

The Study of the Relationship between Managers' Transformational and Transactional Leadership Styles and School Effectiveness in Secondary Schools in Iran

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Abstract

The purpose of this paper is to study the relationship between secondary school managers' transformational and transactional leadership styles and school effectiveness and also to study the possibility of school effectiveness based on secondary school managers' transformational and transactional leadership styles in Iran. The participants were selected among managers, teachers, students and parents from Shiraz City, Iran. The Multifactor Leadership Questionnaire (MLQ-5X) and School Effectiveness Questionnaire (SEQ) were used to measure secondary school managers' leadership styles and school effectiveness respectively. Correlation coefficient (Pearson Correlation) and linear regression were used to analyze the data based on the designed hypotheses for this research. Based on the results of this research, there was a positive correlation with school effectiveness in secondary schools in Shiraz City as the higher the scores in transformational leadership style of managers, the higher the scores were in school effectiveness. Finally, leadership style can be a good and tenable predictor for school effectiveness in Shiraz City. Thus, the findings of the study indicated that managers should practice transformational leadership style for improving the school quality and effectiveness.

Key words: School Effectiveness, leadership style, teacher's perception, secondary school

Introduction

The purpose of this paper was to find out the relationship between secondary school managers' transformational and transactional leadership styles and school effectiveness and also to study the possibility of school effectiveness based on secondary school managers' transformational and transactional leadership styles in Iran.

Based on the mentioned objectives the following four hypotheses have been formulated:

- There is a positive relationship between secondary school managers' transformational leadership style and school effectiveness in Iran.
- There is a positive relationship between secondary school managers' transactional leadership style and school effectiveness in Iran.
- Secondary school managers' transformational leadership style could be a good predictor to school effectiveness in Iran.

- Secondary school managers' transactional leadership style could be a good predictor to school effectiveness in Iran.

In addition, no study was reported to consider the secondary school managers' leadership styles in Shiraz City (Iran), the researcher decided to investigate this area and also fill the existing research gap.

Leadership of school managers has a basic role in school because it determines the success or failure of any school. The study of leadership in schools is closely tied to the analysis of school effectiveness. The importance of leadership is reflected in every aspect of the school specially school effectiveness. Teachers who are supported by managers display a better sense of responsibility than those who do not have their managers' support. The role of today's school managers has become increasingly more complex now (Colgan, 2003; Fullan, 2003; Hopkins, 2000; Johnson, 2002; Norton, 2002; Pavin, 1991; Quinn, 2003; Rooney, 2003; Stronge, 1998). The comment made by one of the managers who participated in O'Hanlon and Clifton's (2004) study captures the effect of the managers' personality on the school, "I think that I have heard that some schools even smell like the principal because as the principal walks from room to room that fragrance, whatever kind of fragrance that the lady wears, follows her long" (p.3).

School improvement movement of the past years has put a great emphasis on the role of leaders. Across OECD Member countries, "school systems and individual schools are experimenting with new approaches to management that seek to run schools in ways that are right for the 1st century." (OECD, 2001b, p. 13)

Increasing the studies on managers' leadership styles shows the importance of this role in educational environments. Managers' leadership styles is also widely valued as a desirable educational goal and is frequently posited as a mediating variable that facilitates the attainment of other desired outcomes such as school effectiveness. In fact, the studies reviewed in the previous pages reveal that most of the researchers studied managers' leadership styles as one of the many variables related to school effectiveness. The findings of many reported studies show a positive relationship between managers' leadership styles and school effectiveness (Huffman, 2003; Buss, 1985 and 1998; Andrews and Soder, 1987; Brookover, et al., 1978; Edmonds, 1978; Glasman, 1984; Lezotte, 1997; Schmitt, 1990; Stolp and Smith, 1994; Marks and Printy, 2003; Lezotte and Pepperl, 1999; Rashmi, 1993; and Farahbakhsh, 1995).

Historical Perspective on Leadership

Scholars and researchers have been interested in leadership for thousands of years (Cantu, 1997). Leadership has been widely discussed, written about, and practiced for thousands of years and still remains an active area of inquiry (Goleman, Boyatzis and McKee, 2002; Kouzes and Posner 2002, Yukl 2002; Kotter, 1999; Bass, 1997; Bass, 1990; Bennis, 1989). According to Burns (1978), "Leadership is one of the most observed and least understood phenomena on earth (p. 2). Leadership is identified by researchers in the manner that fits their perspectives of leadership and contains the factors of interest to the researcher (Yukl, 2002).

School Effectiveness Debate

Literature on school effectiveness can be traced from the time of Coleman's Report (1966) supported to a great extent by Jencks, Smith, Acland, Bane, Cohen, Gintis, Heyns and Michelson (1972). Based on Hayden and Thompson, (2000), at that stage the home environment was argued to be the biggest factor in influencing children's progress in schools. The schools therefore were

regarded as not very useful to the future of children's education if they were unable to accommodate the conditions of lower, poor or working class children. It was for that reason that a radical call was made by such authors as Ivan Illich for a de-schooling policy because schools were regarded by the de-schoolers as ineffective (p. 157).

Nongauza (2004) argues that good schools are normally those that are well managed, able to link with the communities in which they are found and capable of producing good results. To understand school effectiveness researcher looks at what makes a school good. No conducting teachers, parents and students' opinion about school effectiveness is an important factor which enough attention has not been paid to it. In this research, the researcher tried to take the opinion of these three groups by taking their opinion through questionnaire. Although parents are not seen inside the educational system, they can have a very important role in school effectiveness.

Method

In order to achieve the objectives of the present study Normative Survey method was used for investigating the inter-relationships amongst the variables viz managers' leadership style in relation to school effectiveness in Iran. The population for the present study could be considered as all managers of governmental secondary schools in Shiraz City, (Iran).

For the selection of sample, the researcher collected the details of all the secondary schools in Shiraz. Using simple random procedure from the list of schools the researcher identified 30 schools. The population has been further limited to the managers and teachers who are working at the secondary stage and students who are in 9th and 10th standards along with their parents.

Further, from each of the identified schools, one manager, 6-7 teachers, 5 students and 5 parents were randomly selected.

The final sample for the present study consists of 30 secondary school managers, 196 teachers, 139 parents and 142 students.

Instrument

The selection of suitable instruments or tools is of vital importance for successful research. As the study involved 2 main variables, namely, leadership style and school effectiveness, the following two tools were employed for measuring these variables in the study.

(i) Multifactor Leadership Style (MLQ-5X) revised by Bass and Avolio (1995).

(ii) School Effectiveness Questionnaire (SEQ) developed by Baldwin et al. (1993).

The Multifactor Leadership Questionnaire (MLQ-5X) (the used tool for this research) first developed by Bass in 1985 and was revised several times through subsequent research. It was revised by Bass and Avolio (1995) to measure the transformational and transactional leadership styles. According to its manual and sampler set (Avolio and Bass, 2004), The MLQ-5X Short is "available in a validated form of 45 items for organizational survey and research purposes and for preparation of individual leader reports" (p. 5). Furthermore, the MLQ-5X Long is "available in a validated form of 63 items for training, development and feedback purposes" (p. 5). The researcher utilized the MLQ-5X short form in the study. MLQ-5X incorporated a leader form and a rater form. Rater form of this questionnaire was used in this research. Further, from each of the identified schools, one manager and 6-7 teachers were randomly selected and they answered the questionnaire using a 5-point Likert scale representing the frequency of each behavior about their managers. Each questionnaire included 45 items with a specific variable selected for each leadership factor (five subscales for transformational leadership and four subscales for transactional leadership and one for non-leadership factor). The Transformational subscales were the following: Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, and

Individual Consideration. The Transactional subscales were Contingent Reward, Management-by-Exception-Active, and Management-by-Exception-Passive. The non-leadership subscale was Laissez-faire. There were three outcomes of leadership, Extra Effort, Effectiveness, and Satisfaction with the Leadership.

The School Effectiveness Questionnaire (SEQ) developed by Baldwin, Coney, Fardig, and Thomas (1993) was utilized for the purpose of this study.

The School Effectiveness Questionnaire grew out of a project conducted by the Orange County, Florida, School District in 1990. Orange County began its project by assembling a committee of district-level staff and managers from the various elementary and secondary schools. The committee also included parent and community representatives. The committee agreed upon 11 characteristics of school effectiveness that would be measured in Orange County schools (Baldwin et al., 1993). The committee developed questionnaires for teachers, parents, and students.

Data Analysis

After coding data, the SPSS program was then used to create the initial response distributions for each item in teacher, parent, and student questionnaires. A value was designated as an identifier of the outcomes in SPSS program. Researcher used Rater Form of Multifactor Leadership Questionnaire (MLQ-5X) revised by Bass and Avolio (1995) in this research for independent variable i.e. leadership style. Participants answered the questionnaire using a 5-point Likert scale representing the frequency of each behavior, examples are 0=not at all, 1=once in a while, 2=sometimes, 3=fairly often, 4=frequently, if not always. For dependent variable i.e. school effectiveness used School Effectiveness Questionnaire (SEQ) developed by Baldwin et al., (1993), for example: "5" was identified as strongly agree, "4" was identified as agree, "3" was identified as uncertain, "2" was identified as disagree and "1" was identified as strongly disagree.

After entering the survey responses into the SPSS software and coding the data, some statistical techniques such as correlation coefficient (Pearson Correlation) and linear regression were used to analyze the data based on the designed hypotheses for this research.

Validity and Reliability of MLQ-5X and SEQ

MIQ has been used in nearly 200 research programs, doctoral dissertations and master's theses around the world. Since this instrument fits well into the description of managers' leadership styles, the researcher posited that the MIQ-5X was a valid research instrument to be used in this study. The reliabilities within each data set generally indicated that the MLQ-5X was reliably measuring each leadership factor across the initial nine data sets used by Bass and Avolio (1995).

Researchers constructed the MLQ-5X from a series of studies. The development of the MLQ-5X included many revisions and involved various researchers. According to Avolio and Bass (2004), the MLQ is a "full range" leadership instrument.

Rowold (2005), furthermore, validated the instrument. He stated "...The MLQ has been developed and validated (Avolio and Bass, 2004). It is now the standard instrument for assessing a range of transformational, transactional and non-leadership scales" (p. 4). According to Avolio and Bass (2004), the MLQ-5X is a full range leadership model. "This full range includes leadership dimensions which are highly transformational at one end to those which are avoidant at the other end." (p. 45).

According to Avolio and Bass (2004) the scale scores are based on ratings by others evaluating a target leader from the initial set of nine samples (N=2, 154) reported in the 1985 MLQ Technical Report. No self-ratings are reported. Reliabilities for the total items and for each

leadership factor scale ranged from .74 to .94. All of the scales' reliabilities were generally high, exceeding standards cut offs for internal consistency recommended in the literature.

The original questionnaires were field-tested using teachers, parents, and students in 7 schools, with 9th and 10th standards represented. The results were analyzed and revised based on these data. Afterwards, managers, teachers, parents, and students were surveyed with the revised instruments. Cronbach's (1951) coefficient alpha was computed on data obtained from the secondary schools of Shiraz City to provide an estimate of the internal consistency reliability for each of the characteristics. The internal consistency reliability for all participants had a range from .77 to .96. The questions tested from the instrument were reliable. The high coefficient for each characteristic created questions that were clear with no ambiguity.

The analysis and interpretation of the data in the context of the hypotheses of the study have been attempted in the following part.

Raw Score Norms for Transformational Leadership Style

For the interpretation of the scores on the secondary school managers' transformational leadership style raw score norms have been prepared to the total sample. Table 1 shows the raw score norms on the secondary school managers' transformational leadership style.

Table 1. Raw score norms for the secondary school managers' transformational leadership style.

Interpretation	Range of Raw Scores
Excellent	65-80
Good	49-64
Average	33-48
Weak	17-32
Very Weak	1-16

The score on the secondary school managers' transformational leadership style in Shiraz City was 55.73. This showed that the average obtained score in Shiraz City was in the 'good' category.

Raw Score Norms for Transactional Leadership Style

For the interpretation of the scores on the secondary school managers' transactional leadership style raw score norms have been prepared for the total sample. Table 2 has summarized the raw score norms on the secondary school managers' transactional leadership style.

Table 2. Raw score norms for the secondary school managers' transactional leadership style.

Interpretation	Range of Raw Scores
Excellent	63-54
Good	40-52
Average	27-39
Weak	14-26
Very Weak	1-13

The score on the secondary school managers' transactional leadership style in Shiraz City was 27.25. This showed that the obtained scores in Shiraz City were within the average range.

Raw Score Norms for School Effectiveness

For the interpretation of the scores on school effectiveness raw score norms have been prepared for the total sample. Table 3 has summarized the raw score norms on school effectiveness.

Table 3. Raw score norms for school effectiveness

Interpretation	Range of Raw Scores
Very High	601-750
High	451-600
Average	301-450
Below Average	151-300
Low	1-150

The score on school effectiveness at the secondary stage in Shiraz City was 573.51. This showed that the obtained score on school effectiveness in Shiraz was high.

Results and conclusion**Managers' Transformational Leadership Style and School Effectiveness**

Correlation coefficient between transformational leadership scores of secondary school managers and school effectiveness in Iran was calculated as depicted in Table 4.

Table 4. Correlation coefficient between the transformational leadership style of secondary school managers and school effectiveness.

Country	Transformational Leadership Scores	School Effectiveness Scores	Coefficient of Correlation	Sig.
Iran (Shiraz)	55.73	573.51	0.715	0.000

In the first hypothesis it was hypothesized that there is a positive relationship between secondary school managers' transformational leadership style and school effectiveness in Iran. According to the above table, secondary school managers' transformational leadership style had a very high positive correlation with school effectiveness in Shiraz City which was significant at the 0.01 level of significance ($r=0.715$; $p<0.000$). It means that secondary school managers' transformational leadership style is effective in enhancing school effectiveness in Iran as the higher the scores in managers' transformational leadership style, the higher the scores were in school effectiveness. So, the hypothesis, "There is a positive relationship between secondary school managers' transformational leadership style and school effectiveness in Iran" is accepted that there is a positive relationship between secondary school managers' transformational leadership style and the school effectiveness in Iran. (The findings in the above research hypothesis are confirmed by the findings reported by Rafiei et. al. (2011), Jandaghi, G., et. al. (2009).

Managers' Transactional Leadership Style and School Effectiveness

Correlation coefficient between transactional leadership scores of secondary school managers and school effectiveness in Iran was calculated as presented in Table 5.

Table 5. Correlation coefficient between the transactional leadership style of secondary school managers and school effectiveness.

Country	Transactional Leadership Scores	School Effectiveness Scores	Coefficient of Correlation	Sig.
Iran (Shiraz)	27.25	573.51	-0.338	0.068

In the second hypothesis it was hypothesized that there is a positive relationship between secondary school managers' transactional leadership style and school effectiveness in Iran. According to the above table, the relationship between secondary school managers' transactional leadership style and school effectiveness in Shiraz City was ($r=-0.338$; $p<0.068$) asserting a low negative relationship which was not significant at the 0.05 level of significance. So, the hypothesis, "There is a positive relationship between secondary school managers' transactional leadership style and school effectiveness in Iran" is rejected for Iran.

Prediction of School Effectiveness of Shiraz City based on Transformational Leadership

While applying linear regression analysis, school effectiveness was taken as a criterion variable with transformational leadership style as a predictor variable. A summary of the regression analysis was presented in Table 6.

Table 6. Prediction of school effectiveness on the basis of managers' transformational leadership style of Shiraz City.

Predictor No. Variables	Regression Analysis Results for School Effectiveness				
	<i>B</i>	<i>Beta</i>	<i>r</i>	<i>Beta x r</i>	<i>% of Contribution</i>
Transformational Leadership Style	2.717	0.715	0.715	0.512	51.2

Regarding the prediction of school effectiveness of Shiraz city, Table 6 revealed that managers' transformational leadership style as one variable and constant (as other variables influencing school effectiveness) appeared to contribute towards the prediction of school effectiveness. The obtained r (0.715) represented a high positive relationship between school effectiveness and predictor, namely managers' transformational leadership style. The relationship was also found to be significant at the 0.05 level of significance. Accordingly, the confidence of determination (R Square) is 0.512, which suggests that about 51.2 % of variance in the criterion variable (school effectiveness) may be accounted for by managers' transformational leadership style. The rest of the variance (about 48.8%) may be attributed to the variables not included in the prediction.

On the basis of the discussions presented in the above paragraph, the third hypothesis, "Secondary school managers' transformational leadership style could be a good predictor to school effectiveness in Iran" seems to be hold good and tenable in Shiraz City.

Therefore, it may be stated that school effectiveness may be predicted highly on the basis of managers' transformational leadership style in Shiraz City. The findings in the above research hypothesis are confirmed by the findings reported by Kirby, Paradise and King (1992), and David Todd (2000).

With regard to the prediction of school effectiveness in Shiraz city based on transactional leadership, while applying linear regression analysis, school effectiveness was taken as a criterion

variable with transactional leadership style as a predictor variable. A summary of the regression analysis was presented in Table 7.

Table 7. Prediction of school effectiveness on the basis of managers' transactional leadership style in Shiraz City.

Predictor Variable	Regression Analysis Results for School Effectiveness				
	<i>B</i>	<i>Beta</i>	<i>r</i>	<i>Beta x r</i>	<i>% of Contribution</i>
Transactional Leadership Style	- 2.172	-0.338	-0.338	0.114	11.4

Table 7 also revealed that managers' transactional leadership style as one variable and constant (as other variables influencing school effectiveness) appeared to contribute towards the prediction of school effectiveness. The obtained r (-0.338) represented a low negative relationship between school effectiveness and predictor variable, namely managers' transactional leadership style. The relationship was not significant at the 0.05 level of significance. Accordingly, the confidence of determination (R Square) is 0.114, which suggests that about 11.4 % of variance in the criterion variable (school effectiveness) may be accounted for by managers' transactional leadership style. The rest of the variance (about 88.6%) may be attributed to the variables not included in the prediction.

On the basis of the discussion presented in the above paragraph, the fourth hypothesis, "Secondary school managers' transactional leadership style could be a good predictor to school effectiveness in Iran" does not seem to be tenable in the case of schools selected in Shiraz City and is rejected at the 0.05 level of significance.

Therefore, we can conclude that the school effectiveness may be predicted at low levels on the basis of managers' transactional leadership style in Shiraz City, and there are other variables which influence school effectiveness more than managers' transactional leadership style.

Limitations of Findings

The study under reference has yielded several important and interesting findings. An effort was made to make the study as precise and scientific as possible. However, no research study can claim to be prescriptive and may not give final verdict on the phenomenon investigated upon. The findings of the present piece of research do suffer from unavoidable limitations arising out of the constraints of human and material resources and the time at the disposal of the researcher. Besides, the scope of the findings may be limited to the area chosen, tools, methodology employed, design followed and ultimately the approach utilized for analysis and interpretation of data.

Suggestions for future research

It is hoped that the present piece of research would stimulate some researchers to take up studies on school effectiveness and various dimensions of leadership styles of managers. Having gained some experience by working on the secondary school managers' leadership style and school effectiveness, the following suggestions for further research are offered:

- Similar studies may be replicated on larger samples and in other cities by taking the secondary school managers' leadership style and school effectiveness from different programs so as to examine the phenomenon in further detail.

- A study may be planned and undertaken to predict school effectiveness by employing a fresh set of variables other than the variables included in the present study.
- It would be worthwhile to conduct more macro and micro level studies on the nature and characteristics of secondary school managers and their leadership styles for effective planning of the programs of education institutions.
- Studies may be conducted to identify factors contributing to effective leadership style of secondary school managers.
- Studies may be conducted to highlight relationship between school manager's leadership style and school effectiveness at different stages (levels) of school education.
- Studies may be conducted to identify factors contributing to school effectiveness in secondary schools.
- Studies may also be planned and executed to explore the influence of motivational factors effective to improve secondary school managers' leadership style and school effectiveness.

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