

# Investigating the Effect of Transformational Leadership on the Success of the Results of the Projects in the Listed Companies in Tehran Stock Exchange

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## ABSTRACT

This study sought to examine the impact of transformational leadership style of managers on the successful results of the project. To conduct the study, the population consists of project team members of several companies listed in Tehran Stock Exchange including project managers, project team members and people who have a direct relationship with the directors and members of the project team and who are familiar with project management. Total population is about 100 people, among which 75 people were selected using Cochran formula and random sampling. In order to measure transformational leadership and the results of the project, a 5-point Likert questionnaire was used. To analyze the data, structural equation modeling was used. The results showed many positive effects of transformational leadership on the success of the project.

**KEYWORDS:** Transformational leadership, successful project results, indicators of project success

## INTRODUCTION

One of the most important factors in the success of all projects is effective leadership of project. Many researchers have written about the role of leadership in the success of the projects (Berg and Karlsen, 2007; Dainty, Cheng and Moore, 2005; Gehring, 2007; Hauschildt, Gesche and Medcof, 2000; Hyvari, 2006; Kezsbom, 1998; Kodjabadian and Petty, 2007; Neuhauser, 2007; Schmid and Adams, 2008; Thomas and Pinto, 1999; Turner and Muller, 2005). Researchers have emphasized the importance of project leadership in the success of the project results and believe that success of project results requires attention to the human aspects of the project and the manpower doing it. Despite numerous studies, project managers are faced with many problems and challenges associated with leadership such as leadership style, stress, uncertainty, motivation, learning and teamwork (Berg and Karlsen, 2007). Hauschildt and others (2000) have reported that projects success depends more on human factors such as the project leadership, support by senior management and the project team. At the same time, the importance increases with the increase in complexity, risk and innovation of projects. Researchers also found that the crucial role of leadership ability of the project manager has a direct relationship with the results of the project (Hauschildt and others, 2000). In a study conducted in the faculty of Management and Economics at Cambridge University in England, it was found that 80 percent of projects fail because of poor leadership (Zhang and Faerman, 2007). Other researchers consider weaknesses of the teamwork of project teams as the reason for this failure. Tornatzky & Fletcher (1990) proposed the following reasons for the failure of projects:

### 1. Organizational history

Project failure can be due to poor leadership, poor organizational culture and lack of support for high-level managers.

### 2. The external environment

Project failure can be due to competitors, suppliers, customers, vendors, the government and the lack of appropriate training.

### 3. Technology

Failure can be due to hardware, software, and telecommunications or a combination of these three factors.

Leadership is considered as a different factor in the failure of projects (Roepke, Agarwal & Ferratt, 2000). Leadership affects the company's culture, the culture of the project, the project's strategy and commitment of the team (Shore, 2005). Although many researchers (Baker, Murphy & Fisher, 1983; Finch, 2003; Hyvari, 2000; Pinto & Trailer, 1998; Zimmer & Yasin, 1998) have identified leadership as a crucial factor in the success of the project, but there are few studies in this regard. A team leader needs a leader to carry out its duties effectively. Having enough management skills is not enough in the project area (Thite, 2000). Project management techniques need managers who have knowledge and experience in management and leadership (Berg and Karlsen, 2007). In a business environment, managers ensure performing duties, while the leader is sensitive to the needs of people and all that employees need to be best (Maccoby, 2000). Integrating leadership

concepts allow managers to use their skills and logic for project activities. There are a variety of leadership styles to deal and cope with the challenges facing project managers. Transformational leadership is one of the most important of them. The present paper aims to introduce the theory of transformational leadership in addition to investigating its vital impact on the success of the projects in exchange organizations in Iran.

### Transformational leadership

Burns (1978) is known as the father of transformational leadership. The idea of this leadership style is to make subordinates committed to and ensured about the objectives, strategies and responsibility of leaders of the organization. In fact, Bass (1985) believes that in addition to creating conditional bonuses like transactional leaders, transformational leaders focus on employees' needs and are concerned about their personal development in line with creating and maintaining organizational values. These leaders have taught their subordinates how to think about the interests of the organization and expect them to move in that direction. In fact, subordinates understand the importance of organizational goals and look to achieve them in this leadership style. In fact, transformational leaders change individual interests to the collective interests (Ford, 2005). Transformational leadership focuses on subordinates. Transformational leader makes employees committed by his behavior. Recent developments in leadership theories have transferred from the theory of charismatic leadership that assumed leader to be unconventional and followers to be dependent on leaders to neo-charismatic and transformational leadership theories that pay attention to the development and empowerment of followers for independent performance. According to Burns theory of transformational leadership, Bass offered a new theory. Bass considers transformational leader as a person who empowers followers and motivates them for performance beyond their expectations and also encourages them to think about collective goals rather than personal goals (Kanger, 2003). Based on Bass's model, transformational leadership is defined based on four factors of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration.

### Criteria for project success

Determining the outcome of the project's success is the extent to which the measures of the project satisfy a series of specific objectives set out among all project constraints such as time, money and other resources (Cleland, 1964). The criterion for the success of the project results depends on the demands of authorities and is preset (Bergand Karlsen, 2007; Blackburn, 2002; Cleland, 2004; Kerzner, 2006). These factors are usually cost, time, quality and scope of the project (Project Management Institute, 2008). In general, success of the project depends on the effective management of time, cost and performance expectations constraints. In order to achieve this index, managers should possess leadership skills and exercise them (Ahmad, 2008; Cleland, 1964; Finch, 2003; Hyvari, 2006; Pinto and Prescott, 1988; Sumner et al. 2006; Zimmer and Yasin, 1998). With the use of proper leadership qualities such as trust, value and vision, project managers can lead projects effectively and efficiently (Maylor, 2003). Shmidt (2008) noted that effective leader leads the project team towards achieving the desired results of the project. Ahmed (2008) suggested that not only should the project manager be recognized as the leader for project team members, but also in the eyes of all people in the process. To achieve such knowledge, the project manager should maintain insights, improvement and team collaboration and remove obstacles facing the project team (Ghattas & McKee, 2004). By reviewing the literature, it can be concluded that project manager's competencies are a lot and comprehensive and project manager is responsible for leading the project team towards the desired objectives of the project (Kerzner, 2006). The role of the project manager is to combine technology and human resources to achieve the desired results (Blackburn, 2002). Many researchers consider the combination of appropriate leadership style, strong human resources and planning as the main factors for success in projects. Other researchers also put greater emphasis on leadership styles in projects. In general, in most of the obtained and mentioned results by researchers, the role of leadership is very important and obvious (Blackburn, 2002).

### Statistical population

Since the aim of this study is effective and efficient leadership of companies' projects, statistical population includes project managers, project team members and people who have a direct relationship with the managers and members of the project team and who are familiar with project management. The total number of population is 100 people and using Morgan table, 75 were selected. Since their number is more than 30, according to the central limit theorem in the statistics, there will be no problem for data analysis.

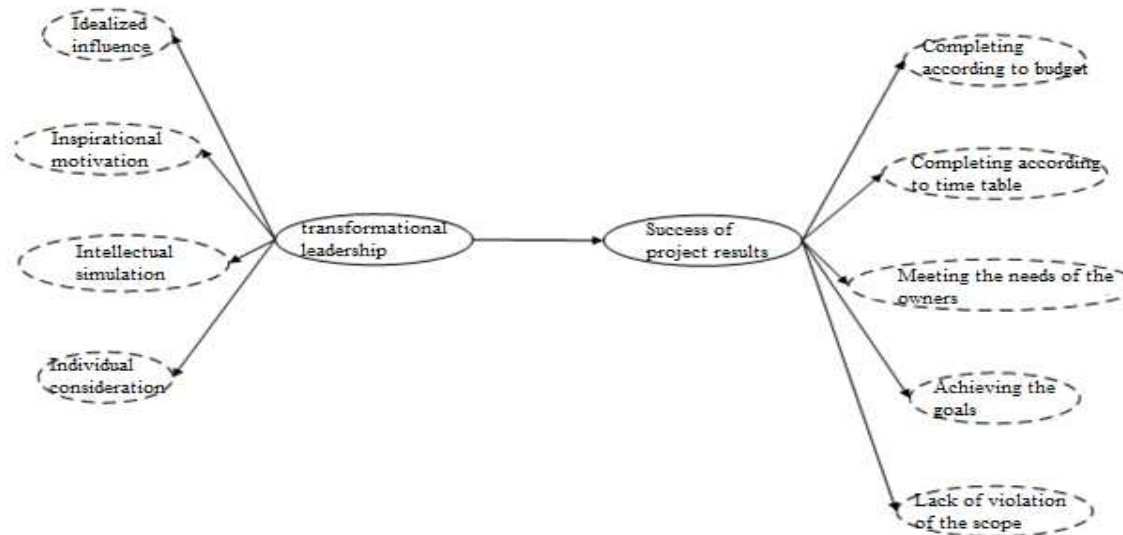
### Statistical sample

In order to determine the sample size, simple random sampling method was used and using Cochran sampling formula, a sample of 75 people was selected and tested. Cochran sampling formula is as follows:

$$n = \frac{\frac{z_{\alpha}^2}{d^2} pq}{1 + \frac{\frac{z_{\alpha}^2}{d^2} pq^{-1}}{N}} = \frac{\frac{[1.96]^2}{[0.13]^2} \times 0.25 \times 0.75}{1 + \frac{[1.96]^2 \times 0.25 \times 0.75 - 1}{249}}$$

## RESEARCH METHOD

The study is an applied research in terms of its goal. Since in this study the researchers do not intend to interfere in the style of leadership and the success of the project results and just study the status quo, it is a descriptive study. Two questionnaires were used to measure the variables. Conceptual model of the study is as follows:



**Figure 1: conceptual model**

### **Idealized influence**

It describes leaders who act as strong models for followers. If a leader is transformational, he will create a sense of appreciation, admiration and loyalty among his followers and will emphasize on the importance of having a strong commitment to achieve the missions of organization.

### **Inspirational motivation**

It describes leaders who increase followers' commitment through their participation in drawing future prospects and create motivation.

### **Intellectual stimulation**

Intellectual stimulation of followers occurs when the leader helps them to achieve constructive initiative and creativity.

### **Individual consideration**

Development-oriented support is manifested when a leader pays enough attention to the needs of followers in order to achieve further growth and does not hesitate for any guidance and support in this regard. Accordingly, the leader imposes duties for followers that contribute to their growth from various aspects (Sanjaghi, 2001).

To measure the dependent variable of the success of the project results, five criteria of completion of project according to budget, completion of project according to the time table, meeting the needs of the project owners, achieving goals and lack of violation of the scope of the project have been used. Five-point Likert scale was used for questionnaire analysis which included numbers from 1 (strongly disagree) to 5 (strongly agree). To measure the reliability of the questionnaire, two methods were used: 1-Cronbach's alpha and 2-composite reliability. The acceptable limit for Cronbach's alpha is values equal or above 0.7, while this level for composite reliability is equal to 0.8 and above. Values less than these two values mean that reliability is unacceptable. Also, it should be said that composite reliability is far stronger than Cronbach's alpha; because it also takes into account the weight of each question that is not observed in the Cronbach's alpha. Two methods were used to check the validity: 1- the use of experts' opinion and 2- the use of the average variance extracted. Acceptable limit for the average variance extracted is equal to 0.5 and above. To evaluate the predictive and explanatory power of transformational leadership for the success of project results, the coefficient of determination has been used. Acceptable values for coefficient of determination for single constructs (such as this research) are equal to 0.33 and above. Values less than 0.33 indicate a low predictive power of independent construct (transformational leadership) for the dependent variable (the success of the project results). To analyze

the data, factor analysis and structural equation modeling was used. Structural equations discussed in this study are variance-based and partial least squares method is applied. The difference of the variance-based (partial least squares) with covariance-based methods (such as LISREL) is that this method does not require special distributive hypotheses and is consistent with any number of sample and reliable results are obtained. This method also has fewer restrictions, and it is especially good in cases when there is a need for forecast between variables. In total, the power of this method is much higher than the covariance model. The only advantage covariance method over this method is the ability to assess bilateral relations simultaneously that partial least squares has not such ability. Due to the investigation of the effect of transformational leadership on the success of project results and the one-way path, there will be no such problem and this method can be used without any concern. This method has great validity indicators that are used for composite constructs and cannot be applied for our model and hence, will not be mentioned here. Also, in the alpha values of 0.05 and less, the t-statistics values of higher than 1.96 are considered meaningful (Azar, 2012). Also in order to measure the importance of each component, factor loadings structural model is used. Whatever the loads are greater and closer to one, the components is more important.

### Research hypotheses

First hypothesis: transformational leadership affects the success of the project results.

Second hypothesis: the idealized influence component of the transformational leadership affects the success of the project results.

Third hypothesis: the inspirational motivation component of the transformational leadership affects the success of the project results.

Fourth hypothesis: the intellectual stimulation component of the transformational leadership affects the success of the project results.

Fifth hypothesis: the individual concern component of the transformational leadership affects the success of the project results.

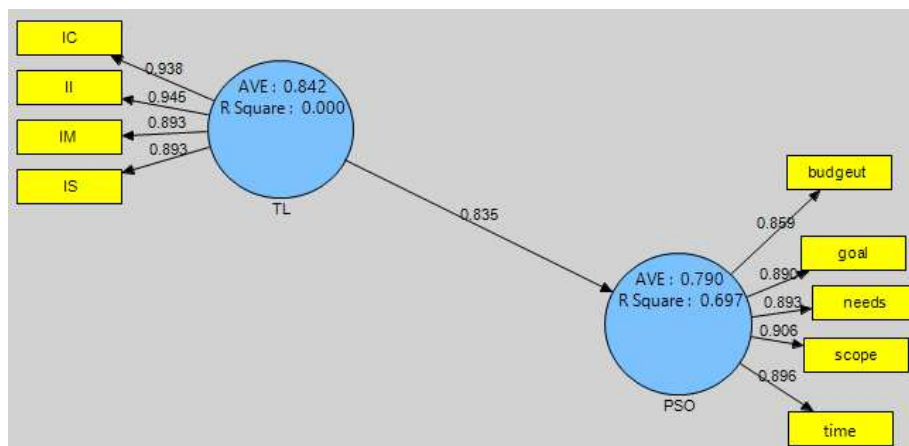


Figure 2: Software output in standard mode

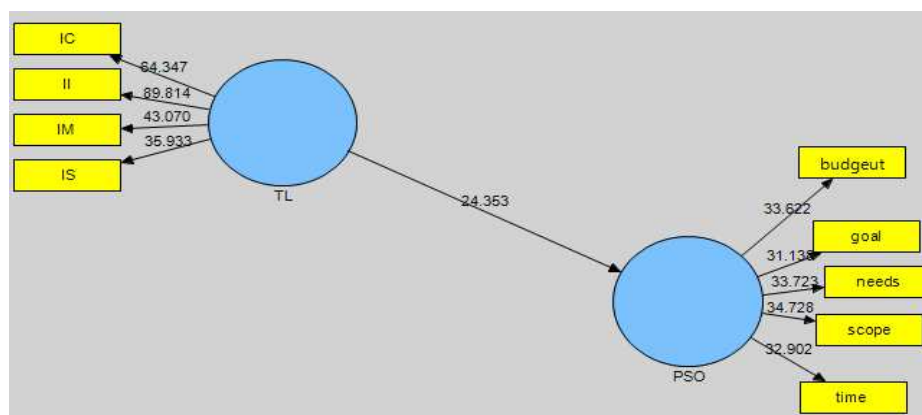


Figure 3: software output in significance mode

As can be seen, all loading factors have values above 0.4 and are approved. The value of path coefficient of the impact of transformational leadership on the success of the project results has had significant statistical value higher than 1.96 and therefore, the main and the first hypotheses are approved at the 99% confidence level. The model parameters are as follows:

Indicator	Subset	Acceptable value	Obtained values	Result
AVE	Reliability	0.5	0.84 & 0.87	Approved
R-square	Reliability	0.33	0.69	Approved
C.R.	Validity	0.8	0.95 & 0.94	Approved
Alpha	Validity	0.7	0.94 & 0.93	Approved

As can be seen, all the indicators of the model are approved.

The table below investigates the output of the effects of dimensions of transformational leadership on the success of the project. Hypotheses have been made with the order of the conceptual model.

**Table 1: The effects of the dimensions of transformational leadership on the success of the project results**

Hypothesis	Path coefficient	T-statistics	Result
Idealized influence on the success of the project results	0.81	18.6	Approved
Inspirational motivation on the success of the project results	0.71	12.01	Approved
Intellectual simulation on the success of the project results	0.7	13.1	Approved
Individual concern on the success of the project results	0.82	19.8	Approved

As can be seen, all the hypotheses are approved at 99% confidence level.

### Conclusion and suggestions

According to the analysis of the results, it can be easily seen that transformational leadership greatly affects the success of the project results. Therefore, the project managers are recommended to move towards transformational leadership style and stay away from leadership style that are traditional and bureaucratic.

Great direct and indirect and obvious and non-obvious costs will be imposed on organization and project team in which project manager is responsible, due to an error in project as a huge and vital team work. Transformational leadership can prevent problems such as high costs of solving mistakes, lack of completion of project according to the time table itself has great costs, failure to satisfy the project owners that can have great negative impacts on money paid, the violation of the scope that can result in the delay of new project or imposition of modifying costs.

Transformational leadership does not need any cost and just should create and strengthen transformative features in the project managers. So, project managers must take transformational leadership more seriously. Project managers should enhance the features of compassion, consider the needs and demands of the project team, encourage members of the project team for creativity, maintain a good relationship between the manager and the team members and the team owners and, ultimately, create a sense of trust among team members about their importance for the project manager.

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