Examination of the Effects of Some Variables in Internal Control and Organizational Stress Management via Multiple Regression on Perception of Risk and Uncertainty

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Examination of the Effects of Some Variables in Internal Control and Organizational Stress Management via Multiple Regression on Perception of Risk and Uncertainty

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Abstract

Internal control is an essential element of successful and effective management. Internal control which plays a role as a proactive and integral element in organizations' adapting to changing and changes also plays an important role in the realization of organizational strategy. In some cases, change brings risks along with uncertainties. One of the most effective tools against the stress occurring in cases where the risks and change cannot be managed is, without doubt, internal control practices. Risk management practices are dealt with within the scope of internal control. Risk management is directly related to perception of risks and uncertainties of the employees and the organisation. The effect of some variables on the perception of risk and uncertainty has been investigated since the risks and uncertainties in the organisations are constantly in interaction with stress and internal control applications. The study was conducted face to face by asking 348 entrepreneurs operating on the textile industry to fill in the survey form in Kayseri in Turkey. The effects of total work experience, age, gender and strength on perception of risk and uncertainty have been determined.

Keywords: Internal control, organizational stress, perception of risk and uncertainty, meaningful work, flexibility.

1.Introduction

According to the Institute of Internal Control Auditors, internal control is defined as: Internal control is an activity performed by the management in order to increase the likelihood of the realization of the objectives which have been planned before. The Institute of Internal Control Auditors (IIA) states that controls could have the quality of being preventive (preventive of the occurrence of undesired events), inspections, preventive (preventive absence of adverse events), finder (finder and corrective of an event undesired but happened), or directive (stimulator for a desired event to be realised) (Sawyer et al, 2003).

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Internal control is broadly defined by The Committee of Sponsoring Organizations of the Treadway Commission (COSO) as a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of strategic goals relating to operations, reliability of financial reporting, designed to enable to trust in obtaining the objectives in compliance with laws, regulations and policies to be obeyed (Yilanci, 2003). Internal control helps an institution reach its performance and profitability objectives as well as being protected against the risk of loss.

Risks arising from within and outside institutions may stem from the changes around the activities, new staff, renewal or replacement of the information system, rapid growth, new technologies, new products and activities, reconstruction of the institution, overseas operations, the adoption or changing of new accounting principles (Hall, 2004).

Organizational stress refers to a phenomenon, the sources of stress and the state of tension in a business atmosphere (Maureen et al, 2001) as well as indicating characteristics of a job and harmful effects of work-related socio-psychological situations on individuals (Behr, 1998). Basic sources of organisational stress are rumours arising in situations of uncertainty in workplaces, conflicts, behaviours directed towards violence or discrimination (Bordier et al, 2006), ambiguity and/or role conflicts that are observed where there is a chaos of power and responsibility (Christine, 2003). Reasons of organisational stress can be summarized as task-oriented stress (the difficulty and uncertainty of a job and excess of work load); role-related stress (conflict, uncertainty, work intensity); stress caused by the behaviour of the environment (the effect of the crowd etc.); stress caused by the physical environment (extreme cold or hot working environment, noise, etc.); stress arising from the social environment (interpersonal conflict, stress related to private life, exclusion and marginalization or forcing to isolation); stress stemming from the individual himself or herself (Ertekin, 1993) is possible.

Different from other positive psychological capital components, "sturdiness" having a more reactive nature is defined as positive adaptation of an individual to the circumstances under specific risks and adverse condition (Masten and Reed, 2002) to be robust for the problems and difficulties, and to be able to recuperate (Avey, Wernsing and Luthans, 2008). The workers with high flexibility do not have difficulty in adapting to the conditions of competitive, variable and uncertain work environment. (Akcay, 2012).

Although there is not a common idea what its nature and components are, meaningful work is a concept which is very attractive for researchers (Steger et al., 2012). It can be defined as the positive and important contribution of a work to individuals' meaningfulness of life besides individuals' having pleasure from their work (Rosso, Dekas and Wrzesniewski, 2010).

Meaningful work could be said to have three primary aspects: (1) Psychological Meaningfulness at work, how significant the work is f2 the employees (2) Making meaning via work: understanding the meaning of life linking with a meaningful work; (3) Greater good motivations: The need to make a positive impact on the greater good for especially others (Steger et al., 2012).

The concept of risk bears the probability of occurrence of various possibilities in connection with a threat. It is based on the distinction between reality and possibility in this respect. The validity of the concept disappears in the cases where possibilities disappear or get out of the individual initiatives. In other words, the risk is about how the individual or the society defines themselves in coping with the change and the future. (Furedi, 2001). The researches show that such factors as age, income and education level are active in "taking risks" besides the personal characteristics like the ability to predict the future and adventurism (Sung and Hanna, 1997).

2.Method

The research was conducted in order to find out how the employees in textile manufacturing sector got effected from such factors as flexible behaviours to perceptions of risk and uncertainty, gender, education level, age, total work experience and meaningful work through the method of relational survey. The universe of the survey is composed of the entrepreneurs in textile industry in Kayseri in Turkey. The sample of the survey consists of totally 348 people- chosen through random exemplification method, 110 (31,6 %) of whom are women and 238 (68,4 %) of whom are men.

2.1. Means of Measurement

The survey form consists of the following means of measurement:

- 1. Demographic Data Form: Consist of questions related to age, gender, education level and total work experience.
- Flexibility Scale: A 15-question scale, developed by Wagnild, GM Young, HM (1993).
 Cronbach Alpha reliability coefficient of the scale was calculated as 0,829.
- Scale of Meaningful Work: A10-question scale adapted to Turkish by Ali, A., Hamedoğlu, M., Kumar, MP., And Pine, H. (2013). Cronbach Alpha reliability coefficient of the scale was calculated as 0,891.
- 4- Perception of Risk and Uncertainty Scale: Perception of risk and uncertainty scale developed by Bozkurt, Veysel and Baştürk (2009) is consisted of 6 questions. Cronbach Alpha reliability coefficient of the scale was calculated as 0,707.

For all scales, confirmatory factor analysis is performed by benefitting from Statistical Package of the Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) 23.0 and the fit indices those were obtained from the analysis were shown in table 1.

Fit Measure	Good Fit	Acceptable Fit	Flexibility	Meaningful Work	Perception of Risk and Uncertainty
χ2/df	$0 \le \chi 2/df \le 2,0$	$2 \le \chi 2/\mathrm{df} \le 3$	2,611	1,170	1,428
RMSEA	,0≤RMSEA≤,05	,0≤RMSEA≤,08	,068	,022	,035
NFI	,95≤NFI≤1,00	,90≤ NFI≤,95	,987	,989	,966
RFI	.90 <rfi<1.00< td=""><td>.85<rfi≤.90< td=""><td>.968</td><td>.973</td><td>,927</td></rfi≤.90<></td></rfi<1.00<>	.85 <rfi≤.90< td=""><td>.968</td><td>.973</td><td>,927</td></rfi≤.90<>	.968	.973	,927

Table 1: Fit indexes of scales

Last, N., Last, N., & Last, N. (2017). Title in article's language. Journal of Human Sciences, 14(3), NNN-NNN. doi:10.14687/jhs.v14i3.NNNN

IFI	,95≤IFI≤ 1,00	,90≤IFI≤,95	,992	,998	,990
TLI	,95≤TLI≤1,00	,90≤TLI≤,95	,980	,996	,977
CFI	,97≤CFI≤1,00	,95≤CFI≤,97	,992	,998	,989
HOELTER	>2	00	316	471	489

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Root Mean Square Error of Approximation (RMESA), Normed Fit Index (NFI), Relative Fit Index (RFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Holter's critical value (HOELTER) and p-value for H0 (PCLOSE) rates have been examined. NFI, is positively related with the number of Sampling. NFI, RFI, IFI, TLI and CFI rates between 0,00 and 1,00. If model rates between 0,05 and 0,08 RMESA, it can be regarded as an acceptable harmony. The limit values for coherence indexes are shown in Table 1. (Hair vd., 2010; Bayram, 2010: 75-76).

When the table-1 is examined above, it is seen that the analysis rates are of a relative agreement or acceptable limits.

3.Results

Descriptive statistics related to demographic data of the employees participating in the study are shown in Table 2.

Table 2: Descriptive statistics on demographic data

ъ	D	D .	-	т.
Frequency	Percent	Experience	Frequency	Percent
133	38,2	1-5 years	163	46,8
154	44,3	6-10 years	98	28,2
57	16,4	11-15 years	38	10,9
4	1,1	16-20 years	32	9,2
348	100,0	21 years and over	17	4,9
Frequency	Percent	Total	348	100,0
51	14,7	Gender	Frequency	Percent
18	5,2	Woman	110	31,6
279	80,2	Man	238	68,4
348	100,0	Total	348	100,0
	154 57 4 348 Frequency 51 18 279	133 38,2 154 44,3 57 16,4 4 1,1 348 100,0 Frequency Percent 51 14,7 18 5,2 279 80,2	133 38,2 1-5 years 154 44,3 6-10 years 57 16,4 11-15 years 4 1,1 16-20 years 348 100,0 21 years and over Frequency Percent Total 51 14,7 Gender 18 5,2 Woman 279 80,2 Man	133 38,2 1-5 years 163 154 44,3 6-10 years 98 57 16,4 11-15 years 38 4 1,1 16-20 years 32 348 100,0 21 years and over 17 Frequency 51 14,7 Gender Frequency 18 5,2 Woman 110 279 80,2 Man 238

It is clearly seen in the Table 2 that 31.6% of the respondents are women and 68.42 % of them are men; the percentage of those who are graduates of a faculty is 80,2 %, which is rather a high one; the average age is 40, which is also high, and less than 40 with the rate of 82,5% (=38,2%+44,3%); their work experience in current workplace is less than 10 years with the rate of 75% (=46,8%+28,2%)

Table 3: Model summary for multiple regression

		R	Adjusted R	Std. Error of the		Change S	tatist	ics	
Model	R	Square	Square Square	Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,406ª	,165	,155	1,131	,165	16,922	4	343	,000
2	,454b	,206	,192	1,106	,041	8,876	2	341	,000

a. Predictors: (Constant), gender, education level, age, total work experience

b. Predictors: (Constant), gender, education level, age, total work experience, sturdiness / flexibility, meaningful work

When the Table 3 is examined, it can be seen that sig F change value for model 1 and model 2 is 0,000; model 2 has lower R square change (0,041<0,165) and f change (8,876<16,922) values with regard to model 1; however, it has higher values than model 1 in respect of R (0,454>0,406), R square (0,206>0,165) and adjusted R square (0,192>0,155).

	Model	Sum of Squares	df	Mean Square	F	р
	Regression	86,574	4	21,644		
1	Residual	438,701	343	1,279	16,922	,000₺
	Total	525,276	347			
	Regression	108,282	6	18,047		
2	Residual	416,994	341	1,223	14,758	,000c
	Total	525,276	347			

Table 4: ANOVA* for multiple regression^a

When the ANOVA analysis in Table 4 is examined, it is seen that models 1 and 2 have the same meaning level (p = 0.000); df value of model 2 is higher than that of model 1 (6> 4), yet its F value is lower than that of model 1 (14.758 <16.922).

Model		Unstandar	dized Coefficients	Standardized Coefficients			ı
		В	Std. Error	Beta	t	Р	l
Γ	(Constant)	2,928	,313		9,346	,000	١
l	Total work experience	,310	,066	,297	4,692	,000	ı
1	Education level	-,004	,061	-,004	-,071	,943	١
	Age	-,263	,104	-,159	-2,533	,012	ı
L	Gender	,939	,131	,355	7,162	,000	ı
	(Constant)	1,593	,526		3,029	,003	ı
	Total work experience	,212	,069	,203	3,086	,002	ı
	Education level	-,033	,060	-,028	-,557	,578	ı
2	Age	-,202	,103	-,122	-1,965	,049	ı
	Gender	,922	,128	,349	7,184	,000	ı
	Sturdiness/Flexibility	,023	,083	,015	,273	,785	ı
	Meaningful work	,261	,073	,212	3,571	,000	ı

Dependent Variable: Perception of Risk and Uncertainty

a. Dependent variable: Perception of Risk and Uncertainty

b. Predictors: (Constant), gender, education level, age, total work experience

c. Predictors: (Constant), gender, education level, age, total work experience, sturdiness / flexibility meaningful work

It is seen, when Table 5 is examined, that total work experience, age, gender and meaningful work meet the condition of p< 0,05 in model 2 and these variables have the same effects as p values to perception of risk and uncertainty.

Table 6: Multiple regression to the excluded variables^a

					Collinearity Statistics
Model	Beta In	t	Р	Partial Correlation	Tolerance
Sturdiness/Flexibility	,111 ^b	2,199	,029	,118	,943
Meaningful work	,219b	4,210	,000	,222	,856

a. Dependent Variable: Perception of Risk and Uncertainty

In Table 6 it is seen that flexibility and meaningful work meet the condition of p < 0.05. When the values in Table 6 are evaluated along with those in Table 4, it can be said that there is a relation of sturdiness and flexibility but its effect is likely to be coincidental as seen in model 2. The results of the analysis of the correlation carried out in order to research the detail of this relation is shown in Table 6.

Table 7: Correlations

		1	2	3	4	5	6	7
1-age	Pearson Correlation P	1						
2-gender	Pearson Correlation	,029	1					
2-gender	p	,588	1					
3-education level	Pearson Correlation	,170**	-,005	1				
5-education level	p	,001	,930	1				
4 +-+-1 1	Pearson Correlation	,614**	-,064	,193**	1			
4-total work experience	P	,000	,235	,000	1			
5-Perception of risk and	Pearson Correlation	,033	,332**	,025	,176**	1		
uncertainty	P	,544	<u>,000</u>	,644	<u>,001</u>	1		
6-Sturdiness/Flexibility	Pearson Correlation	,040	,003	-,010	,206**	,160**	1	
0-Sturdiness/ Flexibility	p	,456	,960	,848	<u>,000</u>	<u>,003</u>	1	
7 Manufactul made	Pearson Correlation	,114*	-,003	,171**	,340**	,269**	,505**	1
7-Meaningful work	P	<u>,034</u>	,960	<u>,001</u>	<u>,000</u>	<u>,000</u>	<u>,000</u>	1

N = 348, * p <.05, ** p <.01

When the Table-7 is investigated it can be seen that there is a positive, bi-directional but weak correlation between flexibility and perception of risk and uncertainty at the level of 0.160 **.

4. Results and Discussion

In this research, the effect of work experience, age, gender, meaningful work and sturdiness/flexibility, which is among the subscales of psychological capital, on the perception of risk and uncertainty has been investigated. It was determined that age (p = 0.049), gender (p = 0.000) and work experience (p = 0.002) had influence on the perception of risk an1d uncertainty

b. Predictors in the model: (Constant), gender, education level, age, total work experience

and the results obtained (Sung and Hanna, 1997) are consistent with the literature. However, the result of our research could not be compared with the literature because no research carried out on either the effects or the relation between the perception of risk and uncertainty and meaningful work (p = 0.000) and sturdiness/flexibility (p = 0.785 and p > 0.05) was not found.

Internal control consisting of control environment, risk assessment, control activities, information, communication and follow-up elements is not an objective but a means of administration that bears the aim of reaching an organization to its objectives. It doesn't identify the objectives but provides reasonable assurance in order to achieve the targets which have been set before. Because it is risk-based, it is directly related to organizational stress. It is possible for organizational stress to arise in all organizations, in which a healthy internal control system has not been established, before or during the stage the system is set. Direction, severity and emergence of the organizational stress may vary according to the risks and uncertainties in the processes. The elements out of the organization as well as the individual elements play a role in emergence of organizational stress.

While organizations establish internal control system, they must do it by keeping in mind that it is process that encompasses all activities and is based on the principle of steadiness; not limiting it only to certain points, to certain areas and to certain periods. Throughout the process, strategic steps should be determined by analysing human source and institutional capacity rather than just planning and filling some standard forms systematically. Institutional competence and capacity should be planned simultaneously and strategic objectives must be realized.

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