

# The Effect of Transformational Leadership on Middle School Students' Intrinsic Motivation and Expectancy-Value in Physical Education

*Minhyun Kim*

Bridgewater College, USA

*Glenn Hushman*

*Lauren Holzberg*

University of New Mexico, USA

*Hosung So*

California State University San Bernardino, USA

doi: 10.19044/ejes.v4no2a2 [URL:http://dx.doi.org/10.19044/ejes.v4no2a2](http://dx.doi.org/10.19044/ejes.v4no2a2)

---

## 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 the relationship between physical education teachers' transformational leadership and middle school students' expectancy-value and intrinsic motivation. To conduct this study, 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, and multiple regression. According to regression analyses, transformational leadership had a positive impact on students' expectancy-value and intrinsic motivation. Additionally, based on multiple regression, intellectual stimulation was a common factor that positively affected students' expectancy-value and intrinsic motivation. The results of the study supported the importance of transformational leadership that affects middle school students' intrinsic motivation and expectancy-value in physical education. It is recommended that physical education teachers be able to understand and display appropriate leadership, in particular transformational leadership.

---

**Keywords:** Transformational Leadership, Intrinsic Motivation, Expectancy-Value.

## **Introduction**

Leadership is important in many venues, including business, the military, the sports world and school systems, and has the potential to enhance the effectiveness of an organization greatly. 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). 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.

Traditionally, in leadership in physical education more likely displayed 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). More importantly, as the current teaching practices of physical education trends 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 a holistic approach of quality of learning health benefits of physical activity, social behavior management and enjoyment (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.

## **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).

The efficiency and benefits of transformational leadership have been documents extensively, in particular as applied to education (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), displaying as a role model and motivating followers to accomplish the goals. 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.

**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.

**Intellectual stimulation.** Intellectual stimulation involves promoting followers' curiosity, problem-solving, and novel ways of thinking by stimulating followers' intelligence. 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.

**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.

## **Research Methodology:**

### **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. This research will examine the relationship between each transformational component as it relates to motivation and the 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.

### **Research Design and Procedures**

The study was conducted as quantitative research by participating middle school students. Due to constraints of time and accessibility, a convenience sampling method was applied in this study (Lohr, 1999). Copies of the survey and consent form were prepared and distributed to the students during school visitations. To ensure the confidentiality of the survey, 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 be judged as right or wrong. After the physical education teacher left the classroom, the researchers distributed a survey package to the students. The survey package included a cover letter and the four questionnaires. The survey took approximately 15-20 minutes to complete. After the students complete their answers, they returned the survey package to the researcher

### **Population and Sample**

The population for the 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.

## **Results:**

### **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 resulting in yielding 262 usable surveys for the data analysis. Demographic

description of the sample follows: Subjects consisted of 122 male (46.6%) and 140 female (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 1 shows the demographic information.

Table 1. *Descriptive Statistics for Demographic Variables*

Variable	Category	Frequency	Percent (%)
Gender	Male	122	46.6
	Female	140	53.4
Grade	6 <sup>th</sup>	76	29.0
	7 <sup>th</sup>	106	40.5
	8 <sup>th</sup>	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

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

According to Table 2, four transformational leadership behaviors, including idealized influence, had a statistically significant effect on middle school students' expectancy-value. Specifically, the results of regression analysis showed: individualized consideration ( $\beta=.36, p<.001$ ), inspirational motivation ( $\beta=.35, p<.001$ ), intellectual stimulation ( $\beta=.41, p<.001$ ), and individual consideration ( $\beta=.32, p<.001$ ) had significant positive effects on expectancy-value.

Table 2. *The Regression Analysis for Transformational Leadership on Expectancy-Value*

Dependent Variable	Predictor	$\beta$	<i>T</i>	<i>p</i>
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

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 ( $R^2 =.19, F (2, 257) = 14.77, p <.01$ ) (see Table 3).

As seen Table 4, four transformational leadership behaviors, including idealized influence, had statistically significant effect on middle school students' intrinsic motivation. The results of multiple regression

indicated that individualized consideration ( $\beta=.40$ ,  $p<.001$ ), inspirational motivation ( $\beta=.39$ ,  $p<.001$ ), intellectual stimulation ( $\beta=.44$ ,  $p<.001$ ), and individual consideration ( $\beta=.39$ ,  $p<.001$ ) had significant positive effects on expectancy-value.

Table 3. *Multiple Regression Analysis for Middle School Students' Expectancy-Value According to Teachers' Transformational Leadership*

Dependent Variable	Predictor	SE	$\beta$	$t$	$p$	VIF
Expectancy-Value	(Constant)	.23		10.87	0.00	
	II	.08	.14	6.27	.16	3.08
	IM	.08	.08	6.98	.41	3.14
	IS	.06	.29	7.22	.01*	1.91
	IC	-.09	.09	5.55	.76	3.16

D-W=1.886,  $R^2=0.19$ ,  $F=14.77$ ,  $*p<.01$

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

Table 4. *The Multiple Regression Analysis for Transformational Leadership on Intrinsic Motivation*

Dependent Variable	Predictor	B	$t$	$p$
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

Furthermore, multiple regression analysis showed that intellectual stimulation accounted for 29% of the variance in middle school students' expectancy-value levels ( $R^2 = .27$ ,  $F(4, 257) = 24.06$ ,  $p < .01$ ) (see Table 5).

Table 5. *Multiple Regression Analysis for Middle School Students' Intrinsic Motivation According to Teachers' Transformational Leadership*

Dependent Variable	Predictor	SE	$\beta$	$T$	$P$
Intrinsic Motivation	(Constant)	.32		8.51	0.00
	II	.13	.15	6.27	.19
	IM	.08	.10	6.98	.39
	IS	.28	.29	7.22	.01*
	IC	.05	.07	5.55	.59

D-W=1.814,  $R^2=0.27$ ,  $F=24.06$ ,  $*p<.01$

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

## Discussion:

This study 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 the 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, 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, the result of this study is somewhat different from 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 the results of this study, 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. 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).

**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). 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.

**References:**

- Avolio, B. J., & Bass, B. M. (2004). Multifactor leadership questionnaire: Third edition manual and sampler set. Redwood City, CA: Mind Garden.
- Barling, J., Christie, A., & Hopton, A. (2010). Leadership. In S. Zedeck (Ed.), *Handbook of industrial and organizational psychology* (pp. 183-240). Washington, DC: American Psychological Association.
- Beauchamp, M., Barling, J., Li, Z., Morton, K., Keith, S., & Zumbo, B. (2010). Development and psychometric properties of the transformational teaching questionnaire. *Journal of Health Psychology, 15*(8), 1123-1134.
- Browne, J. (1992). Reasons for the selection or nonselection of physical education studies by year 12 girls. *Journal of Teaching in Physical Education, 11*, 402-410.
- Burns, J. M. (1978). *Leadership*. NY: Harper & Row.
- Carlson, T. B. (1995). We hate gym: Student alienation from physical education. *Journal of Teaching in Physical Education, 14*, 467-47.
- Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sports: development of a leadership scale. *Journal of Sport Psychology, 2*, 34-45.
- Daft, R. L. (2008). *The leadership experience* (4th ed.). Mason, OH: SouthWestern.
- Day, C., Sammons, P., Leithwood, K., Hopkins, D., Harris, A., Gu, Q., & Brown, E. (2010). *Ten strong claims about successful school leadership*. Nottingham: NCSL.
- Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational leadership and team performance. *Journal of organizational change management, 17*(2), 177-193.



- Eccles, J. S., & Wigfield, A. (1995). In the mind of the achiever: The structure of adolescents' academic achievement related beliefs and self-perceptions. *Personality and Social Psychology Bulletin*, 21, 215–225.
- Fernandez-Balboa, J. (1993). Sociocultural characteristics of the hidden curriculum in physical education. *Quest*, 45(2), 230-254.
- Goodboy, A. K., & Myers, S. A. (2008). Relational maintenance behaviors of friends with benefits: Investigating equity and relational characteristics. *Human Communication*, 11, 71-86.
- Graham, G. (2008). *Teaching children physical education: Becoming a master teacher* (3rd ed.). Champaign, IL: Human Kinetics.
- Jung, S, Pyo, N., & Kim, M. (2008). Influence of Physical Education Teacher's Transformational Leadership on Trust and Class Satisfaction. *Journal of Fisheries and Marine Sciences Education*, 25(2), 526-537.
- Katzenmeyer, M., & Moller, G. (2009). *Awakening the sleeping giant: helping teachers develop as leaders*. Thousand Oaks: Corwin Press.
- Kim, B.Y. (2010). Application of Transformational Leadership: The Case of Hiddink Leadership. *The Korean Association of Sport Law*, 13(1), 11-37.
- Kirkbride, P. (2006). Developing transformational leaders: the full range leadership model in action, *Industrial and commercial training*, 38(1), 23-32.
- Kwon, H. H., Pyun, D., & Kim, M. (2010). Perceived leadership behavior of physical education teacher-coaches: When they teach vs. when they coach. *Journal of Teaching in Physical Education*, 29,131-145.
- Lohr, Sharon L. (1999). *Sampling: Design and Analysis*. Albany: Duxbury Press.
- McAuley, E., Duncan, T., & Tammen, V. V. (1989). Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 60, 48-58.
- Metzler, N.W. (2000). *Instructional models for physical education*. Needham Heights, MA: Allyn & Bacon.
- Pounder, J. S. (2003). Employing transformational leadership to enhance the quality of management development instruction. *Journal of Management Development*, 22, 6-13.
- Sallis, J. F., & McKenzie, T. L. (1991). Physical education's role in public health. *Research Quarterly for Exercise and Sport*, 62, 124–137.
- Templin, T., Woodford, R., & Mulling, C. (1982). On becoming a physical educator: Occupational choice and the anticipatory socialization process. *Quest*, 34, 119-133.
- Wersch, A. V., Trew, K., & Turner, I. (1992). Post-primary school pupils' interest in physical education: Age and gender differences. *British Journal of Educational Psychology*, 62, 56-72.

Yang, Y. (2007). A study of the relationship between students' perceptions of goal orientation and physical education teacher leadership styles in Taiwan. Unpublished Doctoral dissertation. Spalding University, Kentucky