

The Relation between Problem Solving Styles and Job Satisfaction among University Employees

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ABSTRACT

The presented research is aimed to find the relation between problem solving styles (constructive and unconstructive) and job satisfaction among Ferdowsi University employees, Mashhad, in 1392. The research is correlational in terms of type. The study population is consisted of 140 staff members of Ferdowsi University who were asked to complete Job Description Index (JDI) and Cassidy & Long problem solving style questionnaire. The statistical method used in the research is Pearson coefficient correlation and it is a survey research design. The results indicate that the more constructive is the problem solving style, the higher is job satisfaction and vice versa. From among the aspects of constructive problem solving, self-confidence is the most influential factor on increasing job satisfaction and inhibition is the most effective variable, among unconstructive problem solving aspects, in decreasing job satisfaction.

Keywords: Job satisfaction, Problem solving, University employees.

Introduction

The foundation of the wealth of any organization is its employees in terms of their knowledge, skills and motivations. Owning such a wealth is very important because the main source of power for organizations in the next decade and probably the next century won't be technology but initiative, commitment and capabilities of the staff members. In order to face future challenges, there is no way for organizations except gaining its employees' trust and commitment and this is only possible with job satisfaction (Mohammadi, M. 1380). Job satisfaction is considered a valuable and necessary component for improving health and life satisfaction. This is important because job is the core of an adult's identity (Habib&Shirazi, 1382. Quoting from Shakiba, 1384). While the role of job satisfaction is obvious in one's personal life, it is measured by work-related conditions. This concept is defined as a positive or pleasant

emotional state which is obtained through their assessment of employment or unemployment conditions. The definition covers a vast area, meaning that it includes all of the occupation's characteristics, workplace, its human and official relations, personal and demographic characteristics of employees, its social status, hierarchy of power and its economic benefits (Snipes, R.L, Oswald, S.L., Latour, M. & Armenaka, A.A., 2005; Ho, C.L. & Au, W.T., 2006; Demirtas, Z. 2010). From a psychologist's point of view job satisfaction is a positive pleasant emotional state which is the outcome of job assessments or personal experience. This positive emotional state contributes a lot to mental and physical health of people. For this purpose we should consider three points: first, job is associated with development and satisfaction for the individual. Second, it seems that jobs with no possibility of self-direction and control bring less mental health for the owners of such jobs. Finally, unemployment is associated with significant negative effects. There are many behaviors and occupational outcomes which are concluded to be the result of job satisfaction or dissatisfaction (Pardo Linares, P.J. 2011). All these points demonstrate the importance of research in this area. Since this concept is an attitude variable, there are two approaches in its study; the general approach which defines job satisfaction a holistic and integrated feeling toward job and bilateral approach which considers different aspects of a job like payment, benefits, coworkers, managers, working conditions etc. (Spector, 2007). The final assumption is that people are different in their being satisfied or dissatisfied with their jobs (Judge, T., Heller & Mount, 2002). Since the aim of this study is the psychological investigation of job satisfaction, the subject has been dealt with using the bilateral approach. Higher education centers, especially universities, as the most important scientific and research sources, play an important role in the development and advancement of any society. Achieving goals of higher education depends on optimum use of human resources. Many variables can determine job satisfaction. Some researchers put these variables in four groups of organizational, environmental, job nature and personal factors. However, Spector (2000) categorized the factors determining job satisfaction in two groups; factors related to the job and personal factors. Some researchers also support the idea of investigating personal characteristics as the influential factors in job satisfaction. Job satisfaction is very important from different aspects in different environments and for various groups. Some studies identify personal traits and variables as important as effective factors on job satisfaction and some others believe working conditions are influential (Jafarzadeh Kermani, Zahra; Fattahi, Rahmatollah, 1383; quoting from Shakiba, 1384). Most experts believe mental health of working environment is effective on improving mental health of individuals, since people spend major part of their time and energy in workplace (Kaplan & Sadok, 2000). An effective factor on job satisfaction is the proper use of problem solving skills. Regarding the fact that people use different problem solving skills in stressful situations, efficiency or inefficiency of these methods are crucial in their mental and physical wellbeing (Kleinke, 1387). When facing problems some people become introverted and some express their feelings and ask for help (Huren & Mitchell, 2003; quoting from Latifian, 1384). From psychological point of view problem solving is a cognitive-behavioral and creative process with which the individual finds or creates effective solutions for everyday problems. Sternberg (2003) defines problem solving as mental effort to overcome obstacles on the way of achieving goals. In general it can be said that problem solving is a cognitive, behavioral and emotional process in which a person (or a group) tries to discover or create tools or solutions for facing everyday problems (Dobson, 2005). Nezu has introduced six problem solving styles; creative, confidence, approach, helplessness, control and avoidance. Creative style shows planning and considering different solutions based on the problematic situation. Confidence style in problem solving shows confidence in one's ability for solving problems. The approach style demonstrates positive outlook toward problems and a tendency for facing them. Helplessness style shows one's helplessness in stressful situations. Control style in problem solving refers to the effects of internal and external factors on the stressful situation. Finally, avoidance style shows tendency toward ignoring problems instead of facing them (Cassidy & Long, 1996). The first three styles are constructive and the latter three are called unconstructive. Constructive styles are connected with life satisfaction, positive emotions, promotion motivation and social support. Unconstructive styles are correlated with variables like stress, depression, hostility and job stress (Babapoorokheirodin, Jalil. 1381).

Problem solving skills include specific targeted activities which enable the individual to successfully solve a problem. It is made of four activities, which some authors call problem solving stages and are as follows:

- a) Defining the problem
- b) Creating alternative solutions
- c) Decision making
- d) Performing- the ability to perform, supervise and evaluate solutions and give effective coping responses

Each of these targeted activities plays an important role in discovering and creating a coping response in problematic situations (the same).

The relation between job satisfaction and problem solving has been investigated. Kocak and Eves (2010) in a research titled "The Relation between Problem Solving and Job Satisfaction among School Managers", showed that there is a positive significant relation between problem solving skills and job satisfaction levels among school manager and those with higher job satisfaction and problem solving skills can perform better in increasing educational quality of their schools. Judy Ayres & John Malouf (2007) in a research under the title of "Problem solving training; a way to increase positive feelings, job and life satisfaction in employees" concluded that individuals who received problem solving training had more self-sufficiency in problem solving, and higher job and life satisfaction. Wellbourne (2007) in a study investigated the coping approaches in workplace and the relations between workplace strategies, job attribution style and job satisfaction among hospital nurses. The results indicated that positive job attribution style for facing workplace stresses is correlated with using problem solving (cognitive reconstructing coping style) and less use of avoidance styles. Paul Tyson (2001) in a research titled "organizational stress among hospital nurses" investigated the methods nurses faced stress. The results demonstrated that avoidance and social support had significant correlation with stress and there was an important transaction between job satisfaction and problem solving. In previous studies there have been investigations on the relation between problem solving and variables like organizational growth, job promotions, education, EQ, life satisfaction etc. but the relation between job satisfaction and problem solving has been less noted. So, the presented study deals with the relation between problem solving and job satisfaction among staff of Ferdowsi University, Mashhad. Regarding the types of problem solving styles it can be expected that since employees apply different problem solving styles, in facing job situations, they use different approaches (creative, confidence, approach, avoidance, helplessness and control) which leads to their job satisfaction. Thus, the following assumptions were studied in the presented research:

- There is a relation between problem solving and job satisfaction.
- There is a significant relation between constructive problem solving styles (creative, confidence and approach) and job satisfaction.
- There is a significant relation between unconstructive problem solving styles (avoidance, helplessness and control) and job satisfaction.
- There is a relation between aspects of constructive problem solving and job satisfaction.
- There is a relation between aspects of unconstructive problem solving and job satisfaction.

Methodology:

The presented research is correlational .the study population included all the employees of Ferdowsi University, Mashhad, in 1392 who were 1300 individuals. Regarding the size of the population and the number of variables being studied random sampling was done. 200 questionnaires were distributed and 180 of them were gathered. After dismissing the incomplete questionnaires, 140 of them were analyzed.

Research Tools:

We used two questionnaires for measuring variables and gathering data. They are:

- A) Cassidy & Long Problem Solving Questionnaire: it's been designed by Cassidy and Long (Mohammadi&Sahebi, 1380) in two stages and include 24 questions. It measures 6 factors and each factor includes 4 test materials. The factors are helplessness, control, confidence, creative, avoidance and approach styles. Subscales of helplessness, control and avoidance are the unconstructive problem solving styles and the rest are styles of constructive problem solving (the same). Cronbach's α Coefficient for the scales of problem solving styles in two studies by Cassidy and Long were as follows: helplessness (0.66), control (0.66), creativity (0.57), confidence (0.71), avoidance (0.52), approach (0.65). The α coefficients in the second study were; helplessness (0.86), control (0.60), creativity (0.66), confidence (0.66), avoidance (0.51), approach (0.53). The test reliability coefficients for all subscales in these two studies are ≥ 0.50 . In the study by Mohammadi also the α coefficients were ≥ 0.50 (except for approach). So, the scale is reliable enough. Validity of this scale more depends on its content validity and preparation method. Although there is no discussion of validity included in the instructions of problem solving method scales, but in some questions, some evidence such as people who used it and have the necessary expertise in this area (Mohammadi&Sahebi, 1380) indicate the validity of the scale.
- B) Job Descriptive Index (JDI): it is prepared by P.C. Smith, L.M. Kendall & G.L. Hulin and studies job satisfaction using five different facets; work on present job, present pay, opportunities for promotion, supervision and coworkers. The reliability of the questionnaire was measured using test and retest by Shojaeefar (1380) and Pearson correlation coefficient for job satisfaction was $r = 0.86$. Shojaeefar also measured its validity using criterion validity (0.75) the mentioned validity measurement method was simultaneous criterion validity and the criterion used was Job Descriptive Index by Smith, Kendall and Hulin.

Findings:

Table 1: The Relation between Constructive Problem Solving Style and Job Satisfaction

Statistics	Values
Pearson correlation coefficient	0.169
Significance level	0.046
Number	140

For studying the relation between constructive problem solving and job satisfaction, Pearson correlation coefficient test was used. The results show that intensity of the relation between the two variables is 0.169 and it's positive. Meaning that the more volunteers used constructive problem solving, the more they are satisfied with their jobs. On the contrary, the less they use constructive problem solving, the less they are satisfied with their jobs. Regarding the fact that the significance level of the test is ≥ 0.05 ($\text{sig} = 0.046$), the result can be generalized to the statistical population. So, a significant relation between constructive problem solving and job satisfaction is confirmed.

Table 2: The Relation between Unconstructive Problem Solving and Job Satisfaction

Statistics	Values
Pearson correlation coefficient	-0.171
Significance level	0.041
Number	140

The results of Pearson correlation Coefficient test show that the intensity between unconstructive problem solving and job satisfaction is 0.171 and it is negative. The more volunteers used this style, the

less job satisfaction they have. On the contrary, people who used unconstructive problem solving less have higher job satisfaction. Regarding the significance level of the test which is ≥ 0.05 ($\text{sig}=0.041$), the results can be generalized to the study population and the significant relation between the two variables is confirmed.

Table 3: The Most Effective Aspect of Unconstructive Problem Solving Style

Coefficients ^a						
Significance level	t	Standardized coefficients	Non-standardized coefficients		Regression stages	
		Impact factor	Standard error	Impact factor		
.000	60.562		.059	3.590	Constant	1
.045	-2.022	-.170	.044	-.089	control	
Dependent variable: job satisfaction						

Results of the regression analysis test indicate that among styles of unconstructive problem solving (helplessness, control, avoidance), control is the most influential one with the impact level of -0.170 on job satisfaction. The more volunteers use control, the less they feel satisfied with their job and vice versa. Regarding the fact that the test's significance level is ≥ 0.05 ($\text{sig}=0.045$), it can be concluded that there is a significant linear relation between the two variables, control and job satisfaction.

Table 4: The Most Effective Aspect of Constructive Problem Solving Style

Coefficients ^a						
Significance level	t	Standardized coefficients	Non-standardized coefficients		Regression stages	
		Impact factor	Standard error	Impact factor		
.000	25.235		.128	3.236	constant	1
.024	2.290	.191	.040	.093	control	
Dependent variable: job satisfaction						

Results of multiple regression analysis show that among constructive problem solving styles (approach, confidence, and creative), confidence has the highest impact on job satisfaction (0.191). In other words, a person with higher confidence has more job satisfaction, and when there is low confidence, there is low job satisfaction, too. With regards to the significance level of the test which is ≥ 0.05 ($\text{sig}=0.000$), it can be said that there is a linear relation between job satisfaction and confidence.

Conclusion

Findings of the research demonstrate the fact that there is a positive relation between constructive problem solving and job satisfaction, and a negative relation between job satisfaction and unconstructive problem solving. Also, there is a positive significant relation between job satisfaction and styles of constructive problem solving of which the most important is confidence. However, between job satisfaction and styles of unconstructive problem solving, especially control, there is a negative significant relation. Previous studies confirm findings of the presented research. For example, research by Yazdi&Jafari, 1389, shows that low mental stress leads to high job satisfaction in managers of organizations. So, it can be said that people who use constructive problem solving, experience less mental stress which leads to more job satisfaction. In another research, Abedi&Forou'ee (1382) stated that firm, active, positive people have more job satisfaction compared with passive, aggressive and negative people. The results of this research agree with the results of the presented one because firm, active and positive people benefit from constructive problem solving which leads to job satisfaction. A research by Kocak& Eves (2010)-"The Relation between Problem Solving and Job Satisfaction in Managers"- and also a similar research by Paul Tyson (2002)-"Organizational Stress among Nurses"- were conducted. The results indicated that there is a positive significant relation between problem solving skills and job satisfaction among managers. Ayres &Malouf (2007) showed that problem solving training has a positive impact on life and job satisfaction. Paul Tyson

(2001) in his research indicated that there is an important transaction between problem solving and job satisfaction. The results of both researches agree with the results of the presented research. So, it can be said that problem solving styles (constructive and unconstructive) play an important role in employees' job satisfaction, comparing the results of this research with the previous ones. Hence, managers, considering this fact, can plan for increasing job satisfaction among their employees; by holding problem solving training sessions, they can increase problem solving skills in their employees which results in increasing job satisfaction and optimum use of human resources.

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