The Effect of Transformational Leadership Behavior on Organizational Culture: An Application in Pharmaceutical Industry

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ABSTRACT: In this study, conducted on 96 employees from production sector in a pharmaceutical company, the effect of transformational leadership behavior on organizational culture is investigated to determine statistically significant relations. The results of the study support the hypotheses. Transformational leadership behavior has a positive and significant correlation between the components of organizational culture such as long / short term orientation, masculinity / feminity, power distance, individualism / collectivisim and uncertainity avoidance.

1. INTRODUCTION

The term leadership has been very widely referred in the literature. Political experts, business executives, social workers and scholars use it in their speeches and writings. Although many theories and theoretical formulations of the leadership concept have been introduced throughout the years, there is still disagreement as to its meaning.

Leadership is defined as a behavior or a process by some scholars. For instance, Bowers and Seashore (1966) gave the concept as "an organizationally useful behavior by one member of an organizational family toward another member or members of that same organizational family". Tannenbaum and Massrick (1957) treated leadership also as a process or function rather than as an exclusive attribute of a predetermined role. They suggested that the leadership role in this process often shift from one person to another. Many researchers also look at leadership from the long / short term orientation point of view. Mescon (1958) said that "true leadership can and must transform a group from a mere collection of individuals into a vital force, capable of goal attainment to a degree which will not be possible in case of an unstructured group of people". Some scholars contributed to this view by underlining the importance of the influence on the subordinates to attain the common goals. For instance, Tannenbaum and Massrick (1957) defined leadership as "an interpersonal influence, exercised in a situation and directed through the communication process, toward the attainment of a specific goal or goals". Parallel with this view, Bennis (1959) also suggested that the only tool for a leader to become effective is his / her skill to influence others. Dion (1968) defined leadership as "a relationship between one or more persons exercising influence and one or more persons submitting to that influence". Leadership is also seen as extraordinary personality characteristics. Bass (1990) claimed that leaders are extraordinary people with specific and exceptional sanctity and heroism, who can set an example for their followers. On the other hand, Jago (1982) defined leadership as both a process and property. According to him, leaders create a process by using noncoercive influence to direct and coordinate the activities of the members in an organization toward the accomplishment of group objectives.

Leadership does not involve the use of force, coercion or domination and is not necessarily implied by the use of such titles as manager, supervisor or superior. However, Tannenbaum and

Massrick (1957) suggested that it also comes from internal resources such as flexibility and understanding. Dion (1968) gave leadership as a multidimensional pattern and a reciprocal relationship revealing three components: leader, follower and the relationship between them. Therefore, it is not only seen as a function of the leader's personality, but also as a function of these two (leader and follower) interacting in specific situations.

2. LITERATURE REVIEW
2.1. Transformational Leadership
Researches on leadership are focused on how leaders create and strengthen the organizations during 1980's. Transformational leadership is created to be succesfull in reaching the goals of the organization, increasing the commitment to the organization and strenghten the process during these objectives of the organizations (Yukl, 1994).

Transformational leadership integrates ideas from trait, style and contingency approaches of leadership (Den Hartog et al., 1997). In the light of findings throughout the years, some characteristics of transformational leaders can be stated as follows:

- They change the core values of followers for the benefit of the common interest by committing people and seeing them as ends not as means,
- They inspire followers to go beyond their own self-interests for the good of the organization with their vision (Avolio and Bass, 2004),
- They are proactive, raise follower awareness for transcendent collective interests and motivate followers to achieve out of range goals (Antonakis et al., 2003),
- They are capable of having profound and extraordinary effects on people by causing shifts in the beliefs, the needs, and the values of followers, so followers can become leaders themselves (Kuhnert and Lewis, 1987),
- They heighten the awareness of followers with vision they create and the strategies for reaching them (Avolio and Bass, 2004),
- They create self-confidence in followers by empowering them,
- They tend to direct specific activities as much as to alter moods, to evoke symbolic images and expectations, and to inspire desires and objectives (Egri and Herman, 2000),
- They create fresh approaches to long-standing problems,
- They transform the organization by defining the need for change, creating new visions, mobilizing commitment to these visions and by providing awareness of the organizational vision and goals (Den Hartog et al., 1997),
- They develop higher level needs for followers such as achievement, autonomy, and affiliation, which can be both work and not work related (Avolio and Bass, 2004),
- They work for developing higher level of autonomy, achievement and performance in followers. Hence, they take the risk of being replaced by the followers they trained.

Components of Transformational Leadership
Throughout the years, Avolio and Bass (2004) defined a dimension called idealized influence, which also refers to charisma, but found to be exhibiting itself into two different dimensions: first, idealized influence behavior which has been referred as behaviorally-based charismatic leadership; second, idealized influence attributed which is an attributed charisma by the followers to the leaders (Conger and Kanungo, 1987). In this way, transformational leadership has 5 dimensions:

Idealized Influence (Behavior): This component refers to the charismatic actions of the leader that focuses on values, beliefs and a sense of mission (Antonakis et al., 2003). These charismatic actions include talking about his / her most important values and beliefs, emphasizing the collective mission and purpose, as well as considering the ethical implications of his / her decisions.

Idealized Influence (Attributed): It refers to whether or not the leader is seen as charismatic, powerful and confident and if the followers would like to be associated with him / her. It is the attribution followers give to their leaders.

Inspirational Motivation: Den Hartog et al. (1997) defined inspiration as the capacity of a leader to act as a model for subordinates. Inspirational motivation refers to the ways leaders take to inspire the followers to achieve both personal and organizational goals. The leader may do that by looking at the future optimistically and enthusiastically by providing a realizable and acceptable vision

with clear communication and by presenting followers ways to reach them. In return, leaders create meaning, challenge and motivation in their followers' work (Avolio and Bass, 2004).

Intellectual Stimulation: Dionne et al. (2004) suggested that this component refers to promoting intelligence, rationality and careful problem solving in followers, challenging followers to think creatively and to find solutions to difficult problems. Den Hartog et al. (1997) claimed that intellectual stimulation encourages followers to question their own values, assumptions and beliefs and even those of their leaders. Inquisitive followers will not be subject to public criticisms because of their mistakes. The leader welcomes the new ideas and solutions by the followers. She / he stimulates followers to think about new ways for old problems. In this way, followers will be able to see and solve the unforeseen problems by the leader (Avolio and Bass, 2004).

Individualized Consideration: This dimension refers to treating followers as individuals and not just members of a group (Dionne et al., 2004). Leader will satisfy the follower by advising, supporting and paying attention to their individual needs and motivate them to develop themselves. The goal of the leader here is not only about recognizing and satisfying the needs of the followers, but also to mentor and coach them to reach their full potential. To reach this goal leaders also make sure that they redefine the organizational climate to a supportive one that promotes new learning opportunities for followers.

2.2. Organizational Culture

Culture, the character of organization, is one of the major issues in organization theory and in academic research, as well as in management practices. In spite of the fact that this concept is relatively a new one in organizational theory, various studies have been performed in this field. Studies of organizational culture share a common goal that is to uncover and interpret aspects of organizational life so that one can better understand the perceptions, beliefs, and actions of organizational members (Martin et al, 1997).

Organizational culture provides its members an understanding to work through the basic problems of survival in and adaptation to the external environment as well as to develop and maintain internal processes (Martin, 2002). Schein (1999) stated that organizational culture is the property of a group and it is a powerful, latent, and often unconscious set of forces that determine both our individual and collective behavior, ways of perceiving, thought patterns, and values.

Sathe (1983) suggested that culture plays a subtle, but pervasive role in organizational life and with a better understanding of organizational culture, organizational leaders can effectively operate within it, deviate from it and when necessary change it. As a supportive idea, Cameron and Quinn (1999) indicated that most organizational scholars and observers now recognize that organizational culture has a powerful effect on the performance and long-term effectiveness of organizations.

Spender (1983) stated that organizational culture is a belief system shared by an organization's members. Being one of the pioneer authors in this concept Ouchi (1981) dealt with symbolic aspects of the concept and defined the term a set of symbols, ceremonies and myths that communicate the underlying values and beliefs of that organization to its employees.

The contemporary definition of organizational culture includes what is valued, the dominant leadership style, the language and symbols, the procedures and routines, and the definitions of success that characterizes an organization. Organizational culture represents the values, underlying assumptions, expectations, collective memories and definitions present in an organization (Cameron and Quinn, 1999). The definition of Van Fleet (1991) by taking together the three common threads that run through these various definitions allowed us to create a definition which most authors would probably agree. That is "organizational culture is the set of values, often taken for granted that helps people in an organization understand which actions are considered acceptable and which are considered unacceptable".

Components of Organizational Culture

Pettigrew (1979) explained the elements of culture as symbols, rituals, language, beliefs and myths. Trice and Beyer (1993) divided the elements of culture into two categories. First category is the values and norms. Second category is the process of transformation of those values and norms to the members of organization. Others extended these classifications as stories, heroes, ceremonies etc. Among them the model of Schein (1985) is the most systematic approach to explain elements of culture. According to him, culture exists on three levels.

Assumptions deal with the fundamental aspects of culture and represents what members believe

to be reality and thereby influence what they perceive and how they thing and feel (Hatch, 1997). Shein (1985) defined seven factors which should be resolved by every culture so that the basic assumptions of that culture can be defined. Those are relationship to environment, nature of reality and truth, nature of human, nature of human activity, nature of human relationship, nature of time and homogeneity vs. diversity.

Values are the standards, goals and social principles of organization. They represent what is important for the organization. They are connected to moral and ethical codes (Swales, 1995). They define the basic consideration of members such as freedom, democracy, tradition, wealth, or loyalty (Hatch, 1997). Values may be located at the surface level in above symbolic approach. Beliefs which are difficult to distinguished from values may be classified in this category. Hatch (1997) contributed Shein's "value concept" by adding "norms" which are closely related to values, in this category. Norms in general are the unwritten rules which establish the type of behavior primarily organization and other individuals may expect from the member of organization. Hatch (1997) argued that values define what is valued. On the other hand, norms draw the boundaries what is considered to be normal or abnormal.

Artifacts, the tangible elements of culture, are the evidence of what is culture's core. They represent the visible, tangible and audible part of culture with stories, myths, logos, ceremonies, jargons etc. Artifacts are classified as physical manifestation, behavioral manifestation and verbal manifestation given in Table 1.

Table 1. The Classification of Artifacts

General Category	Specific Examples
Physical Manifestation	Art / design / logo
	Buildings / décor
	Dress / appearance
	Material objects
	Physical layout
Behavioral Manifestation	Ceremonies / rituals
	Communication patterns
	Traditions / customs
	Rewards / punishments
Verbal Manifestation	Anecdotes / jokes
	Jargon / names / nicknames
	Explanations
	Stories / myths / history
	Heroes / villains
	Metaphors

Source: Hatch, 1997, pp. 216

2.3. The Effect of Transformational Leadership Behavior on Organizational Culture

The role of leadership in creating culture is almost an indisputable reality in organizational theory. One of the most prominent author that suggested this reality is Schein (1985) who stated that organizations do not form accidentally, instead they are goal oriented and created because one or more individuals perceive that a coordinated and concerned action of a number of people can accomplish. Schein (1985) stated that the process of culture formation is a process of creating a small group. Despite small differences, every organization involves four steps:

1. A single person (founder) has an idea for a new enterprise.
2. The founder brings in one or more other people and creates a core group that shares a common goal and vision with the founder.
3. The founding group begins to act in concert to create an organization by raising funds,

obtaining patents, incorporating, locating work space and so on.

4．Others are brought into the organization and a common history begins to be built. If the group remains fairly stable and has significant shared learning experiences, it will gradually develop assumptions about itself, its environment and how to do things to survive and grow (Schein, 1985).

Transformational leaders have a high role on creating the organizational culture. The values, that transformational leader adopted, can also be adopted easily by the employees. It is important to have a good skilled transformational leader because he / she is taken as a model by the employees in the organization. If the leader has personality and behavioral disorder, the organizational culture can be effected by this disorder problems. This irregular atmosphere at the organization damages the employees working atmosphere and reaching the common goals become difficult. Transformational leaders are the ones who can create the culture of the organization, help employees to involve in the culture and make it his / her own and try to make organizational culture stable in the organization by his / her good communication skills and leadership ability.

3. METHODOLOGY
3.1. Sample
The sample of this study is conducted from a pharmaceutical company in Istanbul which is in private sector. The sample consists of 96 individuals from different departments of the organization.

3.2. Hypotheses
H1: There is a positive and significant correlation between transformational leadership and long / short term orientation.

H2: There is a positive and significant correlation between transformational leadership and masculinity / feminity.

H3: There is a positive and significant correlation between transformational leadership and power distance.

H4: There is a positive and significant correlation between transformational leadership and individualism / collectivism.

H5: There is a positive and significant correlation between transformational leadership and uncertainity avoidance.

3.3. Measures
The questionnaire consisted of 3 independent sections including measurement scales is designed to assess the constructs of this study and demographic information.

Demographic Variables: In the first section of the questionnaire there are demographic vaiables such as gender, age, position at job, educational background and tenure in the organization to gain general information about the respondents.

Measurement of Transformational Leadership: Multifactor Leadership Questionnaire (MLQ) which is designed by Avolio and Bass (2004) is used. There are four subscales which are charisma, being the source of inspiration, being intellectual and individual support. All of these subscales are measured by 5 items from "strongly disagree" to "strongly agree".

Measurement of Organizational Culture: Thirty-item scale is used. There are five subscales which are long / short term orientation, masculinity / feminity, adaptation, being the member of organization and certainity. All of these subscales are measured by 5 items from "strongly disagree" to "strongly agree".

3.4. Research Findings
For analyzing data, the statistical package program SPSS 15.0 is used. According to the descriptive statistics, the sample consists of 37 women (38%) and 59 men (62%). 49% (47 participants) of the sample is between the ages of 20-30, 34% (33 participants) of the sample is between the ages of 31-40 and 17% (16 participants) of the sample is between the ages of 41-50 and higher than 50. 54% (52 participants) are white-coller employee, 46% (44 participants) are blue-collar employee. 4 participants (4%) are primary school graduates, 40 participants (42%) are high school graduates, 33 participants (38%) are university graduates, 15 participants (16%) have a Master's Degree. 30 participants (31%) have a tenure in the organization between 0-5 years, 50 participants (52%) have a tenure in the organization between 6-10 years, 16 participants (17%) have a tenure in the organization more than 11 years.

3.5. Reliability Analysis

To ensure the items' internal consistency, reliability analysis is conducted for transformational leadership and organizational culture. Cronbach alpha scores are ranged between 0.893 and 0.975. The means, standart deviations and reliability coefficients for each variable are given in Table 2.

Table 2. Means, Standart Deviations and Reliability Coefficients of Transformational Leadership and Organizational Culture

Scale	Mean	Std. Dev.	Cronbach α
Transformational Leadership (overall)	**3.7421**	**1.1845**	**0.8963**
- Charisma	3.6791	1.0974	0.8521
- Being the source of inspiration	4.0973	1.0168	0.8873
- Being intellectual	3.5690	1.1683	0.8632
- Individual support	3.3782	1.1739	0.8792
Organizational Culture (overall)	**2.5247**	**1.5789**	**0.9750**
- Long / short term orientation	3.1983	0.9832	0.8943
- Masculinity / feminity	2.9673	1.1298	0.9453
- Power distance	3.2891	1.3425	0.8932
- Individualism / collectivism	2.7830	1.0354	0.9532
- Uncertainity avoidance	3.8020	1.0127	0.8992

In addition, factor analysis using principal components solution with varimax rotation is performed to find the structures for transformational leadership and organizational culture measures. The results of factor analysis are examined, but not given here.

3.6. Correlation Analysis

In order to investigate the hypotheses of the study, correlation analysis is performed and the results are given in Table 3, 4, 5, 6 and 7.

Table 3. Correlation Analysis Between Transformational Leadership and Long / Short Term Orientation

		Long / Short Term Orientation
Transformational Leadership	Correlation Coefficient	0.591**
	Sig. (2-tailed)	0.000
	N	96

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis has been performed to test H1 to identify the correlation between transformational leadership and long / short term orientation. According to Table 3, correlation test results show that there is a positive and significant correlation between transformational leadership and long / short term orientation.

Table 4. Correlation Analysis Between Transformational Leadership and Masculinity / Feminity

		Masculinity / Feminity
Transformational Leadership	Correlation Coefficient	0.548**
	Sig. (2-tailed)	0.000
	N	96

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis has been performed to test H2 to identify the correlation between transformational leadership and masculinity / feminity. According to Table 4, correlation test results show that there is a positive and significant correlation between transformational leadership and masculinity / feminity.

Table 5. Correlation Analysis Between Transformational Leadership and Power Distance

		Power Distance
Transformational Leadership	Correlation Coefficient	0.462**
	Sig. (2-tailed)	0.000
	N	96

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis has been performed to test H3 to identify the correlation between transformational leadership and power distance. According to Table 5, correlation test results show that there is a positive and significant correlation between transformational leadership and power distance.

Table 6. Correlation Analysis Between Transformational Leadership and Individualism / Collectivism

		Individualism / Collectivism
Transformational Leadership	Correlation Coefficient	0.478**
	Sig. (2-tailed)	0.000
	N	96

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis has been performed to test H4 to identify the correlation between transformational leadership and individualism / collectivism. According to Table 6, correlation test results show that there is a positive and significant correlation between transformational leadership and individualism / collectivism.

Table 7. Correlation Analysis Between Transformational Leadership and Uncertainity Avoidance

		Uncertainity Avoidance
Transformational Leadership	Correlation Coefficient	0.397**
	Sig. (2-tailed)	0.000
	N	96

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis has been performed to test H5 to identify the correlation between transformational leadership and uncertainity avoidance. According to Table 7, correlation test results show that there is a positive and significant correlation between transformational leadership and uncertainity avoidance.

4. CONCLUSION

Organizational researchers have increasingly emphasized the roles of the transformational leaders on organizational culture. The studies also provide evidence that these concepts have significantly constructive influence for achieving a work climate which has positive effect on increasing employee performance and the supportive relations among them. A plenty of studies have been conducted in various organizational settings. Some of the empirical results generally support the relations in the same way, but some of them are conflicted. There is not a collective understanding

about the associations of these concepts in the literature. The results of the analyses reported in this study indicate significant findings which will give information about how these concepts are interacting in Turkish organizations and these findings will also provide a significant addition to the literature.

To sum up, one of the most important factors to make a difference under the working conditions of the business environment in 2000's is a committed, productive, highly motivated and innovative human resource. With increase of technological advances and changes, there is need for organizations to address employee satisfaction, organizational commitment, work itself and organizaional culture. The success, survival and competing power of organizations depend on the commitment of their members, supporting their individual developments, ensure their participations, creating an organizational culture and make it stable for a period that all of the members in the organization share the common values and norms and these can be achieved with a leader who has good communication skills, high charisma. Also, it is important to have a leader who is the source of inspiration and intellectual.

5. LIMITATIONS AND RECOMMENDATIONS

One of the limitations of this study is the sample size. The sample of the study consists of only one firm from production sector in pharmaceutical industry. The research could be carried out in different production and service provider sectors. The second limitation of this study is the time. If this study could be performed in wider time period the results would be different because of the changes in business environment.

This study aims to define the effect of transformational leadership behavior on organizatonal culture. Further work should contain a more diverse sample from different sectors, maybe from different regions to observe the effect of cultural dimesions on the variables that are searched. Also, this study investigates transformational leadership. Transactional or authentic leadership can be analyzed in further studies.

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