



THE ASSOCIATES OF MANAGER RELATIONS, HUMAN RESOURCES PRACTICES AND AUTONOMY WITH EMPLOYEE INNOVATIVENESS AND THE MODERATING EFFECT OF ORGANIZATIONAL CULTURE: EVIDENCE FROM SEVERAL INNOVATIVE FIRMS IN TURKEY

Seçil Bal TAŞTAN

Marmara Üniversitesi İşletme Fakültesi
İngilizce İşletme Bölümü

ABSTRACT

Employee innovativeness has been subject to so many studies examining the high performing and innovative organizations in the literature. In the extant literature, it is indicated that employee innovativeness is mostly linked to supportive management, effective and satisfactory human resources practices, job autonomy and supportive organizational culture. Within the framework of innovativeness in the organizations, our study focuses on the notion that innovative and supportive organizational culture as being among the cultural characteristics may moderate the relations of supportive management relations, perceived human resources practices, and autonomy with employee innovativeness. The survey of this study was performed on 235 managers of 12 high performing and innovative firms operating in various industries in Turkey. The obtained data from the questionnaires were analyzed through the SPSS statistical packaged software and LISREL. Confirmatory factor analysis (CFA) was performed and structural model was tested for evaluating the measurement model. The results of the analyses revealed that perceived innovative-supportive type of organizational culture moderated the effects of the supportive management relations, perceived human resources practices and autonomy on employee innovativeness.

Keywords: Innovativeness, Supportive manager relations, Human resources practices, Autonomy, Organizational culture, Innovative firms

ÇALIŞANLARDA YENİLİKÇİLİĞİN ÖNCELLERİ VE ÖRGÜT KÜLTÜRÜNÜN DÜZENLEYİCİ ROLÜ: TÜRKİYE'DEKİ YENİLİKÇİ FIRMALARDAN BULGULAR

ÖZET

Çalışanlarda yenilikçilik kavramı literatürde yüksek performanslı ve yenilikçi örgütleri inceleyen çok sayıda çalışmada ele alınmış olan bir kavram olarak karşımıza çıkmaktadır. Konu ile ilgili literatürde, çalışanlarda yenilikçiliğin daha çok destekleyici yönetim, etkin ve tatmin edici insane kaynakları yönetimi uygulamaları, iş otonomisi ve destekleyici örgüt kültürü kavramları ile ilişkilendirilmekte olduğu görülmektedir. Bu çalışma, örgütlerde yenilikçilik konusu çerçevesinde, söz konusu yönetici ilişkileri, insan kaynakları

uygulamaları ve işyerindeki otonomiye ilişkin algıların çalışanlardaki yenilikçi davranışlarla ilişkili olabileceği ve algılanan yenilikçi-destekleyici tarzdaki örgüt kültürünün bu ilişkiler üzerinde düzenleyici role sahip olabileceği varsayımı üzerinde odaklanmıştır. Bu doğrultuda, Türkiye’de farklı sektörlerde yer alan ve yüksek performanslı ve yenilikçi kurumlar olarak tanımlanmış olan 12 firmada bir araştırma gerçekleştirilmiştir. Uygulanan anket çalışmasına 235 alt ve orta kademe yönetici katılmıştır. Elde edilen veriler SPSS ve LISREL programları kullanılarak analize tabi tutulmuş, Doğrulayıcı Faktör Analizi (DFA) ve Yapısal Eşitlik Modellemesi ile değişkenlere ilişkin ölçümler gerçekleştirilmiştir. Elde edilen sonuçlara göre, algılanan yenilikçi-destekleyici örgüt kültürünün destekleyici yönetici ilişkileri, insan kaynakları uygulamaları ve otonominin çalışanlarda yenilikçi davranışlar üzerindeki etkisini güçlendirdiği ve düzenleyici değişken rolünün anlamlı olduğu belirlenmiştir.

Anahtar Kelimeler: Yenilikçilik, Destekleyici yönetici ilişkileri, İnsan kaynakları uygulamaları, Otonomi, Örgüt kültürü, Yenilikçi firmalar

INTRODUCTION

The objective of this study is to clarify the role of manager relations, human resources practices (HR practices), and autonomy variables as possible antecedents of employee outcomes of innovativeness, focusing on the assumption that perceived supportive manager relations, satisfaction with HR practices, and autonomy satisfaction might contribute to innovativeness. Moreover, organizational culture aspects were suggested as influencing the links between the suggested antecedents and innovativeness.

The scholars have examined the factors influencing innovative behavior at different levels, which are commonly divided into four broad categories, i.e. individual, job, team and organizational level (Woodman, Sawyer and Griffin 1993, Shalley and Gilson, 2004; Parzefall, Seeck and Leppanen, 2008; Walsh, Lynch and Harrington, 2009). One dominant theme that has been argued within international and Turkish academic studies and business reports is that in order to achieve performance, to sustain competitiveness and to survive, the organizations' emphasis should be directed at enhancing the innovativeness. We have recognized that most studies have paid attention on both knowledge base and human base of the factors that influence employee innovativeness. Due to the growing number of studies exploring the potential elements of organizational innovativeness, employee innovativeness has been one crucial factor of the organization's innovativeness. However, in our view, understanding the employee innovativeness is still being an isolated factor, and a perspective concerning its antecedents is lacking. At the same time, increasing emphasis is placed on the organizational culture aspects which precedes and/or influences the actual innovative conditions within the organizations. Consequently, upon a review of the factors that influence employee innovativeness, we argued that understanding of how to better support and foster employee innovativeness in the workplace through cultural aspects, managerial and human resources issues and personal task perceptions would help to develop an insight for enhancing innovativeness in the organizations.

As such, in this study, innovativeness construct is denoted as a process of discretionary, actual, and adoptive behavior which is voluntarily exerted by employees in return for organization's positive handling of social exchanges. It is conceivable that the stimulating and inspiring focus of supportive manager relations (Chalofsky and Krishna, 2009; Rothmann, Diedericks and Swart, 2013), satisfaction with HR policies of the organization (Ruschoff, 2008), autonomy satisfaction (Deci and Ryan, 2012; Rothmann et al., 2013) as well organizational culture variables (Scott-Ladd and Chan, 2004) have emphasis on initiating innovativeness. Based on that rationality, in this study, it is aimed to examine the relationships between supportive manager relations, satisfaction with HR-practices and autonomy satisfaction with employee innovativeness in the moderating context of organizational culture as perceived as bureaucratic and innovative-supportive aspects.

The study is mainly constructed of three parts. In the first part, the conceptual definitions of the study variables, background information based upon the literature review and conceptual rationale for the generation of the hypotheses are given. The second part deals with the research methodology of the study by describing the sample, procedure, and

research instruments used in the survey. Additionally, in this part, the statistical methods used for the interpretation of data and findings are presented. Finally, in the third part, the results of overall analysis are discussed; the concluding remarks and practical implications are given, and the study limitations are enumerated.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

1.1. The Concept of Employee Innovativeness

In terms of conceptualizing the concept of innovativeness, Hurt, Joseph and Cook (1977, pp:59-60) described innovativeness as “willingness to change”. Along with Hurt et al.’s description, Midgley and Dowling (1978, p.230) defined innovativeness as a form of innate personality trait. Rogers (1983, p:23) viewed innovativeness as the “elapsed time of adoption of an idea or behaviour”. Damanpour (1991, pp:556-557) addressed that innovations connected to the implementation or adoption of novel ideas could be categorized as either technological (changes in products, services, production processes) or administrative (changes in activities, social processes, structures), and as either radical or incremental, depending on the extent of their impact for existing products or processes.

De Jong and Den Hartog (2008) have conceptualized innovativeness through underlining innovative work behavior (IWB) and indicated that innovativeness included exploration of opportunities and the generation of new ideas (creativity related behavior), but could also include behaviors directed towards implementing change, applying new knowledge or improving processes to enhance personal and/or firm performance (implementation oriented behavior). As further, the extant literature about employee innovativeness defined the concept as engagement in innovative behaviors, which includes behaviors related to the innovation process, i.e. idea generation, idea promotion and idea realization, with the aim of producing innovations (e.g., Kanter 1988, Damanpour, 1991; Scott and Bruce 1994, Ramamoorthy, Flood, Slattery and Sardesai 2005; Walsh et al., 2009; Goldsmith, 2011; Matuska, 2011). The studies examined employee innovativeness throughout the innovation process, from initial idea generation to product development, and eventually to product commercialization, or the adoption of new processes or structures in the organization (e.g. Axtell, Holman, Unsworth, Wall, Waterson and Harrington 2000, Vincent, Decker and Mumford, 2002; Wang and Ahmed, 2004; Huhtala and Parzefall, 2007; Parzefall et al., 2008).

1.2. The Antecedents of Employee Innovativeness

1.2.1. Supportive Manager Relations

Supportive manager relationships strengthen employees’ social identities and generate greater meaningfulness in the organizations (May, Gilson and Harter, 2004, pp:12-13). In an organization where managers, who are empathic about employees’ needs, show support, empower them towards expanding their skills, provides positive feedback and inspire open communication channels, the employees exhibit better individual work outcomes of job performance, citizenship behaviors, innovative work behaviors, etc. (e.g., Chay and Aryee, 1999, p:615; Basadur, 2004, p:105; Ertenu, 2008, p:68; Walsh et al., 2009, p:3; Rothmann et al., 2013:p.2). It has been indicated that supportive manager relations provide employees

to express their concerns and solve work-related problems, to foster a work environment that is conducive to positive employee outcomes (Deci and Ryan, 1985; May et al., 2004). Thus, it is suggested that an important determinant of employees' innovativeness is supportive manager relations (May et al., 2004; Purcell and Hutchinson, 2007; Rothmann et al., Taştan, 2013). Therefore, in line with these previous findings, the following hypothesis is generated in this study:

1H1: Supportive manager relations relate positively to employee innovativeness.

1.2.2.Satisfaction with HR-Practices

It is supposed that a relation between satisfaction with HR-policies and employees' innovativeness is feasible. According to Khilji and Wang (2007, p:380), employees' HR-satisfaction builds the fundamental link between an organization's human resource practices and organizational performance. Employees' satisfaction of HR-practices is defined as an attitudinal assessment of the implementation of HR-practices within an organization (Khilji and Wang, 2007,p:380). Regarding that HR-satisfaction is an indicator of employees' individual experience of HR-practices it is concerned with implemented rather than intended practices (Ruschoff, 2008, p:44). It is indicated that employees' Hr-satisfaction has importance because it has positive impact on employees' general job satisfaction level, positive impact on organizational performance and negative impact on employee withdrawal behaviors and turnover intention. It is suggested that positive employee outcomes, organizational performance, and innovativeness can be enhanced when employees' expectations with the implemented HR-practices are met.

In particular, Shipton, West, Dawson, Birdi and Patterson (2006, pp:5-6) have demonstrated that human resources management practices and policies were significant predictors of innovation. Based on this rationality, the current study focuses on employees' perception related to Hr-practices and its relation to employee innovativeness. Regarding that satisfaction with HR-practices implemented in an organization has associations with positive employee and organizational outcomes, it is expected that employees' satisfaction with organizations' HR-practices may be positively related to employee innovativeness. This results in the generation of the second hypothesis:

2H1: Satisfaction with HR-practices relates positively to employee innovativeness.

1.2.3.Satisfaction with Autonomy

Conservation of Resources (COR) theory (Hobfoll, 1989) indicates that individuals seek to obtain, retain, and protect resources, and stress occurs when resources are threatened, or when individuals fail to gain resources after substantive resource investment. Thus, resources have a central motivational role in this theory. Moreover, according to the interactionist perspective, personal and contextual factors interact to support innovative behavior within employees (Oldham and Cumings, 1996; Woodman, Sawyer and Griffin, 1993). One of such perceived contextual factors is job autonomy. This concept is regarded as the main contextual factor of employee's attitudes, motivation and behavior (Hornung and Rousseau, 2007). In literature (Hackman and Oldhman, 1975; Sazandrishvili, 2009) job autonomy concerns the extent to which employees have a power in organizing their job

activities. Therefore, the current study focused on job autonomy as being among job resources and contextual factors.

Autonomy refers to the freedom of individuals to make independent decisions regarding job related issues (Sazandrishvili, 2009, p:5). Job autonomy gives employees power and more opportunities to determine the frames of the job they are implementing (Kulik, Oldham and Hackman, 1987). Previous cross-sectional studies (Hakanen, Bakker and Schaufeli, 2006; Saks, 2006); Xanthopoulou, Bakker, Demerouti and Schaufeli, 2009; Spiegelaere, Gyes, Witte, Niesen and Hootegem, 2014) have shown that several job resources like autonomy and social support related positively to individual work outcomes of such as involvement, work engagement, creativity, and innovative work behaviors. It was addressed that the managers of high performance companies, who supported autonomy, had employees who experienced more job satisfaction, were more trusting of top managers and felt less pressured and controlled (Deci, Connell and Ryan, 1989, p:583; Rothmann et al., 2013,p:4). According to Deci and Ryan (2012, pp:88-89), increased work autonomy enhances commitment to organization and positive work outcomes. A number of authors (Amabile, Conti, Lazenby and Herron, 1996; Mumford, Scott, Gaddis and Strange, 2002) argued that organizational motivation to innovate and management practices which refer to allowance of freedom and autonomy are important components of innovative performance in organizations. In the study of Scott and Bruce (1994), employees who reported that their supervisors were characterized by high level of autonomy viewed their organization as supportive for innovation. Moreover, previous studies reported that perceived autonomy had positive relationship with work-related outcomes of performance and innovativeness (e.g., Cotton, 1995; Solomon, Winslow and Tarabishy, 2010; Van den Broeck, Vansteenkiste, De Witte, Soenens and Lens, 2010). Thus, in line with the previous findings, the third hypothesis is generated:

3H1: Autonomy satisfaction relates positively to employee innovativeness.

1.2.4.Organizational Culture as a Moderator Variable

Since innovation studies have revealed that organizational culture can act as a driver or barrier to innovation (Valencia, Valle and Jimenez, 2010), few studies attempted to empirically link organizational culture with organizational innovativeness. Blayse and Manley (2004) pointed out the importance of the innovationsupportive culture to champion innovation in an organization. Among the limited studies that focus on the influence of organizational culture on employee innovativeness, it was revealed that a culture which is open for collaboration and a high tolerance of risk would encourage creativity and lead towards innovativeness (Panuwatwanich, Stewart and Mohamed, 2009; Yusof and Abidin, 2011).

When the basic assumptions related to the understanding of organizational culture's relationship with organizational and employee implications, it has been recognized that organizational culture could be examined as an independent variable, moderating variable, or mediating variable. Previous research of Robert and Wasti (2002) and Wasti (2003)

suggested that organizational culture had a positive and significant effect on performance when investigated as an independent variable.

Zheng, Yang and McLean (2009) indicated that organizational culture referred to the existence of a shared definition of the function and purpose of the organization and members, therefore had major influences on organizational functioning. Jung, Su, Baeza and Hong (2008) have demonstrated that organizational culture has significant effect towards quality management deployment. In addition, a recent study has found that organizational culture effected organizational commitment levels of employees (Kranenburg, 2013). On the other side, past literature claimed *organizational culture* to play a vital role in mediating the relationship between variables such as leadership, performance, innovation, citizenship behaviors, etc. Imran, Zahoor and Zaheer (2012) have examined the mediating role of organizational culture in the relationship between transformational leadership and organizational performance. As a result of their study, transformational leadership was found to positively and significantly affect organizational performance along with the mediating role of organizational culture in the relationship between transformational leadership and organizational performance (Imran et al., 2012, p.713).

In this stream of research, several studies have investigated the influence of culture more explicitly and have proposed culture-specific (emic) antecedents as well as culturally salient antecedents of employee attitudinal outcomes such as commitment, involvement, and job satisfaction (e.g. Boyacigiller and Adler, 1991; Palich, Hom and Griffeth, 1995; Redding, Norman and Schlander, 1994; Wasti, 2003). In one of the empirical studies in the latter group, Palich et al. (1995) investigated whether culture moderated the relationship between affective commitment and a number of well-documented antecedents, namely, role clarity, job scope, participative management, and extrinsic rewards. Their results showed that not only were the antecedents strong predictors of affective commitment for each cultural group, but also there were no significant cultural moderation effects. While several other authors concluded that organizational culture aspects could be investigated as a moderating variable and thus, organizational culture has been evaluated as a contingent variable (e.g. Wasti, 2003; Azanza, Moriano and Molero, 2013). A recent study has confirmed that job attitudes and prosocial service behavior relationship was moderated by organizational culture (Limpanitgul, Jirotmontree, Robson and Boonchoo, 2013).

In fact, organizational culture has long been considered to be important in management studies because of its relationship to various outcomes (Robert and Wasti, 2002). However, studies in which organizational culture has been explicitly explored as a moderating variable are limited in number (Robert and Wasti, 2002). Thus, the primary aim of the present study is to investigate the role of organizational culture on the relationship between employee perceptions (i.e., supportive manager relations, HR practices, and autonomy) and innovativeness at work. By linking such employee perceptions and innovativeness together, the current void in the literature would be filled and the organization, in pursuit of

innovativeness, would be better informed on how to develop and manage employee innovativeness.

Based on the above discussion, in the current study, we assumed that type of organizational culture could affect innovativeness in the organizations and could have a moderating role on the links between the suggested antecedent variables and innovativeness. Organizational culture in this study has been viewed as a contingent variable which might affect the strength and direction of the relationship between the independent variables and the innovativeness construct. A mediation effect of organizational culture has not been expected since we have not assumed that the independent variables would affect innovativeness over organizational culture (see Büyüköztürk, 2007; Imran et al., 2012). Thus, it can be suggested that the independent variables would affect the innovativeness directly and separately and with the interaction of organizational culture aspects, the effect of those variables on innovativeness would be strengthened.

Further, this study focused on understanding organizational culture's role with the perspective of Wallach (1983, p:29). Wallach (1983, pp:29-33) conceptualized three categories of organizational culture (a) bureaucratic, (b) innovative, and (c) supportive to measure the organizational culture. A bureaucratic culture was a hierarchical type of culture and this type there are clear lines of authority and responsibility and the work is well planned and organized. The bureaucratic culture was based on power and control. The second category was innovative culture, result oriented and challenging work environment. Innovative cultures mostly focused on internal system of organization and looking for competitive advantage, it encouraged openness to new thoughts and prepared internal capabilities to adopt new ideas, process, or product successfully. The third category supportive culture was teamwork, trusting, encouraging work and a people-oriented environment. An organizational culture that encourages and challenges organizational members to come out with new ideas is also argued to lead towards innovativeness (Panuwatwanich et al., 2009; Jaskyte and Dressler, 2005).

With that respect, organizational culture aspects can be expected to moderate the relationship between supportive manager relations, satisfaction with HR-practices, autonomy satisfaction and innovativeness. Under conditions of high perceived bureaucratic culture, employees may tend to comply on power and control by involving themselves in their required tasks (Scott-Ladd and Chan, 2004, p:96) and since (Wang, Law, Hackett, Wang and Chen, 2005, pp:421-422) it is suggested that for bureaucratic culture, the interactions between among employees are frequently authority and control based so supportive manager relations, satisfaction with HR or personal autonomy would not be effective under conditions of high perceived bureaucracy. In the study of Yusof and Abidin (2011, p:724), the relationship between organizational culture and the innovativeness of the organizations were investigated and the results showed that dimensions of the organizational culture were statistically significantly correlated with organizational innovativeness with moderate strength.

With the adverse approach, under conditions of high supportive/innovative culture, employees may tend to be result-oriented and contribute to product and process innovation by involving themselves in developing required tasks (Scott-Ladd and Chan, 2004, p:97) and since (Wang et al., 2005, p:424; Rasool, Kiyani, Aslam, Akram and Rajput, 2012, p:301) it is suggested that for bureaucratic culture, the interactions between new ideas and teamwork, therefore supportive manager relations, satisfaction with HR and autonomy would be effective under conditions of high perceived supportive/innovative culture. For that rationality, we propose that supportive manager relations, satisfaction with HR and autonomy would have more profound effects on the outcomes of innovativeness when perceived supportive/innovative culture is high. Therefore, from the above discussion, the following hypotheses were proposed:

4H1: Organizational culture when perceived supportive/innovative relates positively to employee innovativeness.

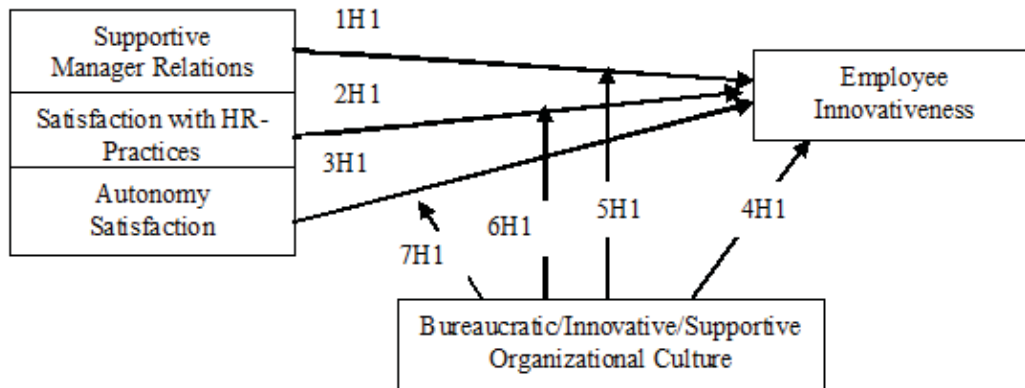
5H1: Organizational culture moderates the relationship between supportive manager relations and employee innovativeness; such that the relationship will be stronger when perceived supportive/innovative culture is high.

6H1: Organizational culture moderates the relationship between satisfaction with HR-Practices and employee innovativeness; such that the relationship will be stronger when perceived supportive/innovative culture is high.

7H1: Organizational culture moderates the relationship between autonomy satisfaction and employee innovativeness; such that the relationship will be stronger when perceived supportive/innovative culture is high.

In accordance with the rationality and background theories of the current study, the conceptual research model and the variables can be presented as follows:

FIGURE 1: The Hypothesized Model



2. METHODOLOGY

2.1. Sample and Data Collection

To test the propositions, a field survey using questionnaires was conducted. The survey of this study was conducted on participants by management level was involving middle management, junior management, senior management, and executive level of high performance and innovative firms in different industries in Turkey. The firms were

identified according to Turkish Time Journal's (2011) official report of "The Most Innovative Firms in Turkey". In this report, 100 firms were listed with grades ranged from 48 to 80 depending on their assessments of innovativeness indicators. Among these firms, 12 firms were identified from different sectors. The questionnaire survey was performed with personal interviews and via electronic database between July 2013 and January 2014. Data obtained from questionnaires were analyzed through the SPSS statistical packet program and LISREL. For testing the measurement model, confirmatory factor analysis (CFA) was performed and structural model was tested.

2.2. Measuring Instruments

The questionnaire was either administered online or as a paper version. Participants receiving the online version got access to the questionnaire by means of a link to an online application as instructed by the researcher and the company administration. In sum, the overall questionnaire was composed of 85 items and 6 demographic questions. The items were evaluated by using a five-point scale that varies from 1 ('totally disagree') to 5 ('totally agree').

"Manager Relations Scale" (MRS) (May et al., 2004, p:30) was used to measure the participants' experiences of manager support and trust which was composed of totally 10 items (5 items for manager support, 5 items for trust). Examples of the items were: "My manager encourages employees to participate in important decisions" and "My manager does what he or she says he or she will do". Rothmann and Rothmann (2010, p:9) found an alpha coefficient of 0.95 and Rothmann et al. (2013, p:7) found an alpha coefficient of 0.90 for the one-dimensional scale.

"Employees' satisfaction with HR-practices" was measured by 36 items developed in accordance to Beer, Spector, Lawrence, Quinn Mills and Walton's (1984) model of human resource management (e.g., Beer et al., 1984; DeNijs, 1998) and composed of the sub components of satisfaction with the amount of employee influence, the work flow, the work system, and the reward-compensation system which have been adopted from Torka and Schyns (2007) and Ruschoff (2008). Examples of the items were such as "To what extent are you asked for your opinion when changes concerning your position/function are made?" (employee influence) and "My compensation is good compared to what I could earn elsewhere in a comparable position" (primary compensation).

"Autonomy satisfaction" was measured with the Work-related Basic Need Satisfaction Scale (WBNSS) (Van den Broeck et al., 2010, p:310) to measure the satisfaction of psychological needs. The WBNSS measures the satisfaction of autonomy, competence and relatedness. In the current study, only the autonomy satisfaction related sub scale was used. An example of the item of six items sub scale was: "I feel like I can pretty much be myself at work". Swart (2012, p:145) confirmed the three-factor structure of the WBNSS and his study revealed an alpha coefficients of 0.81, 0.79 and 0.79 confirm the reliability for autonomy, competence and relatedness satisfaction (Diedericks, 2012, p:159).

“Innovativeness” as being the dependent variable of the current research study was measured by a 9-item scale originally developed by Scott and Bruce (1994), extended by Janssen (2000) and recently confirmed by Ruschoff (2008). The scale is subdivided into three subcategories containing three items each. The categories evaluated employees’ idea generation, idea promotion, and idea realization. Examples of the items were: “How often do you search out new technologies, processes, techniques and/or product ideas” (idea generation) and “How often do you promote and champion ideas to others” (idea promotion) (Scott and Bruce, 1994, p:50). Ruschoff (2008) have found an alpha coefficient of 0.92 for the one-dimensional scale.

“Organizational culture” in the current study was assessed by 24 items organizational culture scale by Wallach (1983) which was also used in the research studies of Koberg and Chusmir (1987, p:401) and Lok and Crawford (2004, p:329). Wallach defined three types of culture (a) bureaucratic, (b) innovative or (c) supportive and each of the three types was assigned 8 items measuring organizational culture. The previous studies have revealed alpha coefficients of 0.70, 0.82, 0.91.

2.3.Descriptive Results

A total of 300 questionnaires were distributed among respondents who were selected by stratified random sampling and 235 usable questionnaires were returned. Majority of the respondents (68.78%) were male and only (31.22%) were female respondents. The average age of the sample group was 37. When respondents were evaluated according to their qualification, it was seen that majority of the respondents were holding masters degree (69%), and very few (30%) were having bachelors degree or degree above masters and very minor (1%) were having below bachelors degree. When respondents were evaluated about their work experience (72%) of the respondents were having work experience between 1-10 years, employees having work experience between 11-20 years were (22%) and employees having work experience more than 20 years were only (6%).

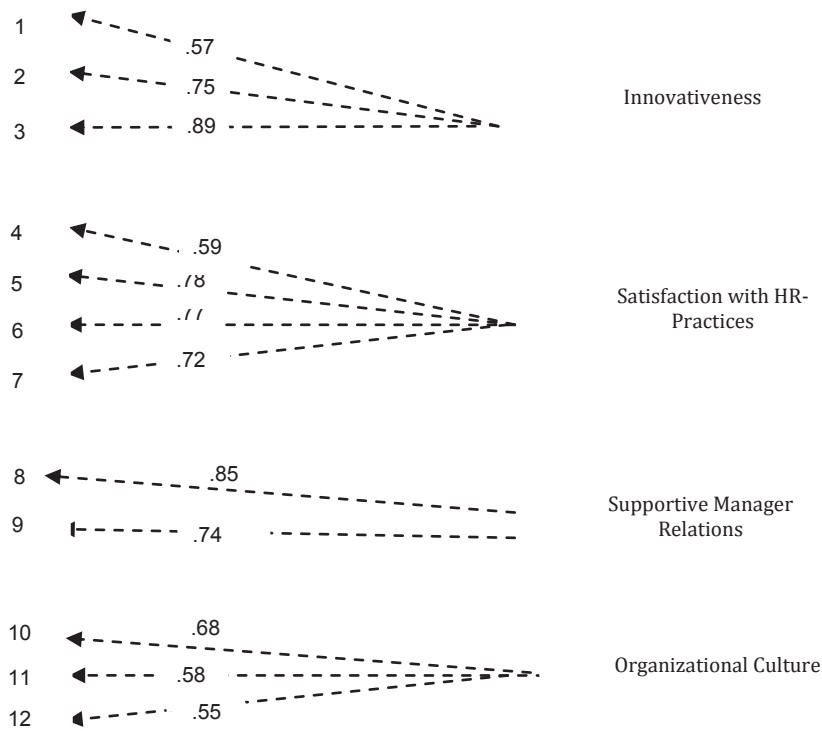
2.4.Reliability and Validity

Cronbach's alpha was utilized for reliability evaluation and the Cronbach's alpha reliability of all the variables were more than 0.7, which indicated that all the scales demonstrated good reliability (Table 1).

As further, content validity and construct validity were used for evaluating the validity of the questionnaires. In order to test the content validity, after devising a framework for the questionnaire, 3 professors and 2 private company managers were asked to modify it if needed. That committee evaluated all the items in the questionnaire and confirmed them. In addition, Confirmatory Factor Analysis (CFA) was used to investigate the construction of the questionnaire. Before adopting CFA, skewness and kurtosis values for each item of the scale were examined to check out the normality. Afterwards CFA was conducted. The results of the CFA of research variables indicated that all the mentioned criteria have been measured with the scales in the questionnaire. Factor loadings of the construction of the questionnaire are presented in the Figure 2.

TABLE 1: The Summary Statistics of Survey

Factors	Number of questions	Mean	α
Manager support	5	4.2055	0.88
Trust	5	3.8765	0.84
Supportive Manager Relations	10	0.86
Sat. with employee influence	9	4.4355	0.79
Sat. with work flow	9	4.4177	0.83
Sat. with work system	9	4.0382	0.89
Sat. with reward&comp.system	9	3.9905	0.92
Satisfaction with HR-Practices	36	0.86
Satisfaction with Autonomy	6	0.91
Idea generation	3	4.2156	0.84
Idea promotion	3	3.8952	0.84
Idea realization	3	3.6871	0.81
Innovativeness	9	0.86
Bureaucratic	8	3.1974	0.78
Innovative-Supportive	16	4.2055	0.85
Organizational Culture	24	0.82

FIGURE 2: Factor Loadings for the Questionnaire

2.5. Measurement Models of Research Variables

In the next stage, the relationship between the latent variables of innovativeness, satisfaction with HR-practices, supportive manager relations, autonomy, and organizational culture, and their indicators were tested. For the assessment of construct validity, confirmatory factor analysis (CFA) was performed (as referred by Nunnally and Bernstein, 1994; Şimşek, 2007). The results of the confirmatory factor analysis (CFA) showed good fitness of the models, proving that the selected indicators were good representatives for each dimension of research variables (Table 2).

TABLE 2: Fitness Indices of Research Variables Based on CFA

Fitness indices	Supp.Man. Relations	Sat. Practices	HR- Autonomy	Innovativeness	Org.Culture	Principle
Chi-square/df	2.3873	2.4456	2.3372	2.2846	2.7933	< 3
P-value	0.00	0.00	0.00	0.00	0.01	< 0.05
RMSEA	0.065	0.061	0.069	0.063	0.074	< 0.10
GFI	0.95	0.92	0.93	0.96	0.98	> 0.9
AGFI	0.91	0.91	0.91	0.94	0.95	> 0.9

2.6. Findings of Structural Equation Modeling Analysis

In this study the relationships among supportive manager relations, satisfaction with HR-practices, satisfaction with autonomy, innovativeness, and organizational culture were tested using the Structural Equation Modeling (SEM) technique. SEM was described as a statistical model where exogenous variables (explanatory variables) can potentially affect endogenous variables (response variables) both directly and indirectly via intervening variables (Byrne, 2013). A structural model is a part of the entire structural equation model diagram that would be completed for every model within the research study's propose. It is used to relate all of the variables (both latent and manifest) that were needed to account for in the model. A measurement model is a part of the entire structural equation model diagram that was completed for every model in accordance with the study propose and it is essential if there are latent variables in the model (Walker, 2012; Garson, 2012). Together, the structural model and the measurement model form the entire structural equation model includes everything that has been measured, observed, or otherwise manipulated in the set of variables examined.

Comparative fit index (CFI), non-normed fitindex (NNFI) and root mean square error of approximation (RMSEA) were used to check if the model fit the data. After re-specification of models Cronbach's Coefficient Alpha was computed to check for the internal consistency of adapted and developed scales. In accordance with the assumptions of SEM, the fit indices and their acceptable levels are displayed with Table 3.

TABLE 3: Fit Indices and Their Acceptable Threshold Levels

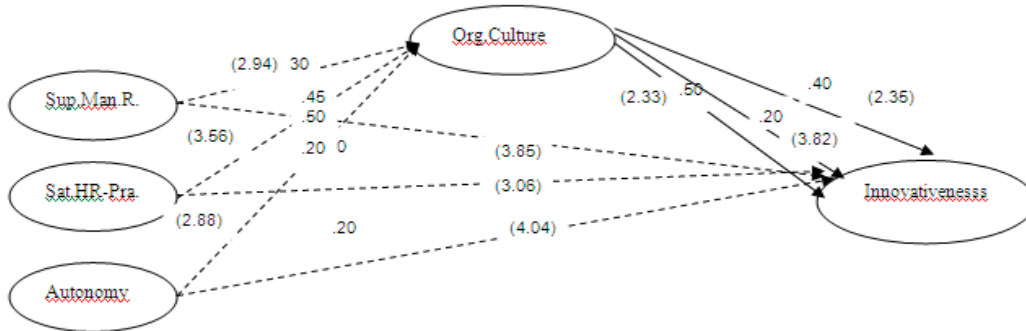
Fit Index	Acceptable Threshold Levels
Chi Square/df	$\chi^2 / df <$
CFI	CFI>0.90, acceptable CFI \geq 0.95
NNFI(TLI)	NNFI>0.90 acceptable NNFI \geq 0.95
RMSEA	RMSEA<0.05, close fit; 0.05<RMSEA< 0.10, mediocre fit; RMSEA>1, poor fit RMSEA<0.08, adequate model fit

Source: Schermelleh-Engel, Moosbrugger and Müller, 2003

For testing the hypotheses, the structural model applying 3 dimensions of innovativeness, 2 dimensions of organizational culture, 36 items of satisfaction with HR-practices, 10 items of supportive manager relations, and 6 items of satisfaction with autonomy was performed. Manifest variable has been existed in the current study since a variable that is directly observed and measured is called a manifest variable (it is also called an indicator variable in some circles). In addition, Path analysis is a special name for a structural equation model which examines only manifest variables, called path analysis (Garson, 2012).

Moreover, as organizational culture was assessed as the moderator variable in the current study, it should be noted that for the purposes of SEM, specifically, moderation refers to a situation that includes three or more variables, such that the presence of one of those variables changes the relationship between the other two (<https://www.stat.purdue.edu/StructuralEquationModeling.doc>). In other words, moderation exists when the association between two variables is not the same at all levels of a third variable. One way to think of moderation is when you observe an interaction between two variables in an ANOVA. The below Figure 3 shows a diagram of moderation. This diagram shows that there are three direct effects that are hypothesized to cause changes in innovativeness – the main effects of supportive manager relations, satisfaction with HR practices, autonomy, and organizational culture, and the interaction effects of each independent variable and organizational culture.

The fit of the models to the data was assessed with the chi-square (X^2) statistic, the Goodness of Fit Index (GFI) and the Root Mean Square Error of Approximation (RMSEA). In addition, three fit indices were used that are less sensitive to sample size: the Comparative Fit Index (CFI), the Incremental Fit Index (IFI), and the Tucker-Lewis Index (TLI). For each of these statistics, values of .90 are acceptable and of .95 or higher are indicative of good fit (Hu and Bentler, 1999). In accordance with Browne and Cudeck's (1993) description, only for the RMSEA for which values of .05 indicate good fit and values up to .08 represented reasonable errors of approximate

FIGURE 3: Structural Equation Model

$\chi^2/df = 2.7232$, $p\text{-value} = 0.000$, $RMSEA = 0.074$

Fitness's indices showed the good fitness of the Structural model; as $RMSEA = 0.074$, $p\text{-value} = 0.000$, and $\chi^2/df = 2.7232$. Moreover, Figure 3 and Table 3 summarize the hypotheses test results in terms of path coefficients (standardized solution) and t-value, by SEM technique.

TABLE 3: The Findings of the Hypotheses Tests

	Hypotheses	Path coefficients	T-value	Results
1H1	Sup.Man.Relations → Innovativeness	0.50	3.85	Confirmed
2H1	Sat. HR-Practices → Innovativeness	0.20	3.06	Confirmed
3H1	Autonomy → Innovativeness	0.20	4.04	Confirmed
4H1	Org.Culture → Innovativeness	0.40	2.77	Confirmed
5H1	Sup.Man.Relations → Culture → Innovativeness	0.50	2.33	Confirmed
6H1	Sat. HR-Practices → Culture → Innovativeness	0.20	3.82	Confirmed
7H1	Autonomy → Culture → Innovativeness	0.40	2.35	Confirmed

CONCLUSION AND RECOMMENDATIONS

The present study aimed to investigate the antecedents of employee innovativeness within the organizations and the moderating role of organizational culture aspects. The findings of this study have revealed that all variables of the research model had significant relationships between each other. A stratified random sampling has led the return of 235 usable questionnaires and the reliabilities of the scales used in the survey were evaluated by utilizing Cronbach's alpha. It was seen that all the scales demonstrated good reliability due to the reliability values of each variables. Moreover, content validity and construct validity for evaluating the validity of the questionnaires were used and in order to examine the construction of the questionnaire. Confirmatory Factor Analysis (CFA) revealed that all the mentioned criteria have been measured in the questionnaire. The findings of the CFA indicated good fitness of the models, proving that the selected indicators were good representatives for each dimension of research variables.

As further, the hypotheses proposing the relationship among supportive manager relations, satisfaction with HR-Practices, autonomy, innovativeness and organizational culture were tested using the Structural Equation Modeling (SEM) technique. Fitness's indices showed the good fitness of the Structural model (RMSEA = 0.074, $p = 0.000$, chi-square/df = 2.7232). The results also indicated significant links between the tested variables supporting our proposed hypotheses. Thus, according to the results of hypotheses tests in terms of path coefficients (standardized solution), t-value, by SEM technique, it was demonstrated that the significant influences of supportive manager relations, satisfaction with HR-Practices and autonomy on innovativeness construct were confirmed. Furthermore, the hypothesis testing the moderating influence of innovative- supportive organizational culture on the relationship between each of the independent variables and innovativeness were confirmed.

These findings supported the previous literature evidences which have indicated that supportive manager relations, HR practices, autonomy and innovative-supportive organizational culture had association with employee outcomes of innovativeness (e.g. Wallach, 1983; Witt et al., 2000; May et al, 2004; Wang et al., 2005; Ruschoff, 2008; Chalofsky and Krishna, 2009; Van den Broeck et al., 2010; Deci and Ryan, 2012; Rothmann et al., 2013). Moreover, the present study went beyond previous models of employee innovativeness that have considered effects of work and individual variables separately. This study confirmed the importance of organizational culture variable as moderator of the effect of perceived supportive manager relations, HR-practices, and autonomy on innovativeness. An initial important finding concerned the role of satisfaction with job autonomy and HR-practices on innovativeness of employees since these variables have been under researched in the previous literature. The importance of these concepts in innovativeness of employees is consistent with other research and can be explained by the fact that HR-practices of the organization provides employees decision-making processes, the work system, the reward system and the human resource flow (Ruschoff, 2008; Salanova, Bakker and Llorens, 2006), while the job autonomy gives freedom and opportunity to carry out their job activities and to put better innovative performance on the work they do (Sazandrishvili, 2009). Thus, this study contributed to the implication about the effects of supportive manager relations, HR practices, perceived autonomy and innovative culture employees' behavioral outcomes of innovativeness. Furthermore, the present study extends our understanding of employee innovativeness by empirically investigating the relationship between dimensions of organizational culture and the innovativeness. This study showed that, in general, the innovativeness of employee in Turkish firms was relatively high and that these employees agreed on the existence of innovative and supportive cultures in their organizations. In addition, the presence of innovative and supportive cultural dimensions in the said organizations would necessarily lead to innovativeness of the employees since that dimension was positively related to innovativeness and had significant moderating impacts on the relates of it antecedents. These results were consistent with earlier studies such as (Scott-Ladd and Chan, 2004; Jaskyte and Dressler, 2005; Yusof and Abidin, 2011), who argue that performance and support oriented cultures are actually drivers to employee innovativeness. These results

also supported Hartmann(2006) claims that organizations having a supporting culture and a performance orientation encourage innovation. Furthermore, the results were compatible with the implications of Dasanayaka's (2009) study in which a significant correlation between culture dimensions of clan and adhocracy types and degree of innovativeness were found. As such, it is suggested that the results of the present study contributes to the understanding of how supportive and innovative organizational culture can stimulate and build employee innovativeness (Martin and Terblanche, 2003) along with HR-practices, autonomy and positive managerial relations among the employees.

However, as a limitation of this study, the questionnaire survey was conducted among the employees working in the management level involving middle management, junior management, senior management, and executive level of high performance and innovative firms in different industries in Turkey (operating in White Good Manufacturing, Food and Drink, Telecommunication, Banking, and Textile industries). Therefore, the findings may not be generalized to all industries or countries. It is recommended that further studies should be applied within larger samples and in different countries. This would enable the generalizability and reliability of the findings. Another limitation of this survey is that innovativeness items were responded by the employees subjectively. Common method biases in behavioral research may be a weak point of the survey (see Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). It is suggested that further surveys can use the supervisor-report method or multiple sources (self reported and leader reported) method for measuring innovativeness so that the objectivity of the responses can be increased and the same-source biases can be eliminated.

REFERENCES

AMABILE T.M., CONTI, R., COON, H., LAZENBY, J., HERRON, M. ,1996, "Assessing the Work Environment for Creativity", *The Academy of Management Journal*, Vol.39, pp:1154-1184.

AXTELL, C.M., HOLMAN, D.J., UNSWORTH, K.L., WALL, T.D., WATERSON, P.E., HARRINGTON, E., 2000, "Shopfloor innovation: facilitating the suggestion and implementation of ideas", *Journal of Occupational and Organizational Psychology*, Vol.73, pp:265-285.

AZANZA, G., MORIANO, J. A., MOLERO, F., 2013, "Authentic leadership and organizational culture as drivers of employees' job satisfaction", *Revista de Psicología del Trabajo y de las Organizaciones*, Vol.29, No.2, pp:45-50.

BASADUR, M., 2004, "Leading others to think innovatively together: Creative leadership", *The Leadership Quarterly*, Vol.15, No.1, pp:103-121.

BEER, M., SPECTOR, B., LAWRENCE, P.R., QUINN MILLS, D., WALTON, R.E., 1984, *Managing Human Assets, A general manager's perspective*, New York, NY: Free Press.

BLAYSE, A.M. and MANLEY, K., 2004, "Key influences on construction innovation", *Construction Innovation, Information, Process Management*, Vol.4, pp:143-154.

BOYACIGILLER, N.A. and ADLER, N.J., 1991, "The parochial dinosaur: Organizational science in a global context", *Academy of Management Journal*, Vol.16, pp:262-290.

BROWNE, M. W. and CUDECK, R., 1993, "Alternative ways of assessing model fit", *Sage Focus Editions*, No.154, pp:136-136.

BÜYÜKÖZTÜRK, Ş., 2007, *Handbook of Data Analysis for Social Sciences (Sosyal Bilimler için Veri Analizi El Kitabı)*, Pegem Publishing, Ankara.

BYRNE, B. M., 2013, *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.

CHALOFISKY, N. and KRISHNA, V., 2009, "Meaningfulness, commitment, and engagement: The intersection of a deeper level of intrinsic motivation", *Advances in Developing Human Resources*, Vol.11, No.2, pp:189-203.

CHAY, Y. W. and ARYEE, S., 1999, "Potential moderating influence of career growth opportunities on careerist orientation and work attitudes: Evidence of the protean career era in Singapore", *Journal of Organizational Behavior*, Vol.20, No.5, pp:613-623.

COTTON, J. L., 1995, "Participation's effect on performance and satisfaction: A reconsideration of Wagner", *Academy of Management Review*, Vol.20, No.2, pp:276-278.

DAMANPOUR, F., 1991, "Organizational innovation: A meta-analysis of effects of determinants and moderators", *Academy of Management Journal*, Vol.34, No.3, pp:555-559.

DASANAYAKA, S. W. S. B., 2009, "Implications of Organizational Culture on Innovation: An Exploratory Micro Study of Sri Lankan Gift and Decorative-ware Sector Firms". In *3th Conference on Micro Evidence on Innovation in Developing Economies*.

DE JONG, J. P. and DEN HARTOG, D. N., 2008, *Innovative work behavior: measurement and Validation*, EIM Business and Policy Research: U.S.A..

DE NIJS, W., 1998, "Human resource management", In H.Doorewaard and W. De Nijs (Eds.), *Organisatieontwikkeling en Human Resource Management* (pp. 23-47). Lemma: Utrecht.

DE SPIEGELAERE, S., VAN GYES, G., DE WITTE, H., NIESEN, W., VAN HOOTEGEM, G., 2014, "On the Relation of Job Insecurity, Job Autonomy, Innovative

Work Behaviour and the Mediating Effect of Work Engagement”, ***Creativity and Innovation Management***, Vol.23, No.3, pp:318-330.

DECI, E. L. and RYAN, R. M., 2012, “*Motivation, personality, and development within embedded social contexts: An overview of self-determination theory*”,***The Oxford Handbook of Human Motivation***, Vol.6, pp.:85-107.

DECI, E. L., CONNELL, J. P.,RYAN, R. M., 1989, “*Self-determination in a work organization*”, ***Journal of Applied Psychology***, Vol.74, No.4, pp:580-598.

DECI, E.L. andRYAN, R.M., 1985, ***Intrinsic motivation and self-determination in human behavior***, New York, NY: Plenum. <http://dx.doi.org/10.1007/978-1-4899-2271-7>.

DIEDERICKS, E., 2012, ***Flourishing of employees in the information technology industry in South Africa***, Unpublished Doctoral Dissertation, North-West University, Vanderbijlpark, South Africa.

ERTENU, B., 2008, ***The role of psychological empowerment between managerial practices and organizational citizenship behavior***, Unpublished Doctoral Dissertation, Marmara University, Social Sciences Institute, Istanbul.

GARSON, G. D., 2012, ***Testing statistical assumptions***. North Carolina: Statistical Associates Publishing.

GOLDSMITH, R. E., 2011, “*The validity of a scale to measure global innovativeness*”,***Journal of Applied Business Research***, Vol.7, No.2, pp:89-97.

HACKMAN, R. and OLDHAM, G.R., 1975, “*Motivation through the Design of Work: Test of a Theory*”, ***Organizational Behavior and Human Performance***, Vol.16, pp:250-279.

HAKANEN, J., BAKKER, A. B., SCHAUFELI, W. B., 2006, “*Burnout and work engagement among teachers*”, ***Journal of School Psychology***, Vol.43, pp:495–513.

HARTMANN, A., 2006, “*The role of organizational culture in motivating innovative behaviour in construction firms*”, ***Construction Innovation: Information ProcessManagement***, Vol.6, pp: 159-172.

HOBFOLL, S. E., 1989, “*Conservation of resources: A new attempt at conceptualizing stress*”, ***American Psychologist***, Vol.44, pp:513–524.

HORNUNG, S. and ROUSSEAU, D.M., 2007, “*Active on the job Proactive in Change: How Autonomy at Work Contributes to Employee Support for Organizational Change*”, ***The Journal of Behavioral Science***, Vol.43, pp:401-423.

- HU, L. T. and BENTLER, P. M., 1999, "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", **Structural Equation Modeling: A Multidisciplinary Journal**, Vol.6, No.1, pp:1-55.
- HUHTALA, H. and PARZEFALL, M. R., 2007, "A review of employee well-being and innovativeness: An opportunity for a mutual benefit", **Creativity and Innovation Management**, Vol.16, No.3, pp:299-306.
- HURT, H. T., JOSEPH, K., COOK, C. D., 1977, "Scales for the measurement of innovativeness", **Human Communication Research**, Vol.4, No.1, pp:58-65.
- IMRAN, R., ZAHOOR, F., ZAHEER, A., 2012, "Leadership and performance relationship: culture matters", **Leadership**, No.3, pp:557-579.
- JANSSEN, O., 2000, "Job demands, perceptions of effort—reward fairness and innovative work behavior", **Journal of Occupational and Organizational Psychology**, Vol.73, pp:287-302.
- JASKYTE, K. and DRESSLER, W.W., 2005, "Organizational Culture and Innovation in Nonprofit Human Service Organizations", **Administrative Social Work**, Vol.29, pp:23-41.
- JUNG, J., SU, X., BAEZA, M., HONG, S., 2008, "The effect of organizational culture stemming from national culture towards quality management deployment", **The TQM Journal**, Vol.20, No.6, pp:622-635.
- KANTER, R. M., 1988, "Three tiers for innovation research", **Communication Research**, Vol.15, No.5, pp:509-523.
- KHILJI, S. E. and WANG, X., 2007, "New evidence in an old debate: Investigating the relationship between HR satisfaction and turnover", **International Business Review**, Vol.16, No.3, pp:377-395.
- KOBERG, C. S. and CHUSMIR, L. H., 1987, "Organizational culture relationships with creativity and other job-related variables", **Journal of Business Research**, Vol.15, No.5, pp:397-409.
- KRANENBURG, D.G., 2013, **The Effect of Organizational Culture and Leadership Style on Organizational Commitment Within SMEs in Suriname, With Job Satisfaction as a Mediator**. Unpublished Master's Thesis, Maastricht School of Management, Management & Business Strategy.
- KULIK T.C., OLDHAM G.R., HACKMAN J.R., 1987, "Work Design as an Approach to Person-Environment Fit", **Journal of Vocational Behavior**, Vol.31, pp:278-296.

LIMPANITGUL, T., JIROTMONTREE, A., ROBSON, M. J., BOONCHOO, P., 2013, "Job attitudes and prosocial service behavior: A test of the moderating role of organizational culture", *Journal of Hospitality and Tourism Management*, Vol.20, pp:5-12.

LOK, P. and CRAWFORD, J., 2004, "The effect of organizational culture and leadership style on job satisfaction and organizational commitment: A cross-national comparison", *Journal of Management Development*, Vol.23, No.4, pp:321-338.

MARTIN, E.C. and TERBLANCHE, F., 2003, "Building organisational culture that stimulates creativity and innovation", *European Journal of Innovation Management*, Vol.6, pp: 64-74.

MATUSKA, E., 2011, "Innovations at organization via creativity of employees", *International Journal of Social Sciences and Humanity Studies*, Vol.3, No.1, pp:103-112.

MAY, D. R., GILSON, R. L., HARTE, L. M., 2004, "The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work", *Journal of Occupational and Organizational Psychology*, Vol.77, No.1, pp:11-37.

MIDGLEY, D. F. and DOWLING, G. R., 1978, "Innovativeness: the concept and its measurement", *Journal of Consumer Research*, Vol.2, pp:229-242.

MUMFORD, M.D., SCOTT, G.M., GADDIS, B., STRANGE, J.M., 2002, "Leading Creative People: Orchestrating Expertise and Relationships", *The Leadership Quarterly*, Vol.13, pp:705-750.

NUNNALLY, J.C. and BERNSTEIN, I.H., 1994, *Psychometric Theory*, 3rd Edition, New York: McGraw-Hill. Sharma.

OLDMAN, R. and CUMMINGS, A., 1996, "Employee Creativity: Personal and Contextual Factors at Work", *Academy of Management Journal*, Vol.39, pp:607-634.

PALICH, L.E., HOM, P.W., GRIFFETH, R.W., 1995, "Managing in the international context: Testing the cultural generality of sources of commitment to multinational enterprises", *Journal of Management*, Vol.21, pp:671-690.

PANUWATWANICH, K., STEWART, R.A., MOHAMED, S., 2009, "Critical Pathways to Enhanced Innovation Diffusion and Business Performance in Australian Design Firms", *Automation Construction*, Vol.18, pp: 790-797.

- PARZEFALL, M. R., SEECK, H., LEPPÄNEN, A., 2008, "Employee innovativeness in organizations: a review of the antecedents", *Finnish Journal of Business Economics*, Vol.2, pp: 165-182.
- PODSAKOFF, P. M., MACKENZIE, S. B., LEE, J.-L., PODSAKOFF, N. P., 2003, "Common Method Biases in Behavioral Research: A Critical View of the Literature and Recommended Remedies", *Journal of Applied Psychology*, Vol.88, pp:879–903.
- PURCELL, J. and HUTCHINSON, S., 2007, "Front-line managers as agents in the HRM-performance causal chain: Theory, analysis and evidence", *Human Resource Management Journal*, Vol.17, No.1, pp:3-20.
- RAMAMOORTHY, N., FLOOD, P. C., SLATTERY, T., SARDESSAI, R., 2005, "Determinants of innovative work behavior: Development and test of an integrated model", *Creativity and Innovation Management*, Vol.14, No.2, pp:142-150.
- RASOOL, S., KIYAN, A. A., ASLAM, M. J., AKRAM, M. U., RAJPUT, A. A., 2012, "Impact of organizational culture on employee's career salience: An empirical study of banking sector in Islamabad, Pakistan", *International Journal of Business and Social Science*, Vol.3, No.7, pp:299-306.
- REDDING, S.G., NORMAN, A., SCHLANDER, A., 1994, "The nature of individual attachment to the organization: A review of East Asian variations". In H.C. Triandis, M. Dunnette, & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd edn., Vol. 4, pp. 648–688). Palo Alto, CA: Consulting Psychologists Press.
- ROBERT, C. and WASTI, S. A., 2002, "Organizational individualism and collectivism: Theoretical development and an empirical test of a measure", *Journal of Management*, Vol.28, No.4, pp:544-566.
- ROGERS, E.M., 1983, *The Diffusion of Innovation*, 3rd Edition, New York: The Free Press.
- ROTHMANN, S. and ROTHMANN, S. Jr., 2010, "Factors associated with employee engagement in South Africa", *SA Journal of Industrial Psychology*, Vol.36, No.2, pp:1–12.
- ROTHMANN, S., DIEDERICKS, E., SWART, J. P., 2013, "Manager relations, psychological need satisfaction and intention to leave in the agricultural sector", *SA Journal of Industrial Psychology*, Vol.39, No.2, pp:1-11.
- RUSCHOFF, B., 2008, *Uncovering individual potential: An integrative approach to LMX and transformational leadership*, Unpublished Bachelor's Dissertation, University of Twente, Faculty of Behavioral Sciences, Germany.

SAKS, A. M., 2006, "Antecedents and consequences of employee engagement", *Journal of Managerial Psychology*, Vol.21, Noç7, pp:600-619.

SALANOVA, M., BAKKER, A. B., LLORENS, S., 2006, "Flow at Work: Evidence for an Upward Spiral of Personal and Organizational Resources", *Journal of Happiness Studies*, Vol.7, pp:1-22.

SAZANDRISHVILI, N., 2009, *Contextual and Personal Antecedents of Innovative Behavior*, Unpublished Doctoral Dissertation, University of Twente, U.S.A.

SCHERMELLEH-ENGEL, K., MOOSBRUGGER, H., MÜLLER, H., 2003, "Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures", *Methods of Psychological Research Online*, Vol.8, No.2, pp:23-74.

SCOTT, S. G. and BRUCE, R. A., 1994, "Determinants of innovative behavior: A path model of individual innovation in the workplace", *Academy of Management Journal*, Vol.37, No.3, pp:580-607.

SCOTT-LADD, B. and CHAN, C. C., 2004, "Emotional intelligence and participation in decision-making: strategies for promoting organizational learning and change", *Strategic Change*, Vol.13, No.2, pp:95-105.

SHALLEY, C.E. and GILSON, L.L., 2004, "What leaders need to know: A review of social and contextual factors that can foster or hinder creativity", *Leadership Quarterly*, Vol.15, No.1, pp:33-53.

SHIPTON, H., WEST, M.A., DAWSON, J., BIRDI, K., PATTERSON, M., 2006, "HRM as a predictor of innovation", *Human Resource Management Journal*, Vol.16, No.1, pp:3-27.

SOLOMON, G.T., WINSLOW, E.K., TARABISHY, A., 2010, "The role of climate in fostering innovative behavior in entrepreneurial SMEs", Derived from <http://usasbe.org/knowledge/proceedings/proceedingsDocs/USASBE1998proceedings-29-Solomon.PDF> (05.04.2012).

SWART, J.P., 2012, *Antecedents and outcomes of happiness of managers in the agricultural sector in South Africa*, Unpublished Doctoral Dissertation, North-West University, Vanderbijlpark, South Africa.

ŞİMŞEK, Ö.F., 2007, *Yapısal eşitlik modellemesine giriş temel ilkeler ve LISREL uygulamaları* (Basic principles for structural equational modelling and LISREL applications), Ekinoks Publishing: Ankara.

TAŞTAN, S. B., 2013, “*The influences of participative organizational climate and self-leadership on innovative behavior and the roles of job involvement and proactive personality: A survey in the context of SMEs in Izmir*”, ***Procedia-Social and Behavioral Sciences***, Vol.75, pp:407-419.

TORKA, N. and SCHYNS, B., 2007, “*On the transferability of “traditional” satisfaction theory to non-traditional employment relationships: Temp agency work satisfaction*”, ***Employee Relations***, Vol.29, No.5, pp:440-457.

VALENCIA, J.C.N., VALLE, R.S., JIMENEZ, D.J., 2010, “*Organizational culture as determinant of product innovation*”, ***European Journal of Innovation Management***, Vol.13, pp:466-480.

VAN DEN BROECK, A., VANSTEENKISTE, M., LENS, W., DE WITTE, H., 2010, “*Unemployed individuals' work values and job flexibility: An explanation from expectancy-value theory and self-determination theory*”, ***Applied Psychology***, Vol.59, No.2, pp:296-317.

VINCENT, A. S., DECKER, B. P., MUMFORD, M. D., 2002, “*Divergent thinking, intelligence, and expertise: A test of alternative models*”, ***Creativity Research Journal***, Vol.14, No.2, pp:163-178.

YUSOF, N. A. and ABIDIN, N. Z., 2011, “*Does Organizational Culture Influence the Innovativeness of Public-Listed Housing Developers?*”, ***American Journal of Applied Sciences***, Vol.8, No.7, pp:724-744.

WALKER, I., 2012, ***Factor Analysis, Path Analysis, Structural Equation Modelling***, Johns and Bartlett Publisher.

WALLACH, E. J., 1983, “*Individuals and organizations: The cultural match*”, ***Training & Development Journal***, Vol.37, No.2, pp:28-50.

WALSH, M., LYNCH, P., HARRINGTON, D., 2009, “*Innovativeness: A conceptual framework—antecedents, dimensions, and outcomes*”. In 27 th Euro CHRIE Conference: ***From Services to Experiences in Tourism and the Hospitality Industry and Education***, Vol. 22, pp:1-20.

WANG, C.L. and AHMED, P.K., 2004, “*The development and validation of the organizational innovativeness construct using confirmatory factor analysis*”, ***European Journal of Innovation Management***, Vol.7, No.4, pp:303-313.

WANG, H., LAW, K. S., HACKETT, R. D., WANG, D., CHEN, Z. X., 2005, “*Leader-member exchange as a mediator of the relationship between transformational leadership*

and followers' performance and organizational citizenship behavior", *Academy of Management Journal*, Vol.48, No.3, pp:420-432.

Wasti, S.A., 2003, "The influence of cultural values on antecedents of organizational commitment: an individual-level analysis", *Applied Psychology: An International Review*, Vol.52, No.4, pp:533-554.

WOODMAN, R. W., SAWYER, J. E. AND GRIFFIN, R. W., 1993, "Toward a theory of Organizational Creativity", *Academy of Management Review*, Vol.18, No.2, pp:293-321.

XANTHOPOULOU, D., BAKKER, A. B., DEMEROUTI, E., SCHAUFELI, W. B., 2009, "Reciprocal Relationships Between Job Resources, Personal Resources, And Work Engagement", *Journal of Vocational Behavior*, Vol.74, No.3, pp:235-244.

ZHENG,W., YANG, B., MCLEAN, G.N., 2009, "Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management", *Journal of Business Research*, doi:10,1016.

<https://www.stat.purdue.edu/StructuralEquationModeling.doc>, Accessed: 15.02.2014.