

Financial Risk Tolerance and Burnout Relation: Information and Communication Technology (ICT) Sector Study

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Abstract

This study examines the relationship between financial risk tolerance and burnout with its subscales emotional exhaustion (EE), depersonalization (DEP), and personal accomplishment (PA) on the information and communication technology (ICT) sector employees. In this study, Grable and Lytton Financial Risk Tolerance and Maslach Burnout Inventory (MBI) Scales are used. In addition to this relationship investigation, how financial risk tolerance attitudes change with demographic characteristics is also analyzed in this field study. The result of this study shows that there is a relation between financial risk tolerance and burnout with its emotional exhaustion (EE) subscale. Moreover, to this, it is also attained that financial risk tolerance increases with the education level and income. In addition to this, depersonalization is greater in single than in married, in other words singles are more prone to depersonalization than married.

Keywords

Burnout, Financial Risk Tolerance, MBI, Emotional Exhaustion

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The purpose of this paper is to investigate the relationship between financial risk tolerance and burnout with its subscales emotional exhaustion (EE), depersonalization (DEP), and lack of a sense of personal accomplishment. In addition to this relationship investigation, how financial risk tolerance attitudes change with demographic characteristics is also analyzed in this field study.

In the study, firstly concepts of burnout and financial risk tolerance has been outlined and then detailed with a field study; afterwards analysis applied on the obtained data and the result of the study has been examined and suggestions has been made for the future studies.

Burnout

Burnout can be defined as feeling of exhaustion and restrained. Emotional exhaustion, depersonalization and lack of personal accomplishment are the key indicators for psychological burnout (Maslach, Jackson and Leiter, 1997:192).

Maslach and Jackson's developed a Maslach Burnout Inventory (MBI) scale for assessing the burnout with three subscale, emotional exhaustion (EE), depersonalization (DEP), and personal accomplishment (PA) (Maslach, and Jackson, 1981). Greater risk for errors, increased job turnover, decreased efficiency and diminished empathy are the other effects of burnout. (Maslach and Jackson, 1981).

The first aspect of burnout, emotional exhaustion (EE), is defined as "the feeling of being emotionally overextended and exhausted by one's work" (Maslach and Jackson, 1981: 101). Emotional exhaustion refers to feelings of fatigue or depletion of energy. Emotional exhaustion is generally saw with the feeling of decreased sensitivity to other people, jobs and themselves, helplessness and degradation self-esteem and lack of accomplishment when psychological and emotional demands are more than normal level (Maslach and Jackson 1986; Cordes and Dougherty, 1993).

Depersonalization (DEP) can be defined as a mood that comes after the emotional exhaustion with the feelings

of detachment from the organization and workers as individuals (Cordes and Dougherty, 1993), negative attitudes toward work and other people, helplessness and lack of control (Lewin and Sager, 2007). Depersonalization manifests itself as behaving colleagues or other employees in business like an object.

Depersonalized people feels themselves like in they are in a failure especially about solving problems, tries to find an escape and minimize the relations with other persons. As a result of these feelings, depersonalized people are biased with mental accounting effect categorizing everything especially people.

Personnel accomplishment (PA) affects negatively the burnout. For this reason the PA scores in MBI scale have to be commented truly. On behalf of burnout, the PA scores should be negative. In other words, the opposite of PA can be named by lack of personnel accomplishment (LPA). The lack of personal accomplishment (LPA) is usually prevail in diminished willingness for competence and achievement and its behaviors are independent from emotional exhaustion and depersonalization (Maslach and Jackson, 1981). In the effect of lack of personnel accomplishment, self-assessment process goes to failure and people feel like they are unsuccessful.

Financial Risk Tolerance

Financial risk tolerance is defined as the amount of risk believed and accepted and attitude towards the risk. During the investment decision, this decision activity is performed by financial risk estimation. This decision is also affected by the expected value and aim (Grable, 2000; Grable and Lytton, 1999). Usually the decision is done in favor of more attractive outcome (Davey, 2000). Financial risk tolerance and risk aversion are confused terms. Financial risk tolerance and risk aversion have inverse affect between themselves. In other words the more risks tolerance means the less risk aversion and can be imagined by two sides of the same coin. Financial risk tolerance plays a vital role financial decision. For this reason understanding the financial risk tolerance mechanism in detail is

essential. One of the most preferred method for measuring financial risk tolerance is developed by Grable and Lytton (1999, 2003). Grable and Lytton Financial Risk Tolerance Scale consists of a thirteen risk tolerance assessment questions.

Methods

Information and communications technology sector is chosen for the research. In this study, Grable and Lytton Financial Risk Tolerance and Maslach Burnout Inventory (MBI) Scales are used for measuring financial risk tolerance and burnout respectively. Questionnaire form consists of sociodemographic questions and Grable and Lytton Financial Risk Tolerance and Maslach Burnout Inventory (MBI) Scales.

In this field study, 114 people working in ICT sector and making individual investment were reached in March 2016 and the questionnaire form has been filled out. The data obtained in this study has been re-

analyzed in statistical software program and Cronbach alpha value has been calculated as $\alpha = .734$

Collected demographic factors are age, gender, marital status, education, current income and number of dependents.

Results

The Maslach Burnout Inventory (MBI) Scale has 22 items with three subscales; 9 item for emotional exhaustion (EE), 5 items for depersonalization (DEP) and 8 items for personal accomplishment (PA). Cronbach alpha reliability values for subscales are .786 for EE, .653 for DEP, and .635 for PA.

Grable and Lytton Financial Risk Tolerance Scale has thirteen risk tolerance assessment questions. Cronbach alpha reliability values for Financial Risk Tolerance is .633.

All statistical analysis was done by using the Statistical software.

Respondents

Table.1. Demographic Factors

Gender	Male	Female				
	86.0%	14.0%				
Marital Status	Married	Single				
	68.4%	31.6%				
Age	29-38	39-48	18-28	49+		
	57.9%	24.6%	14.9%	2.6%		
Education	Undergraduate	Associate Degree	Graduate	High School		
	58.8%	16.7%	13.2%	11.4%		
Monthly Income	1000-1300USD	700-1000USD	1300-1600USD	2000USD+	up to 700USD	1600-2000USD
	25.4%	23.7%	17.5%	13.2%	11.4%	8.8.%
Dependents	1	3	2	4	5	
	33.3%	24.6%	22.8%	15.8%	3.5%	

Demographic values are listed on the Table.1 and the most significant ones are: %86 of the respondents is man, %68.4 is married, %57.9 has age of 29-38, %58.8 has undergraduate education level, %25.4 has 1000-1300USD monthly income and %33.3 has only one dependent.

Dependent Variable

The dependent variable of this study is Financial Risk Tolerance. Financial Risk Tolerance is evaluated by summing each of thirteen item risk tolerance score (Grable and Lytton, 1999).

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The mean value of Financial Risk Tolerance scale is 28.63, minimum value is 14 and maximum value is 40; min and max value of the scale is 13.00 and 47.00. The standard deviation is 4.94.

One way Anova test is used to find how financial risk tolerance scores change with demographic factors. As a result of analysis, it is found that there is positive relationship between financial risk tolerance score and education and financial risk tolerance score and monthly income.

Table.2. Financial Risk Tolerance - Education

Education	Financial Risk Tolerance					
	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
High School	15	25,53	5,249	1,355	18	37
Associate Degree	19	28,26	5,506	1,263	17	35
Undergraduate	67	29,10	4,54	0,555	14	39
Graduate	13	30,23	4,746	1,316	23	40
Total	114	28,62	4,939	0,463	14	40

Table.3. Anova: Financial Risk Tolerance - Education

ANOVA	Financial Risk Tolerance				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	194,787	3	64,929	2,788	0,044
Within Groups	2561,994	110	23,291		
Total	2756,781	113			

According to Table.2 while the level of education increases, financial risk tolerance also increases. This relationship can be explained that education level impact on a person's ability to accept risk. Specifically, higher levels of education is felt to increase a person's ability to assess risk and are therefore thought to be positively correlated to higher financial risk tolerance. Significance level in Table.3 shows that this relationship is meaningful at $p < 0.05$ level.

Table.4. Financial Risk Tolerance – Monthly Income

Education	Financial Risk Tolerance					
	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
up to 700USD	13	25,62	5,009	1,389	19	37
700-1000USD	27	26,85	6,112	1,176	14	36
1000-1300USD	29	28,9	4,419	0,821	22	39
1300-1600USD	20	29,75	3,582	0,801	22	35
1600-2000USD	10	30,6	2,675	0,846	26	36
2000USD+	15	31,07	4,399	1,136	26	40
Total	114	28,62	4,939	0,463	14	40

Table.5. Anova: Financial Risk Tolerance - Monthly Income

ANOVA	Financial Risk Tolerance				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	358,523	5	71,705	3,229	0,009
Within Groups	2398,257	108	22,206		
Total	2756,781	113			

Similarly, according to Table.4 while the level of monthly income increases, financial risk tolerance also increases. This positively and uniformly supported relationship can be explained that income and related wealth level impacts and on a person's ability to accept risk. Specifically, higher levels of incomes are associated with higher financial risk tolerance. Table.5 shows that this relationship is meaningful at significance level in $p < 0.01$.

Independent Variables

The Maslach Burnout Inventory (MBI) scores are used as independent variables in this study. The Maslach Burnout Inventory (MBI) Scale has three subscales; emotional exhaustion (EE), depersonalization (DEP) and personal accomplishment (PA).

Table.6. Descriptive Statistics and Correlations MBI Subscales (EE-DEP-PA)

	EE	DEP	PA
EE		0.579*	
DEP	0.579*		
PA			
Mean	17.82	7.14	21.81
SD	5.135	3.525	3.342
Min.-Max.	0-34	0-20	0-40

* p <0.01

In Table.6 descriptive statistics and correlations among MBI subscales (EE, DEP, and PA) are presented. Only significant correlation can be found only between EE and DEP by correlation analysis. Concerning to the descriptive, the mean value of The Maslach Burnout Inventory (MBI) subscores are: Emotional exhaustion (EE), depersonalization (DEP) and personal accomplishment (PA) scores are 17.82, 7.14 and 21.81; minimum and maximum values are 0 and 34, 0 and 20 and 0 and 40; standard deviations are 5.135, 3.525 and 3.342 respectively in Table 6. It is found that only correlations between EE, DEP and PA score and demographic factors are DEP and marital status.

Table.7. Depersonalization – Marital Status

	N	Mean	Std. Deviation	Std. Error	Minimum
Depersonalization					
Married	78	6,63	3,438	0,389	0
Single	36	8,25	3,500	0,583	0
Total	114	7,14	3,525	0,330	0

Table.8. Anova: Depersonalization – Marital Status

	Depersonalization				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	64,786	1	64,786	5,419	0,022
Within Groups	1338,968	112	11,955		
Total	1403,754	113			

Table 7 shows that mean values of depersonalization is greater in married than in single. Singles are more prone to depersonalization than married. There is

ANOVA^a

Model	Sum of Squares	df	Mean	F	Sig.
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p<0.005 significance between marital status and depersonalization in Table.8.

Financial Risk Tolerance Analysis

It is tried to find how risk tolerance score is affected by Emotional exhaustion (EE), depersonalization (DEP) and personal accomplishment (PA) scores and demographic variables. For this reason, correlation analysis was performed. After the calculations, the result correlation table shows us that there are significant positive correlations between financial risk tolerance and emotional exhaustion, financial risk tolerance and income and financial risk tolerance and level of education with Pearson Correlation Coefficients of 0.230 (p < 0.05 significance level), 0.349 and 0.255 (p < 0.01 significance level) respectively.

After that, regression analysis is performed to find cause effect relations between financial risk tolerances and significant correlated factors above explained emotional exhaustion, income and level of education.

Table.9. Regression Analysis: Model Summary (Financial Risk Tolerance – Emotional Exhaustion, Level of Education and Income)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,421 ^a	0,177	0,155	4,541

^aPredictors: (Constant), Emotional Exhaustion, Level of Education and Income.

Table.9 shows that, variance of dependent variable financial risk tolerance can be explained the ratio of 17.7% by independent variables emotional exhaustion, level of education and income.

Table.10. Regression Analysis: Anova (Financial Risk Tolerance – Emotional Exhaustion, Level of Education and Income)

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		Square			
1	Regression	488,188	3	162,729	7,89 ^a ,000 ^b
	Residual	2268,592	110	20,624	
	Total	2756,781	113		

a Dependent Variable: Financial Risk Tolerance

b Predictors: (Constant), Emotional Exhaustion, Level of Education and Income.

According to AnovaTable.10, it can be concluded that there is significant relation, at level of significance $p < 0.001$, between financial risk tolerance and emotional exhaustion, level of education and income. The relations in the table can be formulated as follow:

$$F(3, 110) = 162.729; p < 0.01$$

Table.11. Regression Analysis: Coefficients (Financial Risk Tolerance – Emotional Exhaustion, Level of Education and Income)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19,231	2,418		7,954	0,000
	Level of Education	0,821	0,559	0,140	1,469	0,145
	Income	0,871	0,310	0,270	2,813	0,006
	Emotional Exhaustion	0,197	0,084	0,205	2,354	0,020

a Dependent Variable: Financial Risk Tolerance

Regression coefficients and significance level of those in Table.11 can be used for evaluating the regression equation. In this research study, financial risk tolerance can be formulated as:

$$\text{Financial Risk Tolerance} = 19.231 + 0.871 \text{ Income} + 0.821 \text{ Level of Education} + 0.197 \text{ Emotional Exhaustion}$$

In addition to the above stated explanations, the above written formula shows us that the most effected factor on the financial risk tolerance is income. Level of education and emotional exhaustion follow up the income relatively.

Conclusion and Discussion

The main purpose of this study is to investigate the relationship among financial risk tolerance, burnout and demographic factors.

It is found that there are positive relationships between financial risk tolerance score and emotional exhaustion. This means that, people under the influence of emotional exhaustion, one of the main factor of burnout, can feel more tolerable for

financial decisions; it is inferred that emotional exhaustion burnout can lead to financial blinding.

Analyses shows that while the level of education increases, financial risk tolerance also increases and this relationship can be explained that education level impact on a person's ability to accept risk. Specifically, higher levels of education are felt to increase a person's ability to assess risk; therefore, it is thought to be positively correlated to higher financial risk tolerance, with the increasing level of education, people adopt themselves an ability to tolerate problems and also risky situations.

When it comes to the relations between financial risk tolerance score and monthly income, the analysis shows that the financial risk tolerance increases with the level of monthly income. This positively and uniformly supported relationship can be explained that income and related wealth level impacts and on a person's ability to accept risk. These obtained results can be interpreted that, the more income can give extra tolerance to people for risky financial decisions.

At the end of correlation analysis, an equation, explains how financial risk tolerance is calculated in terms of emotional exhaustion, level of education and income, is obtained. This equation shows that there is significant relation, among financial risk tolerance, emotional exhaustion, level of education and income. The most effected factor on the financial risk tolerance score is income, level of education and emotional exhaustion follow up the income relatively according to the results.

One of the other finding is between the relationship between depersonalization and marital status. This outcome can be commented that marriage may give an extra endurance for depersonalization. Depersonalization, manifesting itself with negative attitudes toward work and other people, is greater in single than in married. In other words, singles are more prone to depersonalization than married.

Recommendations

This paper has the feature of being a significant study for providing an insight for future studies and literature in terms of the findings obtained.

It is considered that the greater the number of research studies that measure the financial risk tolerance and burnout relations the greater the comprehensibility of the cross effects and results will be. Therefore, it is proposed to increase the number of studies and the number of participants in the field study.

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