

Model of occupational stress, that take of organizational commitment and normal personality type in staff of Banks.

Maryam khodabakhshi¹; Dr.Gayane Shaverdian²

1.PHD student of department of psychology in Yerevan state university in Armenia.

2.Department of psychology in Yerevan state university in Armenia.

Khodabakhshi23@gmail.com

Abstract: This research has been conducted to determine a model of occupational stress regarding people personality types, norm of working community and their organizational commitment. Method of this research is descriptive correlation method; statistical society of this research includes all staff members of Shahr Bank of Iran, among them 300 people were selected by random cluster sampling approach from Tehran. In this research some questionnaires of personality types Myers - Briggs, Philip L. Rice occupational stress, Alan - Mayer organizational commitment have been used to determine the normal people personality types, occupational stress, organizational commitment. The findings from step by step regression analysis showed that the most important predictors of occupational stress are emotional and introversive types of personality that have lower organizational commitment in emotional, normative, and continuous dimensions and by using these findings a model is presented to predict the occupational stress.

[Maryam khodabakhshi; Gayane Shaverdian. **Model of occupational stress, that take of organizational commitment and normal personality type in staff of Banks.** Report and Opinion 2012; 4(3):23-30]. (ISSN: 1553-9873). <http://www.sciencepub.net/report>.

Key words: model of occupational stress, personality types, organizational commitment

1. Introduction

Social psychology is the science studies individuals' behavior in groups and society; because people have different personalities and they have different functions according to these personal differences. There are different definitions of personality and theorists introduce different views about the nature of the human character. In a general definition personality can be defined as an enduring and unique collection of individual traits that may be changed in different situations (Schultz, Dune P. (2006). Each person's personality is unique, that is in addition of the similarities that exist between people, and each person has unique features that make him distinct from others. Different understandings of personality concept clearly shows that by passing the time personality meaning has been more extensive than its concept that was a social and apparent image, now personality refers to basic and stable trend of each person (Schultz, D. P. (1990). In Jung's opinion lots of our conscious sensing and reaction to the environment is determined by contrasting extraversion and introversion mental attitudes. After knowing kinds of extraversion and introversion, he considered another distinction among people that are based on what he called them psychological functions. These functions refer to our different and conflicting ways of understanding the real outer and inner world of our mind. Jung considers four mental functions as: sensing, intuition, thinking and feeling (Jung, C. G. (1927). Having different personality types requires different

job requirements, on the other hand having a job and income source is one of needs, plans and concerns of a person that has completed childhood, having a job is a sign of adulthood by which a person shows his abilities and skills and discovers his restrictions. Halland has based his theory on two important principals 1) Choosing profession depends on the type of personality. 2) Choosing profession is in a direct relationship with individual attitudes and trends; if a person cannot be in his place according to his capability and the type of his personality, he will have numerous problems Carsten, J (2006).

Occupational stress is a kind of stress that a given individual undergoes it in a certain job. Both individual and occupational features have considered involved in this definition. National institute for occupational safety and health defines occupational stress as lack of coordination between working needs with abilities, capabilities and aspirations of the individual (Pascale Carayon& etal, 1999). Special conditions of work, expanding the work pressure, job training cause increasing mental and physical illnesses. HSE defines stress as: some reactions that people show because of excessive pressures or demands that are contrary to their expectations (Health and Safety Executive (HSE) (2001) Psychologists of Texas University have considered two groups of consequences for occupational stress include physiological and psychological consequences (Kingama & Mireille, 2002), Cooper and David sons 1987 consider four main factors of occupational stress

including internal factors, organizational role, communication in work place and organizational atmosphere (Miller, David (2001). Nowadays occupational stress is one of the important problems in organizations that are considered in this research.

One of the most important capitals of each organization is having employees with high organizational commitment, in recent years organizational commitment has been important part of organizational studies and study center, because its relation with organization quality has been proved. Research show that staff commitment is an effective and strong force (Culverson DE, 2002). Organizational commitment is an attitude about staff loyalty to the organization and is an ongoing process through participation in corporate decisions causes considering people, organization, success and prosperity of the organization (Seeratdoost Z, 2005). Efficient manpower is a main index of excellence of an organization to other organizations. Committed manpower raises an organization in society and prepares the field for developing and expanding the organization (Saghafi N. 2006). Researcher provides theoretical definitions of personality types, occupational stress and organizational commitment by considering mentioned items.

2: Method and Material

This research is a fundamental research and its purpose is to explore relationships between variables and research method is correlation. To analysis data descriptive statistics method has been used like Frequency tables, graphs, calculating means, SD and also statistical indices have been used to test hypothesis by correlative method and multi variables regression. To determine type of bank staff personality, Mayers-Brigs questionnaire has been used that is inferential from Gustav Jung theory and this questionnaire is one of the most famous questionnaires in world and has been populated in Iran by Jahanian (2006). Mayers-Brigs questionnaire, sixth edition European-English volume, is an instrument with 88 questions and includes 25 questions in extroversion – introversion dimension, 19 questions in sensory- intuition, 24 questions in thinking-feeling and 19 questions in judging- perceiver dimension and it has one extra question that doesn't include test scoring (Yiannakis, C. & Taylor, N. 2009). Philip. L.Rice questionnaire (1991) has been used to determine occupational stress level of bank staff (124). This test has 57 items with some information about occupational stress. It has been translated and standardized for the first time by Hatami (1999). Allen and mayer Organizational commitment questionnaire (1993) has been used to evaluate occupational commitment of staff. This questionnaire has been made by Allen, Mayer and Smith in 1993 to

measure and evaluate three dimensions of occupational commitment includes feeling, continuous and normative commitment with 18 questions.

The statistical society in present research includes: all employees of Shahr Bank in Tehran who are working in 2011 that selected cluster randomly.

2-1) Statistical Analysis of Survey Data

2-1-1) Description of Sample

The subjects of the current study, with regards to the loss of subject values and cases that have been partially completed, eventually included 300 employees and managers. Frequency distribution of sample separated by gender, education level and organizational positions (managers and employees) are illustrated in Table 1.

Table 1: distribution of samples based on different genders, education levels and organizational status

Sex	Organizational position	Education				Total
		Diploma	Advanced Diploma	BA	MA	
Man	Manager	17	13	67	2	99
	Employee	13	17	66	9	105
Woman	Manager	8	7	42	0	39
	Employee	3	0	47	7	57
Total		41	37	204	18	300

According to the above table, it can be seen that amongst the total sample, 41 individuals had high school diploma degree, 37 advanced diploma degree, 204 with Bachelor's and 18 with master's. Additionally, there are 204 men and 96 women. Furthermore, from the whole sample, 138 subjects are managers and the remaining are employees. The details of each of the categories are specified in the table above. Hence, the bar charts and frequency tables to separate each of the demographic variables in the study are given below. Based on the following table, it can be seen that from a total of 300 samples of the study, 68 percents are male and 32 percent are women.

In Table 2, the average of standard deviation, minimum and maximum values of the variables of the study are presented after data analysis and removal of incomplete and disrupted values for 300 subjects. It should be noted that firstly, occupational stress alongside its first three subscales, after that, organizational commitment besides its subscales and eventually, descriptive statistics of eight subscales of various Myers - Briggs indicators are offered. Furthermore, since the extreme high and low values for each variable of organizational commitment and occupational stress and personality types that have followed are the amounts to be determined, points 25% and 75% of the first and third quarter were calculated as well that will be provided in the following section.

Table 2: average, standard deviation, minimum and maximum values (n=300)

Statistic is Variables	Average	Standard deviation	Minimum	Maximum
Job Stress	161.46	19.64	113	220
Interpersonal relations	66.38	7.76	45	95
Physical health	56.38	11.48	25	91
Career interests	39.24	6.22	26	63
Organizational commitment	82.64	10.90	53	107
Commitment to continuous	29.79	5.94	15	40
Emotional commitment	25.82	4.34	15	38
Normative commitment	27.02	3.60	16	37
Extraversion	18.19	5.29	3	31
Introversion	15.07	5.44	2	31
Sensing	14.98	3.92	5	24
Intuition	10.25	3.42	2	19
Thinking	17.17	4.49	3	27
Feeling	7.30	3.64	0	16
Judgment	18.98	4.42	3	28
Perception	9.06	4.93	0	27

2-2) Research Hypotheses

According to the first major study hypotheses, Pearson correlation coefficients between the 8 personality dimensions and occupational stress are presented in Table 3.

Table 3: The correlation of personality types with occupational stress

Statistic Subscale	n	df	r	Sig
Extraversion	300	298	0.31	0.00
Introversion	300	298	-0.29	0.00
Intuition	300	298	0.14	0.01
Sensing	300	298	-0.11	0.06
Thinking	300	298	-0.19	0.01
Feeling	300	298	0.10	0.00
Judgment	300	298	-0.24	0.00
Perception	300	298	0.27	0.00

According to Table 3, it can be seen that the correlation between personality type and level of occupational stress is significant at 0.01 and 0.05 so that the observed correlation fluctuates in the range - 0.29 to 0.31.

According to the fact that Myers - Briggs questionnaire has 4 main subscales each of which have two functions, the correlation coefficients are

provided separately for each scale and function. In Table 3 - 10, each of the functions introversion (0.31) and extraversion (-0.29) possess significant correlation coefficients that are moderate to occupational stress. Moreover, the observed value of the critical value (0.14) is larger at level 0.01 and consequently, there is a 99 percent direct and significant relationship between occupational stress and introversion. And as the introversion of staff, their occupational stress level increases as well and on the other hand, the inverse correlation between extraversion and occupational stress demonstrates that those employees with higher extraversion characteristics live with less occupational stress.

Due to the above table, thinking function with correlation coefficient (-0.11) does not have a significant relation with the level of occupational stress and the observed value is equal to the critical value (-0.11) at 0.05 level. On the corollary above, feeling has a correlation of (0.14) relative to occupational stress. And the observed values of the critical value (0.11) are larger at the 0.05 level. Consequently, with a confidence of 95 percents, there is a direct and significant relationship between the functions of feeling and occupational stress and as employees' performance approaches feeling rather than thinking, their stress level inclines. According to Table 4 - 10, the feeling function has a correlation coefficient of 0.30 with a significant relationship with

occupational stress and the observed value is more than the critical value (0.14) at level 0.01. Therefore, with a confidence of 99 percents, it can be said that as feeling performance grows, occupational stress goes up as well. In contrary, those with thinking have a correlation of (-0.19) inversely correlated with occupational stress. And the observed values of the critical value (-0.14) at level 0.01 shows that with 99% confidence, there is a significant relationship between occupational stress and thinking as with higher thinking performance, employees' stress levels decrease. Besides, according to Table 4 - 10, it can be seen that the perception function is in a direct correlation with occupational stress ($r = 0.27, p < 0.01$) and with 99% confidence, it can be concluded that with an increase in perception performance, occupational stress increases too. The judgment function shows a significant inverse correlation with occupational stress ($r = -0.24, p < 0.01$) so that the more judgmental performance an individual has, the lower is the level of occupational stress experienced by that person.

There is significant correlation between the type of personality and organizational commitment.

Table 4, the correlation coefficients between personality types and organizational commitment

Statistic Subscale	n	df	r	Sig
Extraversion	300	298	0.30	0.00
Introversion	300	298	-0.32	0.00
Intuition	300	298	0.08	0.16
Sensing	300	298	-0.16	0.00
Thinking	300	298	0.13	0.02
Feeling	300	298	-0.22	0.00
Judgment	300	298	0.27	0.00
Perception	300	298	-0.31	0.00

According to the above table, each of the above functions of introversion (-0.32) and extraversion (0.30) have a significant and moderate correlation with organizational commitment. And the observed values are larger than the critical value (0.14) at the 0.01 level and with 99% confidence, it can be said that a significant inverse relationship exists between organizational commitment and increased introversion and as employees' introversion increases, their organizational commitment reduces and this states for a direct correlation with extraversion showed as the higher extraversion is, the higher would be the organizational commitment.

According to the above table, intuition function ($r = 0.08, p > 0.05$) does not have a significant correlation with organizational commitment. On the other hand, sensing function is significantly and inversely correlated with organizational commitment at the 0.01 level ($r = -0.16, p < 0.01$) so that higher levels of sensing function is associated with lower organizational commitment.

Besides, feeling functions have a correlation coefficient (-0.22) with organizational commitment and the observed value is less than the critical value (-0.14) at the 0.01 level and with a 99 percent confidence, an increase is resulted by feeling performance, reducing organizational commitment. Additionally, thinking function also has a significant correlation (0.13) to organizational commitment. And the observed value is larger than the critical value (0.11) at the 0.05 level and with 95 percent confidence, a significant relationship exists between thinking function and organizational commitment and as employees' performance approaches thinking, their commitment to their organization grows.

Also according to Table 2- 15, perception function has a significant inverse correlation with organizational commitment ($r = -0.31, p < 0.01$) and with 99% confidence, with a perception performance, organizational commitment decreases. Moreover, judgment function also has a significant direct correlation with organizational commitment ($r = 0.27, p < 0.01$) so that as judgment performance increases, an increase in organizational commitment is resulted.

3) There is a significant correlation between occupational stress and organizational commitment.

Table 5: correlation coefficient between organizational commitment and occupational stress

Variables Predictors	Organizational commitment and occupational stress
v	300
P	- 0.68
df	298
Sig	0.00

According to Table 5, it can be seen that the correlation between organizational commitment and occupational stress is significant at 0.01 level, so that the observed correlation (-0.68) is far less than the critical value (-0.14) with the degree of freedom of 298. Consequently, with a confidence of 99 percents,

it can be said that there is a strong and significant correlation between continuous commitment and occupational stress in the field of interpersonal relations and as stress increases, continuous commitment is reduced.

2-3) Multivariate Regression Analysis

Assumptions

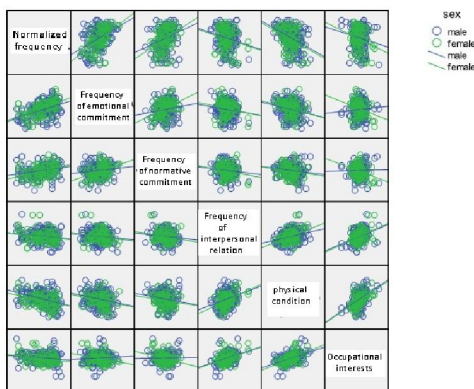
a) Multiple Linearity between variables

For the purpose of analyzing the existence of linearity between predictive variables, a set of indicators should be noted. In this study, condition index and variance inflation factor were used for the prediction of organizational commitment and occupational stress. In case condition index value is considerably above 30 and variance inflation factor over the interval 5 to 10 relations, linearity relations is established among the variables. According to the results, the condition index values in this study and the inflation factor are less than 30 and less than 2 respectively, which is quite appropriate. Therefore, there is no established multiple linearity relationship between variables. And the regression analysis is permitted.

b) Existence of linearity relation between variables

Linear relationship between variables was evaluated through distribution charts and distribution graphs of the predict variables to distinguish between the dependent variable associated with the regression line was drawn. Checking the charts demonstrate that the relationship between variables is linear.

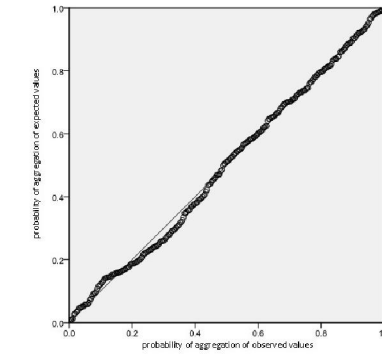
Figure 1: plot of the distribution of variables



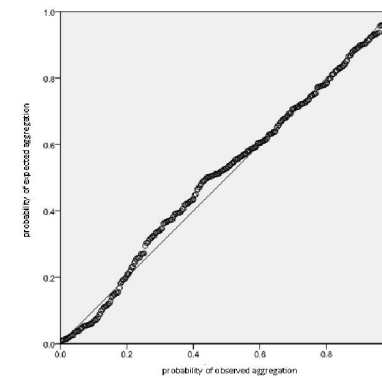
c) Normalization of distribution of residual

In order to verify this hypothesis, the increasing probability of distribution curve for the expected and observed values was used. As can be seen, the residual have a normal distribution for

prediction of occupational stress and organizational commitment according to Figures 3 – 7 and 3- 8, and it can also be observed that points are placed around the original diameter and the distribution chart the cumulative possibility has a slope of 45 degrees. Consequently, the distribution of each variable in predicting residual follows a normal distribution.



Graph 4 – 2: probability of aggregation of observed and expected values



Graph 4 – 3: probability of observed and expected aggregations

D) Lack of correlation between residual

To verify this hypothesis, Durbin - Watson statistic for prediction of stress resulted in 1.77 and for the prediction of organizational commitment was 1.89 which is proper and stands for no correlation between the residual values. Given the verification of basic assumptions of regression analysis, its implementation for predicting occupational stress is permitted. The following table presents the results of regression analysis to predict the stress by the help of personality types.

According to Table 2, it can be seen that five models are extracted from the stepwise regression process and eventually, the 5 variables with the highest rate in predicting occupational stress have remained in the fifth model. The 3 variables of these variables are sub-scales of organizational commitment.

Table 6: standardized coefficients, squared correlation coefficient shifts in the multivariate stepwise model to predict stress

Model	Variable	beta	R ²	ΔR^2	t	F
1	Continuous Commitment	-0.57	0.33	0.33	-12.02**	144.42 **
2	Normative commitment	-0.45 -0.31	0.41	0.08	-9.41** -6.41**	102.51 **
3	Continuous Commitment Normative commitment Emotional commitment	-0.34 -0.27 -0.26	0.46	0.05	-6.73** -5.86** -5.24**	83.57 **
4	Normative commitment Emotional commitment Feeling	-0.33 -0.26 -0.24 0.17	0.49	0.03	-6.56** -5.79** -4.92** 3.98 **	69.77 **
5	Commitment to continuous Normative commitment Emotional commitment Feeling Extraversion	-0.30 -0.26 -0.22 0.19 -0.13	0.50	0.01	-5.93** -5.79** -4.49** 4.41** -2.95**	59.02 **

**P < 0.01

According to the above table, it can be observed that the first model to predict the beta prediction coefficient (-0.57) for the continuous commitment is significant ($t = -12.02$, $p < 0.01$). Therefore, the regression coefficient demonstrates that each of the standard deviations varies and an increase in continuous commitment with a standard deviation of 0.57 is aligned with a reduction in occupational stress. The power of prediction for the first model is about 33% ($R^2=0.33$).

In the second model, with the addition of normative commitment, the prediction power in the model almost increases by about 8 percents and reaches 41 percents. A significant predictive factor for the continuous commitment in this model shows that each deviation change in continuous commitment with a standard deviation of 0.45 is associated changes in occupational stress ($t = -9.41$, $p < 0.01$). Furthermore, a significant factor for normative commitment demonstrates that any deviation in the normative commitment to reduce the stress is associated with a standard deviation of 0.31 ($t = -6.41$, $p < 0.01$).

In the third model, with the addition of the emotional commitment, the prediction power increases by about 5 percents and reaches 46 percents. A significant predictive factor for the continuous commitment in this model shows that any deviation change in continuous commitment is associated with a standard deviation of 0.34 in occupational stress ($t = -6.73$, $p < 0.01$). Moreover, a significant factor for normative commitment represents that any deviation

in normative commitment is aligned with a reduction in stress associated with a standard deviation of 0.27 ($t = -5.86$, $p < 0.01$). Similarly, the beta coefficient indicates that the emotional commitment to each standard deviation increase in this variable is associated with a 0.26 standard deviation decrease in stress levels ($t = -5.24$, $p < 0.01$).

In the fourth model, with the addition of feeling function from the eight Myers - Briggs functions, it can be seen that this function has a regression coefficient that is statistically significant ($t = 3.98$, $p < 0.01$). The beta coefficient of which is 0.17 and prediction power through this function comparative to the third model have risen by about 3 percents ($\Delta R^2 = 0.49-0.46 = 0.03$).

In the last model, with the addition of extraversion function, the prediction power via stepwise model has risen by one percent reaching to 0.50. The prediction coefficient of extraversion (-0.13) alongside other variables is significant ($t = -2.95$, $p < 0.01$). The regression coefficients for the feeling function (0.19) is positive and significant ($t = 4.41$, $p < 0.01$). The regression coefficients for continuous commitment ($t = -5.93$, $p < 0.01$), normative ($t = -5.79$, $p < 0.01$) and emotional ($t = -4.49$, $p < 0.01$) are also significantly inversely correlated. Amongst these coefficients, the best predictive factor belongs to the continuous commitment and the final regression equation is as follows; Introversion (-0.13) + Feeling (0.19) + Emotional Commitment (-0.22) + Normative Commitment (-0.26) + Continuous Commitment (-0.30) = Occupational Stress



Research model: Predicting occupational stress by organizational commitment and personality types

3) Conclusion and Discussion

This research has been conducted to study the relation between personality characteristics with occupational stress and organizational commitment of employees of Shahr Bank in 2011, it has been done by descriptive (correlative) method and multi variable regression test. Statistical results of the first hypothesis showed that there is positive significant correlation between occupational stress with introvert, emotional and perceive personality type and extraverts, sensory, thinking and judging people have lower occupational stress. Also findings resulted from the second hypothesis showed that extraverts, judging and thinking people have higher organizational commitment toward introverts, sensory, feeling and perceive, and resulted findings of the third hypothesis showed that there is a significant correlation between occupational stresses with organizational commitment, this means that people with higher occupational stress have lower organizational commitment. In regression analysis, predictors of occupational stress related to personality and organizational commitment showed that emotional type and introverts are the highest predictors of occupational stress and on the other hand low organizational commitment is one of the components of occupational stress according to this research findings.

According to research findings emotional and introvert types are most predictors of occupational stress, emotional are concentrated on their and others' emotions, they mostly prefer others' satisfaction and they have lower decision making power, all of these features cause these people to be in more pressure in stressful condition, on the other hand introverts mostly consider inner world, they are so cautious in their relation and they prefer withdrawal, in stressful condition they are affected more.

By using research findings predicting model of occupational stress can be explained in this way that this model has been made based on differences of personality types and their relation with organizational commitment and commitment stress and result of its analysis by using regression states that organization commitment is one of predictors of occupational stress, in other word people with low organizational commitment tend to leave organization, they are sensitive to stress and they adhere less to their pledges, they prefer introversion and are mostly following personal emotions, in encountering problems they tend to illogical behavior and these results were obtained by findings of correlation between personality types with organizational commitment and occupational stress.

Corresponding Author:

Maryam khodabakhshi
PHD student of psychology
Department of psychology
YSU, Yerevan State University in Armenia.

References

1. Carsten, J (2006). The 7 hidden reasons employees leave: How to recognize the subtle signs and act before it is too late, pp:203.
2. Culverson DE (2002). Exploring organizational commitment following radical change: A case study within the Parks Canada Agency [dissertation]. Canada: University of Waterloo; pp 342-356.
3. Hatami, Mohamad (1998).determination of stress on working mothers and non-working mothers and effective of therapist reduce of stress, [Dissertation]. Tehran: Allame Tabatabai University.
4. Health and Safety Executive (HSE) (2001). Tackling work-related stress: A manager's

- guide to improving and maintaining employee health and well-being. Suffolk, HSE.
5. Jahanian, Malihe (2006). Standardization marker Myers-Briggs (MBTI) in private sector employees in Tehran city, [Dissertation]. Tehran: Allame Tabatabai University.
 6. Jung, C. G. (1927). The structure of the psyche. In collected works, Princeton, NJ: Princeton University Press (VOL.8,PP.129-158.
 7. Kingama & Mireille, ICN on occupational stress and worker Health, nursing Matters; 2002; pp; 1-5.
 8. Miller, David (2001). ; Dying to Care? Work, stress and burnout in HIV/AIDS; Routledge, Published, (2001). pp: 14-27.
 9. Pascale Carayon, Michael J. Smith, Maria C. Haims. (1999). Work Organization, Job Stress and Work-Related Musculoskeletal Disorders; by Journal article; Human Factors, Vol. 41.
 10. Saghafi N. Relationship of Organizational culture with Organizational commitment of the employee's social security [dissertation]. Tehran: University of Tehran; 2006.
 11. Schultz, Dune P. (2006). Theorise of personality 9Edition, University of south Florida, pp;127.
 12. Schultz, D. P. (1990). Intimate friends, dangerous rivals: The turbulent relationship between Freud and Jung. Los Angeles: Tarcher pp;134.
 13. Seeratdoost Z. Relationship between organizational commitment rate performance and headquarters national Iranian oil products distribution [dissertation]. Tehran: Institute of Higher Education; 2005 (Farsi).
 14. Yiannakis, C. & Taylor, N. (2009). Sout Africa: Jopie Van Rooyen & Partners, S.A (Pty) Ltd.

2/22/2012