behavior, particularly people-oriented behavior, not the leaders' personal qualities. However, it was concluded that the studies failed to provide consistent dimensions of behaviors (Robbins, 1986).

Situational approach. In the early 1960s, Hersey and Blanchard (1984) argued that effective leadership is contingent on leaders' ability to modify their behavior according to situations and circumstances. Stogdill (1974) stated that "the evidence suggests that leadership is a relation that exists between persons in a social situation, and that persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 63-64). This theory suggested that leaders should be able to understand each situation and respond to it with the best behaviors appropriately, which requires a great deal of adaptability (Graeff, 1983; Johanson, 1990).

More specifically, Hersey and Blanchard (1984) paid attention to subordinate "maturity" defined as the "ability and willingness of people to take responsibility for directing their own behavior" (p. 151), the core situational characteristic. Depending on the level of followers' maturity, Hersey and Blanchard (1984) suggested four types of situational leadership: directing, coaching, supporting, and delegating. Directing is necessary when the follower is unwilling or afraid to attempt the task. As a result of followers' low competence and low commitment, the leader provides specific direction regarding goals and tracks the individuals' performances to maintain their roles (high-directive and low-supportive behavior). Coaching is required when the followers display some competence and inconsistent commitment. In this case, the leader continues to offer goals and task visions while motivating followers in an attempt to boost their confidence (high-directive and supportive behavior). Supporting is necessary when the follower shows high competence and

inconsistent commitment. This allows the leaders to discuss and decide goals and job performance with followers. In other words, the leader's role is more likely that of a facilitator who encourages and supports followers (low-directive and high-supportive behavior). Lastly, delegating is required when the follower shows high competence and high commitment. This enables the leader to trust and empower followers (low directive and low supportive).

Situational leadership draws significant impact on leadership context as it values and recognizes the diversity and differences among followers (Hersey & Blanchard, 1984). However, situational leadership invites criticism because research pointed out that no particular leadership style can be identified and applied to an organization universally (Glynn & DeJory, 2010). In other words, due to the complexity of diverse organizations and situations, it is difficult to demonstrate conceptual leadership consistently (Nicholls, 1985).

Supportive Behavior	A lot	Supporting S3 For people with: High Competence and Var. Commitment	Coaching S2 For people with: Some Competence Some Commitment
	Little	Delegating S4 For people with: High Competence High Commitment	Directing S1 For people with: Low Competence High Commitment
		Little	A lot

Directive Behavior

Figure 2. Depiction of situational leadership (Hersey & Blanchard, 1998).

Charismatic approach. In the 1970s, Max Weber addressed the idea of charismatic leadership. Weber (1947) defined charisma as “a certain quality of an individual personality by virtue of which he is considered extraordinary and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities.” (p. 241). In fact, the term charisma in Greek translates to “gift of grace”. Weber (1947) posited that few people can be leaders due to limited qualities and that availability is given to extraordinary people. According to Yukl (2002), charismatic leaders possess insights and self-reliance toward an organization and followers. Furthermore, leaders’ behaviors influence followers’ attributes and behaviors, such as “articulating an appealing vision, taking personal risks, and self-sacrifices to attain the vision” (Yukl, 2002, p. 244).

Transformational Leadership

Transformational leadership initially was proposed by Burns (1978). Daft (2008) defined transformational leadership as “characterized by the ability to bring about significant change in followers and the organization” (p. 356). Transformational leadership is conceptualized as involving a series of behaviors designed to inspire, empower, and motivate others to transcend and achieve higher levels of goals and missions (Avolio & Bass, 2004; Hunt, 1999). In addition to aspects of aspiration, transformational leaders are “an ethical, moral enterprise, through which the integrity of the [organization] would be maintained and enhanced” (Yukl, 2002, p. 76).

As described earlier, the efficiency and benefits of transformational leadership have been documents extensively, in particular as applied to education (Bass & Avolio, 1995; Hsu, Bell, & Cheng, 2002; Kirkbride, 2006). According to Burns (1978), transformational leadership can allow leaders as well as followers to elevate their morality and motivation.

Specifically, transformational leadership can be carried out by providing clear and compelling goals (Kim, 2010; Kuhnert & Lewis, 1987; Tichy & Devanna, 1986), displaying as a role model (Tichy & Devanna, 1986) and motivating followers to accomplish the goals (Bennis, 1989; Yammarino & Dubinsky, 1994). Bass (1985) introduced four dimensions of transformation leadership: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The description below provides more in-depth information about each dimension.

Idealized influence. Idealized influence implies that followers consider their leaders as role models who practice ethical conduct that inspires respect and trust (Barling, Christie, & Hopton, 2010). Transformational leaders resist pressures of immoral and unethical behaviors, by demonstrating highly ethical behavior and extensive personal rapport such as respect, trust, honesty, dignity, enthusiasm, responsibility and influencing positive behaviors, the transformational leader is able to instill critical life virtues into followers (Guerrero & Miller, 1998). According to Yukl (2002); transformational leaders use personalized power and traits to lead and appeal to followers.

Inspirational motivation. Inspirational motivation takes place when leaders share a vision and goal with the organization and followers (Pounder, 2003). Transformational leaders identify and set clear visions and realistic goals as they relate to followers' goals and enthusiasm (Bass & Avolio, 1994). This can be done by communicating clearly with followers, and encouraging and supporting them (Bass, 1985).

Intellectual stimulation. Intellectual stimulation involves promoting followers' curiosity, problem-solving, and novel ways of thinking by stimulating followers' intelligence (Kark, Shamir, & Chen 2003). According to Daft (2014), "people admire leaders who

awaken their curiosity, challenge them to think and learn, and encourage openness to new, inspiring ideas and alternatives” (p. 142). Transformational leaders recognize all types of issues and problems and help followers to solve problems in creative and innovative ways (Avolio et al. 1991); they should be resourceful and knowledgeable. Intellectual stimulation enables followers to maintain motivation and positive behaviors in the organization (Yorges, Weiss, & Strickland, 1999).

Individualized consideration. Individualized consideration takes place when leaders seek and respond to followers’ specific needs and capabilities (Bass & Avolio, 1994). By listening and caring about followers’ concerns and issues, transformational leaders should be able to help and support properly (Avolio & Bass, 1998). Being effective communicators implies multiple important aspects, such as skill in building an intimate relationship, and listening and providing proper reinforcement. Building a relationship means to find value on a personal level (Dionne et al., 2003), which helps create a supportive environment. This develops and maximizes followers’ potential (Barling et al., 2011). Moreover, individualized consideration is the ability, by supporting resources and removing potential barriers, to approach and embrace followers while not sacrificing professional responsibilities (Dionne, Yammarino, Atwater, & Spangler, 2004).

Table 1. *Summary of the Four I's of Transformational Leadership.*

<i>Idealized influence</i>	The leader puts follower needs above his/her own and is admired, respected, and trusted.
<i>Inspirational motivation</i>	The leader motivates followers by establishing a vision of the future and building team spirit.
<i>Intellectual stimulation</i>	The leader stimulates followers to challenge the status quo and to be innovative.
<i>Individualized consideration</i>	The leader recognizes the individual needs of the follower and develops the followers for increased challenges.

Source from Bass et al. (2003).

Criticisms of Transformational Leadership

Despite extensive research supporting the positive aspects of transformational leadership, scholars have discussed its flaws, as it is accepted and applied to many different fields. A major concern about transformational leadership is aligned with charismatic leadership (Yukl, 1999). Yukl (1999) stated that “the more successful the leader is in developing and empowering followers, the less dependent they will be on the leader for future advice and inspiration” (p. 299). Due to characteristics of transformational leadership, such as being a strong role model and having an appealing emotional influence, the problems lie in the increasing likelihood for leaders to abuse their power (Crawford, Gould, & Scott, 2003).

Another criticism of transformational leadership as a possible negative is their willingness to do and lack of impact on followers (Yukl, 1999). He found that even if leaders strongly influence and motivate followers by instilling powerful messages and promoting behaviors, this influence will not last long unless the followers are willing to carry out

directions. Moreover, although transformational leaders attempt to bring and implant potential visions, it seems difficult for leaders to change organizational or followers' existence conditions and beliefs in the present.

Ambiguity and lack of morality of transformational leadership also were discussed. Particularly, sometimes leaders' goals and missions are debatable and questioned, and the purpose of goals may not be for the common good (Tourish & Pinnington, 2002); these could be based on self-interest, which results in to the failure to obtain followers' favor. Additionally, Northhouse (2013) stated that leaders' goals and visions are not always more promising than the existing organizational goals; the leaders' goal also could have morality issues. Bass (1999) postulated that followers can be led in a positive direction or a negative direction by transformational leaders as they are either selfish or selfless. Although leaders have leadership skills, their intentions could be unethical, and the results of organizational behavior could be dangerous or harmful to society and individuals.

Finally, Yukl (1999) asserted that the four factors of transformational leadership are conceptually considerable. However, transformational leadership fails to capture and explain how individuals to build these components; it is unidirectional.

Transformational Leadership in Physical Education

Studies have been conducted to investigate the effects of transformational leadership in physical education programs across the world. As in many educational areas, leaders strive to employ transformational leadership to enhance movement toward their desired goals.

First, a recent qualitative study conducted by Morton, Keith and Beauchamp (2010) in Canada revealed that physical education teachers' transformational teaching affected a range of student behaviors. Particularly, students who perceived their teachers' idealized

influence showed the most positive influence, allowing them to participate in physical education. The next most influential dimensions were individualized consideration, inspirational motivation, and intellectual stimulation, in that order. This study stated that transformational teaching practices have an important meaning in promoting students' beliefs, attitudes, and motivation toward physical education.

Another study, conducted in South Korea by Jung, Pyo, and Kim (2008) employed 685 middle school students to explore the relationship between physical education teachers' transformational leadership and students' satisfaction in physical education. Results showed that this quantitative study idealized influence, individualized consideration, and intellectual stimulation have a significant impact on students' satisfaction. This study also pointed out the different perceptions of effects of transformational leadership by gender. Boys are more affected by idealized influence and individualized consideration than girls. On the other hand, girls are more affected by intellectual stimulation than boys. This study concluded that transformational leadership has a positive impact on student's satisfaction.

Lastly, a quantitative study, by Yang (2007), examined the relationships between physical education teachers' leadership and students' goal orientations in Taiwan. The study participants were 272 male college and high school students and 505 female college and high school students. The study results indicated that regardless of a student's age, gender, and goal orientation, transformational leadership was perceived to be the most efficient leadership style among other various leadership styles, including transformational leadership, transactional leadership, and laissez-faire. Moreover, students' goal orientation was also positively correlated with teachers' transformational leadership.

In conclusion, physical education encompasses various educational objectives, including psychomotor, affective and cognitive and invaluable health-related and psychologically-related outcomes. In order to accomplish these, a great emphasis should be placed on physical education teachers' behaviors and professional competencies. In this regard, displaying effective leadership enables physical education teachers to increase their all-around effectiveness. As studies examine the positive influence of leadership, particularly focusing on transformational leadership, they arrive at the conclusion that such leadership should be fostered and promoted because it can lead to students' learning and positive outcomes. This also may facilitate the general pattern of physical activity in their adult life.

Motivation

The term motivation comes from Latin word *movere*, which means “to move”. According to Bandura (1977), motivation is primarily focused on how behavior is activated and maintained. Brophy (2010) posited that “motivation is a theoretical construct used to explain the initiation, direction, intensity, and quality of behavior, especially goal-directed behavior” (p.3). Motivation can be explained as a significant underlying factor about how and why people act and behave during a given task or work. As a result, motivation has been a significant issue for those who need to mobilize their followers such as group leaders, coaches, administrators, teachers and even parents as motivators, explaining valuable aspects of human behavior.

The study of motivation has a long history leading to various motivation theories such as the expectancy value theory (Atkinson & Feather, 1966), the hierarchy of needs theory (Maslow, 1970), attribution theory (Weiner & Kukla, 1970), social cognitive theory (Bandura, 1977), and achievement goal theory (Pintrich & Schunk, 2002). In an educational

context, many researchers strive to explore the relationship between students' motivation and achievement (Giota, 2002; Greene & DeBacker, 2004), behavior and success (Wigfield & Wagner, 2005). Long (2005) stated:

Anyone working with young people has an interest in what motivates them. Why do children think, feel and behave as they do? Motivation is at the heart of teaching learners of all ages and abilities. With a clearer understanding of motivation in school we are better able to understand and support those young people who find learning at best a chore and at worst something to be actively fought against. Yet, while many students are quickly labelled [sic] as 'demotivated', they can seem incredibly motivated –not to be motivated. (p.1).

As Long described the necessity and importance of the study of motivation, it has been seen as increasingly significant, and educators are encouraged to seek the best teaching practices to motivate students. The following section will focus on intrinsic motivation and expectancy value theory.

Intrinsic motivation. According to Ryan and Deci (1980), intrinsic motivation was defined as “the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn” (p.70). Intrinsic motivation indicates an individual's inclination and reflects the satisfaction inherent in performing each activity (Deci & Ryan, 1980). For example, students who are intrinsically motivated demonstrated better school adjustment, performance, and engagement than students who are extrinsically motivated (Ryan & Deci, 1985). The self-determination theory (SDT) is a theoretical framework that explains human motivation, in particular, intrinsic motivation and inner resources for personality development and behavioral self-determination (Ryan, Kuhl, &

Deci, 1997; Deci & Ryan, 1985). According to SDT, although there are a variety of factors that affect people who are motivated, it is widely accepted that intrinsic motivation is associated with the highest level of self-determination for the sake of individual's behaviors (Ferrer-Caja & Weiss, 2000; Papaioannou, 1995; Standage, Duda, & Ntoumanis, 2003). SDT also suggests that the potential and desires of individuals can be capitalized on by others triggering their internal interests and motivation (Deci & Ryan, 1985). The concept of intrinsic motivation can result in a series of human nature behaviors such as cognitive, affective and behavioral outcomes. Deci and Ryan (1985) posited that when individuals are internally motivated, they are more likely to engage in a task.

According to Vallerand, Deci, and Ryan (1993), intrinsic motivation is conceptualized as containing three dimensions: knowing, accomplishing, and experiencing stimulation. Specifically, the first type of intrinsic motivation, to know, is represented by participating in or doing something to learn, discover, and expand in knowledge. For example, in physical education, students may desire to learn and expand a series of movements and athletic skills. The second type of intrinsic motivation, accomplishment, refers to the affirmative feeling associated with achieving something exceptional or succeeding at a new task. For instance, as students learn and master various skills successfully, as well as they are recognized for their accomplishment by physical education teachers, students are intrinsically motivated. Lastly, experiencing stimulation is related to allowing individuals to experience happiness, enjoyment, and excitement through activity participation. For example, students become excited when they are taught and practice thrilling activities, such as rock climbing or kayaking, in physical education. According to Ryan and Deci (1985), the most important things regarding intrinsic motivation are to

understand and provide factors associated with intrinsic motivation, as well as to reduce and eliminate the chances of weakening these components.

Intrinsic motivation vs extrinsic motivation. A number of studies have been examined to find the primary difference between intrinsic motivation and extrinsic motivation (Deci, 1971; Sansone & Thoman, 2005; Weiner & Mander, 1978). However, much importance has been centered on intrinsic motivation because of its significant outcomes, including creativity, quality, spontaneity, and vitality (Kruglanski, Friedman, & Zeevi 1971). In spite of the significance of underlying intrinsic motivation, it is imperative to understand the major differences and relationship between intrinsic motivation and extrinsic motivation.

Extrinsic motivation is related to the engagement in activities because of consequence desires such as tangible rewards, praise, and incentive (Deci, 1972; Patrick, Skinner, & Connell, 1993). In other words, the behaviors are not derived for their own sake. As discussed earlier, intrinsic motivation allows individuals to sustain and maintain interest, satisfaction, and enjoyment while doing a task (Ryan & Deci, 2000). Additionally, intrinsic motivation helps carry a task for a lasting period. On the other hand, extrinsic motivation entices individuals to perform and complete unattractive and simple task for external rewards (Lepper, Greene & Nisbett, 1973).

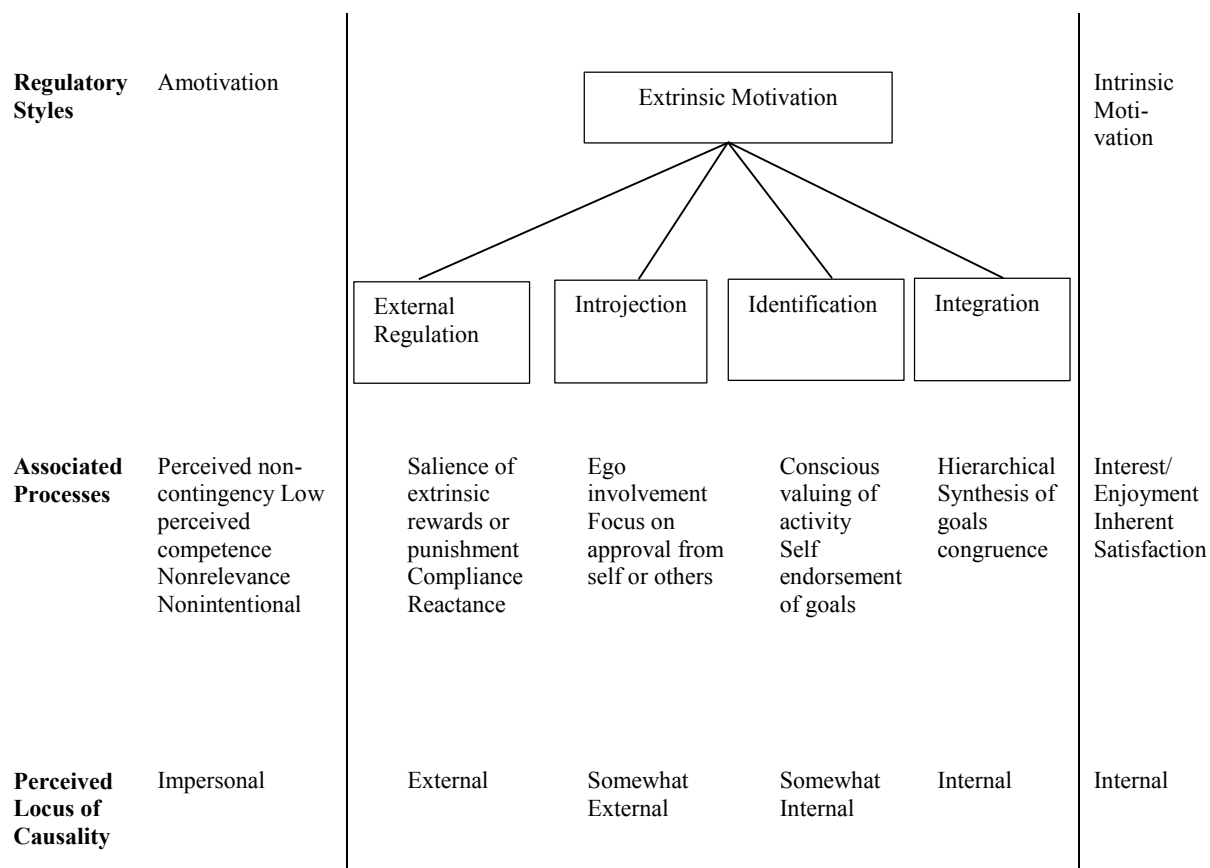


Figure 3. A taxonomy of human motivation (Deci & Ryan, 1980).

Figure 3 illustrates a taxonomy of human motivation. The figure implies that as individuals are motivated internally to act on a task, their motivation orientation shifts from the left side (amotivation) of the diagram to the right side (intrinsic motivation). In contrast, when individuals lose their interest in a task, their motivation orientation moves in the reverse direction, from the right side to the left side. For example, a student who is motivated by an extrinsic reward such as a teacher's positive feedback and praise begins an exercise. Continual exposure can allow the student to experience intrinsic motivation, and as Ryan and Deci (2000) stated "positive feedback will enhance intrinsic motivation" (p. 22).

However, the amount and frequency of extrinsic motivation has been questioned.

Even if some positive roles of extrinsic motivation help increase intrinsic motivation, it may not occur in all circumstances; too many extrinsic rewards can undermine intrinsic motivation (Deci, Koestner, & Ryan, 1999). Much evidence further illustrated that extrinsic rewards can have substantial negative effects on intrinsic motivation (Dweck, 1999; Kruglanski, Friedman, & Zeevi, 1971; Sansone & Harackiewicz, 2000). Thus, in an effort to encourage intrinsic motivation to build, it is always important to seek to reduce the amount of extrinsic rewards to motivate individuals.

In sum, both intrinsic and extrinsic motivations are critical elements of driving human behaviors. Intrinsic motivation enables individuals to perform voluntarily, perceiving joy and satisfaction, and to seek higher goals. Extrinsic motivation is required when individuals need prompt, short-term, and external motivation stimulus. If each individual could initiate tasks based on intrinsic motivation, it would be ideal; however, that is not realistic in real life (Brophy, 2010). Studies have agreed that unexpected external rewards enhance intrinsic motivation (Deci, Koestner, & Ryan, 1999; Kohn, 1996), and that it does not diminish intrinsic motivation. Offering positive and sincere praise and feedback is the most effective extrinsic motivation (Hennessey, Amabile, & Martinage, 1989). Therefore, it is important to keep motivating individuals by focusing on intrinsic motivation, as well as to employ extrinsic motivation as needed.

Intrinsic motivation in physical education. The level of K-12 students' motivation to participate in physical education has declined (Ntoumanis, Barkoukis, & Thøgersen-Ntoumani, 2009; Xiang, McBride, & Guan, 2004). Studies have found that one way to increase the level of students' participation in physical education is to focus on students' intrinsic motivation, as SDT supports the importance of an internal value on a task. Many

researchers in physical education also agree that when students are intrinsically motivated, they maintain their interest and engage in physical education (Biddle & Mutrie, 2001; Weiss, Ebbeck, & Horn, 1997). Various components are related to students' motivation in physical education. A study suggested that appropriate teaching that includes students' motivation and goal setting can enhance students' motivation toward physical education (MacNamara, Collins, Bailey, Toms, Ford, & Pearce, 2011).

As for teaching practices, the acronym TARGET was discussed by Epstein (1988). The acronym stands for task, authority, recognition, grouping, evaluation, and time. It has been suggested that the TARGET increases students' intrinsic motivation (Epstein, 1988). More specifically about the TARGET, tasks are represented as consistent with various levels of difficulty for students. This can be done by modifying rules and activities to be developmentally appropriate. Authority means that teachers provide some responsibility for students to take in choosing class activities. As SDT is a motivation framework, an autonomy-support climate increases the students' motivation (Standage & Gillison, 2007). Teachers bring several activities or practices that are consistent with class objectives and allow students to select activities they prefer to do (Hill & Cleven, 2006). Recognition refers to providing positive feedback congruent with students' performances. Delivering proper feedback has a positive impact on students' intrinsic motivation and their competence in physical education (Koka & Hein, 2003). Due to the natural sports settings, grouping takes place in physical education regularly. Teachers should consider grouping to maximize students' participation. It is recommended that grouping be based on skill level rather than by gender. Because studies have shown that physical education teachers' preference for boys and for skilled students (Dunbar & O'Sullivan, 1986; McBride, 1990), it is important that

teachers should ensure that they treat all groups professionally and provide equal opportunity for them to engage in activities (Whitehead & Corbin, 1991). Evaluation also plays a major role in promoting students' motivation (Wiersma & Sherman, 2008). Evaluation should not be based on peer comparison or normative standards of measurement. By employing authentic evaluation assessment systems such as PE Metrics, and various elements of evaluation components such as student projects, portfolios and student journals, students can be comprehensively evaluated. Lastly, in terms of time, students should be allowed enough time to understand and practice given tasks. Teachers should ensure students' learning pace and provide opportunities to develop their competence.

Another studies examined by Ntoumanis (2001) showed that class environments also play an important role in influencing students' intrinsic motivation. He conducted the study by employing 424 British students aged from 14-16 years. The quantitative study found that a physical education class in which students are asked to cooperate and to be connected to their peers while practicing new skills and working together, students perceive a less competitive and intense environment. On the other hand, in situations in which students are evaluated by comparative criteria in which competition is intense, students' motivation decreased. Additionally, consistent with the concept of TARGET, students who had an opportunity to choose activities in class showed high intrinsic motivation. This promotes students' sense of ownership and responsibilities in the classroom.

Moreover, research has found that social agents also have a significant impact on students' intrinsic motivation in physical education. Daniel, Sam, Caroline, and Adrian (2001) conducted a study in order to examine the motivational climate in physical education focusing on social agents such as parents, coaches, physical education teachers, and peers.

This study results of this study indicated that parents were the most influential social agents for children whose average age was 12.2, to participate in physical education. Particularly, children who perceived their fathers' high encouragement and expectations showed higher interest in physical education. On the other hand, teacher and peer groups were the most influential social agents for adolescents whose average age was 15.1 to engage in physical education. This study indicated that a students' social agent played a major role, as well as influenced change as the students aged.

In short, studies have found that many factors impact students' intrinsic motivation in physical education. Intrinsic motivation is positively associated with students' intentions, effort and participation. In view of evidence to support it, intrinsic motivation is encouraged in physical education.

Expectancy Value Theory

The origin of the expectancy value theory stems from research seeking to understand human behaviors regarding the factors that influence people to become motivated and to sustain efforts toward goals and work. The expectancy-value theory has been applied extensively to numerous professional fields to explain and capture motivational patterns (Eccles & Wigfield, 2002; Eccles & Wigfield, 1995), including physical education (Xiang, McBride, & Bruene, 2004; Xiang, McBride, & Guan, 2004). As its name implies, the expectancy value model focuses on two critical aspects: an expectation of being successful in a current or distant task and the value placed on having a value for doing the task. Originally, Atkinson (1964) proposed that the tendency to succeed or fail, persistence, and performance can be explained by an individual's expectancies and perceived value of upcoming tasks. According to Eccles and Wigfield (1995), the expectancy value is based on an assumption

that “it is not reality itself (past successes or failures) that most directly determines children’s expectancies, values, and behavior, but the interpretation of that reality” (p. 81). Eccles and colleagues extended Atkinson’s theory by elaborating on the expectancy-value model of achievement (Eccles & Wigfield, 2002). They posited that when individuals value tasks and subjects and believe that can do the tasks, they are more likely to engage and pursue achievement. Additionally, while individuals constantly assess their competence and interest, their specific beliefs and expectancies can be changed or developed over time as they perceive values in certain tasks (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002). This allows individuals to determine the level of motivation and engagement.

In short, the expectancy value model illustrates that an individual’s behaviors are in response to his or her beliefs and perceived value toward the task (Eccles & Wigfield, 1995). Below is a more in-depth description of expectancy-value theory.

Expectancies. Expectancies are defined as individuals’ anticipation for success or failure in terms of how performances will be followed (Eccles & Wigfield, 1995). According to Eccles and Wigfield (2002), one’s self-concept of ability, perception of task difficulty and perception of others’ expectations have a direct impact on expectancies. Particularly, self-concept of ability refers to “the assessment of one’s own competency to perform specific tasks or to carry out role-appropriate behaviors” (Eccles et al., 1983, p. 82). As Bandura (1997) asserted, the importance of self-efficacy to succeed with a task, self-concept of ability is consistent with Bandura’s self-efficacy, and these concepts are associated with expectancies as well.

The expectancy consists of the belief in one’s ability and expectancy belief. Ability beliefs refer to the individual’s perception of current competence at a given task (Eccles &

Wigfield, 2002). For instance, a student may wonder: How good am I in physical education? Expectancy beliefs focus on the individual's ability in the future, or, how well does the individual expect to do in physical education this semester. Although the contents and focus of self-efficacy and expectancy beliefs are different, the two are empirically associated (Eccles & Wigfield, 1995). Overall, the concepts of expectancy are similar to self-efficacy (Bandura, 1997), focusing on one's personal and efficacy expectations (Eccles & Wigfield, 2002). In this regard, the research supports the belief that students tend to favor school subjects in which they perform better and value (Eccles et al., 1983).

However, education-related research has found that it is difficult for students to maintain self-competency and expectancy beliefs as they experience school life (Jacobs et al., 2004). For example, longitudinal research in education has indicated that the level of expectancies, including self-competence and self-concept of ability, declined as students moved from elementary school to middle school and on to high school (Jacobs et al., 2004). The most important point regarding expectancies is how to increase the level of one's expectancy on tasks. Both Eccles and her colleagues' and Bandura's self-efficacy theory (1997) asserted that increasing self-competency should have positive impact on expectancy. A study by Bembenutty and Hefer (2008) found that if students expect to achieve a task, they are more likely to sustain and put more effort into being successful. Moreover, socialization factors also contribute to the shape of expectancy. Parents, teachers, counselors and school administrators play a major role in identifying and developing individuals' expectancies (Meece, Glienke, & Burg, 2006). For example, a study by Flowers and Flowers (2008) showed a strong relationship between students' academic achievement, as well as high parental expectation and high grade-point average (Somers, Owens & Piliawsky, 2009).

Task values. Task value is defined as the importance a person places on individual values for certain tasks (Eccles & Wigfield, 2002). The value of the task is related to the questions, for instance, “Why do I want to do physical activities?” and “What is the value of doing physical activities?” Four components of task values have been identified across academic areas: (1) attainment value (importance), (2) intrinsic value (interest), (3) utility value (usefulness), and (4) cost (Eccles & Wigfield, 1995).

Eccles and Wigfield (1995) defined the attainment value as one that “incorporates one’s perception of the task’s ability to confirm salient and valued characteristics of the self (e.g., masculinity, femininity, competence), to provide a challenge, and to offer a forum for fulfilling achievement, power, and social needs” (p. 89). In other words, attainment value refers to the personal importance of doing well on a given task (Eccles & Wigfield, 1995). For example, if a student who believes that learning various physical activities is important, the student actively engages in physical education class.

Intrinsic value is determined by how much the individual perceives the inherent enjoyment of performing the activity, or their internal subjective interest is in tasks. As Deci and Ryan’s studies of intrinsic and extrinsic motivation (1985) and the studies of the concept of interest by Hidi and Renninger (2006) indicated, the importance intrinsic value is similar to the notions of intrinsic motivation and personal interest (Pintrich, 1990). For example, a quantitative study by Chen and Darst (2001) examined students who intrinsically were interested in physical activities and showed a higher level of learning outcomes in physical education.

Utility value refers to the usefulness of a task related to current and future goals. Utility value might not be considered to be the nature of the task at hand (Eccles, 2005)

because it is more likely associated with extrinsic motivation, as Deci and Ryan (1985) suggested.

Additionally, utility value is described as an individual's goals, originally set by the external environment. For instance, people could participate in various physical activities not because they like to exercise but because they realize the value and importance of importance of exercising to maintain good health.

Lastly, cost is conceptualized in regard to the negative aspects of engaging in a task, such as task anxiety and fear of both success and failure. The amount of effort is required to succeed and the lost opportunities can result in making one choice over another.

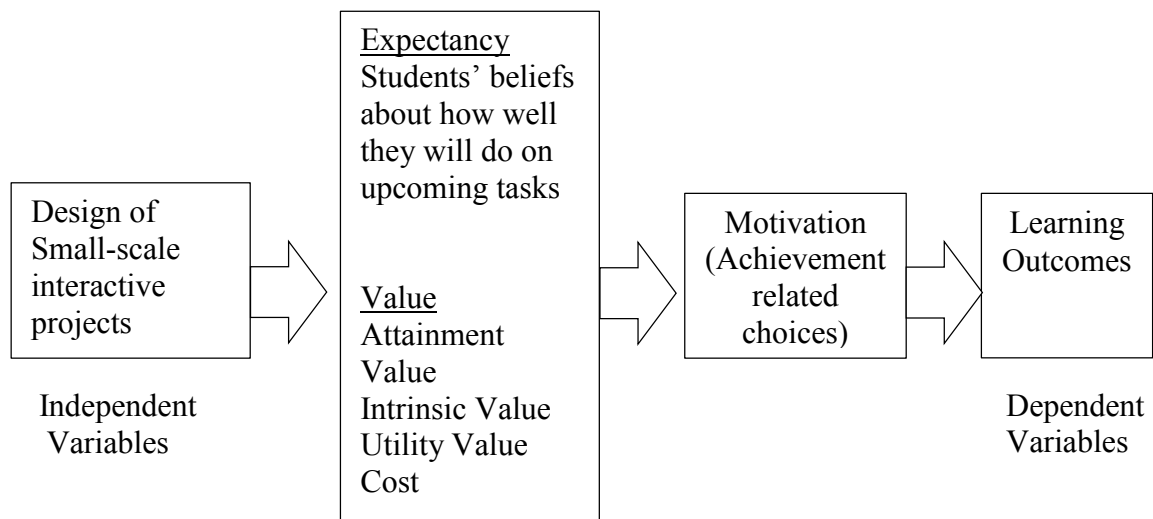


Figure 4. Using expectancy value theory to understand the effect of independent variables associated with structuring design experiences on learning outcomes.

Expectancy value theory in physical education. In physical education, many aspects of learning occur not only to enhance students' psychomotor skills but also so that

students may acquire conceptual knowledge of physical activities (NASPE, 2004).

Furthermore, physical education programs also help students promote social skills. However, Chen and Ennis (2004) argued that even though students can benefit from physical education, they do not value physical education as much as other major academic fields. In addition to students' placing low value on physical education, as students move into secondary school, they are less likely to participate in physical education (Ennis, 2006).

As described earlier, the expectancy value theory provides significant criteria to maximize students' motivation and achievements in physical education. Various studies have investigated the relationship between expectancy value and students' learning in physical education.

For example, Xiang, McBride, and Bruene (2004) explored a quantitative study by examining 125 fourth graders students who participated in a running program in the United States. The study revealed that students' interest value and expectancy beliefs were the major contributors to the students' running performance, indicating 43 percent and 22 percent, respectively, out of multiple variances (e.g., expectancy beliefs, subjective values, and performance goal).

In addition, Xiang and her colleagues (2003) conducted a study with 414 second and fourth grade students in the throwing tasks. Research results demonstrated that positive relationships between expectancy-related values and task values for the domains of physical education and the ability to predict effort and persistence. These results in physical education provided empirical evidence to support the way physical education teachers teach and approach students. Outcomes are better if teachers pay attention to enhancing students' task

values and expectancy beliefs in physical activities and physical education classes in ways that are useful, interesting, and important (Cox & Whaley, 2004)

Zhu and Chen (2010) conducted another study to examine the relationship between expectancy-value and students' participation in after-school physical activity classes in the United States. A total of 854 middle school students from 12 different schools participated in this study. The study found that students' expectancy beliefs for success in class were positively related to their psychomotor achievement variables.

In summary, the expectancy-value models illustrate that variables associated with individuals' values and expectations are linked to motivation and achievement related to a task. Studies have supported the importance of students' beliefs and values in physical education. Findings recognize that in order for students to gain successful outcomes in physical education, their expectancy beliefs are critical. It can be suggested that finding ways to increase the expectancy-values for students enables physical educators to influence students to engage in class positively, and to enhance their motivation.

Chapter 3

Methodology

This chapter describes the outline of methodology used to conduct this study. The purpose of this study was to explore the relationship between transformational leadership and students' intrinsic motivation and expectancy value. This chapter has four sections: research design and procedures, population and sample, instrumentation, and data analysis.

Research Design and Procedures

This study was conducted as quantitative research by participating middle school students. After obtaining approval from the Institutional Review Board (IRB) of the University of New Mexico, physical education teachers' transformational leadership as perceived by middle school students was measured. In addition, students' intrinsic motivation and expectancy-value toward physical education were analyzed.

Due to constraints of time and accessibility, a convenience sampling method was applied in this study (Lohr, 1999). One meeting was held with three private middle school physical education teachers in August 2015 in which the purpose and significance of the study were also explained and discussed with the teachers. After the meeting, permission to conduct class observations and data collection were granted by two teachers.

Copies of the survey and consent form were prepared and distributed to the students during school visitations. To ensure the confidentiality of the survey, an anonymous setting was created by allowing enough space between students, and the physical education teacher was out of the classroom during the survey. Answers from students reflected their individual experiences and opinions of their physical education class and were not judged as right or wrong. After the physical education teacher left the classroom, the researchers distributed a

survey packet to the students. The survey packet included a cover letter and the four questionnaires. The survey took approximately 15-20 minutes to complete. After the students completed their answers, they returned the survey packet to the researcher.

Population and Sample

The population for this study was in a large school district (District-5) in Albuquerque, New Mexico in the United States. The sampling frame for this study was 295 middle school students from two private middle schools located in Albuquerque. Two private schools were selected because they are one of the biggest private schools in Albuquerque; each school has approximately 2,000 students. Furthermore, they are known to provide regular physical education classes, for instance, students are taking three physical education classes per a week.

Pilot Study

According to Polit, Beck and Hungler (2001), a pilot study refers to a “small scale version or trial run in preparation for a major study (p.467). A pilot study can enhance various factors of the main study, such as survey comprehension, wording, reliability and validity of results (Baker, 1994). For this study, the pilot study was employed at a private school in Albuquerque, New Mexico in January 2016. This school was selected because it is one of the biggest private schools in Albuquerque and is similar to two other private schools that will participate in this study. In this pilot study, nineteen 6th grade students volunteered to participate. Students were asked to read four questionnaires and to mark any words or phrases that did not make sense and confused them. Based on the findings of this pilot study, the survey procedures and designs were easily understood by participants. Specifically, all students responded that the survey was easy to read and directions were easy to follow.

However, it was revealed that there were some difficult and ambiguous words, such as optimistic, capable, task, and skill in the survey. As a result, a few words were modified to make the survey much clearer.

Instrumentation

Four instruments were utilized to collect and analyze the data needed for this study.

First, demographic information questionnaire including three items was used to obtain students' personal information, such as gender, grade, and ethnicity.

The second instrument was the Transformational Teaching Questionnaire (TTQ) developed by Beauchamp et al (2010). The TTQ is designed to measure four components (Table 2): (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, Bass & Riggio, 2006) of transformational leadership in educational settings, in particular for adolescents. The TTQ reported a fairly easy readability score of 78.6 (grade 4 reading ability, Flesch, 1948) and consists of 16 items. Each item on the questionnaire contains a descriptive statement and a 5-point rating scale (0 = not at all, 1 = once in a while, 2 = sometimes, 3 = fairly often, and 4 = frequently, if not always). Examples of questions are: "Creates lessons that really encourage me to think", "Recognizes the needs and abilities of each student in the class", and "Tries to help students who might be struggling". Studies have reported the reliability of the TTQ as 0.94, which is considered highly reliable (Antonakis, 2001; Harvey, Royal, & Stout, 2003). In addition, Beauchamp et al (2010) found that the TTQ showed an internal consistency ($\alpha = 0.96$).

Table 2. *Transformational Teaching Questionnaire Items*

Subscales	Items	The number of items
Idealized Influence	2, 5, 12, and 16	4
Inspirational Motivation	4, 6 ,8, and 15	4
Intellectual Stimulation	3, 7, 10, and 13	4
Individualized Consideration	1, 9, 11, and 14	4

Third, the Intrinsic Motivation Inventory (IMI) developed by McAuley, Duncan and Tammen (1989) was used to measure the level of students' motivation in physical education. IMI is the most popular questionnaire to measure the scale of students' motivation in the context of education, as well as in physical education (Tsigilis & Theodosiou, 2003). The IMI consists of 16 items, including sub-scales: interest, enjoyment and effort/importance, four questions respectively. The IMI uses a point a 7-Likert format ranging from 1 (e.g., very unsuccessful) to 7 (e.g., very successful). Example questions are: "I enjoy physical education very much" and "I would describe physical education as very interesting". McAuley, Duncan, and Tammen (1989) reported that the IMI is a reliable and concise measurement to determine individuals' levels of intrinsic motivation, as well as to show internal consistency ($\alpha = .92$) and test-retest reliability (intra-class correlation = .77).

Fianlly, student expectancy beliefs and task values were measured by using a modified Expectancy-Value Questionnaire (EVQ) developed by Eccles and Wigfield (1995). EVQ consists of 11 items by employing 5-point Likert scale (e.g. 1= not good, 5= very good). Specifically, five items measure expectancy beliefs (items 1, 2, 3, 4, and 5), and six items are related to measuring the attainment (importance), intrinsic (interest), and utility (usefulness)

values (items 6, 7, 8, 9, 10, and 11). Xiang, McBride, and Solmon (2003a) conducted the validity and test-retest reliability. The last two questions are open-ended items measuring cost in physical education. Example questions are: “How good are you in physical education?”, “How much do you like your physical education classes”, and “If you had a choice, would you rather not come to physical education class?” They reported that the EVQ has Cronbach α ranging from .63 to .8. In addition, Zhu, Sun, Chen, and Ennis (2012) provided the internal reliability (Cronbach α) for the .85, .76, .89, and .83 for expectancy belief, attainment value, intrinsic value, and utility value, respectively.

Data Analysis

The quantitative data from this study was analyzed by using the Statistical Package for the Social Sciences 22.0 (SPSS 22.0). All of the statistical significance tests were set at an alpha level of .05 ($\alpha=.05$) and a confidence level at 95%. This study used the following statistical methods to examine collected data and research questions:

1. Descriptive Statistics. Frequencies and percentage were used to describe distribution of demographic variables. Means and standard deviations were used to describe the central and variation distributions of age, gender, and ethnicity.
2. Exploratory factor analysis and reliability test.
3. T-test. T-tests were used to test whether gender played a statistically significant difference on the teacher leadership, intrinsic motivation, and expectancy value.
4. One-way ANOVAs were employed to examine whether an independent group such as grade levels and ethnic groups played a significant difference in teacher leadership, intrinsic motivation and expectancy value, respectively.

5. Single and multiple regression analyses were utilized to find a correlation between transformational leadership and two different variables: intrinsic motivation and expectancy value.

Chapter 4

Results

This chapter includes the results of the data collection and statistical analyses. The main purpose of this study was to find the effects of physical education teachers' transformational leadership on middle school students' intrinsic and expectancy-value in physical education. The results are shown with the following information: 1) description of subjects in terms of gender, grade, and ethnicity; 2) exploratory factor and confirmatory factor analysis of the survey; 3) T-test and ANOVA to figure out the difference students' perception regarding expectancy-value and intrinsic motivation; 4) regression to discover the relationship between teachers' transformational leadership and students' expectancy-value and intrinsic motivation.

Description of Subjects

Two local private middle schools were selected in this study. A total of 295 students participated in this study. Of the surveys collected, 33 surveys with missing or duplicate surveys were excluded in this study, which resulted a yield of 262 usable surveys for the data analysis (table 3). Demographic description of the sample follows: Subjects consisted of 122 males (46.6%) and 140 females (53.4%). There were 76 sixth grade students (29%), 106 seventh grade students (40.5%), and 80 eighth grade students (30.5%). In regard to ethnicity, there were 75 Hispanic (28.6%), 155 Caucasian (59.2%), 12 African American (4.6%), 10 Asian (3.8%), and 10 other (3.8%). Table 3 shows the demographic information.

Table 3. *Descriptive Statistics for Demographic Variables*

Variable	Category	Frequency	Percent (%)
Gender	Male	122	46.6
	Female	140	53.4
Grade	6 th	76	29.0
	7 th	106	40.5
	8 th	80	30.5
Ethnicity	Hispanic	75	28.6
	Caucasian	155	59.2
	African American	12	4.6
	Asian	10	3.8
	Other	10	3.8

Exploratory Factor Analyses of the Survey Instruments

As seen in Table 4, an exploratory factor analysis was employed to conduct the validity of the Transformational Teaching Questionnaire (TTQ). The results illustrated that the KMO score was .90, which is predicted without error (commonly the score of .80 or above is considered as meritorious) (Yong & Pearce, 2013). In addition, it was shown that three items were confined with the idealized influence, along with 16.03% of the variance and 3.83 Eigenvalue. Three items were described by the second factor (Intellectual Stimulation), along with 10.92% of variance and 5.12 Eigenvalue. Four items were indicated as intellectual stimulation, along with 11.45% variance and 6.54 Eigenvalue. Four items were described by individualized consideration, along with 6.99% variance and 3.88

Eigenvalue. Finally, due to the low factor loading score, one item from idealized influence and inspirational motivation was deleted for the further data analysis (item 8 and 12).

Table 4. *Exploratory Factor Analysis of Transformational Teaching Questionnaire*

Attributes	Factor 1	Factor 2	Factor 3	Factor 4
Q2	.66			
Q5	.73			
Q16	.74			
Q12	(.34)			
Q4		.77		
Q6		.74		
Q15		.68		
Q8		(.26)		
Q3			.71	
Q7			.70	
Q10			.84	
Q13			.61	
Q1				.71
Q9				.71
Q11				.79
Q14				.62
Variance (%)	16.03	10.92	11.45	6.99
Initial Eigenvalue	3.83	5.12	6.54	3.88
KMO	0.90			
Bartlett's Test of Sphericity	.000 (sig)			
Factor	II	IM	IS	IC

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration

Table 5 shows the results of an exploratory factor analysis of expectancy-value questionnaire. The KMO score was .83. Moreover, four items were confined with the first factor (Ability Belief and Expectancy), along with 12.02% of the variance and 7.67 Eigenvalue. Six items were described by the second factor (Usefulness and Importance), along with 24.87% of variance and 1.24 Eigenvalue. Due to the low factor loading score, one

item from enjoyment, competence, and tension and pressure was deleted for the further data analysis (item 3).

Table 5. *Exploratory Factor Analysis of Expectancy-Value Questionnaire*

Attributes	Factor 1	Factor 2
E1	.83	
E2	.76	
E4	.73	
E5	.79	
E3	(.31)	
E6		.81
E7		.85
E8		.75
E9		.60
E10		.69
E11		.71
Variance (%)	12.02	24.87
Initial Eigenvalue	7.67	1.24
KMO	0.83	
Bartlett's Test of Sphericity	.000 (sig)	
Factor	AB & EX	UI

Note. AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance

Table 6 indicates the results of an exploratory factor analysis of intrinsic motivation index. It was shown that the KMO score was .92. Three items were confined with the first factor (Enjoyment) accounting for 27.35% and 6.12 Eigenvalue. Three items were described by the second factor (Competence), along with 22.38% of variance and 3.19 Eigenvalue. Four items were confined with the third factor (Effort), along with 13.79% of variance and 4.01 Eigenvalue. Three items were confined with the fourth factor (Tension and Pressure), accounting for 18.66% and 5.87 Eigenvalue. Finally, due to the low factor loading score, one

item from enjoyment, competence, and tension and pressure was deleted for the further data analysis (item 5, 15, and 16).

Table 6. *Exploratory Factor Analysis of Intrinsic Motivation Index Questionnaire*

Attributes	Factor 1	Factor 2	Factor 3	Factor 4
I1	.61			
I7	.79			
I8	.69			
I15	(.40)			
I2		.79		
I12		.64		
I14		.84		
I16		(.32)		
I3			.74	
I4			.65	
I6			.70	
I11			.81	
I9				.77
I10				.80
I13				.74
I5				(.23)
Variance (%)	27.35	22.38	13.79	18.66
Initial EigenValue	6.12	3.19	4.01	5.87
KMO	0.92			
Bartlett's Test of Sphericity	.000 (sig)			
Factor	EJ	CO	EF	TP

Note. EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure

Reliability

A reliability analysis was examined to measure the level of internal consistency for three questionnaires, as well as the relationships of items.

Table 7 depicts the reliability value (Cronbach's Alpha) for transformational teaching questionnaire. In respect to the reliability coefficient, three were idealized influence ($\alpha = .80$), inspirational motivation ($\alpha = .80$), intellectual stimulation ($\alpha = .83$), and individual

consideration ($\alpha = .82$). According to Tavakol and Dennick (2011), a Cronbach's alpha that ranges between .70 to .95 is considered as obtaining a reliable level of internal consistency. In this regard, based on the value of Cronbach's alpha, it was found that the transformational teaching questionnaire was reliable.

Table 7. *Cronbach's Alpha of Transformational Teaching Questionnaire*

Variables	Number of Items	Cronbach's alpha
II	3	0.80
IM	3	0.80
IS	4	0.83
IC	4	0.82

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration

Table 8 illustrates the reliability value (Cronbach's Alpha) for the expectancy-value questionnaire. According to the results, ability belief and expectancy were categorized as one variable. In respect to the reliability coefficient, three were ability belief and expectancy ($\alpha = .78$) and usefulness and importance ($\alpha = .83$). One item from ability belief and expectancy was extracted due to the low score of construct reliability. Based on Cronbach's alpha value, the expectancy-value questionnaire can be regarded as having relatively high reliability of the instrument.

Table 8. *Cronbach's Alpha of Expectancy-Value Questionnaire*

Variables	Number of Items	Cronbach's alpha
AB & EX	4	0.78
UI	6	0.83

Note. AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance

Table 9 presents the reliability value (Cronbach's Alpha) for intrinsic motivation index. In respect to the reliability coefficient, three were enjoyment ($\alpha = .73$), competence ($\alpha = .82$), effort ($\alpha = .80$), and tension and pressure ($\alpha = .84$).

Table 9. *Cronbach's alpha of Intrinsic Motivation Index Questionnaire*

Variables	Number of Items	Cronbach's alpha
EJ	3	0.73
CO	3	0.82
EF	4	0.80
TP	3	0.84

Note. EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure

In summary, it can be concluded that all three questionnaires can describe reliably regarding teachers' transformational leadership, and students' expectancy-value and intrinsic motivation in physical education.

Research Question 1: Does student perception of their teachers' transformational leadership positively associate and correlate with students' motivation in physical education?

Table 10 shows a series of one-way ANOVA to determine if there were any significant differences between middle school students' perception levels in physical education teachers' transformational leadership according to grade. Scheffe's test was used as the post hoc comparison test. Significant between-group differences were found. Specifically, 6th (M = 4.44, SD = 0.68) and 7th grade students (M = 4.36, SD = 0.71) showed higher mean score than 8th grade students (M = 4.06, SD = 0.89) regarding idealized influence, and 6th (M = 4.51, SD = 0.55) and 7th grade students (M = 4.39, SD = 0.75) showed higher mean score than 8th grade students (M = 4.13, SD = 0.93) in terms of inspirational motivation, and 6th grade students (M = 4.17, SD = 0.64) showed higher mean score than 7th grade students (M = 3.87, SD = 0.87) and 8th grade students (M = 3.63, SD = 0.96) regarding intellectual stimulation, and lastly 6th grade students (M = 4.49, SD = 0.49) showed higher mean score than 8th grade students (M = 4.19, SD = 0.85) in terms of individual consideration.

Table 10. *Differences in Perception of Transformational Teaching According to Grade*

Factor	6 th N=76		7 th N=106		8 th N=80		F	p	Scheffe
	M	SD	M	SD	M	SD			
II	4.44	0.68	4.36	0.71	4.06	0.89	5.72	.004**	6 th , 7 th >8 th
IM	4.51	0.55	4.39	0.75	4.13	0.93	5.16	.006**	6 th , 7 th >8 th
IS	4.17	0.64	3.87	0.87	3.63	0.96	8.06	.000***	6 th > 7 th , 8 th
IC	4.49	0.49	4.37	0.67	4.19	0.85	3.77	.024*	6 th >8 th

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * $p<.05$, ** $p<.01$, *** $p<.001$

Table 11 depicts the mean scores of middle school students' perception of expectancy-value in physical education according to grade. There were statistically significant differences. Sixth grade students (M = 4.19, SD = 0.57) showed higher mean score than 7th grade students (M = 3.99, SD = 0.64) and 8th grade students (M = 3.98, SD = 0.64) regarding ability belief and expectancy, and 6th grade students (M = 3.99, SD = 0.54) showed higher mean score than 7th grade students (M = 3.77, SD = 0.69) and 8th grade students (M = 3.59, SD = 0.80) in terms of usefulness and importance in physical education.

Table 11. *Differences in Perception of Expectancy-Value According to Grade*

Factor	6 th N=76		7 th N=106		8 th N=80		F	p	Scheffe
	M	SD	M	SD	M	SD			
AB & EX	4.19	0.57	3.99	0.64	3.98	0.64	3.36	.036*	6 th >7 th , 8 th
UI	3.99	0.54	3.77	0.69	3.59	0.80	6.47	.002**	6 th >7 th , 8 th

Note. AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance, * $p<.05$, ** $p<.01$, *** $p<.001$

Table 12 shows the mean scores of middle school students' perception of intrinsic motivation in physical education according to grade. 6th grade students (M = 5.53, SD = 1.10) showed higher mean score than 7th grade students (M = 4.96, SD = 1.20) and 8th grade students (M = 4.92, SD = 1.19) regarding enjoyment, and 6th grade students (M = 5.64, SD = 0.85) showed higher mean score than 7th grade students (M = 5.27, SD = 0.99) and 8th grade students (M = 5.00, SD = 1.06) in terms of effort, and 6th grade students (M = 5.67, SD = 1.03) showed higher mean score than 7th grade students (M = 5.26, SD = 1.13) and 8th grade students (M = 5.31, SD = 1.11) regarding tension and pressure. However, no statistically different significance found in regard to students' competence.

Table 12. *Differences in Perception of Intrinsic-Motivation According to Grade*

Factor	6 th N=76		7 th N=106		8 th N=80		<i>F</i>	<i>p</i>	<i>Scheffe</i>
	M	SD	M	SD	M	SD			
EJ	5.53	1.10	4.96	1.20	4.92	1.19	6.75	.001**	6 th > 7 th , 8 th
CO	5.36	1.03	5.02	1.12	5.02	1.06	2.64	.073	-
EF	5.64	0.85	5.27	0.99	5.00	1.06	8.39	.000***	6 th > 7 th , 8 th
TP	5.67	1.03	5.26	1.13	5.31	1.11	3.35	.037*	6 th > 7 th , 8 th

Note. EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 13 shows a paired sample t-test to determine if there were any significant differences between middle school students' perception levels in physical education teachers' transformational leadership according to gender. The results provided that no significant differences were found in all of transformational leadership.

Table 13. *Differences in Perception of Transformational Leadership According to Gender*

Factor	Male N=122		Female N=140		<i>t</i>	<i>p</i>
	M	SD	M	SD		
II	4.37	0.64	4.22	0.87	1.54	.123
IM	4.43	0.60	4.27	0.89	1.67	.096
IS	3.93	0.79	3.83	0.91	0.87	.384
IC	4.42	0.58	4.28	0.76	1.57	.117

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 14 illustrates the mean scores of male and female middle school students' perception of expectancy-value in physical education. There were statistically significant differences. Male students (M = 4.14, SD = 0.60) showed higher mean score than female students (M = 3.94, SD = 0.61) regarding ability belief and expectancy, and male students (M = 3.88, SD = 0.62) showed higher mean score than female students (M = 3.69, SD = 0.76) in terms of usefulness and importance in physical education.

Table 14. *Differences in Perception of Expectancy-Value According to Gender*

Factor	Male N=122		Female N=140		<i>t</i>	<i>p</i>
	M	SD	M	SD		
AB & EX	4.14	0.60	3.94	0.61	2.69	.007**
UI	3.88	0.62	3.69	0.76	2.12	.035*

Note. AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 15 shows the mean scores of male and female middle school students' perception of intrinsic motivation in physical education. Male students (M = 5.29, SD = 1.16)

showed higher mean score than female students ($M = 4.96$, $SD = 1.21$) regarding enjoyment, and male students ($M = 5.43$, $SD = 0.98$) showed higher mean score than female students ($M = 5.43$, $SD = 0.98$) in terms of effort. However, no statistical significance found in regard to competence and tension and pressure.

Table 15. *Differences in Perception of Intrinsic Motivation According to Gender*

Factor	Male N=122		Female N=140		<i>t</i>	<i>P</i>
	M	SD	M	SD		
EJ	5.29	1.16	4.96	1.21	2.26	.024*
CO	5.25	1.06	5.01	1.09	1.74	.082
EF	5.43	0.98	5.18	1.01	2.00	.046*
TP	5.50	1.06	5.30	1.14	1.45	.146

Note. EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 16, 17, and 18 indicate a series of one-way ANOVA to determine if there were any significant differences between middle school students' perception levels in physical education teachers' transformational leadership, expectancy-value, and intrinsic motivation according to ethnicity. The results indicated that no significant differences were found in all of transformational leadership, expectancy-value, and intrinsic motivation.

Table 16. *Differences in Perception of Transformational Teaching According to Ethnicity*

Factor	White N=155		Hispanic N=75		Other N=32		<i>F</i>	<i>p</i>
	M	SD	M	SD	M	SD		
II	4.26	0.81	4.31	0.76	4.37	0.63	.272	.762
IM	4.28	0.81	4.42	0.74	4.46	0.61	1.28	.280
IS	3.81	0.92	3.97	0.81	4.00	0.64	1.31	.269
IC	4.29	0.73	4.45	0.63	4.40	0.55	1.46	.233

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 17. *Differences in Perception of Expectancy-Value According to Ethnicity*

Factor	White N=155		Hispanic N=75		Other N=32		<i>F</i>	<i>p</i>
	M	SD	M	SD	M	SD		
AB & EX	4.03	0.57	4.05	0.70	4.03	0.62	.039	.962
UI	3.73	0.70	3.91	0.71	3.73	0.70	1.79	.168

Note. AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 18. *Differences in Perception of Intrinsic Motivation According to Ethnicity*

Factor	White N=155		Hispanic N=75		Other N=32		<i>F</i>	<i>p</i>
	M	SD	M	SD	M	SD		
EJ	5.07	1.26	5.19	1.14	5.14	1.19	.255	.775
CO	5.05	1.10	5.24	1.09	5.21	0.98	.871	.420
EF	5.24	1.00	5.34	1.02	5.42	0.99	.535	.586
TP	5.31	1.15	5.59	1.03	5.34	1.03	1.65	.193

Note. EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure, * $p < .05$, ** $p < .01$, *** $p < .001$

Research Question 2: Is there a relationship between physical education teachers' transformational leadership and middle school students' expectancy-value and intrinsic motivation?

In order to explore the effects of transformational leadership on middle school students' intrinsic motivation and expectancy-value in physical education, single and multiple regression analysis were employed.

According to Table 19, four transformational leadership behaviors, including idealized influence, had a statistically significant effect on middle school students' expectancy-value. Specifically, the results of single regression showed: individualized consideration ($\beta=.36, p<.05$) had a positive effect on expectancy-value, inspirational motivation ($\beta=.35, p<.05$) had a positive effect on expectancy-value, intellectual stimulation ($\beta=.41, p<.05$) had a positive effect on expectancy-value, and individual consideration ($\beta=.32, p<.05$) had positive effect on expectancy-value.

Table 19. *The Single Regression Analysis for Transformational Leadership on Expectancy-Value*

Dependent Variable	Predictor	β	t	p
Expectancy-Value	II	.36	6.27	.000***
	IM	.35	6.98	.000***
	IS	.41	7.22	.000***
	IC	.32	5.55	.000***

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * $p<.05$, ** $p<.01$, *** $p<.001$

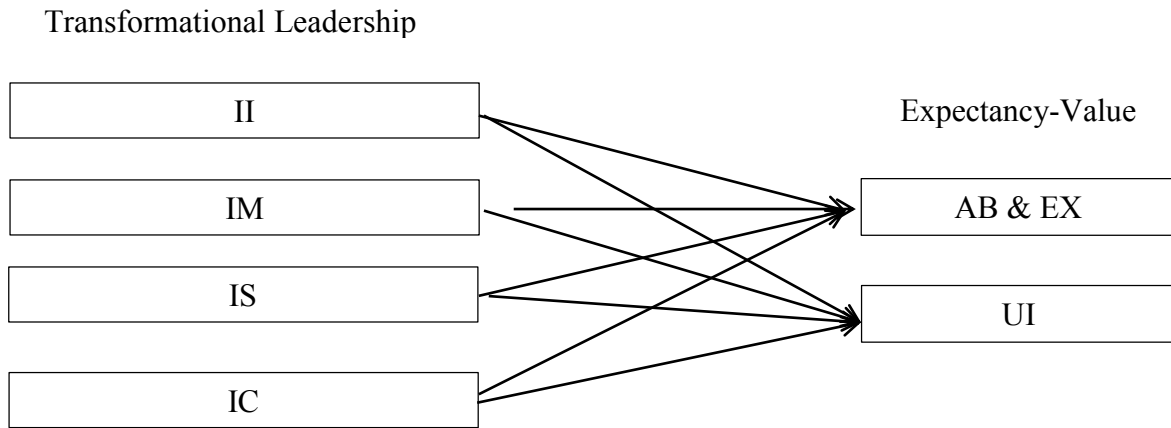


Figure 5. The Model of Single Regression between Transformational Leadership and Expectancy-Value

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance

In addition, multiple regression analysis was employed, the results of this analysis provided that intellectual stimulation accounted for 19% of the variance in middle school students' expectancy-value levels ($R^2 = .19$, $F(2, 257) = 14.77$, $p < .05$) (see Table 20).

Table 20. *Multiple Regression Analysis for Middle School Students' Expectancy-Value According to Teachers' Transformational Leadership*

Dependent Variable	Predictor	SE	β	t	p	VIF
	(Constant)	.23		10.87	0.00	
	II	.08	.14	6.27	.16	3.08
Expectancy- Value	IM	.08	.08	6.98	.41	3.14
	IS	.06	.29	7.22	.00***	1.91
	IC	-.09	.09	5.55	.76	3.16
D-W=1.886, R ² =0.19, F=14.771, * p <.05						

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * p <.05, ** p <.01, *** p <.001

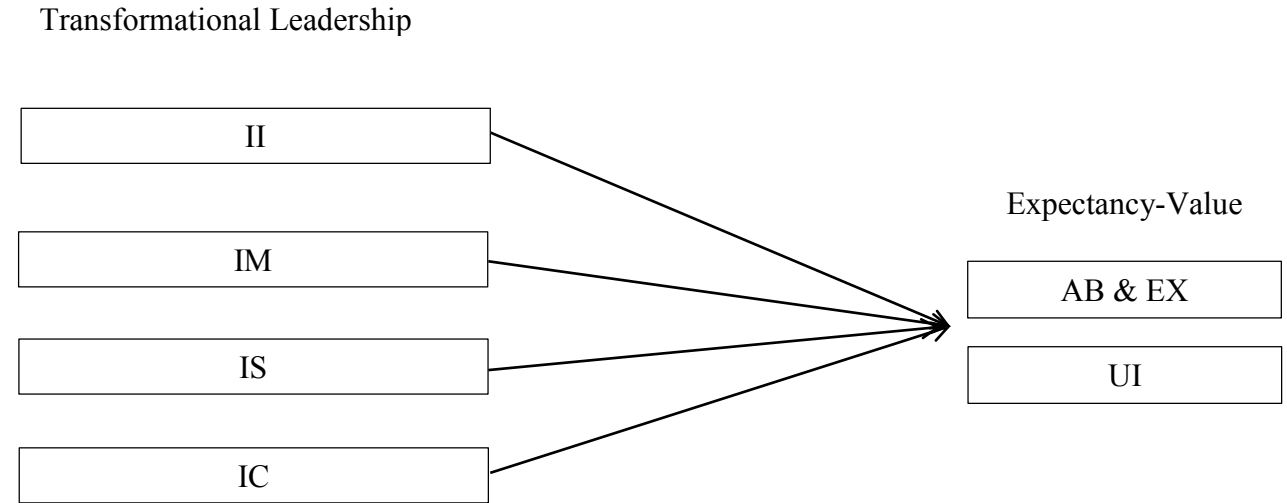


Figure 6. The Model of Multiple Regression between Transformational Leadership and Expectancy-Value

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, AB=Ability Belief, EX=Expectancy, UI=Usefulness and Importance

As seen table 21, four transformational leadership behaviors, including idealized influence, had statistically significant effect on middle school students' intrinsic motivation. The results of single regression indicated that individualized consideration ($\beta=.40, p<.05$) had a positive effect on expectancy-value, inspirational motivation ($\beta=.39, p<.05$) had a positive effect on expectancy-value, intellectual stimulation ($\beta=.44, p<.05$) had a positive effect on expectancy-value, and individual consideration ($\beta=.39, p<.05$) had a positive effect on expectancy-value.

Table 21. *The Single Regression Analysis for Transformational Leadership on Intrinsic Motivation*

Dependent Variable	Predictor	B	<i>t</i>	<i>p</i>
Intrinsic Motivation	II	.40	7.12	.000***
	IM	.39	6.90	.000***
	IS	.44	7.91	.000***
	IC	.39	6.81	.000***

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * $p<.05$, ** $p<.01$, *** $p<.001$

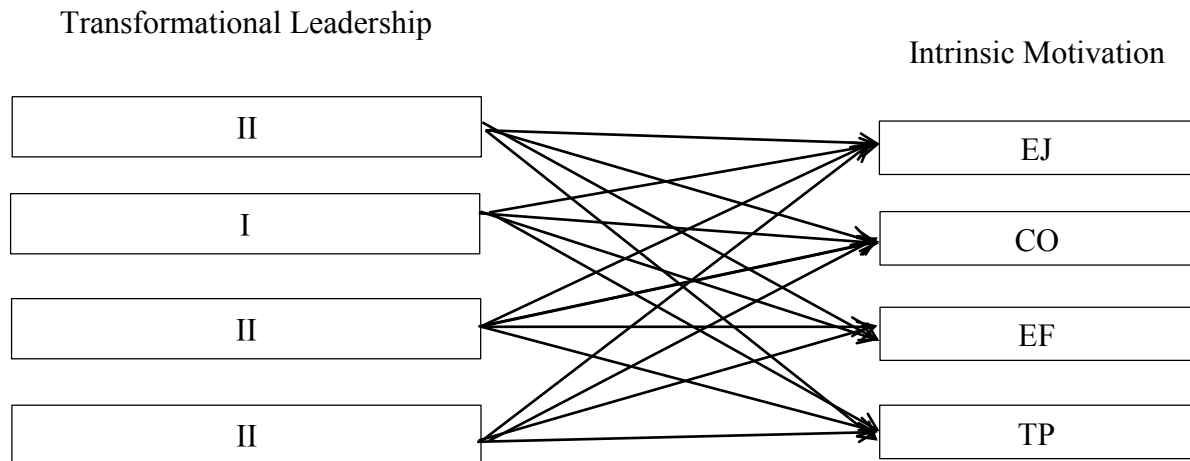


Figure 7. The Model of Single Regression between Transformational Leadership and Intrinsic Motivation

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure

Furthermore, multiple regression analysis was conducted; the results of this analysis provided that intellectual stimulation accounted for 29% of the variance in middle school students' expectancy-value levels [$R^2 = .27$, $F(4, 257) = 24.06$, $p < .05$] (see Table 22).

Table 22. *Multiple Regression Analysis for Middle School Students' Intrinsic Motivation According to Teachers' Transformational Leadership*

Dependent Variable	Predictor	SE	β	t	P
	(Constant)	.32		8.51	0.00
	II	.13	.15	6.27	.19
Intrinsic Motivation	IM	.08	.10	6.98	.39
	IS	.28	.29	7.22	.00***
	IC	.05	.07	5.55	.59
D-W=1.814, R ² =0.27, F=24.062, * p <.05					

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, * p <.05, ** p <.01, *** p <.001

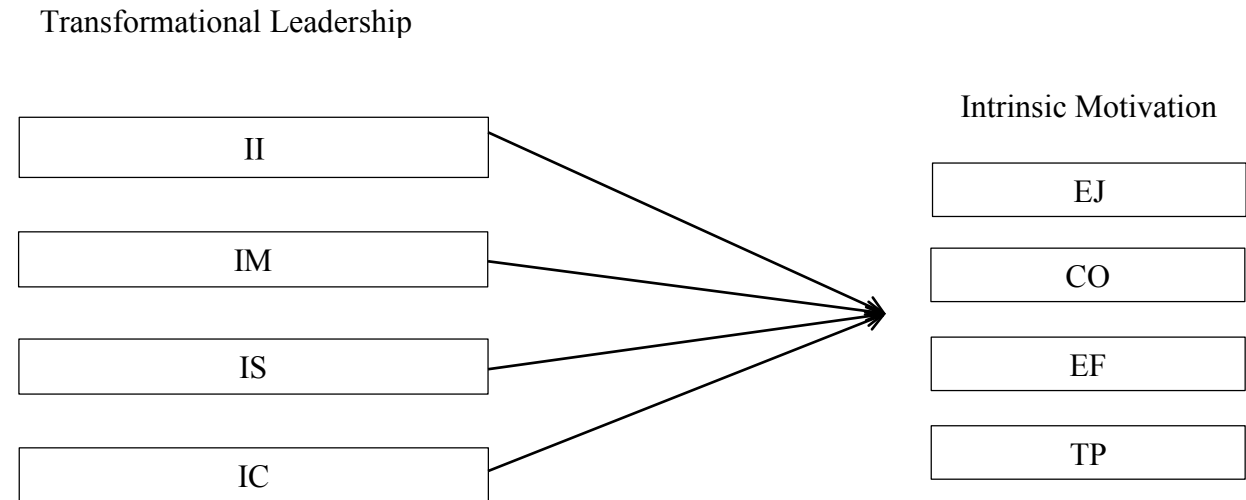


Figure 8. The Model of Multiple Regression between Transformational Leadership and Intrinsic Motivation

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration, EJ=Enjoyment, CO=Competence, EF=Effort, TP= Tension and Pressure

Chapter 5

Discussion and Conclusion

The final chapter consists of three sections. The first section discusses the results of the study. The second section discusses the practical implications of this study, and finally the recommendations for future research are provided.

Discussion

Research Question 1: Are there differences in middle school students' perception of physical education teachers' transformational leadership, expectancy-value, and intrinsic motivation?

The results of the T-test and ANOVA provided a series of meaningful findings.

Grade level. First, it was found that there was a significant difference in terms of middle school students' perception of teachers' transformational leadership, expectancy-value, and intrinsic motivation according to grade level. Given the results, 6th and 7th grade students perceived higher teachers' transformational leadership related to idealized influence and inspirational motivation than 8th grade students. In addition, 6th grade students perceived higher transformational leadership regarding intellectual stimulation expectancy-value and intrinsic motivation than 7th and 8th grade students. Finally, 6th grade students perceived higher transformational leadership in terms of idealized consideration than 8th grade students. Overall, in this study, it was found that in middle school physical education lower grade students are more likely to have a stronger perception than higher grade students regarding teachers' transformational leadership. In other words, in this study, age plays a significant role in perceiving teachers' transformational leadership.

Second, it was shown that 6th grade students had a higher expectancy-value than 7th and 8th grade students. Specifically, 6th grade students perceive a higher ability belief and expectancy toward physical education than 7th and 8th grade students. In addition, 6th grade students perceived a higher usefulness regarding physical education than 7th and 8th grade students. This result is highly consistent with other previous studies that explore the level of secondary school students' perception in physical education (Fredricks & Eccles, 2002; Jacobs et al., 2002).

Lastly, study results indicated that 6th grade students had higher intrinsic motivation than 7th and 8th grade students. Specifically, 6th grade students are more likely to enjoy and put in more efforts than 7th and 8th grade students.

In fact, previous studies have shown mixed findings in terms of grade differences in expectancy-value and motivation. Most research has shown that students' expectancy-value and motivation decline as students move to higher grades (Chase, 2001; Xiang et al., 2003). However, a few studies support the idea that it is hard to distinguish students' expectancy-value and motivation regarding grade level (Xiang, 2000; Xiang & Lee, 1998). These study results can contribute to the majority empirical evidence; students' general perception in physical education declines across school years.

Gender. As gender has been a significant topic in all areas of sports and health-related research, this present study also provides a different perception in physical education. First, with respect to gender, it was revealed that there was no significant difference regarding students' perception about physical education teachers' transformational leadership. However, male students perceived a higher level of expectancy-value than female students. Furthermore, male students perceived a higher level of intrinsic motivation. This

result is highly consistent with many previous studies that examine the gender differences in physical education; boys are more likely to have positive perception of physical education and feel more competence and enjoyment more than girls (Gao & Xiang, 2008; Xiang et al., 2003).

Specifically, given the results, male students are more likely to enjoy and put more efforts than female students in physical education. Although the participation of females in sports and physical education has been increasing, this study results posited that male middle school students showed higher expectation and motivation in physical education.

Ethnicity. No statistical differences were found among transformational leadership, expectancy-value, and intrinsic motivation regarding students' ethnicity. In this regard, it is assumed that students' ethnicity is not a major factor that affects their expectancy-value and intrinsic motivation in physical education.

Research Question 2: Is there a relationship between physical education teachers' transformational leadership and middle school students' expectancy-value and intrinsic motivation?

Research question 2 attempted to examine the effects of physical education teachers' transformational leadership on middle school students' expectancy-value and intrinsic motivation. The results indicated that four components in transformational leadership positively influenced middle students' expectancy-value and intrinsic motivation. This finding is consistent with a past study that there transformational leadership had a positive impact on students' perceptions regardless of age, gender, and skill level in physical education (Yang, 2007). Particularly, the present study captured an interesting finding. It was revealed that out of four transformational components, intellectual stimulation was one of the

powerful common components that affects middle school students' expectancy-value and intrinsic motivation. In fact, this study result is somewhat different than a previous study. According to Jung, Pyo, and Kim (2008), idealized influence and individual consideration were shown to be strong factors that enhance middle school students' motivation. However, this study posited that intellectual stimulation was one of the most important factors. The result of the current study demonstrates the importance of providing interesting, age and developmentally appropriate class activities. Based on this study's results, it is important to meet both genders' interest and physical skill levels as female students' physical competence and intrinsic motivation showed fairly lower than male students. In fact, according to Fernandez-Balboa (1993), physical education remains a male-dominated terrain where gender biases are reproduced and typically unchallenged. For example, curriculum and equipment is mostly provided to accommodate male students. In addition, oftentimes, the physical education class environment is too competitive for girls, which prevents them from participating in activities. Thus, it is necessary for middle school physical teachers to understand various physical activities that can embrace both genders and promote their interest and participation. By seeking and providing new perspectives of positive teaching methods and strategies, middle school physical education teachers can maximize their teaching and boost students' learning and motivation. Furthermore, the curriculum is one of the major factors that influence students' learning in physical education (Subramaniam & Silverman, 2000). In this regard, providing appropriate curricula has strong impact on middle school students' learning and participation. In particular, since middle school students' skill levels are highly associated with their motivation, curricula should incorporate all skill levels by providing age and developmentally appropriate framework. Effective curricula entail

comprehensive, inclusive, progressive activities and guide developmentally appropriate physical education. Additionally, since there is a variety of ability and interest among middle school students, it is absolutely essential to provide varied activities. These activities are derived from areas such as team and individual activities, gymnastics, rhythm and dance, outdoor challenge and pursuits, aquatics, and cooperative activities (Metzler, 2000).

In sum, based on the result, it is suggested that transformational leadership plays a critical role in enhancing middle schools' feelings of competence and the level of motivation.

Implications

The results of this study can be a meaningful asset to assist current and future middle school physical education teachers who strive to create quality physical education programs. As this study indicates, displaying transformational leadership in the teaching of physical education provides practical implications which can be useful to physical education teachers and educators.

Idealized Influence

Idealized influence is about being a role model whom followers seek to emulate (Bono & Judge, 2004). Because physical education teachers act as role models, several specific domain aspects should be considered. First of all, according to Graham (2008), students can benefit from both instructional and motivational aspects by a hands-on demonstration in physical education. Students should be provided with a proper demonstration which allows them to improve efficient physical activity skills and increase students' interest in learning. Thus, the physical education teacher should be a skillful role model. Of course, it is impossible for each teacher to master all kinds of physical activity skills; however, physical education teachers should keep developing athletic skills, as well as

acquiring new knowledge of physical activities as much as possible. If physical education teachers lack in skill areas, they should seek training opportunities to improve the skills. In short, physical education teachers must be skilled in their subject and activities so that they are able to demonstrate the techniques as needed.

Second, physical education teachers must reflect good health. In other words, they should stay active and be physically fit. As students are taught the importance of being physically active and life-long movers in physical education classes, physical education teachers should regularly participate in various physical activities. The importance of physical activities is illustrated by physical education teachers effectively when they are good models. Particularly, obesity and sedentary life have been serious issues; it is important for physical education teachers to encourage students to participate in a regular moderate to vigorous activity life style, as well as to eat a healthy diet. According to Davison and Birch, (2001), obese children are more likely to shape health behaviors by having a role model. This study pointed out that children learn by observing their role models, both good and bad. In addition to being role models, teachers try to share activities and exercise experiences with students. For example, a physical education may experience that motivates students to go out and exercise.

Third, since basic ethical behaviors are emphasized in physical education classes, physical education teachers should model important life values, such as dignity, enthusiasm, respect, sincerity and responsibility. When teachers embody these, students not only learn physical aspects, as well as more important life virtues. Physical education teachers build a class culture of collaboration based on values such as integrity and fairness. Eventually, by demonstrating and valuing crucial life components, physical education teachers earn respect

from students and schools. In physical education classes, transformational leadership requires that instructors lead students by doing, not simply by telling.

Inspirational Motivation

Inspirational motivation takes place when physical education teachers encourage their students by providing a clear mission and vision and by setting higher standards in physical education. The vision and standards are not necessarily challenging or difficult; for example, they could be a commitment for students to reach goals that allow them to become passionate and motivated. Through clear and appropriate missions and visions, physical education teachers enable students to achieve the same passion and motivation that they themselves emulate. Thus, it is a good idea to share a mission and vision by creating a mission statement. After creating the mission statement, teachers post it in the gymnasium and share it regularly from the beginning of the semester. By reminding students of the mission and goals regularly, physical education teachers influence them to build commitment to major changes, including changes in the attitudes and assumptions of students (Bass, Avolio, Jung & Berson, 2003). These critical components can be obtained by setting clear and appropriate visions and goals. Great leaders such as, Bill Gates and Dr. Martin Luther King, Jr., who, respectively, inspired a company and a society by sharing visions, physical education teachers need to connect with students through visions and meaningful goals. Physical education teachers not only teach, but they inspire students.

Intellectual Stimulation

Intellectual stimulation involves arousing students' curiosity and learning desires by employing various teaching methods. According to Daft (2014), "people admire leaders who awaken their curiosity, challenge them to think and learn, and encourage openness to new,

inspiring ideas and alternatives” (p.142). Physical education teachers can use idealized influence to develop creative and innovative learning experiences for students. First, using technology in a physical education class allows teachers to promote both cognitive and effective learning. For example, to analyze students’ performances and provide specific and congruent feedback, using a wide range of digital tools is effective because it helps one see what the human eyes cannot catch in real time and provides accurate movement analysis (Trout, 2013). In addition to digital devices, teachers can simply use a smart phone, as well as many free applications which help teachers assess skills, to record and analyze students’ performances. Such applications include Coaches' Eyes, Coach My Video Mobile and Ubersense. Due to advanced technology, it is now easy to use diverse technologies in physical education classes. Moreover, to encourage students to be physically active and to increase the number of steps, it is useful to use pedometers (Bassett & Strath, 2002). In particular, a finger pedometer is convenient for virtually all age groups and measures heart rate, and the approximate amount of calories burned. According to Jenny, Hushman, and Hushman (2013), incorporating motion based video-gaming such as Wii and X-Box also can create enjoyable physical education classes. Although in order to use motion-based gaming, several items are required, including the game device, CDs, and screens or just white sheets (instead of buying expensive screens), such devices are another way to boost students’ physical activity and get students moving (e.g., Wii dance). These technologies typically do not require an extensive budget, and do stimulate learning.

Second, by employing various teaching styles, physical education teachers can create different learning environments. For example, based on Mosstons’ spectrum, command style teachers are more likely to create rigid and authoritarian management classes. On the other

hand, by using reciprocal teaching, teachers are more likely to create self-learning by using an interactive teaching style and challenging learning; challenging students in the classroom may be the most influential aspect of intellectual stimulation. Based on the lesson plan and activity, employing different teaching styles may increase and stimulate students' learning.

Third, there is a wide range of ways that physical education teachers provide accommodations and modifications to attain student success, appropriate skills, and satisfaction. For example, by modifying rules and equipment in a softball unit, such as kick-ball style hitting, T-ball and slow-pitch, and using different balls such as 16-inch gator skin ball and a 12-inch Wiffle ball (Brian et al., 2014), students can be taught the same content by learning a different task. Physical education teachers have to learn how to accommodate the skills to students based on individual needs and to stimulate students by incorporating new teaching skills and materials. Physical education teachers continuously invest in the development of teaching.

Individualized Consideration

Individualized consideration takes place when physical education teachers find and respond to specific students' needs. In physical education classes, there are varied students, including culturally diverse groups and special populations; students also have different skills and knowledge. By listening and caring about students' concerns and issues, physical education teachers should be able to support students to properly participate in physical education classes. To respond to individual considerations, using effective materials and modified equipment helps teachers meet varied students' needs. For instance, visual aids and task cards help not only enhance the comprehension level of special populations, such as

those with autism and intellectual disabilities (Nguyen & WaTanabe, 2013), but culturally diverse students also can benefit from them.

More importantly, in order to provide individualized consideration, physical education teachers should be effective communicators because it is the way students and teachers connect. Effective communication entails multiple important aspects, such as building an intimate relationship, listening, and providing proper reinforcement. Building a relationship means to find value on a personal level. It is the ability to approach and embrace students while not sacrificing professional responsibilities. Cheng (1994) found that teachers who scored high in both consideration and initiating structure were better at leading a class of students whereas teachers who scored low on both consideration and low initiating structure were ineffective for promoting learning and students' affective outcomes. Brown (2007) revealed that the relationship can be powerful in the classroom and in determining students' success and failure. Furthermore, a big part of being effective communicators is listening. In fact, the only way to achieve it is by listening. By asking questions such as, "How was the class?" and "How did you feel about today's class?" and "What would you suggest for this class?" or by inviting a discussion, physical education teachers can actively listen and find important things related to classes and students. These questions and conversation can create a conversation and, ultimately, a student-centered class environment. Lastly, when teachers commit to expressing genuine words of thanks or praise, students' individualized efforts will be recognized. Physical education teachers should focus on positive student performances and areas and should not hold back on praise and kind expressions. Transformational leadership is highly interactive. Physical education teachers strive to build positive

relationships with students and draw the best from their students by showing authentic care and respect.

Recommendations for Future Research

This study examined the relationship between physical education teachers' transformational leadership and middle school students' intrinsic motivation and expectancy-value. The results found the importance of physical education teachers' leadership. In order to expand the range of its topic, there are several recommendations for future research.

First of all, this study used a convenience sampling technique and the sample was collected in a private-school in Albuquerque, which is associated with a limitation of generalization. In other words, the convenience sample may not represent of overall middle school students' perception about physical education teachers' transformational leadership. Therefore, it is recommended to study at various education settings, such as public middle school and charter school. In addition, a follow-up study needs to explore broader age groups, including elementary and high school students. This helps compare the similarities and differences of effective transformational leadership among age groups.

Second, qualitative research can help obtain in-depth understanding of proper transformational leadership and the impacts on students. Particularly, by observing physical education teachers' instructions and interviewing students' perceptions over teachers' leadership, it will provide detailed spectrum of effects of transformational leaderships.

Lastly, in terms of independent variables, this study only focused on transformational leadership. In future research, as there are a variety of leadership styles, it would be meaningful to examine the effects of other leaderships, such as transactional leadership and servant leadership. In addition, by studying a wide range of dependent variables, such as

students' achievement, enjoyment, and behaviors in physical education, this would give wide points of views regarding transformational leadership.

Conclusion

The main role of physical education teachers is to educate students about various physical movements and physical activities. Beyond good teaching, providing effective leadership has positive impacts on student outcomes (Day et al., 2010). In fact, traditionally, physical education teachers tend to be more authoritarian than teachers of other subject teachers as they employ a militaristic style of teaching. In addition, students are asked to reproduce what they learn without questioning it. This results in decreasing student-centered learning environments and creating one-way learning. Therefore, it is necessary for physical educators to understand and challenge old biases that affect students' learning. By seeking and providing new perspectives of positive teaching methods and strategies, physical education teachers should be able to offer a high quality physical education.

One way to enhance quality of physical education is to focus on appropriate leadership. Physical education teachers are able to understand and display effective leadership and teaching styles. Particularly, transformational leadership is one of the effective theoretical frameworks that include four domains: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Such leadership includes the process of influencing major changes in the attitudes and assumptions of group members and building commitment for major changes. Transformational leadership (Burns, 1978) can be effective for boosting students' learning and motivation as it focuses on individual consideration, intellectual stimulation, inspiring individual and idealized influence. In fact, being a transformational leader is a challenging task in physical education.

It requires various critical components and high standards. In order to display transformational leadership, the leader must share a vision and goal, be a role model, stimulate students' learning, and establish strong interpersonal relationships.

The results of the study support the importance of transformational leadership that affects middle school students' intrinsic motivation and expectancy-value in physical education. Thus, it is recommended that physical education teachers be able to understand and display appropriate leadership, in particular transformational leadership. The future of physical education classes may depend upon teachers' effective leadership. Physical education teachers should continuously strive toward effective leadership.

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Appendices

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Appendix A

Consent Form



The Importance of Leadership: An Investigation of Effects of Transformational Leadership on Middle School Students' Intrinsic Motivation and Expectancy-Value in Physical Education

Consent to Participate in Research
11/20/2015

Purpose of the study:

My name is Minhyun Kim, a doctoral candidate at the University of New Mexico in the Department of Health, Exercise & Sport Sciences. I and Dr. Glenn Hushman (my academic advisor and a principal investigator of this study) are conducting a research about the relationship between physical education teachers' leadership and middle school students' enjoyment and value in physical education. Through this study, I would like to investigate how physical education teachers' leadership style is related to students' leaning and participation. You are being asked to participate in this study because you are currently taking physical education class.

What you will do in the study:

Your participation will involve filling out the survey questionnaire about leadership, enjoyment, and value in regards to your physical education class. The survey should take about 10-15 minutes to complete. To ensure the privacy of the survey, the researcher will create a semi-private setting by allowing enough space between students, and the physical education teacher will be out of the classroom during the survey. Students' answers will reflect their individual experiences and opinions of their physical education class. After you complete their answers, return the survey packets to the researcher. Your involvement in the study is voluntary, and you may choose not to participate. There are no names or identifying information associated with this survey. The findings from this study may provide valuable information to promote the quality of physical education.

Risks:

There is no greater than minimal risks for this research. The biggest potential risk would be loss of confidentiality.

Benefits:

There will be no direct benefits to students and physical education teachers promptly. However, in the foreseeable future, the study results will provide detailed leadership components and teaching strategies for middle school physical education teachers. This eventually results in promoting the quality of middle school physical education.

Confidentiality of your information:

The returned survey questionnaire will be kept under a lock and key in a filing cabinet located in room 230D office in the Johnson Center. The data from the completed questionnaire (word document) then will be entered into a version 22 of SPSS software for statistical analysis. Only the researcher and research advisor will have access to the procured data.

Payment:

There will be no compensation for participants.

Right to withdraw from the study:

Any students, at his or her desire, may stop the survey or withdraw from the study.

If you have any questions about this research project, please feel free to call Minhyun Kim at 909-910-6372 and mhkim@unm.edu or Dr. Glenn Hushman at 505-449-7123 and ghushman@unm.edu. If you have questions regarding your legal rights as a research subject, you may call the UNM Office of the IRB (OIRB) at (505) 277-2644. Thank you for your consideration.



Institutional Review Board

Appendix B

Parental Consent Form

Parent Informed Consent

The Importance of Leadership: An Investigation of Effects of Transformational Leadership on Middle School Students' Intrinsic Motivation and Expectancy-Value in Physical Education

Dear Parents:

My name is Minhyun Kim, a doctoral student at the University of New Mexico in the Department of Health, Exercise & Sport Sciences. I and Dr. Glenn Hushman (my academic advisor and a principal investigator of this study) are conducting a research about the relationship between physical education teachers' leadership and middle school students' enjoyment and value in physical education. Through this study, I would like to investigate how physical education teachers' leadership style is related to students' learning and participation in physical education.

Your child's will involve filling out the survey questionnaire about leadership, enjoyment and value in regards to physical education class. The survey should take about 10-15 minutes to complete. There is no greater than minimal risk for this research. The biggest potential risk would be loss of confidentiality. Your child's involvement in the study is voluntary, and you may refuse to allow your child to participate or withdraw your child from the study at any time. There are no names or identifying information associated with this survey. Answered questionnaires will be viewed only by the researcher and will be used for the academic purpose only. The findings from this study may provide valuable information to promote the quality of physical education.

If you have any questions about this research project, please feel free to call Minhyun Kim at 909-910-6372 or mhkim@unm.edu. You may also contact my academic advisor, Dr. Glenn Hushman, at 505-449-7123 or ghushman@unm.edu. If you have questions regarding your legal rights as a research subject, you may call the UNM Office of the IRB (OIRB) at (505) 277-2644.

Thank you for your consideration.
Sincerely,

Minhyun Kim, Doctoral Candidate
Physical Education and Teacher Education Program
University of New Mexico

Please sign on this paper that you have read the request and indicate whether you wish your child participate or not.

Approval/ Refusal
Child's Name (Print) _____

Signature of Parent or Guardian _____ Date _____



Number: 22015
Version: 01/15/2016
Approved: 01/21/2016
Expires: 01/20/2017

Appendix C

IRB Approval



DATE: January 22, 2016

REFERENCE #: 22015

PROJECT TITLE: [839070-2] The Importance of Leadership: An Investigation of Effects of Transformational Leadership on Middle School Students' Intrinsic Motivation and Expectancy-Value in Physical Education

PI OF RECORD: Glenn Hushman, Ph.D.

SUBMISSION TYPE: Amendment/Modification

BOARD DECISION: APPROVED

EFFECTIVE DATE: January 21, 2016

EXPIRATION DATE: January 20, 2017

RISK LEVEL: Minimal Risk

REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category 7

SUBPART DECISION: D 404

PROJECT STATUS: Active - Open to Enrollment

DOCUMENTS:

- Consent Form - ConsentForm Kim.doc (UPDATED: 01/15/2016)
- Consent Form - Parental consent form (UPDATED: 01/15/2016)
- Letter - Responding letter (UPDATED: 01/15/2016)
- Protocol - Protocol.doc (UPDATED: 01/15/2016)
- Questionnaire/Survey - Questionnaires for Dissertation.docx (UPDATED: 01/15/2016)
- Advertisement - Recruitment Script (UPDATED: 12/21/2015)
- Application Form - IRB project information 2 (signed) (UPDATED: 12/21/2015)
- Application Form - Project_Information Kim.doc (UPDATED: 12/21/2015)
- CV/Resume - CV Kim.pdf (UPDATED: 12/18/2015)
- CV/Resume - Dr. Hushman CV (UPDATED: 12/18/2015)
- Letter - LoS Sandia Prep (UPDATED: 12/21/2015)
- Letter - LoS Bosque (UPDATED: 12/21/2015)
- Letter - Los Menaul (UPDATED: 12/21/2015)
- Other - Department Review (UPDATED: 12/21/2015)
- Other - IRB Project Team (UPDATED: 12/21/2015)
- Questionnaire/Survey - Questionnaires for Dissertation.docx (UPDATED: 12/21/2015)
- Training/Certification - CITI Kim.pdf (UPDATED: 12/21/2015)

Expedited review of this submission occurred on January 14, 2016 and requested modifications were reviewed using Expedited procedures on January 21, 2016.

Thank you for your submission of Amendment/Modification materials for this project. The University of New Mexico (UNM) IRB Main Campus has APPROVED your submission. This approval is based on an acceptable risk/benefit ratio and a project design wherein the risks to human participants have been minimized.

This determination applies only to the activities described in the submission and does not apply should any changes be made to this research. If changes are being considered, it is the responsibility of the Principal Investigator to submit an amendment to this project for IRB review and receive IRB approval prior to implementing the changes. A change in the research may disqualify this research from the current review category.

The IRB has determined the following:

Informed consent must be obtained and documentation of informed consent has been waived for children this project. To obtain consent, use only approved consent document(s).

Children may be involved as participants in this project under Subpart D 404 and permission from one parent/guardian is required and signature is required.

Child assent has been waived.

All reportable events must be promptly reported to the UNM IRB, including: UNANTICIPATED PROBLEMS involving risks to participants or others, SERIOUS adverse events, UNEXPECTED adverse events, NON-COMPLIANCE issues, and COMPLAINTS. All sponsor reporting requirements should also be followed.

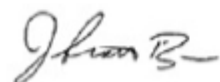
The UNM IRB approved the project from January 21, 2016 to January 20, 2017. A continuing review or closure submission is due no later than December 21, 2016. **It is the responsibility of the Principal Investigator to apply for continuing review and receive continuing approval for the duration of this project. If the IRB approval for this project expires, all research related activities must stop and further action will be required by the IRB.**

Please use the appropriate reporting forms and procedures to request amendments, continuing review, closure, and reporting of events for this project. Refer to the OIRB website for forms and guidance on submissions.

Please note that all IRB records must be retained for a minimum of five years after the closure of this project.

The Office of the IRB can be contacted through: mail at MSC02 1665, 1 University of New Mexico, Albuquerque, NM 87131-0001; phone at 505.277.2644; email at irbmaincampus@unm.edu; or in-person at 1805 Sigma Chi Rd. NE, Albuquerque, NM 87106. You can also visit the OIRB website at irb.unm.edu.

Sincerely,



J. Scott Tonigan, PhD
IRB Chair

Appendix D

Recruitment Script

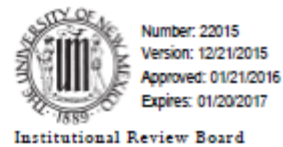
Recruitment Script

Hello everyone. Thank you Coach for allowing me to be here! My name is Minhyun Kim and I am a doctoral student at the University of New Mexico. I am currently working on my doctoral degree in Physical Education, Sports & Exercise Science. The purpose of this dissertation study is to study the relationship between physical education teachers' leadership and middle school students' enjoyment and value in physical education. I am here this morning to tell you about a research opportunity.

I have a brief survey that would take 10-15 minutes of your time to complete. You will involve filling out the survey questionnaire about leadership, enjoyment and value in regards to physical education class. Your participation is entirely voluntary; No personally identifying information is being collected such as name, address, and your signature. There is no potential risk to participants. The findings from this study may provide valuable information to promote the quality of physical education

Does anyone have any questions for me at this time?

I have a few minutes to answer any questions that you might have privately as well. I will also be around for you to help if you need any help or support to fill out the survey questionnaire. Thank you for your time and consideration.



Appendix E

Questionnaires

Demographic Information

Grade:

Gender: Male/Female

Ethnicity: a. Hispanic b. Caucasian (White) c. African American d. Asian e. other

Transformational Teaching Questionnaire

This questionnaire is used to describe the leadership style of the above-mentioned individual as you perceive it. Answer all items on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank. Please answer this questionnaire anonymously.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing. Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently
1	2	3	4	5

The Person I Am Rating...

1. Shows that s/he cares about me	1	2	3	4	5
2. Acts as a person that I look up to	1	2	3	4	5
3. Creates lessons that really encourage me to think	1	2	3	4	5
4. Demonstrates that s/he believes in me	1	2	3	4	5
5. Treats me in ways that build my respect	1	2	3	4	5
6. Is enthusiastic about what I am capable of achieving	1	2	3	4	5
7. Provides me with tasks and challenges that get me to think in different ways	1	2	3	4	5
8. Motivates me to try my hardest	1	2	3	4	5
9. Tries to know every student in the class	1	2	3	4	5
10. Gets me to question my own and others' ideas	1	2	3	4	5
11. Tries to help students who might be struggling	1	2	3	4	5
12. Talks about his/ her personal values	1	2	3	4	5
13. Encourages me to look at issues from different sides	1	2	3	4	5
14. Recognizes the needs and abilities of each student in the class	1	2	3	4	5
15. Is optimistic about what I can accomplish	1	2	3	4	5
16. Behaves as someone I can trust	1	2	3	4	5

Expectancy-Value Questionnaire

Directions: Please answer each question truthfully. Circle one number only for each statement. There are no right or wrong answers

1. How good at activities and games in P.E. are you?
(1) very bad (2) bad (3) not sure (4) good (5) very good
2. How good at P.E. are you, compared to other students?
(1) one of the worst (2) one of the bad (3) not sure (4) one of the good (5) one of the best.
3. How good at P.E. are you, compared to other school subjects?
(1) a lot worse in P.E. (2) a little worse in P.E. (3) not sure (4) a little better in P.E.
(5) a lot better in P.E.
4. How good would you be at learning something new in P.E. this year?
(1) very bad (2) bad (3) not sure (4) good (5) very good.
5. How well will you learn activities and games in P.E. this year?
(1) not at all well (2) not well (3) not sure (4) well (5) very well
6. For me, being good at activities and games in P.E. is...
(1) not very important (2) not important (3) not sure (4) important (5) very important
7. Compared to your other school subjects, how important is it to you to be good at activities and games in P.E.?
(1) not very important (2) not important (3) not sure (4) important (5) very important.
8. In general, I find learning new activities and games in P.E. is...
(1) “way” boring (2) “way” a little boring (3) not sure (4) “way” a little fun; (5) “way” fun.
9. How much do you like activities and games in P.E.?
(1) don’t like it at all (2) don’t like it (3) not sure (4) like it (5) like it very much.
10. Some things that you learn in school help you do things better outside of class. We call this being useful. For example, learning about plants might help you grow a garden. In general, how useful is what you learn in P.E.?
(1) not useful at all; (2) not useful (3) not sure (4) useful (5) very useful.
11. Compared to your other school subjects, how useful is what you learn in P.E.?
(1) not useful at all (2) not useful (3) not sure (4) useful (5) very useful.

Intrinsic Motivation Index

Please carefully read each statement below, and indicate which of the responses best represent your belief in *physical education class*. There are no right or wrong answers.

Very Strongly Disagree 1	Strongly Disagree 2	Disagree 3	Neutral 4	Agree 5	Strongly Agree 6	Very Strongly Agree 7
1. I enjoyed the activity very much						1 2 3 4 5 6 7
2. I think I am pretty good at the activity						1 2 3 4 5 6 7
3. I put a lot of effort into the practice session						1 2 3 4 5 6 7
4. It was important for me to do well at this task						1 2 3 4 5 6 7
5. I felt tense while practicing						1 2 3 4 5 6 7
6. I tried very hard while practicing						1 2 3 4 5 6 7
7. This activity was fun						1 2 3 4 5 6 7
8. I would describe this activity as very interesting						1 2 3 4 5 6 7
9. I felt pressured while practicing the task						1 2 3 4 5 6 7
10. I was anxious while practicing the task						1 2 3 4 5 6 7
11. I didn't try very hard to learn the skill						1 2 3 4 5 6 7
12. After practicing for a while, I felt pretty competent						1 2 3 4 5 6 7
13. I was very relaxed while practicing						1 2 3 4 5 6 7
14. I am pretty skilled at the skill						1 2 3 4 5 6 7
15. The activity did not hold my attention						1 2 3 4 5 6 7
16. I could not do the skill very well						1 2 3 4 5 6 7

Thank you!!!