Organizational Climate and Effectiveness Relationship in IT Sector: Mediating Effect of Organizational Commitment

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Abstract: Human resource of an organization is considered as a central variable which affects the effectiveness of an organization. In this competitive era employees are considered as an asset to the organization and it is the only resource which can use all other resources within organization in an effective way. Human resource with its skills, capability, talent and intelligence can help an organization to achieve its objectives. The performance of employees will only be high when a favourable environment with growth opportunities will be provided to them. The present study focuses on the effect of organizational climate on organizational effectiveness of IT sector with organizational commitment as a mediator. Data was collected through structured questionnaire with the help of convenient sampling from 350 employees from Delhi and NCR. Process macro along with AMOS was used to measure the mediating effect of commitment between organizational climate and organizational effectiveness. A significant partial mediation using Bootstrapping was found with an indirect effect of organizational climate on organizational effectiveness ($$\beta = .32$$, Boot (LLCI= .8678, ULCI= 1.599). Total effect of organizational climate on Organizational effectiveness was .71, whereas direct effect was .39.

Key Words: Organizational Commitment, Job Organizational climate, Organizational effectiveness, IT sector.

1. INTRODUCTION

Effectiveness is that degree which helps an organization to accomplish its goals and to get success (Robbins, 2001). Due to the impact of organizational effectiveness on organizational performance and objectivity it plays a vital role at every level of organization (Powell and Yalcin, 2010). Effectiveness determines the success of an organization and helps in fulfilling the objectives (Alagheband, 2009) and because of this impact it is the core area of organization theory (Robbins, 2001). Pennings and Goodman (1977) illustrated that organizational effectiveness is an important problem in science as well as social science. In today's era of cut throat competition it is only through organizational effectiveness that an organization can endure and maximize its profits. Peter Drucker (1967) explained effectiveness as, “doing the right things”. It is the degree to which goals of an organization are accomplished (Daft, 1995; Khadivi and Aljami-Farid, 2008). It is the capability of an organization for accessing and absorbing limited resources in a well-organized manner and realizes its objectives (Federman, 2006; Cameron, 1978).

Effectiveness cannot be attributed to a single factor as there are many variables which affect the effectiveness of an organization. It is evaluated by using multiple this criteria. Survival of organization in competitive era is considered as the ultimate and long term criteria of effectiveness (Gibson et.al 1973). Human resource of an organization is considered as an important variable which affects the effectiveness of an organization. As human beings are considered as the assets of an organization and it is the only resource which can use all other resources of an organization in an effective way. Human resource with its skills, capability, talent and intelligence can help an organization to achieve its objectives. And to check how human resource leads to organizational effectiveness here two variables are taken namely: organizational climate and organizational commitment. The term “Organizational Climate” is relatively a contemporary term. The implementation of human relationship approach more eagerly embraced organizational climate. Lewin and his associates were the first to establish this concept in 1939 (Ali and Patnaik, 2014), and they introduce this concept as psychological climate instead of organizational climate. Elements such as objective, needs, social relations, a pleasant or aggressive environment, freedom and autonomy describe the psychological climate concept (Schneider and Reichers, 1990). According to Forehand and Gilmer (1964), organizational climate expresses the features of an organization, sets it apart from other organizations, is fairly stable and consistent in long run and affects the conduct of its personnel’s. (Litwin and Tagiuri, 1968) stated that the organizational climate is explained by employees perception and have an effect on their thoughts and enthusiasm. Organizational objectives like higher productivity, fewer turnovers and less absenteeism can only be achieved when employees feel committed to the organization. Committed workforce will put their entire hard work to fulfill the expectations of the organization and their goals. Allen and Meyer (1990) defined it as an outlook which relates to the state of mind an individual has about organization. It is the intensity and firmness of an employee’s devotion towards the organization. Meyer and Allen (1997) explained it as the ability of a person to remain honest to the organization and give all his efforts to organization success even in difficult and unpleasant situations. Mowday et al. (1982) recommended that positive association between both individual and organization will be beneficial to individual, organization and society at large.
When employees are committed it revealed that they are concerned and dedicated. Mowday et al. (1982) explained organizational commitment as trust and faith of employees in goals and values of an organization; wish to stay as a part of the organization and truthfulness to the organization. Porter et al. (1974) added that committed employee will feel attached towards organization, wish to be part of organization, and will put on additional hard work for its success. The role of organizational commitment between organizational climate and organizational effectiveness has not been addressed adequately in Indian IT sector. Through this study an effort is made to discover the factors highly affecting commitment and satisfaction level of employees and to combat the factors which hinder organizational effectiveness. To establish the relationship between studying variables and setting up the hypothesis various studies were reviewed and it was found that both organizational climate and commitment have a significant impact on organizational effectiveness.

II. REVIEW OF LITERATURE
Sharan (1968) explained that formal structure, objectives and environment are the parameters on which climate of an organization is based. Menon (1971) investigated that commitment and responsiveness of employees is the outcome of their satisfaction by learning new things and providing different type of work in a supportive organizational climate. Lawler et.al (1974) explained that perceived climate share a considerable relationship with performance and satisfaction level of employees. Personal factors such as age of employees, education level, professional training and experience at work place do not affect perception of employees towards climate. When a manager having need for achievement gets an achievement oriented climate his performance will be high. Wiener (1988) was of the opinion that shared values of employees in an organization contribute to organization climate. Uthayasuriyan (2005) found that perception of artisans, supervisors and executives about organizational climate was different in respect attitude of worker’s, characteristics of job, value system, structure of management, and performance and reward relationship. Steers (1977) said that personal characteristics, job characteristics and work experience had an impact on commitment level of hospital employees, scientists and engineers. Angle et.al (1981) attempted to relate the commitment level of lower level employees and organizational effectiveness of organization providing bus services. Organizational adaptability, turnover and tardiness rate were found to be associated with organizational commitment. Feldman (1981) explained that the relationship between supervisor and employee on different level is affected by age, appearance, behaviour etc. Supervisors consider old age employees more committed than young employees whereas Mottaz (1987) was of the opinion that personal characteristics have little effect on satisfaction level or commitment. Rewards gained from work better predicted the commitment level of employees. Glission and Durick (1988) explained that type of leadership and age of organization were the two organization characteristics and education was one of the employee’s characteristic that predicted the organizational commitment. Romzek (1989) illustrated that employee feels committed due to time and money attached in an organization in the form of retirement plan. Bowen et.al (1994) institute that married employees remains highly committed to the organization than those who are single. Pettaway (2015) said an organization will be effective when the working condition of employees, job safety, comfort facilities available to employees along with support services are according to the employee’s expectations. Perceived autonomy, experimentation, and collaboration were the factors which influenced affective commitment positively, while confrontation and experimentation were the factors affecting normative commitment positively. Authenticity was found to have links with continuance commitment. (Gabrani et.al, 2016) said that when employees of an organization are satisfied with their pay, promotion, supervisors and co-workers they will feel emotionally attached with the organization.

A. Objectives of the Present Study
Rationale of conducting the study is to check the likely mediating impact of organizational commitment on the relationship between organizational effectiveness and organizational climate. This is an attempt to discover and clarify the factors which helps in achieving higher level of organizational effectiveness. Based on the purpose of study following objectives are framed.

- To examine organizational climate and commitment level of employees in IT sector.
- To check the impact of climate on organizational commitment in IT sector.
- To assess the impact of organizational commitment on effectiveness of IT sector.
- To measure the effect of organizational climate on effectiveness in IT sector.
- To check the mediating affect of commitment on organizational climate and organizational effectiveness.

III. RESEARCH METHODOLOGY
A. Tools and implementations
The present study examines how organizational climate mediates between organizational commitment and organizational effectiveness in IT sector among Delhi and NCR. The proposed model assumes that organization commitment significantly mediate the relationship between climate and effectiveness. To measure the effect of commitment information was taken from 350 employees of IT sector using structured questionnaire. The instrument consists of two sections, first one consists of demographic details and the second one consists of statements about organizational climate, organizational commitment and organizational effectiveness. Information was taken on five point Likert scale.
B. Hypotheses
Sixteen statements by C.N. Daftuar (1997) were used to measure organizational effectiveness on eight dimensions like consensus, legitimization, self-control, need for independence, job involvement, innovation, organizational attachment, and organizational commitment. Organizational climate was measured on nine dimensions (professional help, formalization, professional management, organizational risk taking, standardization, people orientation, centralization, formal communication, concern for welfare) with the help of questionnaire prepared by Shailendra Singh (1989) consisting of thirty statements. Three dimensions (faith in organizational goals and principles, a readiness to put hard work for organization, and strong wish to be member of organization) were used to measure organizational commitment with the help of questionnaire framed by Mowday (1979) consisting of fifteen statements. Four hypotheses were framed on the basis of literature and tested with the help of above stated questionnaire.

H₁: there is a significant impact of organizational climate on organizational commitment.

H₂: there is a significant impact of organizational commitment on organizational effectiveness.

H₃: there is a significant impact of job organizational climate on organizational effectiveness.

H₄: Commitment significantly mediates the association among climate and effectiveness.

C. Sampling process
Data was collected from 350 employees from IT sector among Delhi and NCR through convenient sampling. The feedback was analyzed quantitatively with Likert scale. Demographic characteristics of respondents, descriptive statistics and testing of hypothesis were reviewed with SPSS. Process macro was used to test the mediating effect of organizational commitment along with AMOS. Structure Equation Modelling was used for testing model fit.

IV. ANALYSIS AND INTERPRETATION
For measuring the mediating effect of organizational commitment data was collected from 350 employees working among IT sector in Delhi and NCR region. Table I illustrates the demographic profile of respondents. When employees were categorized on the basis of gender it was found that there were 200 male and 150 females which show almost equal composition of both the genders. When respondents were distributed according to age, 140 employees were from age group 25-30 followed by age group 30-40 years (100). Minimum numbers of respondents were from age group 40 years and above (40). Employees were also asked over their education qualification. It was recorded that 50% of employees possess only a graduate degree, 48.46% possess post graduate degree and only 1.54% have M.phil/ Ph.D. degree. Talking about their work experience, 100 respondents had an experience of less than 5years, 120 respondents had an experience of 5-10 years, 100 respondents had an experience of 10-20 years and only 30 respondents were from experience group 20 years and above. When respondents were asked about their monthly income group, it was found that 36.15% had income above 150000, 23.85% were from income group 100000-150000 whereas 35.38% were from income group 50000-100000.

Table-I: Statistics of Demographic Profile

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Less than 25 years</td>
<td>70</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>25-30 years</td>
<td>140</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>30-40 years</td>
<td>100</td>
<td>28.57</td>
</tr>
<tr>
<td></td>
<td>Above 40 years</td>
<td>40</td>
<td>11.43</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>200</td>
<td>57.14</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>150</td>
<td>42.86</td>
</tr>
<tr>
<td>Experience</td>
<td>Less than 5 years</td>
<td>100</td>
<td>28.57</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>120</td>
<td>34.28</td>
</tr>
<tr>
<td></td>
<td>10-20 years</td>
<td>100</td>
<td>28.57</td>
</tr>
<tr>
<td></td>
<td>More than 20 years</td>
<td>30</td>
<td>8.58</td>
</tr>
<tr>
<td>Income</td>
<td>Less than 50000</td>
<td>16</td>
<td>4.62</td>
</tr>
<tr>
<td></td>
<td>50000-100000</td>
<td>124</td>
<td>35.38</td>
</tr>
<tr>
<td></td>
<td>100000-150000</td>
<td>83</td>
<td>23.85</td>
</tr>
<tr>
<td></td>
<td>Above 150000</td>
<td>127</td>
<td>36.15</td>
</tr>
<tr>
<td>Education qualification</td>
<td>Graduate</td>
<td>175</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Post graduate</td>
<td>169</td>
<td>48.28</td>
</tr>
<tr>
<td></td>
<td>Mphil, PH.D</td>
<td>6</td>
<td>1.72</td>
</tr>
</tbody>
</table>

Table-II: Reliability statistics

<table>
<thead>
<tr>
<th>Organizational Variables</th>
<th>Cronbach Alpha</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational effectiveness</td>
<td>.78</td>
<td>16</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>.85</td>
<td>15</td>
</tr>
<tr>
<td>Organizational climate</td>
<td>.85</td>
<td>30</td>
</tr>
</tbody>
</table>

Table II exhibited the results of reliability test. Reliability test was conducted to check the internal consistency of statements used for measuring a variable. The cronbach alpha above .60 was considered acceptable. Since the reliability results of all the three variables were above .60, the data is considered to be consistent for further analysis. Mean and correlation between variables is shown in table III. Table shows that mean of all the three variables was above 4 which explained that employee’s commitment was high and organization climate was in favour of employees.
Mean score of organization effectiveness (4.19) also revealed that due to high commitment and good organizational climate the effectiveness was also high. Results further revealed a high and significant correlation between climate and commitment (.63), climate and effectiveness (.67), organizational commitment and effectiveness (.71).

Table- III: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>N</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OE</td>
<td>4.19</td>
<td>.24</td>
<td>350</td>
<td>1</td>
</tr>
<tr>
<td>OC</td>
<td>4.18</td>
<td>.38</td>
<td>350</td>
<td>.67***</td>
</tr>
<tr>
<td>OCM</td>
<td>4.29</td>
<td>.26</td>
<td>350</td>
<td>.71*** .63***</td>
</tr>
</tbody>
</table>

Note: 1. OCM= Organizational Commitment, OC= Organizational Climate, OE= Organizational effectiveness 2. ***p< .01

Table IV depicts the indices of model fitness showing 7 fitness criteria. As shown in the table CMIN/DF is 1.637 which shows that model is good as its acceptable limit is below 4. All values were near to their traditional criteria which showed that model was fit for that study with p value less than .05.

Figure 1: Structural Model of the Study

Figure 1 depicts the structural model of the study. Confirmatory factor analysis was used to test whether the observed measures were related with their own constructs. For model fit and confirmatory analysis various dimensions of organizational climate, organizational commitment and organizational effectiveness were used. Almost each dimension loaded significantly with their constructs (p< .01 & .05).
Table V illustrates the regression weights of the study model. The result presents a positive and considerable impact of climate on organizational commitment ($\beta = 1.17$, $P < 0.01$, Hypothesis 1). This clarifies that when organizational climate increases by one unit, it will lead to 1.17 increases in organizational commitment. It was instituted that organizational climate also had a positive and significant affect on organizational effectiveness ($\beta = 0.75$, $P < 0.05$, Hypothesis 2). This explains that organizational effectiveness is enhanced up to 75% by climate. When the impact of commitment on effectiveness was examined, 54% of variations were depicted by commitment. There found positive and considerable impact of commitment on effectiveness ($\beta = 0.54$, $P < 0.01$, C.R. = 3.47, Hypothesis 3).

**Testing for mediation**

$H_3$: commitment significantly mediates the association among climate and effectiveness.

![Figure 2: Model showing mediating effect with paths](image-url)
Organizational Climate and Effectiveness Relationship in IT Sector: Mediating Effect of Organizational Commitment

Table VI: Coefficients of the mediating effect

<table>
<thead>
<tr>
<th>Testing path</th>
<th>B</th>
<th>SE(β)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path c: DV = Organizational effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV = organizational climate</td>
<td>.718</td>
<td>.06</td>
<td>.581, .856</td>
</tr>
<tr>
<td>Path a: DV = Organizational commitment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV = organizational climate</td>
<td>.96</td>
<td>.10</td>
<td>.760, 1.177</td>
</tr>
<tr>
<td>Path b &amp; c’: DV = organizational effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV = organizational climate</td>
<td>.39</td>
<td>.07</td>
<td>.242, .548</td>
</tr>
<tr>
<td>IV = Organizational Commitment</td>
<td>.33</td>
<td>.05</td>
<td>.233, .433</td>
</tr>
<tr>
<td>Indirect effect</td>
<td>B</td>
<td>Boot(S.E.)</td>
<td>Boot(LLCI,ULCI)</td>
</tr>
<tr>
<td>Path (a*b): DV = Organizational effectiveness (hypothesis 4)</td>
<td>.32</td>
<td>.186</td>
<td>.8678, 1.599</td>
</tr>
</tbody>
</table>

Process macro by Hayes was used to test the mediating effect of organizational commitment between organizational climate and organizational effectiveness. Table VI shows different paths and regression coefficients of those paths. Path c explains the association among climate and organizational effectiveness. Path a illustrated the effect of organizational climate on organizational commitment, since the p value is less than .05 it can be said that path a is also significant. When the effect of organizational climate was checked along with organizational commitment as mediator, a significant and positive impact was found (R² = .59, p = .000). Path b depicts the impact of organizational climate on effectiveness and path c’ measures the direct impact of organizational climate organizational effectiveness. Taking organizational commitment as a mediator when indirect effect of organizational climate on organizational effectiveness was measured, a positive and considerable effect was found (β = .32, Boot (LLCI, ULCI) = .8678, 1.599). Since zero is not included in the Bootstrap confidence intervals, it can be inferred that the mediation was considerable and organizational climate predicts organizational effectiveness with the help of mediator (organizational commitment). After analysing the table it can be determined that commitment considerably mediates the association among climate and effectiveness, hence hypothesis 4 is accepted.

V. CONCLUSION

The study was performed to evaluate the indirect effect of climate on organizational effectiveness through organizational commitment as a mediator in IT sector. The results of present study are similar to those of previous studies. The relationship between organizational culture and organizational climate was found significant akin to the existing literature (Menon, 1971., Nammi & Nezhad, 2009). Previous studies also showed that organizational commitment also had a considerable relationship with effectiveness (Mowday et al., 1979., Angle et al, 1981., Ussahawanitkachit, 2008., Rahim et al, 1994). When impact of organizational climate on effectiveness of organization was measured, a considerable impact of organizational climate on effectiveness was found (Wiener, 1988., Ali and Patnaik, 2014). When mediating effect of commitment between organizational climate and organizational effectiveness was measured it was revealed that decreased impact of organizational climate on effectiveness after taking commitment as mediator was a significant decrease. To increase effectiveness, the business has to think about commitment level of employees. Organization should provide employees with different activities from time to time so that their satisfaction can be boosted. Standardized regression weight of statement “there is a chance to do different things from time to time” is highest (.764) which reveals that the maximum variance of Job satisfaction is depicted by it. This means the variable job satisfaction in IT sector is represented by this statement and IT sector employees always try to do innovative and creative things on the job. The ability of superior in decision making along with the chance to be part of the community also scored high on their regression weight, which means these both statements highly influence the satisfaction level of employees. Statement which explained maximum variation of organizational commitment are: “I find my values and organizational values are similar”, “I am proud to tell others that I am a part of this organization” and “I talk about this organization to my friends as a great place to work for”. These statements show that IT employees consider the values adopted by the organization and communicate others about the positive aspects of the organization. The values and goals of the organization must be clear to each employee. The statements of organizational effectiveness which showed higher standardized regression weight are: “I usually show up for work a little early to get thing ready (.70)” and “I really care about the fate of this organization (.72)”. It can be revealed from these statements that employees feel responsible about completing their task and achieving the goals of the organization. The results of this study imply that management of IT sector should follow democratic style of leadership to increase the organizational effectiveness and allow the workers to take their own decisions. Management should only be consulted for important matters and encourage employees to handle small matters by themselves. Instead of giving orders to the employees guidance should be provided to them to taking their own decisions. Employees must also be encouraged to give new suggestions regarding the work. To avoid labour unrest and disputes between union and management welfare of employees should be held at the top. Proper incentives and rewards should be given to employees so that they can feel committed towards the organization.