

The Moderating Role of Neurotic Traits on the Relationship between Perceived Task-Technology Fit and Job Satisfaction

Dr. Meltem Akca¹,

**Transportation and Logistics Faculty/Istanbul University, Turkey,*

Abstract : This study aims to investigate the moderating role of Neurotic Traits on the Relationship between perceived task-technology fit and job satisfaction. In order to maintain this aim, a survey was actualised in a sample of 301 employees who work in a logistics company. The results revealed that perceived task-technology fit has a positive impact on job satisfaction while neurotic traits of employees decrease this relationship between variables. Employees who have neurotic traits have lower job satisfaction with the task-technology fit.

Keywords: neurotic traits, task-technology fit, job satisfaction, logistics

I. INTRODUCTION

In recent years' information technologies usage related studies have become one of the main topic of academic platform. The relationship between information technology usage and individual job outcomes is also wondered by many researchers. In addition to researchers, managers and patrons either want to know impacts of the over costing information technology investments on employees' job outcomes. Job satisfaction is one of the most significant job outcomes for employees. Positive feelings related with job generate the job satisfaction concept. Satisfied employees tend to increase productivity in organisations. Technology usage also aims to accomplish organisational success. Therefore, perception of task-technology fit tends to increase job satisfaction. According to Goodhue and Thompson (1995) task-technology fit is also beneficial to increase performance and satisfaction of employees. In this study, it is aimed to reveal of perceived task-technology fit on job satisfaction of employees and to show the moderating role of neurotic traits over this interaction. Reference to Mc Crae and Costa's (1999) Big Five Model, it is expected that negative traits of employees tend to minimise the positive impact over the job satisfaction with the perceived task-technology fit. In this context, findings of the study show that employees who have neurotic traits feel lower satisfaction than others about task-technology fit.

II. CONCEPTUAL FRAMEWORK

2.1. Theoretical Framework

In this section it is tried to clarify task-technology fit, job satisfaction and neurotic traits concepts. According to literature, these concepts are explained with the conceptual perspective.

2.1.1. Task-Technology Fit

One of the main aim of information technology usage in organisations is to maximise efficiency and performance of employees. An organisation's daily activities are generally performed by employees[1]. For this reason perception of task-technology fit of employees has a significant value on users' productivity, practicability and effectiveness[2]. Task-technology model determines that information technologies which are used in organisations should be fit with job characteristics. Organisations which are equipped with modern, timeliness, usefulness technologies perform better operations than their competitors. In some examples, improper technology investments with jobs do not achieve the organisational aims. Therefore, information technology related ventures need to be fit with job necessities.

Reference to literature review, task-technology fit has a positive influence over employees' performance, satisfaction and commitment. Adversely, if there is a problem in task-technology fit employees' productivity and satisfaction tend to decrease. In that case, it is come to exist some negative job outcomes at employees as stress, burn-out, intention to leave and deviance behavior [3,4]. According to Millman and Hartwick(1987), usage of information technologies have positive impacts over task performance, task structure, task duration, work-life

quality, business quality and job satisfaction[5]. Delone and Mclean(1992) also stated the significance of information systems usage on employees, tasks and organisations[6]. Then, Goodhue and Thompson(1995) clarified the task-technology fit model[7]. They expressed the importance of task-technology fit for employees' performance and job outcomes. They put a line between task-technology fit and job outcomes. Essentially, task-technology fit model was built to learn technological investment's outcomes over employees or users. In this model, task requirements and technology functions should be accordant with each other. If it is believed by users that there is a fit between tasks requirements and technology functionalities, the aim of technology usage will result with positive outcomes. Technologies which are useful, easy to use and timeliness are preferred for users to use in daily operations. These characterized technologies can easily fit with task requirements. In this context, user perception for technologies has become compatible, practical and time saving. Task-technology fit is approved when employees perceive that technology usage in daily operations increases their job outcomes and finishes the job with less time.

2.1.2. Job Satisfaction

Happiness and favorableness reactions of employee's based on his/her job is called as job satisfaction [8,9]. Job satisfaction shows the employee's positive feelings with the job [10]. Job satisfaction is related with employee's success and performance over the job. Job satisfaction also determines the employees' attitude towards the job and its requirements. Job satisfaction is determined as a substantial indicator in the management area due to its result's impacts over the organisation performance. A satisfied employee's job outcomes will be greater than unsatisfied one. For this reason, job satisfaction has a vital importance on organization's sustainability.

Satisfied employees love their jobs and work better to achieve the aims of the corporation. Adversely, if an employee feels unsatisfied his/her behaviours tend to move of from the job success. Work environment's physical, psychological features and individual characteristics are also important for job satisfaction. Job satisfaction is occurred from intrinsic and extrinsic factors over the job [11]. Intrinsic factors are related with core features of the job. Job necessity, job structure, job assignment are some of intrinsic factors [12]. However, work environment's characteristics are evaluated as extrinsic factors over the job as organisational support, leader-members exchange, organisational culture [13].

2.1.3. Neurotic Traits

Personality traits address to cognitive and behavioral patterns that expose consistence over time and across different situations [14]. Therefore, it is rational to suppose that personality traits impress individual's behaviors, attitudes and values [15]. In the literature review it is revealed that the "big five" personality traits model determine the personal characteristics features. Mc Crae and Costa's (1999) Big Five model has been used more than 20 years to test the model structure [16, 17]. Agreeableness, conscientiousness, extraversion, neuroticism and openness to experience are dimensions of big five model [18]. Accordance to the model, human traits are comprised of these dimensions. Although most of them evoke positive feelings, neuroticism is related with negative traits. Neuroticism is composed of anxiety, anger, worry, depression, insecurity, strain, hotheadedness, disgust, overzealousness related feelings and characteristic features [19]. However, findings of academic studies in the literature demonstrate that favorable traits have positive impact over job satisfaction, there is a negative interaction with neurotic traits and job satisfaction. Individuals who have negative personality traits and emotions generally feel frustration and dissatisfaction [20,21]. Neurotic employees get into trouble as burn-out, work-life conflict, deviant behaviors in workplace [22].

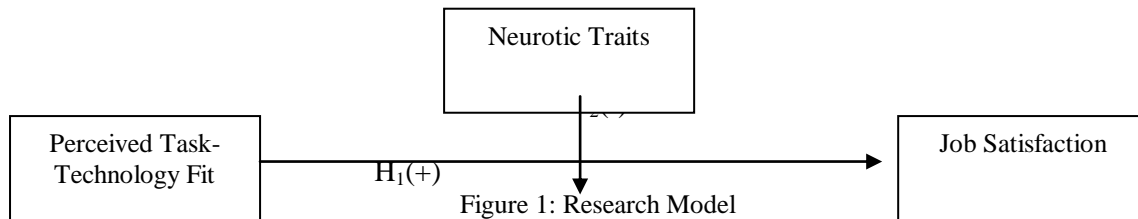
III. METHODOLOGY

Data for this research were acquired through a survey. The sample was comprised of a logistics companys' employees. A convenience sampling method was used in this study. As a result, a total of 301 useable questionnaires were obtained. A self-administrated survey questionnaire that composed of three construct categories which are perceived task-technology fit, neurotic traits and job satisfaction was used as the measurement instrument.

The questionnaire was originated in a total number of 23 items: 8 items to measure the perception of task-technology fit, 6 items for neurotic traits, 5 items for job satisfaction and 4 items for demographics (age, gender, marital status, educational status)[23,24,25]. Responses to the items were saved on a 5-point Likert-type

scale and reliability and validity issues were evaluated. The constructs that had alpha values equal to and above 0.70 were accepted as reliable constructs. The reliability analyses show that all constructs possess satisfactory Cronbach's alpha values: perceived task-technology fit ($\alpha=0.866$), neurotic traits ($\alpha=0.803$), and job satisfaction ($\alpha=0.904$).

Multiple regression analyses were used to analyze the data. A two-step hierarchical model was conducted. In hierarchical regression method, each set of independent variables is entered into separate blocks for analysis and the incremental changes of the R² statistic and the β coefficients are estimated [26].



H₁: Perceived task-technology fit has a positive impact on employees' job satisfaction.

H₂: Neurotic traits moderates the impact of employees' perceived task-technology fit on job satisfaction such that employees' neurotic traits reduce the positive effect of higher perceived task-technology fit on job satisfaction.

IV. RESULTS

The results of factor analyses, correlation analyses and regression analyses are in the tables below. Findings for factor analyses reveal that scales have one dimension as original ones. Cumulative explorations are shown in Table 1.

Table 1: Results of Factor Analysis

Perceived Task-Technology Fit	Kaise-Meyer-Olkin	0,921
	Cumulative exploration	%70,259
Neurotic Traits	Kaise-Meyer-Olkin	0,802
	Cumulative exploration	%65,102
Job Satisfaction	Kaise-Meyer-Olkin	0,903
	Cumulative exploration	%79,16

Moreover, correlations between variables were investigated. Correlations between variables rank as in Table 2. There is a positive and middle level correlation between perceived task-technology fit and job satisfaction. Whereas, neurotic traits is negatively correlated with job satisfaction.

Table 2: Correlations between Variables

	Perceived TTF (Mean Value)	Neurotic Traits (Mean Value)	Job Satisfaction (Mean Value)
Perceived TTF (Mean Value)	1	-0,37	0,587**
Neurotic Traits (Mean Value)	-0,37	1	-0,102*
Job Satisfaction (Mean Value)	0,587**	-0,102**	1
<i>*p<0. 05; **p<0. 01; *** p<0. 001</i>			

In regression analyses a two step hierarchical model was used. In the first model, the positive interaction between perceived task-technology fit and job satisfaction was found. In this step, it was also found that there is a negative reaction between neurotic traits and job satisfaction. Thus far, results demonstrate that H₁ is supported. In the second model, the joint effect of perceived task-technology fit and neurotic traits added the model. In this context, results of the second model indicates that neurotic traits has a partial moderation role on the relationship between perceived task-technology fit and job satisfaction. In model 2, β value decreased 0,258 from 0,591. According to the results H₂ is partial supported.

Table 3: Hierarchical Regression Analyses

Dependent Variable: Job Satisfaction				
Independent Variables	Model 1		Model 2	
	B	S. E.	B	S. E.
Perceived TTF	,591**	,062	,580**	,060
Neurotic Traits	-,108**	,059	-,114**	,056
Perceived TTF X Neurotic Traits			,258**	,049
R	,549		,561	
R²	,404		,413	
Adjusted R²	,399		,406	

V. CONCLUSION

This research seeks to examine the moderating role of neurotic traits in the relationship between perceived task-technology fit and job satisfaction. With this aim, field study was conducted in a logistics company. The results of the study reveal that neurotic traits have a partial moderating impact in the relationship between perceived task-technology fit and job satisfaction. Perceived task-technology fit also have positive and significant impact over job satisfaction. It means that perception of high task-technology fit has greater influence on job satisfaction. In the moderating role, employees who have neurotic traits feel less satisfied with the perception of task-technology fit than others. Next studies will focus on the relations neurotic traits in work environment and job outcomes.

REFERENCES

- [1] Torkzadeh, G., Koufteros, X., & Doll, W. J. (2005). Confirmatory factor analysis and factorial invariance of the impact of information technology instrument. *Omega*, 33(2), 107-118.
- [2] Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information systems research*, 2(3), 192-222.
- [3] Sundaram, S., Schwarz, A., Jones, E., & Chin, W. W. (2007). Technology use on the front line: how information technology enhances individual performance. *Journal of the Academy of Marketing Science*, 35(1), 101-112.
- [4] Dishaw, M. T., & Strong, D. M. (1999). Extending the technology acceptance model with task-technology fit constructs. *Information & management*, 36(1), 9-21.
- [5] Millman, Z., & Hartwick, J. (1987). The impact of automated office systems on middle managers and their work. *MIS quarterly*, 479-491.
- [6] DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information systems research*, 3(1), 60-95.
- [7] Goodhue, D. L., & Thompson, R. L. (1995). Task-technology fit and individual performance. *MIS quarterly*, 213-236.

- [8] Locke, E. A., Sirota, D., & Wolfson, A. D. (1976). An experimental case study of the successes and failures of job enrichment in a government agency. *Journal of Applied Psychology*, 61(6), 701.
- [9] Fields, D. L. (2002). *Taking the measure of work: A guide to validated scales for organizational research and diagnosis*. Sage.
- [10] Hackman, J. R. (1980). Work redesign and motivation. *Professional Psychology*, 11(3), 445.
- [11] Kalleberg, A. L. (1977). Work values and job rewards: A theory of job satisfaction. *American sociological review*, 124-143.
- [12] O'reilly, C. A., & Caldwell, D. F. (1980). Job choice: The impact of intrinsic and extrinsic factors on subsequent satisfaction and commitment. *Journal of Applied Psychology*, 65(5), 559.
- [13] Shim, S., Lusch, R., & O'Brien, M. (2002). A hierarchical model of values, leadership, job satisfaction and commitment: Human resources management implications for the retail industry. *Journal of Marketing Channels*, 10(1), 65-87.
- [14] Bozionelos, N. (2004). The big five of personality and work involvement. *Journal of Managerial Psychology*, 19(1), 69-81.
- [15] Olver, J. M., & Mooradian, T. A. (2003). Personality traits and personal values: A conceptual and empirical integration. *Personality and individual differences*, 35(1), 109-125.
- [16] McCrae, R. R., & Costa Jr, P. T. (1999). A five-factor theory of personality. *Handbook of personality: Theory and research*, 2, 139-153.
- [17] Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual review of psychology*, 41(1), 417-440.
- [18] Larsen, R. J., & Ketelaar, T. (1989). Extraversion, neuroticism and susceptibility to positive and negative mood induction procedures. *Personality and individual Differences*, 10(12), 1221-1228.
- [19] Rusting, C. L., & Larsen, R. J. (1997). Extraversion, neuroticism, and susceptibility to positive and negative affect: A test of two theoretical models. *Personality and individual differences*, 22(5), 607-612.
- [20] Ilies, R., Wilson, K. S., & Wagner, D. T. (2009). The spillover of daily job satisfaction onto employees' family lives: The facilitating role of work-family integration. *Academy of Management Journal*, 52(1), 87-102.
- [21] Ilies, R., Fulmer, I. S., Spitzmuller, M., & Johnson, M. D. (2009). Personality and citizenship behavior: the mediating role of job satisfaction. *Journal of Applied Psychology*, 94(4), 945.
- [22] Bühler, K. E., & Land, T. (2003). Burnout and personality in intensive care: an empirical study. *Hospital topics*, 81(4), 5-12.
- [23] Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American journal of community psychology*, 13(6), 693-713.
- [24] McCrae, R. R., & Costa Jr, P. T. (1999). A five-factor theory of personality. *Handbook of personality: Theory and research*, 2, 139-153.
- [25] Lin, T. C., & Huang, C. C. (2008). Understanding knowledge management system usage antecedents: An integration of social cognitive theory and task technology fit. *Information & Management*, 45(6), 410-417.
- [26] Kamasak, R., & Yavuz, M. (2016). Economic Development, Market Characteristics and Current Business Conditions in Turkey: A Guide for Successful Business Operations. In *Comparative Economics and Regional Development in Turkey* (pp. 336-354). IGI Global.