# Çukurova Üniversitesi BF Dergisi

An Empirical Research to Determine Stress Sources, Symptoms and Results of Travel and Insurance Agency Employees in Antalya

Antalya'daki Seyahat ve Sigorta Acentesi Çalı anlarının Stres Kaynakları, Belirtileri ve Sonuçlarını Belirlemeye Yönelik Ampirik Bir Ara tırma

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#### **ABSTRACT**

Stress is one of the biggest health issues at work today. Over half a million people will have their physical or mental health damaged as a result of stress at work. This study aims to determine stress sources, symptoms and stress-borne physical and psychological results of travel and insurance agency employees in Antalya. Thus factor analyses are used for the statements in the survey and correlation is used to determine the relationship between the factors. Besides, t test is used to determine whether travel and agency employees have diversity in views or not in terms of stress sources, symptoms and results.

Keywords: Stress Sources, Stress Symptoms, Stress Results, Travel Agency, Insurance Agency

# ÖZET

yerinde stres günümüzün en büyük sa lık sorunlarından biridir. Yarım milyondan fazla insan i yerinde ya adıkları stresin sonucu olarak fiziksel veya ruhsal sa lık sorunları ya amaktadır. Bu çalı ma Antalya seyahat ve sigorta acenteli i çalı anlarının stres kaynakları, stres belirtileri ve stresin yarattı ı fiziksel ve psikolojik sonuçları belirlemeyi amaçlamaktadır. Bu amaçla uygulanan anketteki ifadeler için faktör analizi kullanılmı ve korelasyon testi ile faktörler arasındaki ili ki belirlenmeye çalı ılmı tır. Ayrıca seyahat acentesi ve sigorta acentesi çalı anları arasında stres kaynakları, belirtileri ve sonuçları açısından farklılık olup olmadı ını belirlemek için t testi yapılmı tır.

Anahtar Kelimeler: Stres Kaynakları, Stres Belirtileri, Stres Sonuçları, Seyahat Acentesi, Sigorta Acentesi

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# INTRODUCTION

Stress is a costly and significant source of health problems and mental distress with work cited as a primary stressor. Employees particularly working at ticket sales, operation, reservation, and tour sales departments in travel agencies and insurance provision, after-sales services, and damage assessment departments in insurance agencies communicate with customers directly. They are affected by the excessive reluctance, dissatisfaction, and complaints of the customers primarily. It is the main reason that increases stress within the working environment. When stress from family circle, social environment, and physical environment added employees may be reluctant to go work, have problems with their colleagues and have health problems in later stages. All these problems together decrease performance of the employee and may cause financial and emotional damage for the firm. This study aims to determine stress sources, symptoms and results of travel and insurance agency employees in Antalya.

#### 1. STRESS and WORK STRESS

It is not easy to properly define what stress is, although it is quite a common experience for everyone. Stress is a part of everyday life and not necessarily a negative phenomenon, being a physiological stimulus usually connected with human-environment interactions. However, it can become a harmful risk factor for health when it is perceived as an imbalance between an excess of demands and the individual ability to meet them. This causes a perturbation of the psycho-physical equilibrium, taxing physical, psychic and behavioural responses aimed at coping with it. If this coping fails, stress can have harmful consequences on physical, mental and social well-being, with high costs both for the individual and society (http://www.ilo.org/public/english/protection/condtrav/pdf/wc-gc-95.pdf).

Stress concept first suggested by Hans Selye in 1930s is defined as "A person's emotional and physical responding to any physical or psychological stimulus in order to accommodate him/herself to circumstances." (Balta, 2004:23; Selye, 1907:1; Balcı, 2000:2; Karabulut, 1999:155; Eren, 2004:292). It is important to know the difference between waht stress is and what factors that cause stress. Various pressure and demands from family, friends, and government are external stress sources. Pressure and expectations from the individual's inner world are internal stress sources. Internal stress sources are: ambition, materialism, competitiveness, and aggression. Generally internal stress sources have more effect than the outer ones. All internal and external pressures and expectations are sources of stress. The reaction of body against the pressure from these sources is stress. It is a well known fact that human body reacts bio-chemically to all external demands whether it is pleasant or not. Though stress sources may differ biological reaction is generally the same (Özkaya, Yakın ve Ekinci, 2008:164).

The levels of stress experienced will vary between people, as will their reactions to stress. Stress is also difficult to measure. Employers often portray stress as an individual

problem rather than one affecting the whole workplace and may claim that it is caused by problems outside of work. While much stress can be caused by factors such as relationships, health and noisy neighbours, work is still one of the main causes of stress. Stress at work can also compound problems which result from stress caused by personal factors (http://www.unison.org.uk/acrobat/12879.pdf).

Stress can be defined as a psychological state which is part of and reflects a wider process of interaction between the person and their work environment. It is concluded that there is a growing consensus around the adequacy and utility of the psychological approach to stress. Several overview models have been offered as summaries of the stress process. The most notable is that of Cooper, as presented in Figure 1 below. Cooper's model usefully focuses on the nature and detail of work stresses and their individual and organisational outcomes (http://www.isma.org.uk/pdf/publications/stress\_en.pdf).

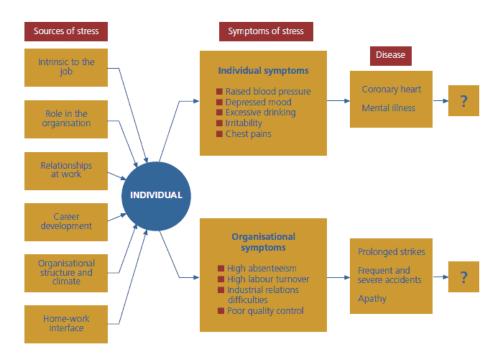


Figure 1: Cooper's Model of dynamics of work stress

Stress, particularly work-related stress, has aroused growing interest across Europe in recent years. The workplace has changed dramatically due to globalisation of the economy, use of new information and communications technology, growing diversity in the workplace (e.g. more women, older and higher educated people, as well as increased migration, particularly between the EU Member States), and an increased mental

workload (Kompier et al, 2000; Landsbergis, 2003; National Institute for Occupational Safety and Health, 2002).

Work stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Work stress can lead to poor health and even injury. The concept of job stress is often confused with challenge, but these concepts are not the same. Challenge energizes us psychologically and physically, and it motivates us to learn new skills and master our jobs. When a challenge is met, we feel relaxed and satisfied. Thus, challenge is an important ingredient for healthy and productive work. Nearly everyone agrees that job stress results from the interaction of the worker and the conditions of work. Views differ, however, on the importance of worker characteristics versus working conditions as the primary cause of job stress. These differing viewpoints are important because they suggest different ways to prevent stress at work. In the past 20 years, many studies have looked at the relationship between work stress and a variety of ailments. Mood and sleep disturbances, upset stomach and headache, and disturbed relationships with family and friends are examples of stress-related problems that are quick to develop and are commonly seen in these studies. These early signs of work stress are usually easy to recognize. But the effects of work stress on chronic diseases are more difficult to see because chronic diseases take a long time to develop and can be influenced by many factors other than stress. Nonetheless, evidence is rapidly accumulating to suggest that stress plays an important role in several types of chronic health problems—especially cardiovascular disease, musculoskeletal disorders, and psychological disorders (http://198.246.98.21/niosh/docs/99-101/pdfs/99-101.pdf).

## 1.2. Stress Factors

Sources of managerial stress have been well documented since the late 1970s. Ivancevich and Matteson identified four categories of work stressors: physical environment, individual level (a mixer of role and career development variables), group level (primarily relationship-based) and organizational level (a mixture of climate, structure, job design and task characteristic) Schuler also identifies seven categories of work stressors in organizations: job qualities, relationships, organizational structure, physical qualities, career development, change and role in the organization. Quick and Quick proposed four categories of stressors: task demands, physical demands and interpersonal demands (Chandraiah, Agrawal, Marimuthu and Manoharan, 2003:6).

# 1.2.1. Organizational Stress Factors

The most important stress factor of the working environment is monotonous of the work. Monotone ongoing of the work and exclusion off the employee from the work process create alienation of the employee and it is a common stress factor (Eren, 1998:224).

Another stress factor in working environment arises from technology. New technology may cause obsolescence of skills of the employee by a rapid change in working environment. Additionally, the need to know knew equipment and system may create thread for the employee. This may be a potential stress source if sufficient training is not provided. New developing technologies create "not achieving the work" feeling for the employee (Tutar, 2000:222).

Another stress factor is physical inconvenience of the working environment. Working in an loud environment exhausts the employee and creates stress. The main physiological affect of excess noise and other physical factors reduces tolerance level for other stress factors and has a negative influence on motivation. Heat, airing, humidity, cleanup are other important stress factors. According to the survey of Ercan and ar (2004) on pharmacists, they have stress as a result of both redirecting the patients and communicating with them directly as well as doing the formal paper works. Especially length of work time, loud and crowded working environment and lack of place to rest are main stress sources.

Stress factors arising from quality of business life are: quantitative and qualitative work load, role conflict and ambiguity, economic and physical, psycho-social conditions and facilities that individual has, techno-stress arising from work depending on computer, lack of social support resulting from the relationship of the individual with his workfellows, insufficient self determination, authorization not equal to responsibility, anxiety about career development, organizational police, organizational climate, organizational structure, etc. (Gökdeniz, 2005:177).

In the study carried out by Algür and Akta (2009) on workers of accommodation services major stress factors are determined as discrimination at the job, ambiguity of authorization and responsibility, poor physical working conditions, and conflict and discordance between workmates.

# 1.2.2. Stress Factors Resulting From Individual Himself

Individual needs, capacity and character compose the individual stress sources. Perception differences, experience, family problems, relationship between family members, growing up and education of children, job problems of couples, moving in a new house, divorce, death, etc. are stress creating factors (Gümü tekin and Öztemiz, 2005:277). Stress sources of humans are often their nature, character, mood or skills that reveal their personality. In other words stress source may become the character of the person itself. That is not the events that affect individuals; it is how the people understand them. The reaction of the individual to his understanding of the environment, environmental changes and relations is bounded to his personality. Self recognition mode of the individual is another stress factor.

A study carried out by Karahan, Gürpınar and Özyürek (2007) on nurses shows that surgery nurses are under potential risk of stress-borne diseases according to the self recognition scores.

#### 1.2.3. Stress Factors Resulting from Social Life

The noted American management and business specialist Albrecht stated 5 change areas to determine what happens to people. Though the five areas, according to him, do not include all important changes of the era they are the root causes for the century being a stress era. The five change areas are; transition from rural life to urban life, transition from stability to mobility, transition from self-sufficiency to consumption economy, transition from closed-system to open system and transition from personal activeness to inactiveness (Okutan and Tengilimo lu, 2002, 25).

#### 1.3. Symptoms and Results of Stress

Stress sources that managers and employees face at work may affect them in terms of physiology, psychology, and behaviour and may cause decline in their efficiency. Psychological consequences include job dissatisfaction, reduced job commitment, anxiety, frustration, anger, and of most concern, burnout. Physical consequences of occupational stress involve changes to normal bodily functioning. Research conducted in numerous settings, including schools, have established links between the following and occupational stress (and burnout): hypertension, elevated blood pressure, dryness in the throat, nervous tics, stomach complaints, ulcers, neck or back pain, headache, migraine, tiredness, chest pain, heart disease and stroke. Behavioural consequences of occupational stress are the actions by individuals. These may arise directly from stress or as a result of psychological or physical reactions as described above. The five major behavioural consequences identified in the literature are withdrawal, reduced performance, deteriorating collegial relations, substance abuse and accidents. As with job dissatisfaction, the money cost can be considerable, but the cost in terms of disrupted learning for students cannot be measured (De Nobile and McCormick, 2005).

In the 2000 European Working Conditions Survey (EWCS), work-related stress was found to be the second most common work-related health problem across the EU15 (at 28%; only back pain was more common). Moreover, work-related stress has also been associated with a number of other ill-health outcomes, such as cardiovascular diseases (Kivimäki et al, 2002), musculoskeletal disorders, particularly back problems (Hoogendoorn et al, 2000).

#### 2. METHODOLOGY

# 2.1. The Purpose and Importance of the Study

The main purpose of this study is to make suggestion to employers and employees in order to decrease stress by revealing sources, symptoms, and results of stress that employees of travel agencies and insurance agencies face because of work and to determine similarities and differences between the sources, symptoms and results of stress in the two different sector groups. The study is important in that it is a large scaled research in Antalya about this subject.

#### 2.2. Population, Sample Selection and Limitations

The population of the study includes group A travel agencies and insurance agencies that operate in Antalya. It is assumed that employees in the sample group have the education and socio-cultural capacity to comprehend and answer the statements in the questioner form. Study results are valid only for the related sample group.

#### 2.3. Technique of the Study and Data Collection

Data was collected using a questionnaire. The questionnaire composed of four sections. "Mayerson Stress Source Scale" that included 43 statements was used at the first section to determine stress sources of travel agency employees. Stress sources were collected in four groups including "social" stress sources resulting from human relations, "job related" stress sources resulting from "self recognition", "physical environment" stress sources resulting from physical environment including noise and air pollution. Scores obtained from each stress source were evaluated in the four groups (Baltas and Balta, 1993:134). There were 20 statements in the second section to present stress symptoms of the employees. There were 13 statements in the third section to determine results of stress of employees. These statements in the two sections was obtained from the study of Aksoy and Kutluca'nın (2006). The fourth and last section of the questionnaire included demographic questions. This questionnaire in compliance with the object of the study was delivered to managers and employees of travel and insurance agencies via e-mail or by hand. There were 407 questionnaire forms after answering period, however 50 of them were excluded due to incomplete or wrong marking and 357 of them were analyzed.

# 2.4. Data Analysis and Interpellation

Data collected from 199 questionnaires was loaded to SPSS 13.0 statistic program. Stress levels were demonstrated pursuant to stress sources scale of employees. In order to determine the relationship between stress sources correlation analysis was used. An average was determined for stress symptoms and results and factor analysis was used. In order to determine the relationship between stress sources, symptoms and results correlation analysis was used. Besides, the data obtained was summarized as frequency and percentages.

# 2.5. Findings

# 2.5.1. Demographic Information of Participants

Demographic information about participants is shown below.

**Table -2.1: Gender Status of Participants** 

	Insurance Agency	Travel Agency	Total
Female	71	70	141
Male	87	129	216

**Table -2.2: Age Status of Participants** 

	Insurance agency	Travel agency	Total
20 and below	4	14	18
21-24	33	34	67
25-29	38	38	76
30-34	30	34	64
35-39	16	42	58
40-44	26	22	48
45-49	6	8	14
50 and over	5	7	12

**Table-2.3: Marital Status of Participants** 

	Insurance agency	Travel agency	Total
Married	59	98	157
Single	99	101	200

**Table-2.4: Educational Status of Participants** 

	Insurance agency	Travel agency	Total
Primary Education	4	2	6
High school and equivalent schools	47	40	87
Associate degree	26	51	77
Undergraduate	73	95	168
Post Graduate	8	11	19

**Table-2.5: Alma Mater of Participants** 

	Insurance agency	Travel agency	Total
Related to the sector	46	138	184
Not related to the sector	112	61	173

**Table-2.6: Sector Experience of Participants** 

	Insurance agency	Travel agency	Total
Less than 1 year	15	9	24
1-3 years	26	26	52
4-5 years	24	32	56
6-7 years	18	27	45
8-9 years	21	20	41
10 years and over	54	85	139

Table-2.7: Experience of Participants at firm they work

	Insurance agency	Travel agency	Total
Less than 1 year	30	37	67
1-3 years	38	64	102
4-5 years	26	39	65
6-7 years	20	15	35
8-9 years	11	11	22
10 years and over	33	33	66

Table-2.8: Gender Status of Managers of Participants

	Insurance agency	Travel agency	
Female	33	39	72
Male	125	160	285

**Table-2.9:The Firm of Participants** 

Insurance agency	Travel agency	
158	199	357

Table 2.1 shows that 141 female and 216 male and a total of 357 employees participated to the survey. It is shown in Table 2.2 that 161 of 357 employees was below 30, 184 was between the ages 30 and 50 and 12 of them were over 50. Table 2.3 shows that 157 of the employees were married and 200 of them were single. Educational status was collected in five categories. Thus, Table 2.4 shows that 6 of the employees have primary school degree and 164 of them have high school or associate degree. 168 of the employees have undergraduate degree while 19 of them have postgraduate. 184 of the employees have an education related with their sector according to Table 2.5. Table 2.6 shows that 139 of the employees have an experience of 10 years or more. On the other hand 24 of them have an experience of 1 year or less. Table 2.7 shows the experience of the participants at their present work. There are 102 employees that have an experience of 1-3 years, 65 employees that have an experience of 4-5 years, 67 employees that have an experience of less than one year and 22 that have an experience of 8-9 years according to the Table 2.7. Gender status of managers of participants is shown at Table 2.8. It can be seen in the Table 2.8 that the large part of the managers of participants are male. Table 2.9 shows that 158 of the participants are insurance agency employees and 199 of them are travel agency employees.

# 2.5.2. Stress Level of Employees

Statements are collected under 4 groups according to Mayerson Stress Source scale and these groups are named as Physical Environment, Social Environment, Business Environment, and Self Recognition. Maximum and minimum values for these groups are below:

Physical	5-7 score	No health threatening situation
Environment	8-12 score	Possibility of disease
	13-17 score	Tendency to disease
	18-25 score	Very high possibility of disease
Social	13-24 score	No health threatening situation
Environment	25-39 score	Possibility of disease
	40-59 score	Tendency to disease
	60-85 score	Very high possibility of disease
Business	15-24 score	No health threatening situation
Environment	25-39 score	Possibility of disease
	40-59 score	Tendency to disease
	60-85 score	Very high possibility of disease
Self recognition	10-14 score	No health threatening situation
	15-24 score	Possibility of disease
	25-34 score	Tendency to disease
	35-50 score	Very high possibility of disease

Possible biological results of existing stress sources of travel agency 12 employees according to the results of the survey are shown below:

Physical	5-7 score	No health threatening	37 persons
Situation	8-12 score	Possibility of disease	90 persons
Environment	13-17 score 18-25 score	Tendency to disease High possib. of disease	51 persons 21 persons
Social	17-24score	No health threatening	30persons

Environment Business	60-85 scores 25-39 score 40-59 score 15-24 score	High possib. of disease Possibility of disease Tendency to disease No health threatening	3 persons 129persons 40 persons 29persons
Environment	25-39 score	Possibility of disease	137persons
	40-59 score	Tendency to disease	33persons
Self recognition	10-14 score	No health threatening	18persons
	15-24 score	Possibility of disease	160persons
	25-34 score	Tendency to disease	21persons

As it can be deduced from the scores, possible biological results of stress sources for the 4 dimensions are mainly found in level 2 "possibility of disease" (physical environment 45.2%, social environment 64.8%, business environment 68.8%, and self recognition % 80.4). With 160 persons (80.4%) self recognition dimension has the highest possibility of disease, while business environment dimension (137 persons, 68.8%), social environment dimension (129 persons, 64.8 %) and finally physical environment dimension (90 persons, 45.2%) followed it respectively declining. Though physical environment dimension is at the last place for the second level "possibility of disease" it has a higher frequency for one upper level "tendency to disease" (physical environment 51 persons, 25.6%, social environment 40 persons, 20.2%, business environment 33 persons, 16.7%, self recognition 21 persons, 10.6%). The only dimension that has a score of 10.6% with 21 persons within all dimensions at the fourth level "Very high possibility of disease", which has the potential of greatest biological results and riskiest for the employee health. It can be comprehended from the analysis that physical environment dimension requires more attention to decrease stress, protect employee health and prevent possible results of stress. It may be beneficial to pay attention, respectively, after physical environment to social environment, business environment and self recognition dimensions.

Accordingly possible biological results of existing stress sources of insurance agency employees according to the results of the survey are shown below:

Physical	5-7 scores	No health threatening	49 persons
Environment	8-12 score	Possibility of disease	60 persons
	13-17 scores	Tendency to disease	39 persons

	18-25 scores	High possib.of disease	10 persons
Social	17-24 scores	No health threatening	12persons
Environment	25-39 score	Possibility of disease	91persons
	40-59 scores	Tendency to disease	52persons
Business	14-24 scores	No health threatening	52persons
Situation	25-39 scores	Possibility of disease	93 persons
Environment	40-59 scores	Tendency to disease	13persons
Self recognition	10-14 scores	No health threatening	17persons
	15-24 scores	Possibility of disease	110persons
	25-34 scores 35-50 scores	Tendency to disease High possib. of disease	27persons 4 persons

As it can be deduced from the scores, possible biological results of stress sources for the 4 dimensions are mainly found in level 2 "possibility of disease" (physical environment 38%, social environment 57.6%, business environment 58.9, and self recognition 69.6%). With 110 persons (69.6%) self recognition dimension has the highest possibility of disease, while business environment dimension (93 persons, 58.9%), social environment dimension (91 persons, 57.6%) and finally physical environment dimension (60 persons, 38%) followed it respectively declining.

## 2.5.3. Correlation Analyses Results of the Relationship between Stress Factors

For insurance agency employees; table 2.10 shows correlation analysis results of how physical environment, social environment, business environment and self recognition affect each other.

Table-2.10: Correlation Analysis of Stress Factors-Insurance Agencies

		Social	Physical	Business	Self
		environment	environment	environment	recognition
	Pearson				
	Correlation	1	0.292	0.598	0.599
Social	Sig.		0.000	0.000	0.000
environment	Total	158	158	158	158
	Pearson				
	Correlation	0.292	1	0.459	0.301
Physical	Sig.	0.001		0.000	0.000
environment	Total	158	158	158	158
	Pearson				
	Correlation	0.598	0.459	1	0.649
Business	Sig.	0.000	0.000		0.000
environment	Total	158	158	158	158
	Pearson				
	Correlation	0.599	0.301	0.649	1
Self	Sig.	0.000	0.000	0.000	
recognition	Total	158	158	158	158

Table 2.10 shows that a stronger linear relationship exists between "self recognition" and "business environment" factors as compared to other factors. Correlation coefficient between "Physical environment" and "Social environment" factors is between 0-0.30 values by a value of 0.292. Therefore it is possible to say that there is weak relationship between these two factors. There is second level of strong relationship between "business environment" and "social environment" factors as compared to other factors. Similarly, there is third level of strong relationship between "self recognition" and "social environment" factors. Briefly, an increase in "business environment" stress factors will lead to a more increase in "self recognition" stress factors than "social environment" factors. Therefore we can infer that the strongest relationship is between "business environment" and "self recognition" factors while the weakest relationship is between "social environment" and "physical environment" factors.

For travel agency employees; Table 2.11 shows correlation analysis results of how stress factors named physical environment, social environment, business environment and self recognition affect each other.

Table-2.11: Correlation Analysis of Stress Factors- Travel Agencies

	_	Social	Physical	Business	Self
		environment	environment	environment	recognition
	Pearson				
	Correlation	1	0.237	0.557	0.524
Social	Sig.		0.001	0.000	0.000
environment	Total	199	199	199	199
	Pearson				
	Correlation	0.237	1	0.340	0.257
Physical	Sig.	0.001		0.000	0.000
environment	Total	199	199	199	199
	Pearson				
	Correlation	0.557	0.340	1	0.587
Business	Sig.	0.000	0.000		0.000
environment	Total	199	199	199	199
	Pearson				
	Correlation	0.524	0.257	0.587	1
Self	Sig.	0.000	0.000	0.000	
recognition	Total	199	199	199	199

Table 2.11 shows that a stronger linear relationship exists between "self recognition" and "business environment" factors as compared to other factors. Correlation coefficient between "Physical environment" and "Social environment" factors is between 0-0.25 values by a value of 0.237. Therefore it is possible to say that there is weak relationship between these two factors. There is second level of strong relationship between "business environment" and "social environment" factors as compared to other factors. Similarly, there is third level of strong relationship between "self recognition" and "social environment" factors. Briefly, an increase in "business environment" stress factors will lead to a more increase in "self recognition" stress factors than "social environment" factors. Therefore we can infer that the strongest relationship is between "business environment" and "self recognition" factors while the weakest relationship is between "social environment" and "physical environment" factors.

# 2.5.4. Factor Analysis Results of Stress Symptoms

Stress symptoms were analysed separately for travel and insurance agency employees. As 20 statements to detect stress symptoms were designed within the same scale type they constituted appropriate data for factor analysis. A 5 point Likert-type scale was prepared and factor analysis was used to determine whether interrelated estimation variances constitute a group in order to detect stress results. However, it is important to test reliability of statements before going with factor analysis. Kaiser Meyer Olkin (K.M.O.) value was detected as 0.769 before factor analysis to detect stress symptoms of insurance agency employees. The fact that this value is greater than 0.5 and close to

1.0 it was concluded that reliability of the statements are relatively high. Varimax rotation was used in analysis, factors that have results less than 0.60 was concealed and iteration was used for 9 times. After the fifth iteration the stress results scale of 20 items decreased to 11 items and they got together in 6 factors that exclude each other. These factors constitute 66.357% of total variance and it is shown in Table 2.12:

Table-2.12: Dimension Degradation of Stress Symptoms – Insurance agencies

(Kaiser Normalization and Varimax Rotation)

			Cumulative
FACTORS	Factor loads	Variance (%)	Variance (%)
Factor 1: Physiologic -1			
- Anorexia	0.772	29.562	29.562
- Nausea	0.610		
Factor 2: Emotional-1			
- Fuss	0.831		
- on tenterhooks	0.889	9.447	39.009
- Sense of inadequacy	0.826		
Factor 3: Physiologic -2			
- Dyspepsia	0.799	8.903	47.912
- Allergy complaint	0.700		
Factor 4: Emotional-2			
- Tension	0.748	6.796	54.708
- Sense of fatigue	0.886		
Factor 5: Behavioural			
- Increase in alcohol use	0.820	6.147	60.855
Factor 6: Physiologic -3			
- More frequent perspiration	0.876	5.502	66.357

The first factor, in Table 2.12, is titled as "physiologic -1" that stress affects. According to the analysis stress primarily causes to physiologic changes. The stress loaded causes loss of appetite. "Emotional 1" prediction variables seen as factor 2 appear more frequently as stress symptoms than the other emotional symptoms. If the stress subjected doesn't vary it is known that physical symptoms appear as well as emotional stress symptoms. Stress presence in all factors at the volume they appear threatens health. When stress presence of symptoms at work is determined introduction of practices and regulations to decrease stress is inevitable in terms of efficiency of employees.

Kaiser Meyer Olkin (K.M.O.) value was detected as 0.890 before factor analysis to detect stress symptoms of travel agency employees. The fact that this value is greater than 0.5 and close to 1.0 it was concluded that reliability of the statements are relatively high. Varimax rotation was used in analysis, factors that have results less than 0.60 was concealed and iteration was used for 9 times. After the fifth iteration the stress results scale of 20 items decreased to 11 items and they got together in 6 factors that exclude each other. These factors constitute 58.110% of total variance and it is shown in Table 2.13:

Table-2.13: Dimension Degradation of Stress Symptoms – Travel agencies

(Kaiser Normalization and Varimax Rotation)

(Italsel Politicalization and Variation	1		Cumulative
FACTORS	Factor loads	Variance (%)	Variance (%)
Factor 1: Emotional			
- Tension	0.535		
- Fuss	0.702		
- on tenterhooks	0.776	31.037	31.037
- Sense of inadequacy	0.776		
- incompatibleness	0.769		
- Avoiding cooperation	0.621		
Factor 2: Physical-1			
- Sense of fatigue	0.695		
- Headache Complaint	0.665	8.865	39.901
-Desire to oversleep	0.528		
- Anorexia	0.600		
Factor 3: Physical -2			
- Blood pressure complaint	0.622		
- Allergy complaint	0.696	6.643	46.545
-Nausea	0.705		
Factor 4: Physical -3			
- Insomnia	0.505		
- More frequent perspiration	0.803	6.426	52.971
-Dyspnoea complaint	0.542		
- Increase/decrease in eating	0.505		
Factor 5: Behavioural			
- Increase in smoke	0.822	5.139	58.110
- Increase in alcohol use	0.766		

The first factor, in Table 2.13, is titled as "emotional-1" that stress affects. According to the analysis stress primarily and intensely causes to physiologic changes. The stress loaded causes fuss and changes in emotional state. Table 2.10 shows that "physical" prediction variables are assemble under 3 groups. "Physical 1" prediction variables seen as factor 2 appear more frequently as stress symptoms than the other emotional symptoms. Factor 5 including "Behavioural" prediction variables shows that increase in harmful habits appear as stress symptoms. Therefore, emotional variables mostly appear

as stress symptoms. It is very hard to detect stress borne emotional variables. It is known that it is known that physical symptoms appear as well as emotional stress symptoms if the stress subjected doesn't vary. Stress presence in all factors at the volume they appear threatens health. When stress presence of symptoms at work is determined introduction of practices and regulations to decrease stress is inevitable in terms of efficiency of employees.

#### 2.5.5- Factor Analysis Results of Stress Results

Stress symptoms were analysed separately for travel and insurance agency employees. As 13 statements to detect stress symptoms were designed within the same scale type they constituted appropriate data for factor analysis. A 5 point Likert-type scale was prepared and factor analysis was used to determine whether interrelated prediction variables constitute a group in order to detect stress results. However, it is important to test reliability of statements before going with factor analysis.

Kaiser Meyer Olkin (K.M.O.) value was detected as 0.887 before factor analysis to detect stress symptoms of insurance agency employees. The fact that this value is greater than 0.5 and close to 1.0 it was concluded that reliability of the statements are relatively high. Varimax rotation was used in analysis, factors that have results less than 0.50 was concealed and iteration was used for 3 times. After the fifth iteration the stress results scale of 13 items decreased to 9 items and they got together in 3 factors that exclude each other. These factors constitute 64.323 % of total variance and it is shown in Table 2.14:

Table-2.14: Dimension Degradation of Stress Results-Insurance agencies

(Kaiser Normalization and Varimax Rotation)

FACTORS	Factor Loads	Variance (%)	Cumulative Variance (%)
Factor 1: Emotional-Behavioural			
- Make mistakes in operations	0.776		
- Excessive sensitivity	0.772	47.021	47.021
- Sense of inadequacy at work	0.649		
- Inappropriate decision-making	0.655		
Factor 2: Behavioural			
- Decrease the quality of work	0.614		
- Offensiveness against colleagues	0.716	9.592	56.613
- Impolite behaviour against customers	0.831		
Factor 3: Reaction to Stress			
- Loss of desire to work	0.663	7.710	64.323
- Divergence from work by leave or report	0.843		

The first factor, in Table 2.14, is titled as Emotional-Behavioural, as all the 4 prediction variables at these factors associate emotional autism, sense of inadequacy and therefore make mistakes. It is wrong to expect a good performance from an employee cracking up or losing self confidence. It will not be possible for the firm to succeed in that case.

The second factor, composing of three prediction variables is titled as Behavioural. Teamwork and cooperation have great importance in personal success and then organizational success of the individual. However, it won't be possible to succeed if the individual has trouble with colleagues, decrease in quality of his work and impolite behaviour against customers as result of stress.

The third factor composing of two prediction variables is Reaction to Stress. Loss of desire to work and divergence from work as a result of stress are barriers against firstly personal and then organizational success.

Kaiser Meyer Olkin (K.M.O.) value was detected as 0.890 before factor analysis to detect stress symptoms of travel agency employees. The fact that this value is greater

than 0.5 and close to 1.0 it was concluded that reliability of the statements are relatively high. Varimax rotation was used in analysis, factors that have results less than 0.50 was concealed and iteration was used for 3 times. After the fifth iteration the stress results scale of 13 items decreased to 10 items and they got together in 3 factors that exclude each other. These factors constitute 52.064% of total variance and it is shown in Table 2.15:

Table-2.15: Dimension Degradation of Stress Results- Travel Agencies

(Kaiser Normalization and Varimax Rotation)

TA CHOPG	Factor	T7 . (0()	Cumulative
FACTORS	Loads	Variance(%)	Variance (%)
Factor 1: Emotional-Behavioural			
- Lose of desire to work	0.852		
- Reluctance to go to work	0.859		
- Autism	0.652	41.696	41.696
- Excessive sensitivity	0.597		
- Considering leaving work	0.768		
Factor 2: Behavioural			
- Divergence from work by leave or report	0.554		
- Sense of inadequacy at work	0.722	10.368	52.064
- Uncooperativeness with colleagues	0.668		
- Inappropriate decision-making	0.762		
- Make mistakes in operations	0.634		

The first factor, in Table 2.15, is titled as Emotional-Behavioural, for all the 5 prediction variables at these factors associate emotional autism and divergence from work. It is wrong to expect a good performance from an employee who does not want to work and consider leaving work constantly. It will not be possible for the firm to succeed in that case.

The second factor, composing of five prediction variables is titled as Behavioural. Teamwork and cooperation have great importance in personal success and then organizational success of the individual. However, it won't be possible to succeed if the individual develop autism and therefore avoids collaboration. Moreover, the employee may cause loss for the firm by avoiding work due to the stress and by inappropriate decisions when he cannot avoid.

# 2.5.6. Analyzing the Relationship among Stress Resources, Symptoms and Results

The results of the correlation analysis conducted to determine the reciprocal impact of data related to the stress resources, symptoms and results of insurance agency employees are shown in Table 2.16.

Table-2.16: Correlation Analysis of Stress Sources, Symptoms and Results -

**Insurance Agencies** 

		Stress Sources	Stress Symptoms	Stress Results
Stress Sources	Pearson Correlation Sig. Total	1 158	0.611 0.000 158	0.692 0.000 158
Stress Symptoms	Pearson Correlation Sig. Total	0.611 0.000 158	1 158	0.696 0.000 158
Stress Results	Pearson Correlation Sig. Total	0.692 0.000 158	0.696 0.000 158	1 158

As it is seen in Table 2.16, the correlation coefficient between stress resources and symptoms has been found to be 0.611. Besides, the correlation coefficient between stress resources and results has been determined as 0.692 and the one between stress symptoms and results as 0.696. This demonstrates that there is a positive relationship among these three groups. In other words, it is possible for the employee who is under stress due to the resources such as working environment, social environment, physical environment and who reveals this stress through such symptoms as tension, fatigue, failure in cooperating to enact such behaviours as unwillingness to going to work and considering quitting the job. It is detected that there is a positive relation among these behaviours.

The results of the correlation analysis conducted to determine the reciprocal impact of data related to the stress resources, symptoms and results of travel agency employees are shown in Table 2.17.

Table-2.17: Correlation Analysis of Stress Sources, Symptoms and Results – Travel Agencies

		Stress Sources	Stress Symptoms	Stress Results
Stress Sources	Pearson Correlation Sig. Total	1 199	0.421 0.001 199	0.554 0.000 199
Stress Symptoms	Pearson Correlation Sig. Total	0.421 0.000 199	1 199	0.619 0.000 199
Stress Results	Pearson Correlation Sig. Total	0.554 0.000 199	0.619 0.000 199	1 199

As it is seen in Table 2.17, the correlation coefficient between stress resources and symptoms has been found to be 0.421. Besides, the correlation coefficient between stress resources and results has been determined as 0.554 and the one between stress symptoms and results as 0.619. This demonstrates that there is a positive relationship among these three groups. In other words, it is possible for the employee who is under stress due to the resources such as working environment, social environment, physical environment and who reveals this stress through such symptoms as tension, fatigue, failure in cooperating to enact such behaviours as unwillingness to going to work and considering quitting the job. It is detected that there is a positive relation among these behaviours.

# 2.5.7. Dissents about Stress Resources, Symptoms and Results of Travel and Insurance Agency Employees

T-test was applied to 31 expressions assigned in order to compare the views of travel and insurance agency employees about stress resources, symptoms and results. It could be said that if the significance value acquired from the t-test is less than 0,05 (p<0,05), determined differences are significant (Bayram, 2004:84). In many expressions, significant differences have been detected as a result of the t-test conducted to detect the differences of views and the levels of these differences. The results are shown in Table 2.18.

Table 2.18: Dissents about Stress Resources, Symptoms and Results of Travel and

**Insurance Agency Employees** 

<b>Independent Variable t Test (Stress Sources)</b>	Agency	N	Average	p
	Travel	199	1.47	
I feel uncomfortable to meet strangers.	Insurance	158	1.61	0.002
	Travel	199	3.58	
I think I have more qualities than I do at work.	Insurance	158	3.23	0.002
	Travel	199	2.91	
Complex works bother me.	Insurance	158	3.30	0.005
I have difficulty in communicating with my	Travel	199	1.35	
children.	Insurance	158	1.58	0.001
	Travel	199	1.97	
I have difficulty in telling what I think.	Insurance	158	2.04	0.002
	Travel	199	2.16	
There are so many smoking at work.	Insurance	158	1.86	0.001
	Travel	199	2.39	
I am working in a highly noisy atmosphere.	Insurance	158	1.99	0.000
Independent Variable t Test (Stress Results)	Agency	N	Average	p
	Travel	199	2.35	
Reluctance to go to work	Insurance	158	2.15	0.001
	Travel	199	2.15	
Considering leaving work	Insurance	158	1.69	0.000
	Travel	199	1.72	
Decreasing quality of work	Insurance	158	1.55	0.001

As it is seen in Table 2.18, it is detected that there are dissents among travel and insurance agency employees in the 3<sup>rd</sup> article of the stress results scale consisted of 13 articles and in the 7<sup>th</sup> article of the stress resources scale of 43 articles. Accordingly, travel agency employees are far more disturbed by smoking and noise at their working environment. The averages of travel agency employees concerning unwillingness to going to work and especially considering quitting the job is also higher. Besides, they

think that they are more qualified in comparison with their job. On the other hand, it is seen that insurance agency employees are more sensitive towards outsiders and more meticulous in complicated issues.

#### 3. CONCLUSION and SUGGESTIONS

This research is carried out in order to determine and compare the stress resources, symptoms and results of travel and insurance agency employees in Antalya. According to the analysis, it is found out that the vast majority of both the employees and the managers of both sectors are male, single, at the age range of 20-40 which could be regarded as young, who have received at least high school education, have at least one year experience in general sector and have been working for 1-3 years at their current company. On the other hand, the ratio of the ones who are not working in a job related to their profession is 49%. This points to the presence of the employees defined as "self-educated" at both sectors. Especially Table 2.5 demonstrates that 70% of the insurance agency employees do not perform their own professions. This rate proves the view that the people who received tourism education have preferred banking and insurance sector.

The analysis aiming at determining stress levels of the employees reveals that the stress level stemming from physical environment creates a probability and tendency to cause disease for both travel and insurance agency employees. That the working environment is noisy, dirty, over-crowded and designed inconsistently with ergonomics affects the employees adversely. Therefore, it is very important for managers to prepare the physical environment properly. Furthermore, it is determined that the stress level arising from social and working environment poses a threat for the employees of both sectors. The stress arising from the relationships of the employee with his colleagues, managers, suppliers, family members and friends affects his performance and job commitment substantially. Thus, the managers are required to follow the social atmosphere at the workplace and to intervene in properly when necessary. Moreover, that the tourism sector in Antalya has seasonal characteristics and a delicate structure and that it is influenced by even the smallest political or economic crisis to a great extent lead to the fact that travel and insurance agency employees feel insecure and unhappy, fear of the future and consequently get more stressed. At this point, it will be useful for managers to prepare and implement programs for motivating their employees.

Different results have been arisen from the factor analysis conducted to determine stress symptoms of the employees of both sectors. The primary stress symptom of insurance agency employees is physical while the primary stress symptom of travel agency employees is emotional. This result can be accepted as a proof of the fact that, as stated above, the tourism sector doesn't assure the employees and leads to fear and hopelessness among them.

Similar results have been acquired from the factor analysis carried out through the expressions of the employees of both sectors about stress results. Stress creates both

emotional and behavioural conditions for the employees of both sectors. Due to stress, the employee shows unwillingness and susceptibility towards his job and correspondingly he makes mistakes in transactions, discontinues to work and enacts fierce and offending behaviours towards his clients and colleagues. It will be fruitful for managers to implement a good stress management, to raise the awareness of their employees and to tell them how to cope with stress.

Finally, according to the results of the t-test conducted to determine whether there is a dissent among the employees of both sectors about stress resources, symptoms and results, it has been understood that the reactions of travel agency employees to physical business are more powerful and their intentions of quitting the job are higher.

According to the results, it can be said that the stress of the employees will influence the whole organization, the business quality and performance will fall, customer complaints will increase and the prestige of the company will be adversely affected in the long term. To prevent these, it could be suggested to attach importance to the motivation of especially the employees, to determine and control the stress resources at work. In the research, the majority comprises of the employees who stated that they have been working at the same company for 10 years and more. Although this indicates the amity between the company and the employee, it also calls to mind the possibility of boredom due to performing the same job with the same people. To avoid this, managers could implement internal rotation and therefore provide the employees to learn different things and be saved from possible boredom. They can present tangible data to the employer by practicing interviews and surveys on the employees about their jobs and companies at certain intervals. Thus, the employer could raise the satisfaction of his employees by changing or developing some practices. Consequently, stress could be prevented. Besides, such activities as picnics, staff nights, iftar (fast-breaking) meals could be arranged outside the company at certain times and positive steps can be taken towards socialization by enabling the employees to attend these activities with their families. So it could be possible for the employee to raise his job commitment and motivation. Several trainings, seminars and teamwork can be organized in order to cope with stress. It is known that irregular nutrition has an impact on stress. The employees could receive education from food engineers on this matter. Also, it can yield positive results for managerial staff to receive education on empathy, motivation, stress management and human psychology.

Stress management programs teach workers about the nature and sources of stress, the effects of stress on health, and personal skills to reduce stress—for example, time management or relaxation exercises. Stress management training may rapidly reduce stress symptoms such as anxiety and sleep disturbances; it also has the advantage of being inexpensive and easy to implement (http://198.246.98.21/niosh/docs/99-101/pdfs/99-101.pdf).

Firstly detecting the cause of stress and then generating solutions will provide prominent progress for both the individual and the organization. For this purpose, it is possible to utilize from the table below.

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