The Study of Relationship Between Distributed Leadership and Academic Optimism in High Schools of Iran

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Abstract: This research was conducted with purpose of studying the relationship between distributed leadership and academic optimism in high schools of Iran. Statistical population included all principal of high-school in Tehran for academic year 2012(418 people). A number of 200 principal were selected via cluster random sampling method using Morgan table. A researchers’ designed questionnaire was used to collect data about distributed leadership and for measuring the Academic Optimism, Mascall, Leithwood, Straus and Sacks (2008) questionnaire to measure the variables including academic emphasis, faculty trust in students and parents, and collective efficacy. Data was analyzed by use of Correlation through SPSS software. Findings are as follows: Correlation coefficient between distributed leadership and academic optimism (R=0.554); distributed leadership and faculty trust in students and parents (R=0.318); distributed leadership and collective efficacy (R=0.348); distributed leadership and academic emphasis (R=0.478) in level 0.05, is significant.

Key words: distributed leadership; principals; academic optimism;

INTRODUCTION

“Effective principal, effective school” is a maxim that continues to be supported (Bossert, Dwyer, Rowan & Lee, 1982; Wallace Foundation, 2011). In 1979, Erickson and Reller argued that the principal is one of the most critical positions in education, and over thirty years later, the Wallace Foundation (2011) reported that principal leadership is among the most pressing matters on a list of public school issues, coming in second after teacher quality. However, the role of the principal has been studied through a number of disparate perspectives (Daresh, Gantner, Dunlap, & Hvizdak, 2000), and the principal’s role continues to change as new policies redirect education and redefine job descriptions for principals (Beck & Murphy, 1993). Versus the background of knowledge-based society, a successful school is no longer an alone kingdom ruled by a single heroic principal (Spillane, 2006; Gronn, 2008).

The Wallace Foundation’s (2011) report on school leadership views the principal’s role as tied to five key responsibilities:
- “shaping a vision of academic success for all students, one based on high standards;
- creating a climate hospitable to education in order that safety, a cooperative spirit and other foundations of fruitful interaction prevail;
- cultivating leadership in others so that teachers and other adults assume their part in realizing the school vision;
- improving instruction to enable teachers to teach at their best and students to learn at their upmost;
- and managing people, data, and processes to foster school improvement”(p. 4).

These five responsibilities tap cognitive, affective and behavioral aspects of leadership, and the components of academic optimism address these aspects as well. Academic optimism contains three elements: self-efficacy, trust in students and parents, and academic emphasis. Efficacy is a belief or expectation; it is cognitive. Trust in students and parents are an effective response. Academic emphasis is behavioral, a push for high expectations in the school workplace (Hoy, Tarter, & Woolfolk Hoy, 2006). It has been studied at the individual and collective level and has been shown to predict academic achievement, even after controlling for socio-economic status and prior student achievement (Hoy, Tarter and Woolfolk Hoy, 2006; McGuigan & Hoy, 2006; Hoy & Smith, 2007). Academic optimism is also associated with a number of positive organizational behaviors, including professional success (Lee, Dedrick, & Smith, 1991), and a more humanistic (Woolfolk & Hoy, 1990).

Because of academic optimism’s relationship to positive outcomes and behaviors at the teacher level, and because the principal plays a vital role in establishing school climate and trust (Aelterman, Engels, Verhaeghe, Sys, Van Petegem, & Panagiotou, 2002).

According to researchers, a number of benefits are derived from the use of distributed leadership by principals in K-12 schools (Harris, 2005 & 2008; Mascall & et al, 2008). One organizational benefit of
Distributed Leadership:

The idea of distributed leadership is not a new one. As far back as 1984, Murgatroyd and Reynolds stressed that “leadership can occur at a variety of levels in response to a variety of situations and is not necessarily tied to possession of a formal organisational role” (cited in Law and Glover 2003 p.37).

In the traditional leadership model, power flows from top to down through a hierarchical ladder. A successful leader is often labeled as a charismatic and heroic role model. (Spillane, 2005) Transformational leadership has become a popular theme, which emphasizes an encouraging, harmonious, and ethical leadership tie within the organization (Bass, 1998; Bass & Avolio, 1994). However, both the traditional leadership model and the transformational approach focus on the “leader” per se (Leithwood & Jantzi, 1990). Leaders’ inborn traits and acquired skills have been widely studied in numerous studies (Northouse, 2007).

Distributive leadership primarily implies a social distribution where a leader’s power of decision-making is dispersed to all members of the school who are then viewed as a collaboration of leaders (Spillane, 2005). Distributed leadership implies interdependency rather than single leader dependency by leaders sharing responsibility with subordinates (Harris, 2003). In a sense, subordinate positions dissipate in distributive leadership as leadership is shared among many individuals in the organization.

Teacher leadership is promotes the idea that members of the organization can share leadership activities (Harris, 2003). Gronn’s (2000) viewed leadership as a stream of influence rather than an explicit connection with a single leader. In a distributive environment, a larger number of constituents in the organization have a stake in the accomplishments of the school (Harris, 2003). Nevertheless, distributed leadership provides us a new lens to observe the leader follower relationship (Spillane, 2005; Woods, 2004). Distributed leadership is built upon the participants’ contributions to the participatory decision making. Research focused on distributed leadership has weathered an initial stage of conceptual exploration and now it goes into an empirical test phase (Gronn, 2008). Distributed leadership provides a new lens to observe leadership practice. “Empowerment”, “interaction”, “democratic environment” and “shared responsibility” are the most expressed words mentioned in various definitions (Hartley, 2007; Scribner, Sawyer, Watson & Myers, 2007; Harris, 2005; Spillane, Dimond, & Jita, 2000).

Some researchers perceive distributed leadership as an overlapping concept with “shared leadership” and “teacher leadership”, because they all emphasize the power delegation, internal interaction, as well as teachers’ dynamics and professionalism (Hartley, 2007; Sheard, 2007; Duignan & Bezzina, 2006; Murphy, 2005). Nevertheless, other scholars like Spillane (2006) and Harris (2005) insist a clear boundary to compartmentalize distributed leadership from other relevant concepts. They argue that distributed leadership is a theory following the practice (Spillane, 2006; Harris, 2005). It goes beyond the power delegation within the school structure. More precisely, distributed leadership is a whole process concerning the internal communication, decision-making, tasks allocation, evaluation and so on. Therefore, scholars need a holistic view to perceive how schools operate, what people do and why (Archer, 2004). Furthermore, Spillane and his colleagues (Spillane, et al., 2001) believe that school leadership is contextually bounded and not intrinsically correct. There is no universal model to distinguish the good practice from the bad practice. Therefore, it is a big challenge for the principals to use leadership wisely and properly as they take macro and micro environments into account. To sum up, the biggest difference between distributed leadership and other relevant concepts such as teacher leadership and shared leadership is that the leadership practice is based on the situation instead of the people (Harris, 2005; Spillane, et. al, 2001).

Distributed leadership takes place in an inclusive and complex school environment. Leadership practice is in the center and the roles of leaders and followers can be shifted according to the different situations. The basic assumption of this definition is to see leadership as a shared function. Power is not a zero-sum commodity; instead, it can be expanded through delegation. (Blasé & Blasé, 2004; Jackson, 2004) Furthermore, the Complexity Theory (also known as the Chaos Theory) raises another important question: If the organizational structure develops from parts-whole relations into more complex phenomena, how would leadership react to such kind of complexity? (Kiel & Elliott, 1997) One possible answer is we need more self-managing teams that exercise distributed leadership. It is notable that the idea of distributed leadership discussed in this study does
not necessarily have to be democratic. The roles of leaders and followers are emergent in certain situations when specialty and expertise are needed. The goal of this framework is to expand the space, increase the opportunities, as well as enhance the capabilities amongst all the people in the organization (Jackson, 2004).

**Academic Optimism:**

One of the most important challenges for educational researchers is to identify properties of schools that make a real difference in academic achievement and that, unlike socioeconomic status, are within the control of school leaders (McGuigan & Hoy, 2006, p. 2).

Academic optimism could be described as a compilation of a 40-years academic quest for school characteristics that have a significant influence on student achievement while overcoming the effects of socioeconomic status (SES) (Hoy, 2012). The origin of this quest could be traced to Coleman’s landmark work in 1966. In this study, Coleman and his colleagues concluded that schools only had minimal influence on student achievement in comparison with the influences of socioeconomic background (Chou, 2003). Hoy, Tarter and Woolfolk Hoy (2006) have identified a new construct found to have made a significant contribution to student achievement after controlling for demographic variables and previous achievement. This new construct is called Academic Optimism.

After many detours, with more advanced statistical procedures and data collection methods, educational scholars have identified at least three school variables that are consistently related to student achievement after controlling for SES. They are academic emphasis, faculty trust in students and parents, and collective efficacy (Hoy, Tarter, & Woolfolk Hoy, 2006).

These three school variables later became the foundation for the development of academic optimism. Hoy and his colleagues (2006) theorized that these three school characteristics are the three dimensions of the construct of academic optimism. Therefore, in order to understand the construct of academic optimism, the concepts of academic emphasis, faculty trust in students and parents, and collective efficacy are discussed first in the following sections.

**Academic Emphasis:**

In the context of academic optimism, it has been defined as “the extent to which a school is driven by a quest for academic excellence” (Goddard, Sweetland, & Hoy, 2000, p. 686). Goddard, Sweetland, and Hoy (2000) proposed that it is a way to conceptualize the normative and behavioral environment of a school which further influence on both individual and organizational behaviors. As a group attribute, academic emphasis not only reflects how much a school values academic success, but also reflects how much faculties did to improve student learning and academic achievement. Therefore, Hoy and his colleagues incorporated it as the behavioral enactment of academic optimism (Hoy et al., 2006). Goddard and his colleagues (2000) described that in a school with high academic emphasis, teachers set high but achievable goals for students and believe that the students have abilities to success; the learning environment is serious and orderly, and students, as well as faculties emphasize and respect academic success.

It refers to the extent to which a school is driven by a quest for academic excellence and academic achievement. In such, there are high, yet achievable goals set for students; the learning environment is orderly and serious; students are motivated to work hard, and they respect academic achievement (Hoy & Miskel, 2005; Hoy, Tarter, & Kottkamp, 1991).

Academic emphasis and achievement were positively related at both the middle school and high school levels, even after controlling for socioeconomic factors (Hoy & Sabo, 1998; Hoy, Tarter, & Bliss, 1990). In 2000, Goddard and his colleagues (2000) further examined the relationship between academic emphasis and student achievement at elementary level. By using hierarchical linear modeling (HLM), both school and student level context variables were taken into account. The finding was consistent with previous studies that academic emphasis is highly related student achievement in elementary schools. In a full HLM model, academic emphasis explained 50.4 percent and 47.4 percent of the between school variability in reading and mathematics achievement respectively. An increase of one standard deviation in academic emphasis was linked with an increase of 40 percent of a standard deviation in mathematics scores and more than 33 percent of a standard deviation in reading scores. This result showed that academic emphasis is a critical factor on student achievement.

Korkmaz (2006) conducted a research in elementary schools located in Ankara, Turkey. The analysis showed that academic emphasis, collegial leadership, and resource support were the elements in healthy school climate that related with robust school vision. These two studies demonstrated that academic emphasis is consistently related with teachers’ robust school vision.

Hoy, Sweetland and Smith (2002) tested the relationship between academic emphases, collective teacher efficacy, and student achievement. They hypothesized that academic emphasis had a strong and direct influence on collective efficacy and academic achievement. By using 97 secondary schools, the authors confirmed their hypothesis and concluded that academic emphasis affects academic achievement indirectly through collective
efficacy. This also means that the study suggested that academic emphasis and collective efficacy are significantly and positively related with each other.

**Trust:**

Faculty trust in students and parents (clients) or collective trust (Forsyth *et al.*, 2011) can be defined as “faculty’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (Tschannen-Moran & Hoy, 2000).

Hoy *et al.* (2006) believed that — faculty trust in parents and students is a collective school property in the same fashion as collective efficacy and academic emphasis.

While one may initially believe these to be separate concepts, factor analyses have consistently demonstrated they are not separate (Goddard, Tschannen-Moran & Hoy, 2001) and Bryk and Schneider (2002) argued that teacher-student trust in elementary schools operates primarily through teacher-parent trust.

Among different kinds of collective trust, faculty trust in students and parents is the one that were incorporated in the construct of academic optimism. Following an extensive review of the literature, Hoy and Tschannen-Moran (2003) defined trust as a willingness to be vulnerable to another party based on the confidence that that party is benevolent, reliable, competent, honest, and open. The subsequent research showed that all five facets of trust in schools vary together to form an integrated construct of faculty trust in schools at the elementary (Hoy & Tschannen-Moran, 2003) levels. They concluded that faculty trust of students and parents enhances student achievement.

Hoy and colleagues suggest cooperation and trust should set the stage for effective student learning as a line of logic in achievement. One of the studies to support this logic was Goddard *et al.* (2001). Using a multilevel model, Goddard and colleagues demonstrated a direct and significant relationship between faculty trust in clients (students and parents) and higher student achievement after controlling for SES. They found faculty trust to be a key property in enabling school structures that worked effectively to overcome some of the disadvantages associated with low SES. Another study conducted by Hoy (2002) examined the trust-achievement relationship in secondary schools where he found support that faculty trust in parents and students was positively related to student achievement after controlling for socioeconomic factors.

Willingness to risk vulnerability, the “willingness to be vulnerable” is a crucial condition for trust because people do not have a need to trust anyone to whom they are not vulnerable (Tschannen-Moran & Hoy, 2000). Vulnerability is a reliance on the actions of others and a belief that those actions will not be detrimental, but favorable to the vulnerable party. There is a presence of trust when the vulnerable party acts in spite of recognized vulnerability.

Benevolence, Benevolence is the belief that one’s well-being, or something one cares about, will be protected and not harmed by the trusted party (Butler & Cantrell, 1984). Trust is the assurance that the other will not exploit one’s vulnerability or take excessive advantage of one even when the opportunity is available (Cummings & Bromly, 1996).

Reliability, Butler and Cantrell (1984) viewed reliability as a belief that one can count on others to follow through with their commitments. We can depend on those we trust to do as they say they will. Therefore, at the most basic level, trust has to do with the consistency of behavior and knowing what to expect from others. Having trust in someone is the confidence that he or she will perform as we expected them (Mishra, 1996).

Competence, Competence is a person’s ability to complete expected tasks properly within certain standards (Tschannen-Moran & Hoy, 2000). Trust instills a belief that a person can meet our expectations of performance of responsibilities.

Honesty, Honesty is a crucial prerequisite of trust. It speaks to a person’s character, integrity, and authenticity. The actions and words of a person must be aligned because only when actions and intentions are united, honesty, character, and integrity are exposed (Tschannen-Moran & Hoy, 2000).

Openness, Openness is the degree a person is willing to share and be vulnerable. Those who exhibit the characteristics of being open display a vulnerability to others, which fosters trust from others (Tschannen-Moran & Hoy, 2000).

**Collective Efficacy:**

Collective efficacy originated from Bandura’s (1997) Social Cognitive theory. He defined self-efficacy as an individual’s belief about her capacity to organize and execute actions required to produce a given level of attainment (Bandura, 1997). Hoy, Tarter & Woolfolk Hoy understood efficacy beliefs to be central mechanisms in human agency, the intentional pursuit of a course of action (2006). Efficacy beliefs affect the choices individuals and collective individuals make about action. Based on previous research, Hoy and colleagues (2006) found positive associations between student achievement and three kinds of efficacy beliefs: self-efficacy beliefs of students (Pajares, 1997), self-efficacy beliefs of teachers (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998), and teachers' collective efficacy beliefs about the school (Goddard, Hoy & Woolfolk Hoy, 2000). Relevant to this study is the collective efficacy beliefs of as it relates to academic performance.
Bandura (1993) was the first to demonstrate the existing relationship between a sense of collective efficacy and academic school performance. He found that schools that had a strong sense of collective efficacy flourished, while those with poor collective efficacy declined in academic performance or showed little academic gain. Goddard, Hoy, and Woolfolk Hoy (2000) and Hoy, Sweetland, and Smith (2002) supported and continued this line of inquiry using collective efficacy as the central variable. They found that collective efficacy was the key variable in explaining student achievement and proved to be a stronger determinant than either SES or academic emphasis. Hoy and colleagues (2006) also concluded that school norms supporting academic achievement and collective efficacy are especially important in motivating achievement among both teachers and students, but academic emphasis is most forceful when collective efficacy is strong: academic emphasis works through collective efficacy.

**Methodology:**
This paper as respect to its nature and subject has been applied through descriptive-survey method. Statistical population for this research included all principal of high-school in Tehran for academic year 2012(418 people). A number of 200 principal were selected via cluster random sampling method using Morgan table.

In this research for measuring the distributed leadership, 20-item questionnaire was used. For measuring the Academic Optimism, Mascall , leithwood , Straus and sacks (2008) questionnaire to measure the variables including academic emphasis, faculty trust in students and parents, and collective efficacy. The validity of the above tools have been examined and confirmed by some of professors of Kharazmi University. For calculating the reliability of the tools, Cronbach’s alpha coefficient was applied and for distributed leadership equaled to 0.77 and for principals’ Academic Optimism equaled to 0.81. Data was analyzed by use of correlation through SPSS software.

**Findings:**

**Table 1:** Correlation coefficient between distributed leadership and Academic Optimism.

<table>
<thead>
<tr>
<th>correlation</th>
<th>R</th>
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<tbody>
<tr>
<td>distributed leadership and Academic Optimism</td>
<td>.554**</td>
</tr>
</tbody>
</table>

Notes: n = 200, *p = 0.05; **p = 0.01

Considering the above table in relation to the correlation coefficient, correlation coefficient between distributed leadership and Academic Optimism (R=.554) in level 0.05, is significant.

**Table 2:** Correlation coefficient between distributed leadership and Academic Optimism dimension.

<table>
<thead>
<tr>
<th>correlation</th>
<th>R</th>
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<tbody>
<tr>
<td>distributed leadership and faculty trust in students and parents</td>
<td>.318*</td>
</tr>
<tr>
<td>distributed leadership and collective efficacy</td>
<td>.348*</td>
</tr>
<tr>
<td>distributed leadership and academic emphasis</td>
<td>.478**</td>
</tr>
</tbody>
</table>

Notes: n = 200, *p = 0.05; **p = 0.01

Considering the above table in relation to the correlation coefficient, correlation coefficient between distributed leadership and faculty trust in students and parents (R=.318), correlation coefficient between distributed leadership and collective efficacy (R=.348) and correlation coefficient between distributed leadership and academic emphasis (R=.478) in level 0.05, is significant.

**Conclusion:**
The challenge of improving organizational performance has led to the study of alterable variables that leaders can shape in order to make a difference in performance (Campbell et al., 1993; Kaiser et al., 2008). Although effective organizations appear to share similarities (Kotter & Heskett, 1992; Marcoulides & Heck, 1993; Nonaka & Toyama, 2002; Podsakoff et al., 1993).

This research looks into the distributed leadership and Academic Optimism relation in high school principals. As the studies showed, the distributed leadership emerges from the daily practice in various forms. The school principals used different empowerment strategies to delegate the responsibilities among the teachers in certain situations (Spillane, 2006; Gronn, 2000).

Academic Optimism is as factors affecting morale and psychological conditions of individual principals. Results show that direct significant relationship between Using distributed approach and an improved sense of Academic Optimism. It seems, principals who are leading the way in the distribution, assessed their Knowledge and skills at a higher level and More willing to use others experience and knowledge. Also Using distributed approach Causing, principals have a more attention to the consequences of their behavior.

**REFERENCES**


