

ORGANIZATIONAL HEALTH ASSESSMENT: A ROMANIA FIRM CASE STUDY

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***Abstract.** Other than measuring units of output or profit to evaluate organization performance, this research develops a new assessment concept, organizational health. The survey of Work Environment Scale as the foundation data for the System-wide Interpretation of Health and Quality was used in this case study on a Romania firm. Structural measurement on organization effectiveness, leadership, and term work efficiency was conducted and further explained by three dimensional graphs with a weighted least squares method. The system-wide assessment shows multiple causalities among the endogenous variables.*

***Key words:** Organizational Assessment, Leadership, Organizational Health*

1. INTRODUCTION

Although the principles of economics have been not changed significantly in the last century, people now look at the world in different ways as globalization and global warming are more obvious. In the business world, organization climate has been paid more attention since inclement market competition following globalization. Even for small firms, seeking short-term profit is not enough for long term survival and growth. Researchers also study newer patterns and the factors which can impact on organization performance, organization climate, and organization behavior.

Organization performance is often measured by effectiveness. With many intense factors as global competition, downsizing, total quality management, and decreased funding in the public sector, it is becoming more difficult to determine whether an organization is meeting performance standards. Organizations can no longer look to single variable measurement of items produced and isolated issues as valid determinants of organizational effectiveness. Reflecting on the concept of interdependence, each part of any system depends on every other part. This is very consistent with a broad based multivariate assessment of organizational effectiveness. Seashore (1993) and Denison (1996) both consider the complexity of diagnosing organizational performance and suggest that climate at least be considered as a valid measurement of organizational effectiveness. In three separate research studies directed toward organizational performance, the authors approached their issues from broad perspectives. Each study used terms such as multidimensional, employment system, and two dimensions to describe their research. However their findings did show positive

linkages of single variables to increased organizational performance. The multi dimensionality of entrepreneurial orientation was the major focus of their study, however Lumpkin and Dess (1996) also indicate that previous work has consistently linked innovation to increased performance. Ainsworth-Land (1986) also indicated that innovation is transformative. Delery and Doty (1996) showed that human resource practices and an organization's employment system have positive significant impact on organizationally relevant performance measures. More specific to this study, they included participation/voice (involvement) as one of seven key human resource practice variables and did find it positively linked to organizational performance. Button, Mathieu, and Zajac (1996), while focusing on the complexity of goal orientation, indicate that attention to task performance is one of several positive relationships to increased organizational performance.

Organizational climate is clearly linked with leadership, but theories in this area are still in their infancy. It appears that the research on leadership is not doing all that those interested in this field would like (Bass 1981) and (Scott 2003). Zammuto (1982), Harrison (1987) and Heifitz and Laurie (2001) studied the designated and visible leaders within any system, and Burns (1978), Bass (1981), and Gleick (1987) indicate limited impact of designated leaders on selected variables within a system. According to Burns (1978), McCall and Lombardo (1978) and Gellis (2001) real leadership only happens when connections are made between the top and the bottom and throughout the system. Although there are some outstanding developments in the study of leadership theory and the delivery of leadership education, such as Lemon (1988), Bennis (1996), and Quinn and Spreitzer (2001) widely used theories and leadership training do not adequately address the results intended. In the 1990s, critics of leadership research continually pointed out deficiencies, most of which revolved around the lack of understanding and observations within the entire system. Senge (1990), Deming (1992), and Scott (1993) indicate a paradigm shift that is moving the locus of control downward in all systems. However, most leadership research has not connected multiple variables of outcome and leadership throughout the system. Edwards and Parry (1993) applied polynomial regression equations and response surface methodology to develop an interpretive framework and illustrate the relationships of difference scores of person-environment study in organizational research. Bennis (1996) discussed several factors that indirectly link autonomy to leadership. Empowerment, independence, freedom, and personal belief in the job are all part of what creates positive leadership within an organization. That takes autonomy. Handy (1996), in his conversation on the future of work, talks freely of independence and indicates that the chaos of the future will necessitate individuals who may be selling skills to several clients or employees, or operating as independent units within an organization. His perspective seems to predict that the successful organizations will allow autonomy within the workforce. Chief executive officers recently have expressed concern over all junior managers following the excessive control models of some senior executives. Based on that assumption it is theorized that excessive control will decrease leadership within a system. Banker, Lee, Potter, and Srinivasan (1996) hypothesized and found significant that excessive monitoring led to smaller performance impacts. Oldham and Cummings (1996) found that 171 employees from two manufacturing facilities responded to leadership and produced the most creative work when supervised in a supportive manner. Also, using a concept of "conversations for accountability," Fry (1995) suggests that leaders and supervisors in an open, non-threatening, and supportive forum will shift behavior from finger pointing into an "enabling organizational practice." While leadership research is certainly increasing, the concept lends itself to a wide range of academic and practitioner approaches to determining what it is and how it impacts organizations.

Organization behavior is related with team work efficiency. Once again, a broader view of several dimensions is needed and the variables of clarity, peer cohesion, and work pressure are believed to have an optimal interaction to reduce destructive conflict, which increase team work efficiency. Four different articles from different types of journals were

selected to show an established relationship between these variables and conflict within the organization. While not using the word *clarity* in their article, Heady and Smith (1996) certainly point to reduced noise and conflict within the organization when there is common meaning, two-way communication, and clear intent between leader stimulus and follower response. Kabanoff (1991) sets a proposition that decreased social integration and loss of cohesiveness increases potential conflict. He presents compelling discussion that the loss of social cohesiveness and the loss of sense of community constitute critical and growing problems for organizations that do not place adequate emphasis on the quality of cohesiveness. Gruenfeld, Mannix, Williams, and Neale (1996) found that direct and indirect conflict is impacted by peer cohesion in that “familiar groups may be better equipped psychologically to resolve conflicts effectively” and strangers “may lack the social ties and interpersonal knowledge” to effectively reduce destructive conflict. Reich (1996) stated “Every time a company engages in a large-scale downsizing, a chill is sent through the living rooms of millions of working families who think they could be next.” His interview is focused primarily on downsizing and the breakdown of implicit social compacts between company and employee that greatly contribute to worker anxiety. However, Reich suggests that this and other types of work pressure will cause much conflict in the organization. One impact of this type of conflict will be reduced loyalty of the work force, and it is not certain that many organizations can sustain that loss of loyalty.

2. MODEL AND DATA

Human organizations, no matter if they are profit or non-profit, cannot be separated from the basics of human behavior. These representative findings from a literature review reinforced opinions connecting each of the specific variables above to the major issues in this study; organization effectiveness, leadership, and efficiency. The measurement of three factors can represent the organization environment scale. This study also uses a broader perspective to include the connections of all the variables under study and also links specific variables to particular issues. In an institution, organization effectiveness, leadership, and team work efficiency are mostly unobserved variables. These three variables are latent variables in our theoretical model, which can be represented by some observable multi-causal endogenous variables (see Figure 1). These endogenous variables and other exogenous variables can then be used to construct a latent variable model. Since these three factors are complicate concept, they should be presented by multiple observable variables. In this study, we use three related endogenous variables in combination to measure each of these three complicated concepts. Organizational Effectiveness can be represented by task orientation, involvement, and innovation. Leadership can be represented by control, supervisor support, and autonomy. Team Work efficiency can be represented by clarity, peer cohesion, and work pressure. Together, the nine individual variables, and collectively grouped into the three major categories of Team Work Efficiency (a lateral view), Leadership (a hierarchical view) and Organizational Effectiveness (a system wide view) form the System-wide Interpretation of Health and Quality and provide a very information rich appraisal and analysis of the system’s Organizational Health.

PROPOSITION 1 (organizational effectiveness):

- a) Strong attention to task orientation will lead to higher organization effectiveness.
- b) A more involved work force will lead to higher organization effectiveness.
- c) An increase in innovative practices among workers will lead to higher organization effectiveness.
- d) Optimal interaction among the variables of innovation, involvement and task orientation (collectively, not individually) within the work force will improve organization effectiveness.

Task Orientation measures the degree of emphasis on good planning, efficiency, and getting the job done. Involvement is defined as the extent to which employees are concerned about and committed to their jobs. Innovation measures the degree of emphasis on variety, change, and new approaches. Increased organization effectiveness can be defined as increased organizational performance, however what measures are appropriate is more difficult to conclude. Three separate variables - task orientation, involvement, and innovation- are shown to have positive relationships with organizational performance, hence organization effectiveness.

PROPOSITION 2 (leadership):

- a) An increase in appropriate supervisor support will lead to more leadership within the organization.
- b) A decrease in excessive control mechanisms will create more leadership within the organization.
- c) An increase in autonomy will increase leadership within the organization.
- d) Optimal interaction among the variables of autonomy, control, and supervisor support (collectively, not individually) within the work force will improve leadership in the organization.

Supervisor Support is defined as the extent to which management is supportive of employees and encourages employees to be supportive of one another. Control is defined as the extent to which management uses rules and pressures to keep employees under control. Autonomy is defined as the extent to which employees are encouraged to be self-sufficient and to make their own decisions. These three variables all have positively represented relationship measurement. Good leadership will improve organizational performance.

PROPOSITION 3 (team work efficiency):

- a) Increased clarity in all communication will reduce destructive conflict in the organization.
- b) An increase in cohesiveness among peers within the work force will decrease destructive conflict in the organization.
- c) A reasonable release in work pressure will decrease destructive conflict in the organization.
- d) Optimal interaction among the variables of clarity, peer cohesion, and work pressure (collectively, not individually) within the work force will reduce excessive and destructive conflict in the organization.

Clarity is defined as the extent to which employees know what to expect in their daily routine and how explicitly rules and policies are communicated. Peer Cohesion is defined as the extent to which employees are friendly and supportive of one another. Work Pressure measures the degree to which the stress of working and time urgency dominate the job milieu. Team work efficiency is one of the most important elements in the modern organizations. Clarity and peer cohesion have positive relationships with team work efficiency. However, optimal level of work pressure is necessary to increase team work efficiency.

PROPOSITION 4:

Assessment on organization effectiveness, leadership, and team work efficiency showing multiple casualty effects is a valid and appropriate method of evaluating organizational health.

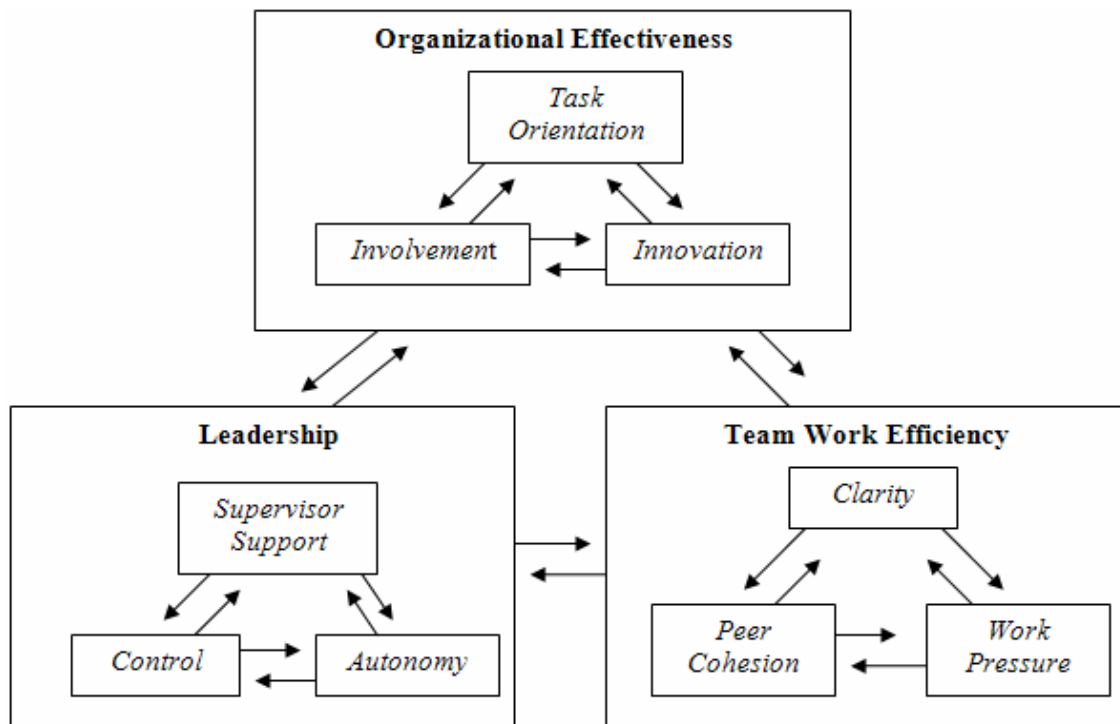


Figure 1

While the importance of individual variables is not to be underrated, the major focus of this study is the broader perspective of the multiple interactive relationships among all of the endogenous and exogenous variables. The study of system wide interactions provides much more detailed information than does one way causal relationships.

In order to facilitate a study of organizational climate with the above variables, the Work Environment Scale (WES) by Ralph Moos (1980) was used to collect data in a Romania company. The WES was selected as a climate assessment device to provide the raw data for this study and its measurement of organizational major factors. It was selected from several instruments for its reasonable costs, ease of administration, and statistical reliability and validity. It provides a way to collect attitudinal data on autonomy, control, supervisor support, clarity, peer cohesion, work pressure, innovation, involvement, and task orientation. Other demographic information such as department and hierarchical level were also collected at the same time.

The survey on a Romania company was completed in 2004 with 52 observations. The average scores of these nine variables are presented in Table 1. Comparing with US averages from a firm a few years before, this Romania firm has relatively strong comparable score in general, with a few noted exceptions.

Table 1

Comparison of the Romania firm's average score with a US firm's average score

Observed Variable	Romania Firm's Score	US Firm's Score	T-Test
<u>Organizational effectiveness</u>			
Task orientation	49.4	48.12	0.8969
Involvement	54.6	55.12	-0.2927
Innovation	55.1	42.97	9.4869**
<u>Leadership</u>			
Supervisor support	48.1	33.41	7.9158**
Control	57.6	44.58	5.2834**
Autonomy	46.8	55.18	-3.4836**
<u>Team work efficiency</u>			

Observed Variable	Romania Firm's Score	US Firm's Score	T-Test
Clarity	49.9	48.37	0.7321
Peer cohesion	54.7	50.74	2.1338*
Work pressure	46.3	41.40	2.2143*

[Note: * Level of significance for one-tailed test is 0.025;

** Level of significance for one-tailed test is 0.005.]

In terms of organizational effectiveness, we compare the average scores of task orientation, involvement, and innovation. By comparing the task orientation scores, the Romania firm's score is not significantly higher than the US firm's score. By comparing the involvement scores, the Romania firm's score is not significantly lower than the US firm's score. By comparing the innovation scores, the Romania firm's score is significantly higher than the US firm's score. This higher innovation score of Romania firm may be caused by different types of business. In terms of leadership, we compare the average scores of supervisor support, control, and autonomy. By comparing the supervisor support scores, the Romania firm's score is also significantly higher from the US firm's score. By comparing control scores, the Romania firm's score is significantly higher than the US firm's score. By comparing the autonomy scores, the Romania firm's score is significantly lower than the US firm's score. These scores clearly show that the leadership styles are different between these two firms. In Romania firm, control and supervisor support are very strong; but in the US firm, people will have more autonomy. This is due to the culture differences. In term of team work efficiency, we compare the average scores of clarity, peer cohesion, and work pressure. By comparing the clarity scores, the Romania firm's score is not significantly different from the US firm's score. By comparing the peer cohesion scores, the Romania firm's score is significantly higher than the US firm's score. By comparing the work pressure scores, the Romania firm's score is significantly higher than the US firm's score. Comparing with the US firm, employees in the Romania firm are more likely willing to work together, and at the same time feel more pressure. With constant high working pressure, workers' strength and motivation could have a lagged burn out effect. The high work pressure may not be a comfortable working place in the long run from an American point of view.

3. ANALYSIS OF MULTIPLE CAUSALITY RELATIONSHIPS

As we have discussed above, the system wide interactions provides much more detailed information about the multiple causality effects. Before we use more advanced estimation methods to show the three groups' interactive effects, we estimate the correlation coefficients first. The correlation coefficients among these variables are in Table 2. All of the correlation coefficient estimations have positive sign, but do not significantly show there are not clear linear relationships among these variables.

Table 2 Correlation coefficients of the among these variables

Organization effectiveness	Task orientation	Involvement	Innovation
Task orientation	1		
Involvement	0.4120	1	
Innovation	0.2288	0.0588	1
Leadership	Supervisor support	Control	Autonomy
Supervisor support	1		
Control	0.2227	1	
Autonomy	0.3190	0.2450	1
Team work efficiency	Clarity	Peer cohesion	Work pressure
Clarity	1		

Organization effectiveness	Task orientation	Involvement	Innovation
Peer cohesion	0.1679	1	
Work pressure	0.0708	0.0447	1

A Weighted Least Squares method is adopted to build three dimensional surface plots. The three complicated concepts of organizational health have been separately presented in three dimensional surface plots. Following is Figure 2 which shows the structure of the organizational effectiveness measurement. Figure 3 shows the structure of the leadership measurement. Figure 4 shows the structure of team work efficiency measurement.

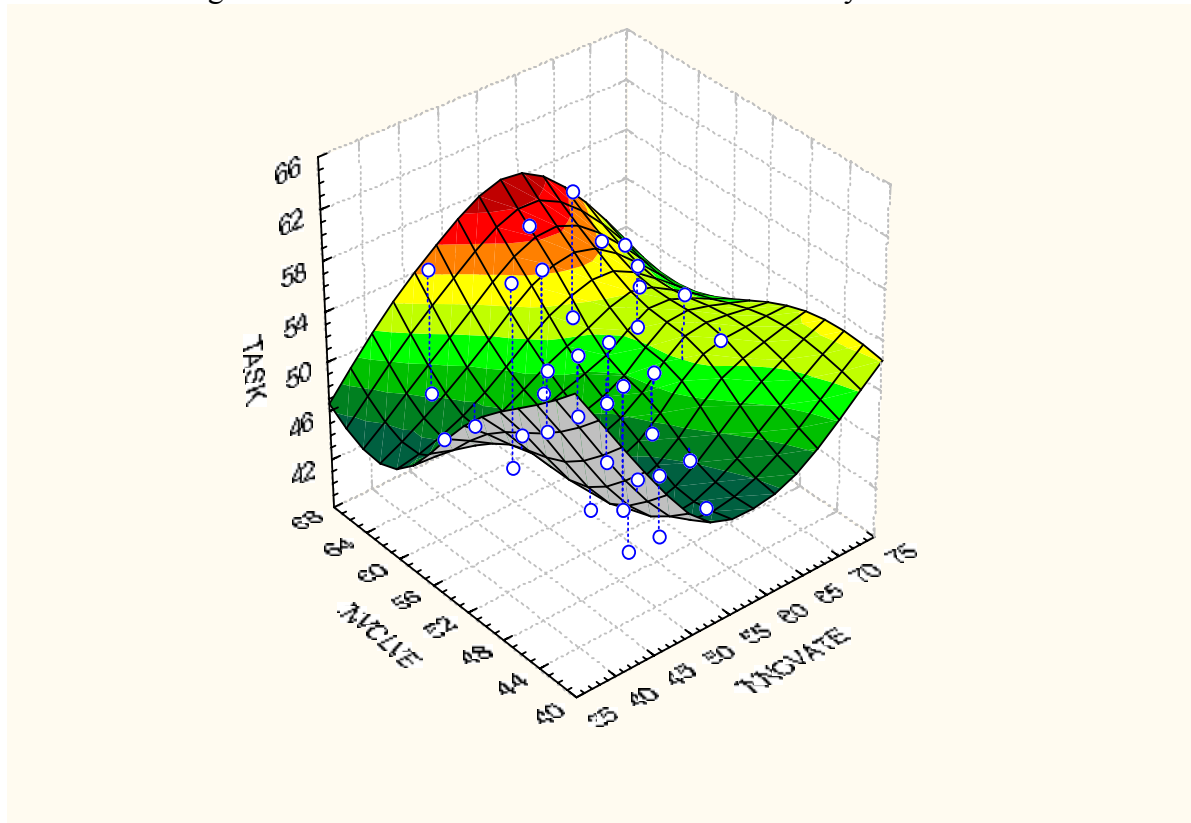


Figure 2: **Organization Effectiveness Chart**

From this Figure 2, we can clearly see the multi-causality among task orientation, involvement, and innovation. The raw data shows the observations are relatively concentrated in the center. Both task orientation and involvement scores have large variation, but innovation has less variation. This 3-D chart of raw data represents the company's organizational effectiveness. The task orientation, being lower than both the involvement and innovation scores, is not very clear to many employees. Even when the task orientation is quite clear to some employees, involvement is low relatively. Innovation relative inside the Romanian firm is low compared to the other variables. However, this particular firm is more 'innovative' than its US comparator. This is partially due to a significantly large employee group within this US firm who simply provide data and will not support any change within the organization. The weighted least squares simulation shows a valley shape of multi-causality among these three variables. If employees involved show too much innovation, the task orientation score will be quite low. If employees are not allowed be innovative, even they involved very much in the work, the task orientation may not be achieved. On the other hand, if the task orientation score was set too high, people would have much less involvement and less innovation. The high involvement and task organization score occur at the point of the company allows employees have reasonable room for innovation.

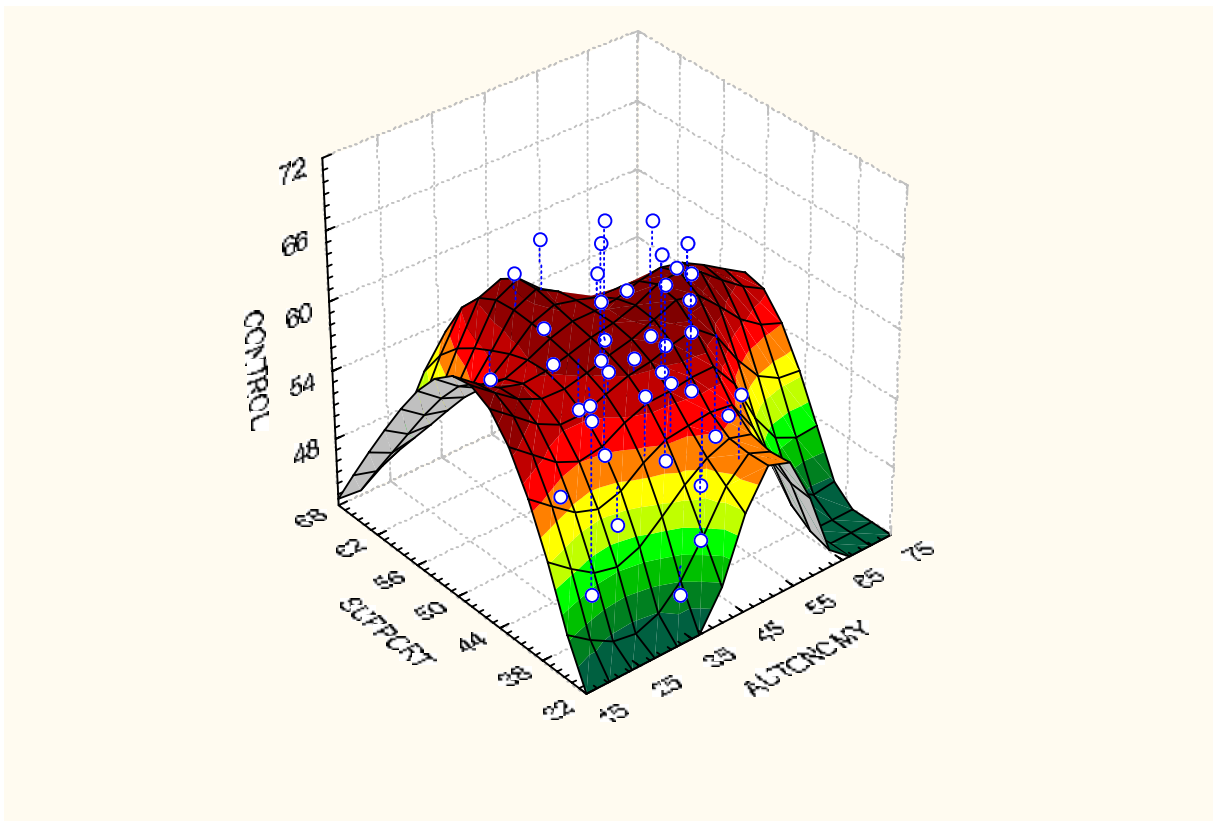


Figure 3: Leadership Chart

From this Figure 3, we can clearly see the multi-causality among supervisor support, control and autonomy. Most of raw data is concentrated in the middle with a high control score. This shows the company has a highly authoritarian and controlling type of management. The control is very strong in the company. However, there is moderate supervisor support. The autonomy, or felt freedom in this organization is relatively low. The weighted least squares simulation shows the multi-causality among these three variables. If the supervisor support is low and control is very high, the score on autonomy will reflect more distance between the manager and workers. From a different view, we can see high control and high supervisor support will cause low autonomy. If the control is low and support is low also, the autonomy is also very low indicating weaker leadership. The reasonable control and optimal supervisor support will have high autonomy, which means a stronger leadership. In contrast with the US firm, the supervisor support is higher, but the autonomy is excessively lower and the perceived control by management is significantly greater. This paradox of relationships is easily understood given Romania's new awareness of her need to successfully interact in the global economic arena. The higher supervisor support could be expected, as, paradoxically the lower autonomy score. Even more than twenty years after the revolution, the lack of autonomy and the excessive control can be reflected by employee's felt need to stabilize an ever changing economy and the manager's felt need to do the same.

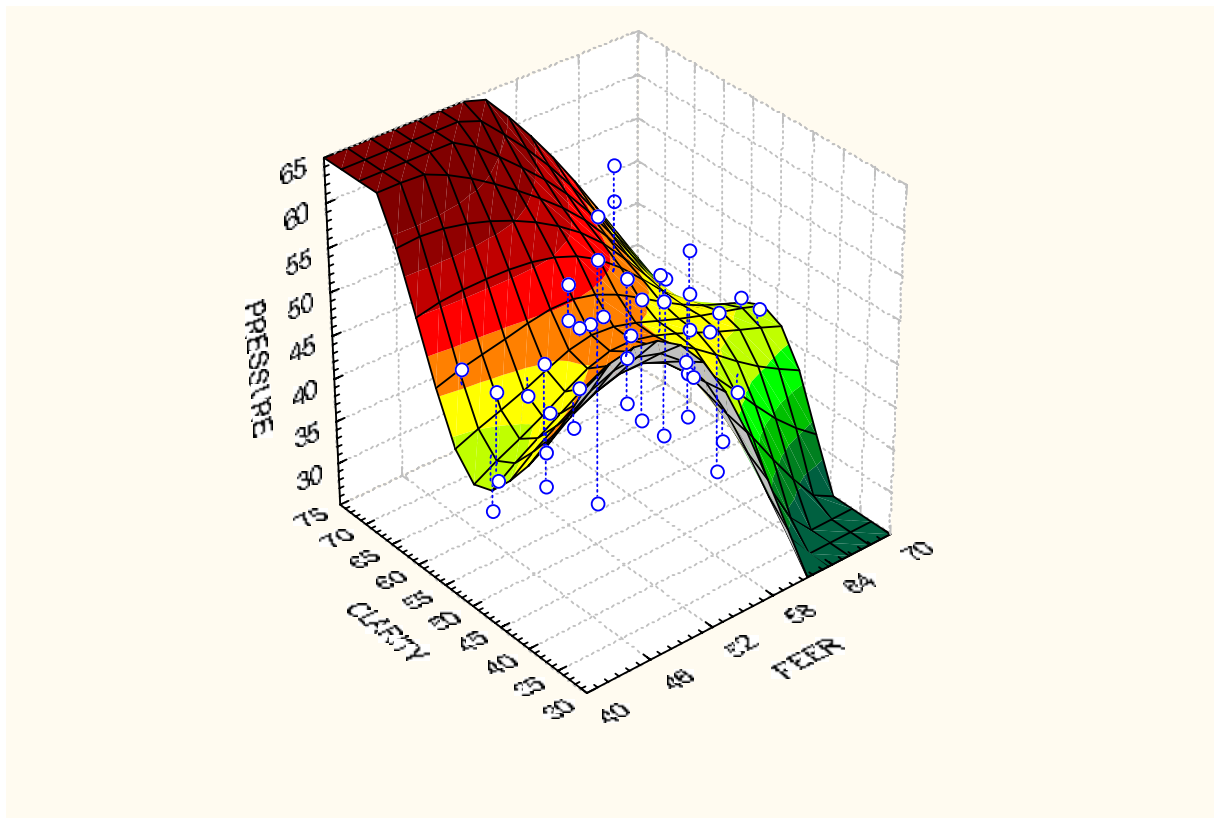


Figure 4: **Team Work Efficiency Chart**

From this Figure 4, we can clearly see the multi-causality among clarity, peer cohesion, and work pressure. The raw data show most of observations as located in the central area and many of them with relatively high work pressure score. Some of them have high work pressure because of low clarity. With medium clarity and high peer cohesion, some people can get relative low work pressure. The weighted least squares simulation shows two extreme points. The combination of high clarity and low peer cohesion will reflect a high work pressure score. The combination of low clarity and high peer cohesion will come out a very low work pressure score. Other than these two extreme cases, other multi-causality among these three variables has a complicated shape. The low score on peer cohesion with low or high clarity will cause high work pressure. The high score on peer cohesion and high clarity will result low work pressure. Combining high clarity and high peer cohesion, the work pressure will be very low. Moderate clarity and moderate peer cohesion will have moderate work pressure.

4. CONCLUSION

In industries, organizational performance is widely measured by output sales, seasonal earnings, or profit margin. In academic research, organizational behavior has been widely studied but has been mainly focused on one-way causality analysis. This study uses the concept of an organization's health to evaluate organizational performance. We look at organization effectiveness, leadership, and team work efficiency. Respect to these three unobserved structural variables, the Work Environment Scales embedded into the System-wide Interpretation of Health and Quality provide clear observable variables (task orientation, involvement, innovation, supervisor support, control, autonomy, work pressure, clarity, and peer cohesion) that have been used to conduct survey research on a Romania company. The weighted least squares method is adopted to estimate three dimensional graphs to show the multi-causality effects among these variables and evaluation of organization performance.

In this case study, a Romania company performance has been studied. We find that this firm's organization effectiveness is good when compared to the US firm. The evaluation

of company's leadership shows a relatively authoritarian and controlling style of management. The assessment on the firm's team work efficiency is not relatively high caused by high work pressure. Since Romania is still in an economic transition period of time, this firm's organizational performance can be considered good. But comparing with an international standard, this firm does not have a significantly strong balance in the leadership area.

Each of the first three propositions indicate the measure of success as an optimal balance of the three micro variables. This study has shown an overall balance of variables in the organizational effectiveness category and a lack of optimal interaction in both the leadership and team work efficiency categories. The lagged impact of these observable behaviors on the organizational effectiveness category is imminent. Proposition four simply indicates that this particular process of a system-wide analysis of all of these performance indicators is an appropriate and information rich assessment process. A more detailed set of charts indicating specific relationships among the various observable variables with a number of pre-selected demographic variables is provided to the firm during exit debriefings. Given the future of Romania and the struggle, the awareness and the subsequent growth in organizational knowledge, organizational improvement in these relationships is highly likely.

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