



# The Relation between Personality Type, Locus of Control, Occupational Satisfaction and Occupational Exhaustion and Determining the Effectiveness of Stress Inoculation Training (SIT) on Reducing it among staffers of Saipa Company

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Available online at: [www.isca.in](http://www.isca.in), [www.isca.me](http://www.isca.me)

Received 8<sup>th</sup> March 2013, revised 12<sup>th</sup> May 2013, accepted 1<sup>st</sup> July 2013

## Abstract

*The primary goal of this investigation was to find out the role and contribution of each of the variables of personality types, locus of control and occupational satisfaction on job burnout. The second purpose of this study was to understand the effectiveness of Stress Inoculation Training (SIT) in reducing occupational exhaustion and increasing occupational satisfaction. In order to achieve the mentioned purposes, we selected a sample group of 310 staffers, randomly from 22 classes of staffers who had participated in Training Courses during their work in Saipa Factory. We have conducted the tests of occupational exhaustion, personality type, locus of control and occupational satisfaction on them. Then we randomly selected 40 subjects from all 52 people who have gained a mark more than one and a standard deviation over mean in occupational exhaustion test, and again divided them randomly into two groups; an experimental group and a control group, each group having 20 subjects. The experimental group participated in the courses of Stress Inoculation Training consisting of nine 45 minute sessions. The techniques and methods used for experimental group are: getting acquainted with career stresses, discussion about consequences and difficulties of stress, clarifying the role of thoughts and beliefs in revelation of stress and its relationship to occupational exhaustion and job dissatisfaction, administering techniques of mental imagery, cognitive reproduction, muscular relaxation, problem solving, thought stopping, self-sufficiency and etc. The results indicated that: Firstly, there is a significant positive relation between occupational exhaustion and personality type. Secondly, there is a significant inverse relationship between occupational exhaustion and locus of control. Thirdly, there is a considerable inverse relation between occupational exhaustion and occupational satisfaction ( $P < 0/01$ ). The results of multiple regression analysis indicated that personality type, locus of control and occupational satisfaction can predict occupational exhaustion. In gradation, the first is occupational satisfaction, locus of control is the second, and personality type is the third. The results from experimental group and control group express that Stress Inoculation Training method is effective in reducing occupational exhaustion ( $P < 0/01$ ) and increasing occupational satisfaction ( $P < 0/01$ ).*

**Keywords:** Personality type, Locus of control, occupational exhaustion, job satisfaction, stress inoculation training (SIT).

## Introduction

Today, the important role of occupation in different aspects is clear for everyone, because of the fact that occupation is the way for providing costs of living and also it has a direct relationship to mental and physical health of people and it can satisfy lots of spiritual needs of human being. Obviously, constructive roles of occupation can be realized when, firstly, the features of an occupation are suitable for the person and secondly, the person feels valuable and effective in his job. In other words, an individual should experience a satisfactory feeling of career success. Psychologically, we can define career success as the feeling of an individual about his job performance and his ability and effectiveness to perform occupational tasks. Sometimes, caused by various factors, a person may feel exhausted about his job and consequently his efficiency will be

impaired. This impairment itself can lead to more occupational exhaustion.

The speed and magnitude of scientific and technological advances have led to many social changes and economic developments. On the basis of these circumstances, profound changes have happened in human life and occupation. Regarding human being as a complex existence, his adaptability to his environment and his endeavors to meet his needs, his equipments and his changes in the work environment and in the organization, is different from the past; because people today are forced to bear restrictions and stresses in the process of adjustment to the social and occupational environment. So a satisfying job and job adjustment, over time, may become a source of dissatisfaction and lack of consistency and this can

cause a person out of his normal routine situation and may be subject to burnout<sup>1</sup>.

**Research Background:** Technical usage of the term “Occupational Exhaustion” originally goes back to Ferudenberg who raised the first discussions about this concept in 1974. “Occupational Exhaustion” or burnout is a state of physical, emotional and mental stress that often comes from a strong and stable long-term emotional stress caused by long-term conflicts with other people<sup>2</sup>. Burnout occurs under conditions of extreme stress and will be revealed as emotional exhaustion, depersonalization and decrease in motivation, progress and promotion<sup>3</sup>.

Friedman in his study concluded that among educational administrators Occupational Exhaustions affected by factors such as expectations, communications, satisfaction and social status<sup>4</sup>.

Bakker et al studied about how physicians are subject to Occupational Exhaustion. They found that continuous contacts with patients threaten physicians’ emotional resources, and they would be subject to emotional reduction as an antecedent for occupational exhaustion and consequently an average amount of exhaustion<sup>5</sup>.

Sarmiento conducted a study in Canada. In this study it is mentioned that power and authority are very important factors in determining Occupational Exhaustion and Job Satisfaction, and performance of educators in reorganizing programs of nursing college<sup>6</sup>.

Studies of in Maastricht University have shown that the factors causing job burnout are very important. In these researches the kind of career can help us to study Occupational Exhaustion better. These studies revealed that psychological features of job have relationship to the beginning of occupational exhaustion. Among other effective factors in increasing Occupational Exhaustion, we can mention lack of independence in decision making and lack of colleagues’ support.

**Literature Review: Job Satisfaction:** Job Satisfaction is consisted of a set of beliefs and emotions that people have about their jobs and it is the feeling of happiness and enjoyment resulted by an occupation which leads to the confidence of a person to his job and makes him more interested in his job.

Herzberg et al in a research on the provision of needs, motivation and job satisfaction which was conducted on 200 engineers and accountants concluded that: i. Providing the Environmental-Health needs just can prevent people from being unhappy, but it will not necessarily lead to motivation and good performance. ii. To motivate people, their motivational needs must be satisfied. Therefore, when individuals feel internal satisfaction, their job performance and success can be increased<sup>7</sup>.

**Locus of Control:** Locus of Control is internal and external control so that in internal control an individual has the responsibility of his actions and regards himself effective in the situation but in the locus of external control the person does not refer actions and phenomena to himself, but he refers them to chance and powerful and authoritative people. In fact he does not know himself effective in the situation. These people are probably more susceptible to job burnout.

Howerton et al conducted a study and concluded that there is a significant negative relationship between external locus of control and educational achievement<sup>8</sup>.

**A and B Personality Types:** Type A behavior pattern has three features: i. Competition: Type “An” individuals tend to have a lot of self-criticism and without feeling satisfaction or success; they try to achieve their goals. ii. Time Urgency: They often lose patience by delay and waste of time. They have an intensive daily schedule and they try to do more than one activity at the same time. iii. Anger and Hostility: In Type “An” individual’s anger or hostility can be easily provoked.

On the other hand, Type B behavior pattern can be specified by features such as low levels of competitiveness, time urgency and hostility. Type B people are inclined to leniency.

Furnham analyzed the relationship between behaviors of personality Type A, psychological distress, and different beliefs of locus of control in a heterogeneous population. Results showed that people with personality Type A had more psychological distress than people with Type B<sup>9</sup>.

Schmied and Lawler studied the relationship between type a behavior control and cardiovascular sensitivity in women working in administrative jobs<sup>10</sup>.

Brook studied the effect of behaviors of different types and locus of control on job satisfaction and occupational health. The results showed that managers with an external locus of control significantly show lower levels of job satisfaction, especially, when it is combined with an “A” Personality Type<sup>11</sup>.

**Research Hypotheses:** i. There is a relationship between personality type and occupational exhaustion. ii. There is a relationship between locus of control and occupational exhaustion. iii. There is an inverse relationship between job satisfaction and occupational exhaustion. iv. Percentage of changes which any of the variables of locus of control, personality type and job satisfaction make on occupational exhaustion is different and the combined effect of these variables on occupational exhaustion is significant. v. Teaching the skills of coping with stress is effective in reducing occupational exhaustion. vi. Teaching the skills of coping with stress is effective in increasing job satisfaction.

## Methodology

**Population:** The population of this study includes all employees of Saipa Co. which participated in in-service training courses in winter 1384 in the administration of education of this factory.

**Sampling Method:** In this study first we chose 20 classes randomly and then we administered the occupational exhaustion test of Lee and Ashforth, job satisfaction test of Davis, Lauf Kosit and Vies, locus of control test of Rater and personality type test of Friedman and Rosenman among 310 of class members. After that the tests were graded and 40 people were chosen randomly from 52 people whose mark in occupational exhaustion was one standard variation upper average and they were placed in two groups; experimental group and control group.

**Method of Measurement:** In the present study the following tests and tools have been used for the measurement of different variables: i. Demographic Characteristics Questionnaire, ii. Occupational Exhaustion Test of Lee and Ashforth, iii. Job Satisfaction Test of Davis, Lauf Kosit and Vies, iv. Locus of Control Test of Rotter, v. Personality Type Test of Friedman and Rosenman.

**Method of Research:** This study was conducted in three phases: i. Preparation of measurement tools: Before conducting the research, Occupational Exhaustion Test of Lee and Ashforth, Job Satisfaction Test of Davis, Laf Kosit and Vies, Locus of Control Test of Rotter and Personality Type Test of Friedman and Rosenman, were prepared considering reliability of the tests. ii. Sampling: After preparation of measurement tools according to the mentioned method of sampling in the past discussions, 40 people were chosen and they were divided to two groups of control and experimental groups randomly. iii. Implementation of research: The study started in Dey (December) 2005 and finished in Esfand (February) 2005. In this period of time two evaluations have been conducted. i. Pre-Test: Before the intervention, i. Post-Tests: For both groups immediately after the end of intervention and education.

## Results and Discussion

First hypothesis: There is a relationship between occupational exhaustion and personality type.

**Table-1**

**Correlation matrix between different variables of job satisfaction (X1), locus of control (X2) and personality type (X3) with occupational exhaustion (Y)**

| Variables | X1 | X2     | X3      | Y       |
|-----------|----|--------|---------|---------|
| X1        | 1  | /338** | -/375** | -/401** |
| X2        |    | 1      | -/337** | -/356** |
| X3        |    |        | 1       | /349**  |
| Y         |    |        |         | 1       |

\* Significance at the level of 0/05, \*\* Significance at the level of 0/01

The results listed in table-1 indicate that there is a significant correlation between personality type and occupational satisfaction with 99% confidence. The results of this research are consistent with the studies of researchers like.

These researches revealed that personality type A having features like competition, time urgency, anger and hostility, impatience, aggression, multiple behaviors and efforts to achieve goals without planning, is related to occupational exhaustion in which an individual has characteristics like negative attitude to job, emotional exhaustion, depersonalization, reduced sense of accomplishment, a feeling of being under pressure, negative self-evaluation, reduced motivation for progress, feeling of hopelessness, failure, suspicion, resentment and confusion. In fact, it can be said that features of a personality type described above can lead to mentioned destructive behaviors of occupational exhaustion.

Second hypothesis: There is a relationship between locus of control and occupational exhaustion.

The results listed in table-1 indicate that there is an inverse relationship between the locus of control and occupational exhaustion (99%).

People who have internal locus of control are the people who know themselves effective in events, keep appropriate strategies for themselves and put the strategies which are not successful for them aside. Also, they are the people who have the Characteristics of job satisfaction, enjoy their jobs, and have emotional adaptability to their occupation and are not perplexed and confused with their jobs. In fact we can say that internal locus of control increases occupational satisfaction but it decreases occupational exhaustion which is accompanied by confusion and incompatibility.

A research which is reported by The Journal of Tehran Hospitals in year 2002 indicates that there is an inverse relationship between internal locus of control and job stress and also there is a correlation between internal locus of control and job satisfaction. As you know, job stress includes annoying emotional and physical responses that it is revealed in the situation of inappropriateness of demands and job requirements with the talents of staffers; and its consequences are emotional exhaustion, depersonalization, failure and lack of personal efficiency and occupational exhaustion. In fact we can say that the people who have external locus of control and have features like nervousness, being vindictive, excitability, being distrustful, being depressed, low self-esteem, and blaming himself for failures and ineffectiveness. So that people with external locus of control are more vulnerable with job stress.

Hypothesis III: There is an inverse relationship between job satisfaction and occupational exhaustion.

The results listed in table-1 show that there is an inverse relationship between job satisfaction and occupational exhaustion, with 99% confidence.

Sarmiento<sup>6</sup> showed that there is an inverse relationship between job burnout and job satisfaction. As we know, job satisfaction can be obtained by two sources: The first source is the feeling of pleasure which is gained by working and activity and the second source is the pleasure of having progress and to be held responsible to do something. In addition to internal factors, external factors such as working conditions, rates of pay, type of work and having workplace connections are effective in job satisfaction. As it is mentioned in the theoretical bases of this study, occupational exhaustion is the result of excessive work, feeling worthless, being confused between expectations and priorities, concerns about job security, distress for much responsibility and unwillingness to perform the duties with the low wages. It can make symptoms like inability, stress and suspicion, lack of motivation for achievement, depersonalization and negative self-evaluation. So we can say that there is an inverse relationship between job satisfaction and occupational exhaustion.

Hypothesis IV: The percentage of changes that each of the variables including locus of control, personality type and job satisfaction have on occupational exhaustion is different.

The results listed in table-2, 3 and 4 indicate that the variables of job satisfaction, personality type and locus of control are

capable to predict occupational exhaustion, where variance explanation of job satisfaction is in the first rank, personality type is in the second rank, and locus of control is in the last rank. The results showed that all variables have a significant relationship with occupational exhaustion with over 99% of confidence and they have a high predictability.

Predicting occupational exhaustion based on job satisfaction regarding the table-4 is significant with 99% confidence and the direction of the correlation is positive. Predicting occupational exhaustion using locus of control regarding the table-3 is significant with 99% confidence.

Of course it is due to mention that predictability will be increased by combining the variables of job satisfaction and locus of control; and finally predicting occupational exhaustion according to personality type regarding table (4) is significant with 99 percent of confidence. Also, it should be mentioned that predictability of occupational exhaustion will be increased by combining variables of job satisfaction, locus of control, and personality type. Finally we can say that in order to predict occupational exhaustion, some factors like job satisfaction, locus of control and personality type are effective, respectively. According to the research results mentioned in the three previous hypotheses we can say that the results are in consistence with previous researches.

Hypothesis Five: Teaching the skills of coping with stress is effective in reducing occupational exhaustion.

**Table-2**

**Summary of regression analysis for job satisfaction variable (X1) with occupational exhaustion (Y) with the control of variables of locus of control (X2) and personality type (X3).**

| Sources of Change | Degrees of Freedom (D. F.) | Sum of Squares (S. S.) | Mean of Squares (M. S.) | Correlation (R) | Squared Correlation (R <sup>2</sup> ) | F P              |
|-------------------|----------------------------|------------------------|-------------------------|-----------------|---------------------------------------|------------------|
| Regression        | 1                          | 1969/87                | 1969/87                 | 0/401           | 0/161                                 | 57/41<br>P=0/000 |
| Residual (error)  | 300                        | 10293/12               | 34/31                   |                 |                                       |                  |

**Table-3**

**Summary of regression analysis for variables of job satisfaction (X1), locus of control (X2) and occupational exhaustion (V) with control of variable of Personality type (X3)**

| Sources of Change | Degrees of Freedom (D. F.) | Sum of Squares (S. S.) | Mean of Squares (M. S.) | Correlation (R) | Squared Correlation (R <sup>2</sup> ) | F P              |
|-------------------|----------------------------|------------------------|-------------------------|-----------------|---------------------------------------|------------------|
| Regression        | 2                          | 2642/38                | 1321/18                 | 0/464           | 0/215                                 | 41/06<br>P=0/000 |
| Residual (error)  | 299                        | 9620/62                | 32/18                   |                 |                                       |                  |

**Table-4**

**Summary of regression analysis for variables of job satisfaction (X1), locus of control (X2) and personality type (X3) with occupational exhaustion (Y)**

| Sources of Change | Degrees of Freedom (D. F.) | Sum of Squares (S. S.) | Mean of Squares (M. S.) | Correlation (R) | Squared Correlation (R <sup>2</sup> ) | F P             |
|-------------------|----------------------------|------------------------|-------------------------|-----------------|---------------------------------------|-----------------|
| Regression        | 3                          | 2966/46                | 988/82                  | 0/492           | 0/242                                 | 31/7<br>P=0/000 |
| Residual (error)  | 298                        | 9296/53                | 31/2                    |                 |                                       |                 |

**Table-5**  
**Initial data of independent t-test to compare the mean difference between pre-test and post-test scores of the experimental and control groups about occupational exhaustion**

| Statistical indicators Groups | Numbers | Differential Mean | Standard Deviation | Standard Error |
|-------------------------------|---------|-------------------|--------------------|----------------|
| Experiment                    | 20      | - 6/9             | 2/95               | 0/58           |
| Control                       | 20      | -1/15             | 1/42               | 0/32           |

The results listed in table-5 indicate that stress inoculation training method is effective in reducing occupational exhaustion with 99% confidence. So that stress inoculation training decreased the level of occupational exhaustion in experimental group comparing to control group. So stress inoculation training has been effective in decreasing occupational exhaustion.

The findings of this study are consistent with the basis of Michenbaum theory<sup>12-14</sup> which has claimed that the stress inoculation training (SIT) decreases stress and other problems close to it? As we are informed, occupational exhaustion is accompanied by numerous physical and psychological symptoms such as stress, feelings of confusion, lack of motivation, depersonalization, feeling of disappointment, suspicion, emotional exhaustion and reduced feeling of personal accomplishment. In stress inoculation training, the main purpose is to make people resistant against stress. In this method, the emphasis is on the fact that a person should be prepared to encounter stressful situations and to fight against stressful stimulus and to learn the methods of coping with stress; and after being successful in self-control in the exposure of stressful stimulus the person should pay attention to self enforcement.

Stress inoculation training methods used in this study include automatic thoughts and beliefs, mental imagery techniques, the relationship between job stress and occupational exhaustion, cognitive reproduction, muscular relaxation, thought stopping and positive self-expression; and they are capable to eliminate symptoms of occupational exhaustion. The findings of this study are in consistence with findings from other studies which analyze the efficacy of this treatment approach in reducing stress and problems close to it.

Hypothesis VI: Skills of coping with stress are effective in increasing job satisfaction.

**Table-6**  
**Preliminary data of independent t-test to compare mean difference between pre-test and post-test scores in experimental and control groups about job satisfaction**

| Statistical indicators Groups | Numbers | Differential Mean | Standard Deviation | Standard Error |
|-------------------------------|---------|-------------------|--------------------|----------------|
| Experiment                    | 20      | 2/85              | 2/32               | 0/52           |
| Control                       | 20      | -1/15             | 1/42               | 0/32           |

The results listed in table-6 indicate that stress inoculation training approach is effective in increasing job satisfaction, with 99% confidence. So stress inoculation training has been effective in increasing job satisfaction. The findings of this study is in consistence with the basis of Michenbaum theory which has claimed that the application of stress inoculation training (SIT) leads to reduced stress and decrease in other problems close to it.

### Conclusion

As was found in the research, there is an inverse and negative relationship between occupational exhaustion and job satisfaction. In fact, the people who have experienced occupational exhaustion, they have experienced job dissatisfaction too. These people do not enjoy doing their jobs and responsibilities. In fact, lack of job satisfaction leads to symptoms of stress, suspicion, feeling of insufficiency, negative self-evaluation and lack of motivation for progress. Considering the fact that stress inoculation training is seeking for making people resistant against psychological stress and uses the methods of recognizing effective factors on occupational dissatisfaction, identifying automatic beliefs, mental imagery techniques, cognitive reproduction, muscular relaxation, thought stopping and positive self-expression, it can eradicate the symptoms of job dissatisfaction and increase their job satisfaction.

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