THE EFFECT OF LEADERSHIP STYLE ON PROFESSIONAL ETHICAL BEHAVIOR: AN EMPIRICAL STUDY IN CEMENT FACTORY

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Abstracts
This study indicates the theoretical perspective and examines the relevant literature that supports the significance of leadership style and professional ethics among employees. The methodology for conducting the study was the use of two quantitative questionnaires aimed at determining the relative contribution that task-oriented and relations-oriented styles of leadership have on different dimensions of professional ethical behavior. This study is conducted in a manufacturing company and data were collected from 200 employees working in the cement factory. Firstly, the study revealed the type of leadership in this factory and then examined the relation between the leadership style and ethical behavior. To test the hypothesis structural equations modeling was used. The results showed that simultaneous high relations-oriented and high task-oriented leadership styles (i.e. supportive behavior) have significant effect positively on professional ethics among employees.

Research paper

Keywords: Leadership style, Professional ethics, Task-oriented, Relation-oriented

Introduction

Ethics has become a crucial topic in business world due to mismanagement and corruption that happened in giant firms such as Enron and WorldCom and finally caused them to collapse (Çelikdemir, 2015). Therefore, in a competitive world today, managers who are tempted to select an easy way which is in contradiction with the request of ethics in order to gain a competitive advantage over the rivals must be careful. They should know that although usually the easiest solutions bring short-term profit, it can affect the long-term profit or even the survival of the company (Vadastreanu, 2015).

According to Çelikdemir (2015) Organizations with respect to professional ethics must adopt business ethics in their strategic management and mission statements and organizational decisions, and need to participate in training courses, and above all, they should display ethics in their real-life act and actions. Companies should consider business ethics toward their stakeholders. However, the concept of ethics is not restricted to this matter, but the employees, too, have to display ethical behavior in their workplaces (Taysir, 2013). Therefore the leaders should behave in a manner which can support and guide employees to act much more ethically and provide the suitable condition for them trough a good leadership style.

There has been little theoretical development or empirical research that addresses the impact of different leadership styles on ethical behavior. According to Momeni (2009), employees’ attitudes, actions, feelings, morale, and perception are deeply affected by a leader’s behavior. Furthermore, an approximation of 25 percent of the reason that employees feel helpful,
motivated, encouraged, and responsible in their workplaces can be defined by a leader’s behavior, based on Kouzes and Posner (2010).

Therefore, it is essential to find out the direct or indirect effect of leadership style on employees’ ethical behavior and also it would be much more critical when we are talking about employees who are from new generation (Çelikdemir, 2015). Since according to Jordan Kaplan professor at Long Island University"New workforce generation is much less likely to abide by the traditional command-and-control type of management which is still common in many organizations”.

The main purpose of this research is to conduct an empirical study based on theory that indicates task-oriented and relations-oriented leadership styles have effects on the employees’ professional ethics. This study begins by a literature review of leadership style, professional ethics and will go on to development of hypotheses. At second section, research methodology, including details of sampling procedures and gathering the data will take place. Presentation of the results and discussion of the findings and recommendation will be provided at the last section.

**Literature Review & Hypothesis Development**

**Leadership**

According to the behavioral leadership approach, “leadership” defines as a process which can direct individual and collective endeavors toward achieving the shared objective of a company (Yukl, 2002).

Many scientific research have conducted to develop models for implementing leadership behavior in the best possible way mostly during 1960s. For instance: Fielder’s Contingency Theory, Hershey and
Blanchard’s Situational Leadership Model, Hause and Mitchell’s Path Goal Model (Radovic Markovic et al., 2013; Baysak & Yener, 2015).

Despite the fact that there could be numerous leadership styles, many scientific researches on leadership styles showed that there are two essential type of behavior for leaders: Task-oriented behaviors and relationship-oriented behaviors. Task-oriented leaders emphasize on the objective; in other words the leader directs employees in order to achieve the goals based on schedules for their activities. They usually concentrate on planning considering deadlines and give instruction to subordinates to do their job (Daft, 2008). Relationship-oriented behavior is the extent to which leader is respectful toward subordinates’ feeling and opinions and cares about them. These leaders insist on mutual trust and friendly communication and try to develop teamwork groups (Daft, 2008).

In addition, Blake and Mouton in 1961 developed a grid which explained task-versus-person preference grid, Farris (1988) and then in 1999 Hersey and Blanchard revealed a theory considering these two main leadership behaviors (Mullane, 2009). According to these scholar researches four different styles when leaders put greater or less focus the task or the relationship:

- System1: High-task, low-relationship focus
- System2: High-task, high-relationship focus
- System3: Low-task, high-relationship focus
- System4: Low-task, low-relationship focus (Mullane, 2009)

Hersey and Blanchard categorized leadership style according to the amount of Task Behavior and Relationship Behavior that the leaders show
to their followers. They introduced four leadership behavior styles, named S1 to S4: directive, supportive, participative, delegating (Mullane, 2009).

A feature of effective leaders is that they would build a positive “relationship” with their employees while they keep an eye on the “task” of them in the organization. This positive relationship will boost the employees’ efficiency and efforts, hence more productivity in the whole organization (Wang & Shyu, 2008). Thus, it may have negative effect on employees to have low relationship with subordinates.

“In search of excellence”, a study carried out by Peters and Watermans, sought to identify the high performing organizations in different industries. This idea triggered a growing number of similar studies in the field of strategic management. The majority of these studies indicated to the significant role played by leadership and leadership style in the performance of organizations (Ozsahin, 2011).

**Professional Ethics**

Ethics refers to an individual's moral judgments according to recognition of what is ‘wrong’ and what is ‘right’ in other words ethics is “the knowledge of right and wrong” (Rad & Rahimi, 2015).

Kidder (2005) considers two different kinds of ethical dilemmas: A “right versus wrong” such as honesty versus dishonesty and a “right versus right” such as success versus honesty. The latter one is much more critical for making decisions. In an organization, ethical dilemmas happen when decision maker (for example an employee) have to make a choice between two “right” values when values come into conflict.
Professional ethics consider ethical in an organization by individuals and groups. According to Moberg & Seabright a set of principles according to action in work environment which is considered by people voluntary is professional ethics. In other words professional ethics is personal responsibility for behave and “do the right thing” in an organizational position.

According to Hosmer (1994), incorporating ethics in the firm strategies and strategic management would help the organization to obtain competitive advantage. He also indicates that ethics can be considered as a good investment and can help the organization to make a good relationship with internal and external stakeholders. Therefore, implementing ethics in strategic management or long term plans can help organizations to increase their performances.

One of the important parts of implementing ethics in a company is demonstration of professional ethics from employees who should decide how they act. Studies based on Kaplan and Norton’s (1996, 2000) Organizational Balanced Scorecard shows that values, mission and vision of the organization and the employee should be in compliance with each other. In other words employees’ behavior and their ambition should be balanced to lead to ethical behavior.

Cadozier (2002) introduces 8 professional ethics dimensions including responsibility, sincerity and honesty, fairness and justice, dominance and racing, respect, sympathy, respecting social values, and loyalty.

**Development of Hypotheses**

The main goal in strategic management is to enhance the performance of the organization and improve their effectiveness and efficiency (Çelikdemir,
2015), and in management studies the effect of leadership on firm’s performance has been the object of interest for a long term (Baysak & Yener, 2015).

In addition, according to Çelikdemir (2015), Providing ethical behavior in an organization is one of the aims of managers (Hunt & Vitell, 1986) since according to the literature, professional ethics also enhances the firm’s performance. As a result, the strategic management field needs to see more studies that try to consider these two important concepts together: business ethics and leadership styles.

Nowadays the effectiveness of the formalized bureaucratic system of the traditional management is debatable (Fry, 2003). The main benefit of bureaucracy and leading by fear is to create a control system that ensures minimum levels of effort, organizational commitment, and performance. However, traditional fear-led bureaucracies also can prevent people from feeling good about their work and causes trust reduction.

According to Holloway (2012) establishing a good relation with the employees is one of the important responsibilities of a leader, and leadership is a process of interaction between the employees and a leader to reach their shared goal. Through this interaction, employees’ behavior and perception is affected by the leader, which will eventually result in a display of suitable behavior on the part of all employees.

As mentioned before there are two main leadership styles in the management literature including task-oriented and relations-oriented leadership styles. According to the researchers at Michigan University relations-oriented leaders that focus on employees’ human requirements in order to provide effective work groups, are much more effective than task-oriented
leaders that prefer to concentrate on objective achievements and human requirements in order to meet schedules, cost reduction and achieving production efficiency (Daft, 2008).

According to the most recent generation who are entering the workforce (people born from mid-1980’s to 2000) appear to have special characteristics. They prefer fewer boundaries than previous generation and are confident in themselves. Moreover they are goal oriented and they believe they are “right”. In order to achieve their goals they really want that others be flexible with them (Çelikdemir, 2015). Therefore a relations-oriented leadership is best suited to this generation because they prefer not to abide by the hierarchies.

It is perceived through the review of the literature that a special leadership style can potentially lead to the creation and continual survival of a positive and ethical behavior in an organization directly or indirectly. As a result, the hypothesis that addresses the theory in this paper is:

**H**: High Relations-oriented (i.e. supportive and/or participative) leadership behaviors are positively related to professional ethics.

This research has tried to investigate the effect of organization leadership style on professional ethic in addition to determining it according to that organization leadership style is very important in employees’ professional ethics. According to the presented cases in literature review & conclusion the general model of the research has been drawn as the figure (1) from dependent & independent variables situation.
**Research Methodology**

This research is applied in terms of aim and is descriptive-survey. Its population includes 200 employees working in the cement factory. The question; “how many should be the sample size” is presented in most of the researches and programs. Choosing a very large sample size results in a resource wasting and choosing a very small one results in unreliable answers. A very important question in factor analysis and structural equations modeling is determining the minimum value of sample size (Kline, 1990; Mc Quitty, 2004).

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**Figure 1.** Research conceptual model
Although, there isn’t any general agreement on choosing the needed sample size for factor analysis and structural equations modeling (Schreiber, 2006) but, according to researchers attempts it has been counted and presented 200 as the needed sample size (Hoelter, 1983; Garver and Mentzer, 1999; Sivo et.al, 2006; Hoe, 2008). Since this research is based on structural equations modeling; therefore, 200 people have been chosen as the needed sample size and questionnaire has randomly been presented among them.

In this research, methods for collecting information have been categorized to two; library and field. Library method has been used for collecting documents on literature review and research background as well as field method has been used for collecting information in order to accept or reject research hypotheses. The questionnaire has been provided by two structures; leadership style and professional ethic. Content validity method (survey from experts) and construct validity (factor analysis) have been used for investigating questionnaire validity. Cronbach’s Alpha has been used for measuring reliability. Cronbach’s Alpha has been 0.871 for leadership style questionnaire and it has been 0.952 for professional ethic questionnaire. So, questionnaire reliability has been desirable (good).

**Case study analysis and results**

To investigate the model; at first confirmatory factor analysis has been used for measuring the relationship between latent variables with items. The measurement model (confirmatory factor analysis) investigates the relationship between items (questionnaire’s questions) with constructs. In fact, the relations can not to be testes until it has not confirmed that indicators (questionnaire’s questions) measure latent variables well. So, the measurement
model (confirmatory factor analysis) is used for confirming that they have been measured well.

Power of the relationship between factors (latent variable) and observable variable has been indicated by factor loading. Factor loading is the value between zero and one. If it is less than 0.3, the relationship will be considered weak and it will be ignored (Foster et.al, 2006: 82). Factor loading between 0.3 and 0.6 is acceptable and if it is greater than 0.6, it will be very desirable (good) (Kline, 1998). The least acceptable factor loading has been stated 0.2 in some of references but, the main criterion for judgment is $t$ statistic. If the test statistic i.e. $t$ statistic is greater than the critical $t_{0.05}$ value i.e. 1.96; therefore, observed factor loading is significant. The result of factor analysis for measurement indexes of research variables has been presented in table (1).
<table>
<thead>
<tr>
<th>Variables</th>
<th>factor load</th>
<th>t-Value</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach's α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
<td>0.551</td>
<td>0.707</td>
<td>0.774</td>
</tr>
<tr>
<td>Q01</td>
<td>0.84</td>
<td>10.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q02</td>
<td>0.63</td>
<td>9.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sincerity and honesty</td>
<td></td>
<td></td>
<td>0.541</td>
<td>0.699</td>
<td>0.774</td>
</tr>
<tr>
<td>Q03</td>
<td>0.64</td>
<td>8.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q04</td>
<td>0.82</td>
<td>11.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairness and justice</td>
<td></td>
<td></td>
<td>0.684</td>
<td>0.811</td>
<td>0.783</td>
</tr>
<tr>
<td>Q05</td>
<td>0.88</td>
<td>14.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q06</td>
<td>0.77</td>
<td>12.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominance and racing</td>
<td></td>
<td></td>
<td>0.511</td>
<td>0.677</td>
<td>0.783</td>
</tr>
<tr>
<td>Q07</td>
<td>0.72</td>
<td>6.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q08</td>
<td>0.71</td>
<td>7.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect</td>
<td></td>
<td></td>
<td>0.449</td>
<td>0.620</td>
<td>0.854</td>
</tr>
<tr>
<td>Q09</td>
<td>0.68</td>
<td>7.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10</td>
<td>0.66</td>
<td>7.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sympathy</td>
<td></td>
<td></td>
<td>0.601</td>
<td>0.750</td>
<td>0.854</td>
</tr>
<tr>
<td>Q11</td>
<td>0.77</td>
<td>9.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td>0.78</td>
<td>9.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respecting social values</td>
<td></td>
<td></td>
<td>0.597</td>
<td>0.746</td>
<td>0.731</td>
</tr>
<tr>
<td>Q13</td>
<td>0.71</td>
<td>9.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14</td>
<td>0.83</td>
<td>11.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td></td>
<td></td>
<td>0.528</td>
<td>0.687</td>
<td>0.769</td>
</tr>
<tr>
<td>Q15</td>
<td>0.82</td>
<td>11.09</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Q16</td>
<td>0.62</td>
<td>7.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td>0.646</td>
<td>0.962</td>
<td>0.812</td>
</tr>
<tr>
<td>L01</td>
<td>0.68</td>
<td>9.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L02</td>
<td>0.70</td>
<td>8.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L03</td>
<td>0.77</td>
<td>11.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L04</td>
<td>0.86</td>
<td>13.45</td>
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<td></td>
</tr>
<tr>
<td>L05</td>
<td>0.89</td>
<td>14.35</td>
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<td></td>
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<tr>
<td>L06</td>
<td>0.79</td>
<td>14.25</td>
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<td></td>
<td></td>
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<tr>
<td>L07</td>
<td>0.82</td>
<td>11.95</td>
<td></td>
<td></td>
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<tr>
<td>L08</td>
<td>0.84</td>
<td>13.01</td>
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</tr>
<tr>
<td>L09</td>
<td>0.68</td>
<td>8.88</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>L10</td>
<td>0.87</td>
<td>12.75</td>
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</tbody>
</table>
The result of confirmatory factor analysis which has been presented in table (1) indicates that items of each research dimensions have properly been chosen. In all cases, standard factor loading has been achieved greater than 0.3 which indicates that the observed correlation is desirable (good). In order to measure the significance of observed standard factor loadings, t statistic has been estimated. In all cases, t statistic value has been achieved greater than 1.96 which indicates that the observed correlation in 95% confidence level is acceptable.

### Research hypotheses analysis by structural equation modeling

At first, leadership style has been determined for measuring the general relationship between leadership style and professional ethic. Dominant leadership style of the organization has been determined according to two relationship-orientation and task-orientation fields. Quartet pattern of Hersey and Blabchard leadership styles is determinable by these two fields (see figure 2). In this research, six questions have been presented for the evaluation of leader’s task-orientation and six of them has been used for the value of leader’s relationship-orientation.

Since, Likert 5-point scale has been used; therefore, the mean score of task-orientation will be between 6 and 36. In this research, the mean score of task-orientation has been achieved 22.77 which indicates task-orientation is high in the organization. On the other hand, the mean score of

<table>
<thead>
<tr>
<th>IV:ariables</th>
<th>factor load</th>
<th>t-Value</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach's α</th>
</tr>
</thead>
<tbody>
<tr>
<td>L11</td>
<td>0.77</td>
<td>11.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L12</td>
<td>0.86</td>
<td>13.45</td>
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<tr>
<td>L13</td>
<td>0.89</td>
<td>14.35</td>
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<td></td>
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<tr>
<td>L14</td>
<td>0.79</td>
<td>14.25</td>
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</tr>
</tbody>
</table>
relationship-orientation has been achieved 23.10 which indicates relationship-orientation is high in the organization, too. According to this, it can be said that organization’s leadership style is collaborative.

![Diagram](image)

**Figure 2.** determining organization leadership style

After determining organization leadership style structural equation modeling has been used for investigating the effect of leadership style on professional ethics. Results are observable as a summary in LISREL software output. These results have been presented in table (2). Standard factor loading between two leadership style and professional ethic variables has been achieved 0.72. Also, $t$ statistic value has been achieved 08.34 which is greater than 1.96 and indicates that the observed correlation is significant. Therefore, supportive leadership style has effect on professional effect with 95% confidence level.
Table (2): the summary of structural equation modeling results

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Standard factor loading</th>
<th>t statistic</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>leadership style → professional ethic</td>
<td>0.72</td>
<td>8.34</td>
<td>Acceptance</td>
</tr>
</tbody>
</table>

Figure 3. results of research final model confirmation
Figure 4. t statistic of research final model confirmation results

Model Goodness of fit

Above structural model has been saturated in two stages. Goodness of fit indexes indicates desirable (good) values. Also, the value of normal Chi-squared has been achieved 1.4 which is acceptable in 1 to 5 interval. Therefore, structural model has the desirable (good) Goodness.

$$\frac{\chi^2}{df} = \frac{236.54}{169} = 1.4$$

Also, since RSMEA index has been achieved 0.021 which is less than 0.05 of value. So, the model has an acceptable Goodness. Other Goodness fit indexes has been placed in acceptable interval.
Table 3. Goodness fit Indexes of research main hypothesis structural model

<table>
<thead>
<tr>
<th>Goodness of fit Index</th>
<th>$\chi^2/df$</th>
<th>RMSEA</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>NNFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable values</td>
<td>&lt;2</td>
<td>&lt;0.1</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>&gt;0.9</td>
<td>0 - 1</td>
</tr>
<tr>
<td>Estimated values</td>
<td>1.4</td>
<td>0.021</td>
<td>0.96</td>
<td>0.96</td>
<td>0.98</td>
<td>0.98</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Composite reliability and convergent validity

When one or two factors are measured, the correlation between these measurements provides two important indexes of validity. If the correlation between factor loadings is high, the questionnaire will have Convergent Validity. Average Variance Extracted and Composite Reliability must be estimated for Convergent Validity. There will be Convergent Validity when the below relation is exists (Fornell & Larcker, 1981);

\[
\begin{align*}
&\text{CR} > 0.7 \\
&\text{CR} > \text{AVE} \\
&\text{AVE} > 0.5
\end{align*}
\]

As, it has been presented in table (1), the value of Average Variance Extracted is greater than 0.5 in all cases as well as the value of Composite Reliability is greater than 0.7. Also, $\text{CR} > \text{AVE}$ is exists in all cases.

Conclusions

The results of this study conducted on employees in a manufacturing cement factory, determine relations-oriented type of leadership should be embraced to increase the professional ethics among employees. The research shows that leadership styles which consider high “relations “ as an essential kind of behavior in leadership -wether the focus on task is high or low- do have positive impact on professional ethics among employees.
References

Khademian, N. 2016. The effect of leadership style on professional ethical behavior: An empirical study in cement factory
