© Kamla-Raj 2013 PRINT: ISSN 0972-0073 ONLINE: ISSN 2456-6802

# The Effects of Science Teachers' Perception of Learning Organization on Job Satisfaction

# Ahmet Cezmi Savas

## Zirve University, Gaziantep, Turkey \*E-mail: cezmi.savas@zirve.edu.tr

KEYWORDS Learning School. Learning Organizations. Job Satisfaction

**ABSTRACT** Learning organizations not only contribute to the organization but also to the employee's wellbeing. The approach of a learning organization's benefits for the employees is as follows: people who work in the learning organizations are happier in their lives. In this research, it was aimed to determine at what levels are the effects of Science teachers' working for Gaziantep National Education Administration, the perception of a learning organization paradigm on job satisfaction. It will be examined whether science teachers' perception of learning organization affect their job satisfaction in a positive way. As the relationship between science teachers' perception of a learning organization on job satisfaction was designated to be examined, the research design was determined to be causal-comparative. The population and sample: this study's population is primary school science teachers working at primary schools within the Gaziantep city boundary in the 2012-2013 academic years. A randomly selected 99 science teachers from this population is the sample of this research. Two scales were used in order to gather the data for this research: Job satisfaction Scale (Short Form Minnesota Satisfaction Questionnaire- MSQ) and Learning Organization Scale (LOS). Data was analyzed by using the hierarchical multiple linear regression models. Findings of this study indicate that perception of general job satisfaction of teachers' learning organizations predicts their job satisfaction strongly and positively. In the light of the findings, some recommendations were made.

#### INTRODUCTION

## Learning Organizations

It has become a necessity to improve quality in all fields and develop new management strategies in view of global competition. The concept of learning organizations as a new management model is adapted as learning organizations. It is crucial for the teachers and the administrators to accept this paradigm of learning organizations so as to improve the education quality at schools, and to raise happy individuals. All structures and organizations, if they want to take a step into the future, should never quit learning (Kocel 2003). Organizations should learn how to learn, and should give importance to team learning. Those learning organizations which are not able to actualize learning will lose their power of competition. Individuals in the organizations ought to gather their individual expertise, open their mental structure to learning, and create synergy.

Address for correspondence: Dr. Ahmet Cezmi Savas Zirve University, Kizilhisar Kampusu, Gaziantep, Turkey Phone: +90 342 211 66 66, Fax: +90 342 211 66 77, E-mail: cezmi.savas@zirve.edu.tr

According to Senge (2006), who first introduced the learning organization, "Learning Organizations are the places where individuals improve their capacity steadily in order to get the truly desired results. New ways of thinking, push the emerging boundaries, human beings continuously learn how to learn cooperatively". According to Garvin (1999), learning organizations have the skill to create, attain, transfer knowledge, and reflect the behavior gained. Rosen (1998) stated that "it is the organization which encourages and nourishes the employee's development, and regards learning as an investment to improve the success and the capacity of the business, therefore, it provides opportunity for learning and improvement, and creates a learning environment.

Senge (2006) expressed five disciplines of learning organizations; mental models, shared vision, team learning, systems thinking, and personal mastery. Learning organizations' five disciplines are explained as follows: Personal mastery: it is one's approach to his life as an artist does to his art, or to lace one's life up meticulously like embroidery. Mental models: deeply ingrained assumptions, generalizations, or even images that influence how we understand the world and how we take action. These models effect how we perceive our life. Shared vision: it is the target aimed which is meaningful for everyone, and is important, and believed. A vision which is determined together, important, meaningful, valuable, and exciting for everyone brings the motivation with itself. Team learning: team learning discipline includes the skill of transforming the differences among the team members into richness, getting the contributions of the individuals who stay outside the team, thinking, applying together, getting results which are greater and permanent than individual results. System thinking: it enables us see the whole picture, and think cooperatively. Provided that we analyze the events alone, we cannot see the relations among them and cannot see the greater system structures which build them (Calkavur 2006).

The most important characteristics of learning organizations are that they are sensitive to changes. The need to change will be determined by both outcome and organization. Organizations become both learning and teaching organization during the time of change. Learning is one of the most important elements of the information age, and is one of the central elements in terms of the new system's improving itself (Toremen 2002).

Learning organizations are ones which have the necessary infrastructure and culture to support the organizational learning process. Individuals are seen as persons who take part in this process actively, and mediate the change. Organizational learning is the capacity of transforming cultural values and the infrastructure targets of an organization which changes according to the environmental factors. Therefore, learning organizations are dependent on the individual and organizational change. Organizations which empower the employees and ensure them to take part in learning opportunities on the individual level, are becoming more successful in organizational learning and transformation (Perkins et al. 2007)

Organizational learning is the use and absorption of knowledge to improve performance. One of the factors that hinder the increase of organizational performance is the lack of organizational learning (Shek Pui Wong et al. 2008). Research about the organizational learning put forth new perspectives about learning. Learning is not only individual but also it can be achieved on the organizational level if appropriate learning conditions and opportunities are provided. Organizational learning is more complex than the sum of individual learning. One of the most important factors of being a learning organization is learning individually, as a group and on the organizational level (Amiri et al. 2010).

Coppieters (2005) categorizes the most important characteristics of learning organizations under the title of school vision and target, school culture, school structure, school strategies, politics, and resources. In regard to characteristics of learning organizations, three dynamics can be mentioned. These three dynamics are as follows:

- 1. Learning organizations have relations with knowledge
- 2. They have the mechanism of renewing themselves
- 3. They are open to the outside world. Therefore, they are sensitive to what happens in the world, and they are responsive (Mills and Friesen 1992).

Personal mastery is the steady improvement of one's self-efficacy and individual capacity in order to reach goals. An organization's efficacy and efficiency can be enhanced by being a learning organization (SeokHee et al. 2007). Organizations can only flourish by individual learning. Individual learning basis does not mean the whole organizational learning; however, organizational learning cannot be achieved without individual learning. Therefore, the main motivation factor in the improvement of the organizations is the individual mastery (Chich- Jen Wang and Fu-Jin 2009).

Then, individuals should systematically practice teamwork within the organizations, as in the collaborative work in the villages, and as in football; they ought to step in when needed and be part of 'a team game' (Demir 2011). In fact, a learning organization is not an administration model but an administration idea or an administrative philosophy. In order to be competitive in a strong changing environment, all companies have to learn both the internal mechanism, namely its process, structure and ability to administer the systems and be able to learn to adapt changes happening in the exterior environment. Many events happening in the organizations rely on learning (Savas and Dos 2010).

Provided that this point of view is dealt with on the basis of organizations, learning organizations emerge. Learning organizations are groups of human beings steadily improving themselves both individually and together so as to reach a desired common future (Calkavur 2006). Learning organizations provide an opportunity to explore our abilities, and aims to reach the deepest values such as commitment to each other, collective effort, and mind. It makes a logical explanation of why people need other people, by supporting the basic passion of learning while aiming to enrich it. It may bear a torch to organizational development by gaining a technical approach (Toremen 2001).

Learning organizations are the ones where learning becomes a basic value and a natural process. There are some characteristics which differentiate learning organizations from other organizations. In the learning organizations, learning is not an extra burden added to the work but an ordinary part; learning is not spontaneous but a process. In all relations, there is cooperation; while the individuals improve themselves, they improve the institutions.

Learning organizations learn with a clear understanding crossing the frontiers with a team spirit. As they evaluate what they learn, they begin to understand how they learn. They swiftly transform the data into useful knowledge in the right place and time. They have the understanding of how to motivate employees. They take risks without jeopardizing the organizations' basic structure and elements (Calik 2003).

The main nuance which differentiates the learning organizations from other organizations is that: they have the skill of systematical problem solving, trying new approaches, taking lessons or benefiting from mistakes or his rivals' errors, and effective and swift knowledge transfer in the whole organization (Genc 2004).

Organizations, which will be successful in the future besides having learning capacity and desire on the individual and organizational basis, will be able to produce valid and reliable knowledge while applying it to new fields. Organizations' learning and having only certain and stereotypical knowledge will not be sufficient, they will have to generate new information, and will have to use the knowledge as a production factor by applying the knowledge and accumulation to the new fields (Calik 2003).

# **Job Satisfaction**

Employees spend one third of their life at work. To have a job, and work in human life has

a crucial place in terms of providing the needs in the psychological and social dimensions (Sarabahksh et al. 1989). The outcomes of a job for a worker are not only for sustaining life but also for social and psychological needs. With work, besides obtaining social status, economic welfare and a living standard, an individual gains certain psychological benefits. Some of these are: job satisfaction, feeling happy, being known, being appreciated, being successful, and proving himself etc. (Kalleberg and Loscocco 1983). In this sense, rather than economic benefits, employees can be happier with the psychological acquisitions (Bakan and Buyukbese 2004). The importance of job satisfaction is seen here with a person's well-being.

There are many evaluations and definitions of job satisfaction which affects employees' efficiency. According to Vieira (2005) with its shortest definition, job satisfaction is the joy of an employee at work. Job satisfaction can be expressed as satisfaction or dissatisfaction at work (Gunbayi 2000).

Locke (1976), defined the job satisfaction as "the employee's expression of pleasure occurring himself by evaluating his work or work life. In this sense, an employee's having a high job satisfaction level puts forth the fact that he generally loves his job and has a positive attitude towards the job (Testa 1999; Davis 2004).

Job satisfaction comprises the universal feelings about a job. Terms such as loving the job, dedicating yourself to a job, loyalty to a job are used for job satisfaction, which is an abstract term (Incir 1990). According to Spector (1997), it is a behavioral reaction of employees whether they like or dislike their job. If an employee evaluates his job and his job cannot create a situation where he feels pleasure or a positive feeling, dissatisfaction will occur. A disgruntled employee isn't happy at work and in his social life. He gives trouble to his family and friends, and makes them unhappy as well (Sun 2002).

Cranny et al. (1992) define job satisfaction as "an emotional reaction he feels for the job after an evaluation between his aspirations and his satisfaction level. It is about how much an employee's aspirations are satisfied at work and what result they attain (Eren 1998). Job satisfaction occurs when salary, job description, friendships, job's characteristics and employer's demands match. It can belong to a group or an individual. Moreover, it can be a part of a job of an employer. An employee may only be satisfied with certain parts, and may not be satisfied with the other parts (Kalleberg 1977).

It is proportional with an employee's aspirations from his job and what he gets at work. If his aspirations are much more than his work output, dissatisfaction occurs (Kreitner and Kinicki 2004). A person hopes to see that both the work he does satisfies his certain needs, and the job undertaken is suitable for his personal values. Shortly, job satisfaction is the sum of the attitudes of employees towards their jobs (Erdogan 1999). Job satisfaction can be handled as a term defining an employee's attitudes and feeling towards employer's work. In this case, positive and acceptable attitudes towards a job mean satisfaction, whereas negative and unacceptable attitudes towards a job mean dissatisfaction (Gunbayi 1999).

Ensuring job satisfaction has a great number of benefits both for the employee and the organization. It is an attitude which is connected with many variables like life satisfaction from a person's view and performance, and organizational commitment from the organization's point of view (Yuksel 2003).

A positive relationship between job satisfaction and life satisfaction can be mentioned (Keser 2005). Generally, it means a joy in a person's life, happiness, and well being. In this sense, job satisfaction has a great importance in human life. An employee who is satisfied with his job will have joy in life (Uyguc et al. 1998).

In today's market conditions, organizations have to use the current employees' effectiveness and efficiency in order to sustain their existence and competition. One of the first things management should do is to improve the performance of the employees. Employees' high job satisfaction enable them reach peak performance (Erdil et al. 2004). Therefore, the organization's managers have start dealing with their employee's job satisfaction (Cetinkanat 2000). It can be stated that it is necessary to make the employees interested and involved in their jobs for the organization's success.

# The Relationship between Learning Organizations and Job Satisfaction

Learning organizations not only contribute to the organization but also to the employee's well-being. The approach of a learning organization's benefits for the employees is as follows: people who work in the learning organizations are happier in their lives. Learning organizations give their employees the hope that the future will be prosperous. Learning organizations supply an appropriate field for productive minds. Learning organizations provide a secure port to take risks with new ideas. Each person's idea is taken into consideration in a learning organization (Toremen 2001). Research points out that job satisfaction, which is an important job output, is influenced from organizational culture and organizational structure (Egan et al. 2004). In this sense, with empowering the employees, participating in the administration, which are sub dimensions of organizational culture, employees' job satisfaction will increase (Daniels and Bailey 1999; Johnson and McIntey 1998). It was determined that job satisfaction and performance increased in the organizations where leadership behavior inspires team work and where learning organizations challenge the traditional system (Gaertner 2000). Research of job satisfaction in learning organizations is an important research topic so as to increase the efficiency of the organizations (Lim 2011; Allamah and Abbasi 2010).

# Significance of the Study

This research has a theoretical and practical importance. The reason why it has theoretical importance is that the research result about the relationship between the organizational culture and job satisfaction will provide invaluable information for the Human Resources experts. The fact is that job satisfaction is a variable which has a strong effect on the organizational work outputs, for example, work performance, job turnover, irregular attendance at work (Judge et al. 2001). If the there is a positive relationship between job satisfaction and organizational culture, the learning organization model will have some practical benefits for education experts. Furthermore, the result of this research will have a pivotal role for education administrators and Human Resources experts, and will guide them accordingly. Because learning organizations will guide them when they design the systems and organizational processes, choose the human resources, make them work, motivate them in various tasks. The result of this research will enlighten the future research which will be done

on the effect of learning organizations' culture on working teachers.

## The Aim of the Study

In this research, it was aimed to determine at what levels are the effects of Science teachers' working for Gaziantep National Education Administration, the perception of a learning organization paradigm on job satisfaction. It will be examined whether science teachers' perception of learning organization affect their job satisfaction in a positive way.

# METHODOLOGY

As the relationship between science teachers' perception of a learning organization on job satisfaction was designated to be examined, the research design was determined to be causalcomparative. According to the causal-comparative model (Fraenkel and Norman 2008; Buyukozturk et al. 2008) the reasons for an event or a case is examined in the context of reason-result.

The population and sample: this study's population is primary school science teachers working at primary schools within the Gaziantep city boundary in the 2012-2013 academic years. A randomly selected 99 science teachers from this population is the sample of this research.

## **Data Collection Instruments**

Two scales were used in order to gather the data for this research. Job satisfaction Scale (Short Form Minnesota Satisfaction Questionnaire- MSQ) was developed by Weiss Davis and England (1967). The Turkish adaptation was performed by Baycan (1985). To measure the organizational perception Learning Organization Scale (LOS), developed by Subas (2010), was used. LOS which is composed of 5 sub dimensions and 30 items has a Cronbach's alpha reliability coefficient of 0,874. LOS is a 4 point Likert type scale with a sum of 120 points.

#### **Data Analysis**

Data was analyzed by using the hierarchical multiple linear regression models. Before starting the analysis, data was examined in terms of missing data values, outlier values, normality, multi-change, in other words the analysis' assumptions were tested. In our research model, the dependent variable is teachers' job satisfaction. While examining the effect of a learning organization variable predicting job satisfaction, variables like gender, age, tenure, and education were controlled in hierarchical multiple linear regression. The model aimed to be tested: "science teachers' perception of a learning organization positively affects their job satisfaction".

# RESULTS

The frequency table of Science teachers by their gender, tenure and age variable were shown in Table 1.

Ta	ble 1:	The	dist	ribution	of	the	sample	according
to	demo	grap	hic	variable	s			

	Ν	%
Gender		
Male	55	54.9
Female	44	45.1
Tenure		
1-5 years	59	59.6
6-10 years	19	19.2
6 and above	21	21.2
Age		
30 and below	57	57.3
31-40 years	29	29.3
41 and above	13	13.1
Total	99	100.0

As seen in Table 1, the majority of the participant teachers are female teachers who recently started their job (Tenure of 1-5 years is 59.6 %).

Table 2: According to a study conducted with the dimensions of job satisfaction and LOS and overall arithmetic mean

Dimensions	Ν	Min.	Max.	X <sub>mean</sub>	S.Er.	S.D.
Job satisfaction	99	1.70	5.00	3.6094	.05020	.70641
Overall learning organization	99	2.28	5.00	3.9302	.03922	.55184
Personal mastery	99	1.67	5.00	4.1650	.04899	.68933
Mental models	99	2.00	5.00	4.0263	.04787	.67359
Building shared vision	99	1.14	5.00	3.6232	.05428	.76377
Team learning	99	2.00	5.00	3.8367	.05525	.77741
System thinking	99	2.00	5.00	4.0482	.04941	.69522

In terms of gender, the majority of the teachers are males 54.9 %). In the age demographic, young teachers under 30 constitute the majority: 57.3 %.

The mean and standard deviation of the answers given to the job satisfaction and LOS scale by the science teachers were given in Table 2.

When looking at the table, it is apparent that the science teachers' learning organization perception scores are high in the range of "I agreestrongly agree" (3.4-5.0), and their job satisfaction score is also high in the range of "it satisfies me adequately, it satisfies me greatly" (3.4-5.0).

The results and findings about the hierarchical multiple linear regression, which was done to examine the effect of teachers' perceptions of learning organizations on general job satisfaction are studied here.

As seen in Table 3, after controlling the teachers' gender, tenure and age variances in the first step, the learning organization perception score was added to the model by enter method in the second step. After the hierarchical multiple linear regression analysis' result, teachers' perception of the learning organization predict their job satisfaction level significantly ( $\beta$ =.514,

p<.001). 25.3 % of the variance in teachers' job satisfaction is explained in this model by teachers' perception of learning organization ( $\Delta R^2$ =.253, p<.001). When we check whether the demographic variances have a significant effect on the variance, it is seen, it does not have a significant effect ( $R^2$ =.013, p>.05). In this case, almost all of the variance is provided by the perception of the learning organization, and thus our model is meaningful (F=17.646, p<.001).

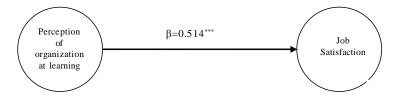
The figure of teachers' perception of organizational learning predicting job satisfaction was shown in the Figure 1 while controlling demographic variables (gender, education, age and tenure).

In this part, in order to examine the teachers' learning organization sub dimensions effect on job satisfaction, findings and results are shown in Figure 1, about the hierarchical multiple linear regression analysis. For the relationship between the perception of a learning organization sub dimensions and job satisfaction, after EFA performed in advance, statistically verified mean scores of sub-dimensions were added to the analysis. As a result of the analysis, 5 itemed learning organization sub-dimensions (mental models, shared vision, team learning, personal

Table 3: Results of hierarchical regression analyses of teachers' job satisfaction on perceptions of learning organization and demographical variables

Model Independent variables		Dependent variable: Job satisfaction								
		В	Std.Er.	Beta	t	р	F	$R^2$	$\Delta R^2$	
6	(Constant)	3.499	.345		10.149	.000				
step	Gender	065	.116	046	558	.578	0.965	.015		
l st	Tenure	.007	.014	.062	.470	.639				
step I	Age	.003	.012	.036	.255	.799				
	(Constant)	.668	.457	1.462	.145					
	Gender	.051	.102	.036	.499	.618			.253**	
2 <sup>nd</sup>	Tenure	007	.012	067	580	.563				
$\sim$	Age	.012	.011	.138	1.130	.260	17.646***	.268		
	Perceptions of Learning									
	Organization	.658	.081	.514	8.168	.000				

\*p<.05, \*\*p<.01, \*\*\*p<.001



\*p<.05, \*\*p<.01, \*\*\*p<.001

Fig. 1. The effect of teachers' perception of organizational learning on teachers' job satisfaction levels

mastery and systems thinking) were added to the analysis as an independent variable in the last step with a stepwise method in the hierarchical multiple linear regression.

As seen in Table 4, after controlling gender, tenure, and age variables in the first step, out of 5 sub-dimensions of a learning organization, added to the model by stepwise method, as 3 sub dimensions' correlation coefficient were determined low by SPSS, it was removed from the model. After performing the hierarchical multiple linear regression analysis, the meaningful predictor of teachers' general job satisfaction, which is the sub dimension of teachers' learning organization, is only team learning (a=.334) and systems thinking ( $\beta$ =.256). Team learning and system thinking dimensions which are the subdimension of a learning organization, predict the teachers' job satisfaction significantly, and therefore, our model is meaningful (F=13.845, p<.001). When gender, tenure, and age, of our demographic variables, are controlled, the 2.5 % of variance in the teachers' general job satisfaction is explained with team learning and systems learning, which are the sub dimensions of learning organizations ( $\Delta R^2$ =.025, p<.001).

Controlling demographic variables (gender, education, age, and tenure), team learning and systems thinking, which are the learning organizations sub-dimensions, and which predict teachers' general job satisfaction, were shown in Figure 2.

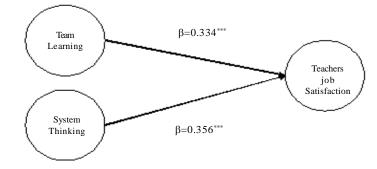
# DISCUSSION

After the conclusion of this research, by choosing a sample of 99 science teachers from Gaziantep, perception of general job satisfaction of teachers' learning organizations predicts their job satisfaction strongly and positively ( $\beta$ =.514,  $\Delta$ R<sup>2</sup>=.253, p<.001). This result parallels

Table 4: Results of hierarchical regression analyses of teachers' job satisfaction on dimensions of learning organization and demographical variables

Model		Dependent Variable: Job Satisfaction								
Independent Variables		В	Std.Er	Beta	t	р	F	$R^2$	$\Delta R^2$	
l <sup>st</sup> step (Enter Method)	(Constant) Gender Tenure Age	3.499 065 .007 .003	.345 .116 .014 .012	10.149 046 .062 .036	.000 558 .470 .255	.578 .639 .799	0.965	.015	.250***	
2 <sup>nd</sup> step (Stepwise Method)	Constant) Gender Tenure Age Team Learning System Thinking	.814 .111 012 .019 .303 .261	.468 .107 .012 .011 .068 .079	.078 110 .220 .334 .256	1.739 1.035 938 1.749 4.491 3.286	.084 .302 .349 .082 .000 .001	13.845*	** .265		

\*p<.05, \*\*p<.01. \*\*\*n<.001



p<.05, \*\*p<.01, \*\*\*p<.001

Fig. 2. The effects of dimensions of organizational learning on teachers' job satisfaction levels

many research findings (Lim 2010; Hsu 2009; Rose et al. 2009; Chivave and Alegre 2008). Similarly Chang and Lee (2007) found out that learning organization culture positively affects the learning organization process, learning organizations' process affects the employee's job satisfaction positively. Allamah and Abbasi (2010) have found that the mediating effects in the relationship between a learning organization's capacity, and intellectual capital and job satisfaction. After the research on IT employees in the United States, they have found that the learning organization increases job satisfaction and decreases the cost of job turnover. Though much research cannot be found on this topic, Yilmaz (2005) has researched the relationship between perception of a learning organization of nurses working at a state hospital and their job satisfaction, and found a positive relationship.

It was seen that teachers' perception of team learning and system thinking, which are subdimensions of learning organization scale, predicts their job satisfaction meaningfully. Likewise, Drani (2009), though he found that system connectedness, which is a sub-dimension of the learning organization, predicts job satisfaction, he found that team learning does not predict job satisfaction meaningfully.

# CONCLUSION

As a conclusion, teachers' perception of the learning organization predicts their job satisfaction level significantly. Team learning and system thinking dimensions which are the sub-dimension of a learning organization, predict the teachers' job satisfaction significantly.

#### RECOMMENDATIONS

Suggestions for future researchers can be stated as follows: this study is limited to the Turkish teachers in Gaziantep. Researchers may repeat the research in another country or city with different sample groups. This research data was collected from the teachers as a self-report. Researchers can make analyses by gathering data from the school directors and parents. For an output in this research, job satisfaction was chosen as a dependent variable. Researchers can make different research with different variables like job performance, burnout, and irregular attendance as a work output. In order to improve the quality of education, National Education administrators need to take steps to spread the learning organization idea. In this context, the first thing to do is to gauge if the schools are ready and eager for this subject. This and other similar research will enlighten the country leaders. Administrators of National Education should create awareness about the learning organization concept for the students of education faculties by cooperating with the universities in order to create the learning schools paradigm. In addition, workshops and seminars should be given to the current teachers and administrators about what to do in search of a learning school.

#### REFERENCES

- Allameh S, Abbasi S, Shokrani R 2010. The mediating role of organizational learning capability between intellectual capital and job satisfaction. *European Journal of Social Science*, 17(1): 125-136.
- Amiri A, Jandghi G, Alvani S, Hosnavi R, Ramezan M. Increasing the intellectual capital in organization: Examining the role of organizational learning. *European Journal of Social Science*, 14(1/2): 98-108.
- Bakan I, Buyukbese T 2004. Relationship between organizational communication and job satisfaction: A field research for academic organizations. *Mediterranean Journal of FEAS*, 7: 1-30.
- Baycan Asli 1985. An Analysis of the Several Aspects of Job Satisfaction Between Different Occupational Groups. Master Thesis Unpublished. Bosporus University Institute of Social Sciences, Istanbul.
- Buyukozturk S, Cakmak E K, Akgun O E, Karadeniz S, Demirel F 2008. Scientific Research Methods. 2<sup>nd</sup> Edition. Ankara: Pegem Akademi.
- Calik T 2003. Educational organizations as learning institutions. *Manas University, Journal of Social Sciences*, 8: 115-130.
- Calkavur E 2006. A Success Story: A Trip of Learning Organization. Istanbul: Remzi.
- Cetinkanat C 2000. *Motivation and Job Satisfaction in Organizations*. 1<sup>st</sup> Edition. Ankara: Ani Publishing House.
- Chang SC, Lee MS 2007. A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction. *Learning Organization*, The, 14(2): 155 – 185.
- Chich-Jen S, Wang, I, Fu-Jin W 2009. The relationships among cross-cultural management, learning organization, and organizational performance in multinationals. *Social Behavior and Personality: An International Journal*, 37(1): 15-30.
- Chiva R, Alegre J 2008. Emotional intelligence and job satisfaction: The role of organizational learning capability. *Personnel Review*, 37(6): 680-701.
- Coppleters P 2005. Turning schools into learning organizations. European Journal of Teacher Education, 28(2): 129-139.

#### THE EFFECTS OF SCIENCE TEACHERS' PERCEPTION OF LEARNING

- Cranny CJ, Smith PC, Stone EF 1992. Job Satisfaction: How People Feel about Their Jobs and How it Affects Their Performance. New York: Lexington Books.
- Daniels K, Bailey A 1999. Strategy development processes and participation in decision-making: Predictors of role stressors and job satisfaction. Journal of Applied Management Studies, 8(1): 27-42.
- Davis G 2004. Job satisfaction survey among employees in small business. *Journal of Small Business and Enterprise Development*, 11(4): 495-503.
- Demir Husamettin 2011. Perception of Academics about University as an Educational Institution (Sample of Zirve University). M.A. Thesis. University of Ahmet Yesevi, Education Faculty, Ankara.
- Dirani KH 2009. Measuring the learning organization culture, organizational commitment and job satisfaction in the Lebanese banking sector. *Human Resource Development International*, 12(2): 189–208
- Egan TM, Yang B, Bartlett KR 2004. The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly*, 15(3): 279-301.
- Erdil O, Keskin H, Imamoglu SZ, Erat S 2004. Relationship with administration style and working conditions, friendship atmosphere and job satisfaction: An application in textile sector. *Journal of Dogus University*, 5(1): 17-26.
- Erdogan I 1999. Organizational Behavior in Business Administration. Istanbul: Donence Publishing House, pp. 39-232.
- Eren E 1998. Organizational Behavior and Organizational Psychology. 5th Edition. Istanbul: Beta Publishing.
- Fraenkel JR, Norman EW 2008. *How to Design and Evaluate Research in Education*. 7<sup>th</sup> Edition. Boston: McGraw-Hill.
- Gaertner S 2000. Structural determinants of job satisfaction and organizational commitment in turnover models. *Human Resource Management Review*, 9(4): 479-93
- Garvin DA 1999. Creating a Learning Organization. Gunduz Bulut (Translator). Istanbul: Mess.
- Genc N 2004. Management and Organization (Modern Systems and Approaches). Ankara: Seckin.
- Gunbayi I 1999. Job Satisfaction of Primary School Teachers. PhD Thesis, Unpublished. Hacettepe University, Ankara.
- Gunbayi I 2000. Job Satisfaction and Motivation in Organizations. Ankara: Ozen Publishing.
- Hsu HY 2009. Organizational Learning Culture's Influence on Job Satisfaction, Organizational Commitment, and Turnover Intention among R&D Professionals in Taiwan during an Economic Downturn. PhD Thesis, Unpublished. Minnesota University, USA.
- Incir G 1990. A Research on Employee's Job Satisfaction. Ankara: National Productivity Center Publishing, No. 401, pp. 11-50.
- Johnson JJ, Mcintey CL 1998. Organization culture and climate correlates of job satisfaction. *Psychological Reports*, 82: 843-850.
  Judge TA, Bono JE, Thoresen CJ, Patton GK 2001.The
- Judge TA, Bono JE, Thoresen CJ, Patton GK 2001. The job satisfaction-job performance relationship: A

qualitative and quantitative review. *Psychological Bulletin*, 127(3): 376.

- Kalleberg AL 1977. Work values and job rewards: A theory of job satisfaction. *American Sociological Review*, 42(1): 124-143.
- Kalleberg AL, Loscocco KA 1983. Aging, values and rewards: Explaining age differences in job satisfaction. American Sociological Review, 48(1): 78-90.
- Keser A 2005. The relationship between job and life satisfaction in automobile sector employees in Bursa-Turkey. Work, Power, Industry Relations and Human Recourses Journal, 7(2): 52-63.
- Kocel T 2003. Business Management. Istanbul: Beta Publishing.
- Kreitner R, Kinicki A 2004. Organizational Behavior. 6<sup>th</sup> Edition. Chicago: Mc Graw Hill.
- Lim T 2010. Relationships among organizational commitment, job satisfaction, and learning organization culture in one Korean private organization. *Asia Pacific Education Review*, 11(3): 311-320.
- Locke EA 1976. Nature and causes of job satisfaction. In: MD Dunnette (Ed.): Handbook of Industrial and Organizational Psychology. Chicago: Wiley and Sons, P. 97.
- Mills DQ, Friesen B 1992. The Learning Organization. European Management Journal, 10(2): 146-156
- Perkins DD, Bess KD, Cooper DG, Jones DL, Armstead T, Speer PW 2007. Community organizational learning: Case studies illustrating a three-dimensional model of levels and orders of change. *Journal of Community Psychology*, 35(3): 303-328.
- Rose RC, Kumar N, Pak OG 2009. The effect of organizational learning on organizational commitment, job satisfaction and work performance. *The Journal of Applied Business Research*, 25(6): 55-66.
- Rosen RH 1998. Managing Humans. Gunduz Bulut (Translator). Istanbul: Mess.
- Savas AC, Dos B 2010. An Experince of Learning Organization: Teacher Inefficiency in Improving Schools, Reason Analysis and Solution Offer. Paper presented in 20<sup>th</sup> National Private Education Congress in Gazi University, Gaziantep, October 21 to 23, 2010.
- Senge P M 2006. *Fifth Discipline*. Ildeniz, A, Dogukan, A. (Translators). Istanbul: YKY.
- Seok Hee J, Tae Whain Sook L K, Myung HA L, Mi KJ 2007. The effect of nurses' use of the principles of learning organization on organizational effectiveness. *Journal of Advanced Nursing*, 58(1): 53-62.
- Shek Pui Wong P, Saic, Ka Yan O 2008. Moderating effect of organizational learning type on performance improvement. *Journal of Management in Engineering*, 24(3): 162-172.
- Spector EP 1997. Job Satisfaction. California: Sage Publications Inc.
- Subas A 2010. Form and Skill's Teachers' Perception of Learning Organization (School) in Primary Schools. M.A. Thesis, Unpublished. Marmara University, Institute of Educational Sciences, Istanbul.
- Sun HO 2002. A Research on Job Satisfaction. Expertise Qualification Thesis, Republic of Turkey Central Bank General Administration of Banknote Printing House, Ankara.
- Testa MR 1999. Satisfaction with organizational vision, job satisfaction and service efforts: An em-

pirical investigation. *Leadership and Organization Development Journal*, 20(3): 154-161.

Toremen F 2001. Learning School. Ankara: Nobel.

- Toremen F 2002. The obstacles and reasons of educational organizations. *Firat University Social Sciences Journal*, 12: 185-202.
  Uyguc N, Arbak Y, Duygulu E, Ciraklar NH 1998. The
- Uyguc N, Arbak Y, Duygulu E, Ciraklar NH 1998.The Examination of Relationship Between Job and Life Satisfaction under the Three Basic Assumptions. University of Nine September FEAS Journal, 13(2): 193.
- Vieira JAC 2005. Skill mismatches and job satisfaction. Economic Letters, 89(1): 39-47
  Weiss DJ, Dawis RW, England GW, Lofquist LH 1967.
- Weiss DJ, Dawis RW, England GW, Lofquist LH 1967. Manual for the Minnesota Satisfaction Questionnaire. Washington: Minnesota Studies.
  Yilmaz F 2005. Job Satisfaction in Learning Organi-
- Yilmaz F 2005. Job Satisfaction in Learning Organizations: An Education and Research Hospital Application. MA Thesis, Unpublished. Gazi University Institute of Social Sciences.
- Yuksel I 2003. An analysis between job stress, commitment, and job satisfaction *Ataturk University Journal of FEAS*, 17(1-2): 132-224.

404