The Effect of Educational Methods of Supply Chain Management on Conflict Management in Educational Environments

Hossein Amiri Dogahe*1, Hamideh Razmara Meydanghah #2, Mohammad Naghi Imani #3

1,3Department of Psychology and Educational Sciences, Islamic Azad University, Central Tehran Branch, Tehran, Iran,

1hm135344@yahoo.com

2Department of Technology and Engineering, Islamic Azad University, Hashtgerd Branch, Alborz, Iran

Abstract- Today, human resource is considered as the main asset of organizations and its competitive advantage and is one of the most valuable resources and capital of that organization. The purpose of this paper is to increase the understanding of the challenges and conflicts in sustainable supply chain management through empirical evidence. Therefore, the importance of attracting, retaining and empowering this capital has always been considered by the thinkers. One of the solemn factors in employee management is solving the conflict between them, which has been analyzed in this paper using inferential statistics. In order to determine the validity of the questionnaire, firstly, the number of items for each component was determined and the initial form of the questionnaire was prepared by evaluating the theoretical foundations and studies, as well as obtaining opinions from some experts. After this stage, several copies of the questionnaire were distributed to a number of experts, and they were asked to express their corrective comments regarding the questionnaire. The results show that there is a significant relationship between avoidance style and teachers' performance, and there was no significant relationship between the managers 'mastery style on the teachers' performance.

Keywords- Educational environment, Leadership training, Negotiation strategy, Employee conflict, supply chain management.

1. Introduction

Academic and corporate awareness of sustainable supply chain and logistics issues has increased significantly in recent years. Conflict is a topic that many thinkers are busy with. Managers often have a negative attitude towards the conflict, and they are scared of it. The underlying cause of this fear is their unaware of the nature and characteristics of the conflict. Conflict occurs to different causes in the organization, misunderstandings, different talents and needs, conflicts of interest, individual, group, economic, social and political problems, inequality and injustice and many other factors can lead to conflict[1-3]. Although some of the factors in the context of time and place or because of the behavior of the manager, staff and specific circumstances may cause problems of barriers and conflicts, but necessarily the conflict should not be detrimental to the work of the organization. On the other hand, it can be noted, the performance of the organization and the organization depends on the performance of an organization and its success in achieving its goals to the success of its managers. The need for successful management performance, on the one hand, is efficiency (doing work properly) and, on the other hand, is effectiveness (proper doing the work). Many studies have shown that there is a conflict and uncontrolled controversy that cause dissatisfaction of individuals and the devastating effects that result from such a phenomenon, conflicts reach the peak[4].

It is painful to enumerate the negative aspects of the conflict, the most important of which are:

• Reduction of job satisfaction
• The weakening of relations between the units of the organization
• Chaos and protest
• Increasing staff turnover
• Launching strikes and protests
• Conflicts, controversy and even physical conflicts.

2. The history of research carried out outside of the Iran

"ArshanaAdami" (2006) in a study led the Conflict Management Model in Nigerian University libraries. The results of the implementation of the questionnaire among professional and semi-professional librarians of three academic libraries in the country have been shown which empowering managers and staff in libraries is crucial to understanding conflicts and managing them. Edwards (2000) evaluates the changes in academic libraries, he believes that library services, technology, organizational structure, ownership policies and access to benefits are steadily changing, and this intensity of change leads to conflicts at different levels of library services and informing will be provided at various levels[6-9]. Implementing the use of management science along with library science discusses the use of general conflict management techniques, awareness of the causes of conflict, and the positive and negative effects of using different techniques of conflict management and provides a summary on the application of theories and thought conflicts in management science in specialized libraries. Scooling (1998) has conducted a research entitled "Investigating the Relationship between Organizational Climate and Conflict Levels." The statistical population of this study consists of 510 teachers from 24 high schools across Pennsylvania. The results show that the degree of conflict is less [7]. The greater the school climate, the greater the degree of conflict in schools, where their directors have modest behavior with violence and neglect with little support from teachers, the degree of conflict is higher. also the results of this research also show that managers who are more successful in solving the personal essential needs of teachers and collaborate with them and the spirit of morality exists in their school, their teachers are more confident [10]. KomeilKozan (1996), in a study entitled "The effects of Culture on the Interpersonal Conflicts Management Technique, comparatively evaluates the Conflict Management Styles in Different Cultures[11]. He has compared the conflict management styles of Jordanian, Turkish In fact, in this study, the comparison of managers' behavior in the two Middle Eastern countries with Rahim's findings in 1983-1986 about American executives is compared, five conflicts management practices studied in this regard include: compulsory, collaborative, comparative, compromise, avoidance, information in this research have been collected by a questionnaire from 215 Turkish managers, 134 Jordanian director in private and public sectors. Based on the results of the above study in Turkey, managers often are considerably preferred the method of co-operation on compulsory and compromise methods[12]. The avoidance method is also applied after an adaptive approach[13-15]. In Jordan, compromise method is much used, the latter method is used more than the Avoidance and Adaptive methods, and these two methods are also used more than the compulsive method used in the last step. Hence, although they share the way of co-operation between managers of both countries, but the biggest difference is in the compulsive mode, which ranked second in Turkey and last in Jordan[16-18].

3. Methodology

Concept of Supply Chain Management.
SCM is management of material, money, men, and information within and across the supply chain to maximize customer satisfaction and to get an edge over competitors. Customers want products at the right place and at the right time. For this, there should be an excellent synchronization between the manufacturer and the customers. This was the origin of the “Barter system” as we all know. As things started becoming complicated, where one person had to reach many individuals for his needs, one of the individuals started management of gathering the products from different people and supplying to those who are in need and thus fulfilling his needs in return. This was the revolutionized form of the Barter system and today it is known as the supply chain management. A supply chain is a network of facilities and distribution channels that encompasses the procurement of materials, production, assembly and delivery of product or service to the customer. The management of the supply chain and the roles of various actors involved differ from industry to industry and company to company. As a result SCM has become a vital issue for manufacturers,
professionals and researchers. The main purpose of this study is to investigate the relationship between managers' conflict resolution styles on the performance of high school students in Karaj high schools. The theoretical framework of this research is based on the Thomas model as shown in Figure 1.

<table>
<thead>
<tr>
<th>Competition</th>
<th>Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay attention to yourself</td>
<td>Compromise</td>
</tr>
<tr>
<td>Avoidance</td>
<td>Alignment</td>
</tr>
<tr>
<td>very low</td>
<td>very much</td>
</tr>
<tr>
<td>Pay attention to others</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1.** Thomas model

Of course, models such as the PotFam model (control, Solutionism and non-coping) or the Coelho-Koelz model (adaptation, exposure, and regulation) can also be used to conduct similar research.

4. Research model

In this research, 5 Model Thomas Style will be used to implement conflict resolution management styles as follows.

![Conflict Resolution Styles](image)

**Figure 2.** Conflict Resolution Styles

The purpose of this research is to investigate the effect of managers' conflict resolution styles on the performance of high school staff in Karaj city by designing the following research hypotheses:

- There is a significant relationship between the styles of avoiding conflicts among managers on the performance of high school principals in Karaj.

- There is a significant relationship between styles based on compromise managers on the performance of teachers.

- There is no significant relationship between the mastery of manager style on the performance of teachers.

- There is no significant relationship between the styles based on the compromise of the managers on the performance of the teachers.

- There is no significant Relationships between the style based on the collaboration of managers with the function of the managers.

5. Results

5.1. Inferential statistics

Analyze data related to avoidance style questions. Is there a relationship between styles based on avoidance of managers’ style with managers’ performance?

**Table 1.** Relationship between styles based on avoidance of managers’ style with managers’ performance

<table>
<thead>
<tr>
<th>numbe r of sample s</th>
<th>Shorten the difference between the ratings of each pair of scores</th>
<th>Correlatio n coefficient calculated</th>
<th>Correlatio n coefficient according to table</th>
<th>Degree s of freedo m</th>
</tr>
</thead>
<tbody>
<tr>
<td>114</td>
<td>1481430</td>
<td>473.0</td>
<td>195.0</td>
<td>112</td>
</tr>
</tbody>
</table>
Since, with the probability of 0.05 and degrees of freedom of 112, the calculated coefficient ($\rho_c = 0.473$) is greater than the correlation coefficient extracted from the correlation coefficient table ($\rho_0 = 0.195$), the null hypothesis is not confirmed and it is concluded that the calculated correlation coefficient is significant.

As a result, there is a significant relationship between the avoidance style and the performance of high school principals in Karaj based on the Spearman correlation formula.

Is there a relationship between the styles based on Mastery of Managers' style with the managers' performance?

**Table 2.** Relationship between the styles in SCM

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Correlation coefficient according to table</th>
<th>Correlation coefficient calculated</th>
<th>Shorten the difference between the ratings of each pair of scores $d^2$</th>
<th>number of samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td>195.0</td>
<td>410.0</td>
<td>95.145673</td>
<td>114</td>
</tr>
</tbody>
</table>

Since, with the probability of 0.05 and degrees of freedom of 112, the calculated coefficient ($\rho_c = 0.410$) is greater than the correlation coefficient extracted from the table of correlation coefficients ($\rho_0 = 0.195$), the null hypothesis is not confirmed and it is concluded that the calculated correlation coefficient is significant [19]. As a result, there is a significant relationship between the styles of conflict between managers' performance of high school principals in Karaj based on Spearman correlation formula.

**5.2. Analysis of data related to compromise style questions**

Is there a relationship between the styles based on the compromise of the managers with the managers' performance?

**Table 3.** Relationship between the compromise styles of managers with managers' performance

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Degree of freedom} & \text{Correlation coefficient according to table} & \text{Correlation coefficient calculated} & \text{Shorten the difference between the ratings of each pair of scores $d^2$} & \text{number of samples} \\
\hline
112 & 195.0 & 029.0 & 253967 & 114 \\
\hline
\end{array}
\]

Since the probability of 0.05 and degrees of freedom of 112, the calculated coefficient ($\rho_c = 0.029$) is smaller than the correlation coefficient obtained from the correlation coefficient table ($\rho_0=0.195$) the null hypothesis is confirmed and it is concluded that the calculated correlation coefficient is not meaningful.

As a result, there is no significant relationship between the styles of compromise conflict between managers on the performance of high school principals in Karaj based on Spearman correlation formula.

**5.3. Analysis of data related to compilation style questions**

Is there a relationship between the styles based on the compromise of the managers with the managers' performance?

**Table 4.** relationship between the styles based on the compromise of the managers with the managers' performance

\[
\begin{array}{|c|c|c|c|}
\hline
\text{Degree of freedom} & \text{Correlation coefficient according to table} & \text{Correlation coefficient calculated} & \text{Shorten the difference between the ratings of each pair of scores $d^2$} & \text{number of samples} \\
\hline
112 & 195.0 & 112.0 & 25.217396 & 114 \\
\hline
\end{array}
\]

Since, with the probability of 0.05 and degrees of freedom of 112, the calculated coefficient ($\rho_c = 0.112$) is smaller than the correlation coefficient extracted from the table of correlation coefficients
\( \rho_0 = 0.195 \), the hypothesis is confirmed and it is concluded that the calculated correlation coefficient is not significant. As a result, there is not a significant relationship between the compromise styles of the managers’ performance of high school principals in Karaj based on the Spearman correlation formula.

### 5.4. Analysis of data on collaborative style questions

Is there a relationship between the styles based on the collaboration of the managers with the managers’ performance?

**Table 5.** Relationship between the styles based on the collaboration of the managers with the managers’ performance

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Correlation coefficient according to table</th>
<th>Correlation coefficient calculated</th>
<th>Shorten the differences between the ratings of each pair of scores ( d^2 )</th>
<th>number of samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>112</td>
<td>195.0</td>
<td>112.0</td>
<td>25.217396</td>
<td>114</td>
</tr>
</tbody>
</table>

Since, with the probability of 0.05 and degrees of freedom of 112, the calculated coefficient (\( \rho_C = 0.059 \)) is smaller than the correlation coefficient extracted from the correlation coefficient table (\( \rho_0 = 0.195 \)), the hypothesis is confirmed and it is concluded that the calculated correlation coefficient is not significant. As a result, there is not a significant relationship between the styles of conflict between managers’ collaboration on the performance of high school principals in Karaj based on Spearman correlation formula.

### 6. Discussion

#### 6.1. Inferential results of the data in terms of hypotheses

**First hypothesis:** As a result, there is a significant relationship between the styles of avoiding conflicts among managers on the performance of high school principals in Karaj.

Investigating the first hypothesis of the research shows that in the conflict situation, principals by avoiding conflict use the avoidance conflict style, which is a significant relationship between the opinion of principals and teachers. The important point is that conflict must be controlled in a way that chaotic not to be occurred due to the separation (avoidance) or due to applying dominance; despotism does not result in it.

**Second hypothesis:** As a result, there is a significant relationship among the compromise conflict style of principals on the performance of high school teachers in Karaj.

Investigating the second hypothesis shows that principals act through compromise to reduce tensions caused by conflict. There is a significant difference between the opinion of principals and teachers in the style of compromise by principals. Principals who use the style of compromise in solving their organization’s (school) conflicts behave in such a way as to solve the problem, i.e., instead of adapting themselves to different views; they try to clarify the disagreements.

**Third hypothesis:** As a result, there is not a significant relationship among the conflict style of dominance of principals on the performance of high school teachers in Karaj.

Investigating the third hypothesis shows that there is no significant difference between the opinion of teachers and principals on the use of an authoritative (dominance and power) method.

**Fourth hypothesis:** As a result, there is no significant relationship among the compromise conflict style of principals on the performance of high school teachers in Karaj.

Investigating the fourth hypothesis shows that there is no significant difference between the opinion of teachers and principals on the use of compromise style in conflict resolution.

**Fifth hypothesis:** As a result, there is no significant relationship between the collaborative style of principals on the performance of high school teachers in Karaj.

Investigating the fifth hypothesis shows that there is not a significant relationship between the use of a
collaborative style in conflict situations between the views of teachers and principals in applying this style[20].

The results of this study are consistent with the findings of Malekzadeh (2007). According to his findings, factors such as group spirit, disinterest of teachers, the degree of their intimacy, the feeling of disturbance of teachers, considering their distancing from teachers has relationship with the effectiveness and performance of staff. Therefore, in order to increase the performance of the staff, the principal must have a warm and friendly environment and considerate and supportive behavior. The way of cooperation and compromise can be seen more in dealing with conflict in a climate that strengthens group spirit[21-23].

By investigating the relationship between emotional intelligence and conflict management styles among principals of girl- high schools in Isfahan, Shah Talebi (2007) found that there is a significant relationship between empathy and compromise styles.

The first hypothesis and the most important result of the research showed that there is not a negative relationship between the level of conflict and the job performance of the staff.

Amiri (2006) has conducted a research entitled "Investigating Knowledge, Attitude and Performance (pak) of Principals of Shahroud University of Medical Sciences in the field of conflict management), according to the need for the required knowledge and positive attitude toward conflict management and its role in conscious performance of principals in this regard, it can be stated that holding training courses in this field for principals and creating the necessary skills in using conflict management methods in them can play an effective role in productivity of the organization.

Genes (2003) in their research have rooted interpersonal conflict among children. The sample of the study includes 276 elementary students. The overall conclusion of this study is that a high agreement in these children, with further progress and productivity, is due to interpersonal conflict and compatibility. BioCamp (2005) found that grass hockey women experienced lower levels of ambiguity about their strengths, while men did not have such an experience. In this research, ambiguity had a significant relationship with sport performance. Joon and Jestion (2003) in separate studies showed that conflict reduces the role of responsibility and sport performance in athletes. Stallers and colleagues (2001) in a study on 200 athlete students showed that conflict and interference in the role of sport are negatively related to mental health. There was a significant relationship between role separation and mental health. Also, in this study, there was a significant negative correlation between role conflict and sport performance. Therefore, the results of the present study are in contradiction with the results of Rasooli's research (2009), Amiri (2006), Jensen (2003), Biocomp (2005), and Alfinston& Hardman (2006), Stallers (2001). Among the other results of the research, there is no significant difference between the level of perceived conflict by male and female employees and their performance.

There is no significant difference between correlation of conflict and job performance of male employees with conflict correlation and job performance of female employees[5, 7].

There is no significant difference between job performance of male and female employees. There is no significant difference between the perceived conflict level of male and female employees[19],[18].

Rasooli (2009) has conducted a research entitled "Conflict Management Strategies among Managers of Lorestan's Hospital". According to the findings, there was a significant relationship between conflict management strategies and gender of people (p = 36%) by conducting correlation coefficient test, it was specified that there is a significant relationship between the age of the subjects and the control strategy of conflict management. (p=1%).

The study of Biocamp et al. (2003) showed that the role ambiguity has relationship with anxiety before the competition in both genders, and the role ambiguity was positively correlated with physical anxiety before the competition in men. Biocamp et al. (2005) found that grass hockey women experienced lower levels of role ambiguity about their strengths, while men did not have such an experience. In this study, the role ambiguity with sport performance was positively correlated. Chasmiz and Milles (1989) found in the research that men and women at each level of management run the conflict in a similar
way; in other words, gender does not affect the management style of the conflict. Despite the recent research on the lack of gender impact on the selection of conflict styles, it has been suggested that gender affects the type of conflict management style. Some other studies by Kurabik Watson (1999) also show that gender affects the conflict management strategy of the individual’s preference. Therefore, the results of the present study are inconsistent with the results of Rasulli (2009), Biocomp (2003), Biocomp (2005), Korabik and Watson (1999), and consistent with the results of the study of Chasmiz and Milles (1989). Conflict is an undeniable phenomenon in social organizations, according to the results of the research, if managers can use the conflict in a proper way and by providing appropriate solutions guide conflict in constructive and creative way, they can use it as a force and a positive pressure in order to better performance of effectiveness, innovation and change, and use as a means of transforming the structure of power and changing the pattern of relationships between groups, and conflict management should maintain the desired level of conflict in the staffing group, because if there is no conflict in the organization or it is low, it will cause the intellectual stop and recession of employees and if it is excessive, it will lead to employee involvement and turmoil in the organization, both of which are unfavorable for the organization and disturbs the work. Therefore, it is the task of the manager to balance the forces and create motivation and incentive in the staff to solve the conflict through interactive and friendly techniques.

6.2. Limitations and Research Problems

6.2.1. Limitations by the researcher

No research can be done without limitations, and the good researcher is the one who identifies the constraints and can even find ways to overcome them for subsequent research done by themselves or others. Among the limitations encountered by the researcher in this research, are as follows:

- The research population of this research is limited to the principals of high schools in Karaj.
- The research tool and data collection are limited to the questionnaire.
- Limitation of the time of research implementation to the academic year 2014-2015.

6.3. Limitations out of the researcher's authority

- Lack of control of some disturbing variables such as age, level of education, and management history, which led to a reduction in internal validity.

This research has been carried out among the high schools of Karaj, so the generalization of its results to other provinces and regions should be done with caution.

- The lack of cooperation and conservatism of some respondents in completing the questionnaire took a lot of time.
- Reliable sources, especially Persian, were scarce or inadequate in the area of research.
- Incompatibility of research samples in terms of personality traits and non-uniformity of their experiences, since each person has different personality characteristics due to individual differences, and the ability to uniformity is difficult, that this situation has made limitations in external validity and generalizability.
- The present study is a cross-sectional study. One of the limitations of cross-sectional studies is its inability to show the impact of time on their variables and relationships. Therefore, the formulation of the results of this study regardless of the effect of time on their variables and their relationships is one of the important limitations of the present research. Therefore, it is inevitable to repeat the findings of this study through longitudinal studies.

7. Conclusion

There is a continuous need to interact with supply chain partners to achieve the basic objective of organization. SCM requires concerted action of all the participants therefore adoption and implementation cannot be as straightforward as other approaches. Researchers and practitioners have developed a sustainable body of knowledge by deploying various qualitative and quantitative tools and techniques. It is observed that organizations have unique products, operations, culture; and have a different level of compatibility & adaptability.
Therefore there cannot be one fix solution for all organizations. Depending upon corporate strategy organizations will have to develop a suitable supply chain management strategy. It would be a formidable task for managers if they do not understand the theoretical foundations and practical implications of SCM.

- If possible, use the forces with education in the field of educational management and psychology and social sciences for management. Because dealing with individual differences is a potential source of conflict management. A manager who does not know about behavioral sciences cannot manage it, thus it increases the conflict.

Principals are always faced with the complex behavior of humans in the school environment, and this complexity consists of several variables. For this reason, principals have to attend psychological labs to find logical solutions and get more perception from themselves and the people around them through an internship course.

- To respond to environmental responses (disagreements between teacher and student and others) and receive feedback as an evaluation in exchange meetings and experience of managers with advisers to be hold every month so that during these meetings, the undesirable behavior of responses can be identified and prevented from repeating it.

- Emphasis on the study of the management resource of each season by principals
- Good situations to deal with conflict styles
- In order to improve the negotiation skills, the following suggestions can be effective:
  • Investigated about your opponent.
  • Start with the right suggestion.
  • Deal with problem, not characters.
  • Do not pay too much attention to initial offers.
  • Emphasize the win-win solutions.
  • Act on accepting third-party help without the shame.

References


