

Measuring Occupational Stressors In Different Constituent Factors- Application Cfa Model

A.Deeba,

Research Scholar,

Department of Commerce,

St.Joseph's College,

Trichy.

Dr. G. John

Associate Professor in Commerce,

St.Joseph's College,

Trichy.

Abstract

Stress is categorized on the basis of job content, working conditions, employment conditions and social relations at work. Without human intervention each and every sector can never organize. Therefore, the study of stress is essential to any organization to resolve their human resources from vicious stress. For this purpose, the researcher has chosen a sample of 414 respondents of bank employees' to collect data regarding occupational stress in "Bank employees" in Perambalur district. The pre-test is conducted among 30 respondents. The internal consistency of the scale measurement Alpha value is found to be more than 0.7. This indicates a good internal consistency of scale item used for this study. The regression co-efficient values are surprising to the researcher where except for the role stressors all other dimensions positively influence the occupational stress.

Keyword: Stress, Occupational stress, Role stress, Bank Employees, Confirmatory Factor Analysis

INTRODUCTION

In our day-to-day routine life, stress has become a very common issue. Stress has become an unavoidable evident part of human life. It happens due to the dramatic and vast changes in

science and technology, industrial growth, rural to urbanization development and so on. Likewise, the other side of stress is induced by very rapid population explosion, non-employability and government policy execution. It is Selye who proposed the term 'Stress' in 1936 and defined it as "Force, Pressure or Strain oriented upon a material object or person, there forces and attempt to maintain its original state (Bushara Bano and Rajivkumar Jha(2012))."Selye has not rejected the other definitions attributed to stress and perceives them from a different point of view. One such definition on stress given by Smith and Carayon(1996) and cited by Samuvel et.al(2009), states that "Stress is a biological process by which the body attempts to adopt some challenges mobilizing its energy,disease fighting and survival and responses. Stress also seen as non-specific responses of the body to demand made on it". Many people encounter stress in different ways, some of them maintain better than others to relieve from stress and its impact. The various kinds of Stress largelydiffer from each other based on the occupation level. The occupation level and its functions create more stress to any person. According to Ahmed and Ahmed (1992), Occupational stress is becoming increasingly globalised and affects all countries, professionals and society in general. The authors Beehr and Newman (1978) define occupational stress as the conditions which are innate in people who have job or who works for a living (Nadeon Malik (2011).

PROBLEM OF THE STUDY

Stress is categorized on the basis of job content, working conditions, employment conditions and social relations at work. Without human intervention each and every sector can never organize. Therefore, the study of stress is essential to any organization to resolve their human resources from vicious stress. The industrial and service sectors not exist from the 'Occupational stresses', particularly the service sector enormously affectedby stress due to many reasons. In sharp contrast, the banking sector is one to focus more on getting stress management. Because banking institution is the backbone of a country's economy. Over the last two decades, banking sector has undergone vast changes in terms of adoption of technologies, absorption and process outsourcing. Miserably, it also leads the bank and its employees to fall prey to stress. Thus, the transformation of banking system, has increased automation, regulatory requirements, lack of support from superior and staff, absence of autonomy in taking decision, work life imbalances and so on (Priyanka Das and Alok, 2013) which in turn affects the mental and physical wellbeingof employees in banks. Lots of studies are being conducted in the field of

science especially psychology, but only fewer studies are being conducted on banking sector. Therefore, the researcher has made an attempt to study the occupational stress in bank employees' in Perambalur district with strong research conundrum. With the normative approach, the researcher has taken this study to analyse the occupational stress in bank employees' in Perambalur district with the following research questions.

The following research questions are pertains by the researcher from problem of the study and while reviewing the literature.

1. What are the different constituent factors which influences stress?
2. Which factor of stress highly affects the bank employees'?

CONCEPTUAL FRAMEWORK

Work stress - The work place has played a significant role in inducing stress. The work related stress arises due to poor working environment, design and work systems, and lack of support from superiors and colleagues. Therefore, the researcher has formed the scale which is used to measure the work stressors as perceived by bank employees'.

Role stress- Each and every sector of business tries to hike the productivity, due to technological growth and unhealthy competitions. To some extent, it also affects the employees with high stress especially on role stressors. In order to exclude the role stressors, first the organizations and their employees should be aware of role stress variables and manage it in a significant and efficient way.

Personal Development stress-The dynamic work related stress causes the most acute problems to employee as well as to the organisation (Cooper & Eaker, 1988). The retention of employee cost is more than acquiring new one to the organisation. Many researches on the same have found the factors that create stress. There are various sources of stressors in the employment organization identified by Pestonjee (1992). They are work, role, personal development, interpersonal relation and organization climate. Personal stress is caused by the nature of work done by the individual, changes in life and personal problems.

Interpersonal stress-Several researchers have proposed mechanisms by which interpersonal stressors increase the risk of depression and provide evidence for their relationships. The World

Health Organization states that certain mental and behavioral disorders, such as depression and anxiety, can result in failing to cope adaptively with a stressor. According to Kato, interpersonal stressors are “Stressful episodes between two or more people that involve quarrels, arguments, negative attitudes or behavior, an uncomfortable atmosphere during a conversation or activity, and concern about hurting others’ feelings”; These are the three types of coping strategies, based on the transactional theory, for dealing with interpersonal stressors.

Organizational Climate stress-Many practices avail to measure the organizational climate such as, freedom to participate in decision making, plan of analysis, free and fair communication, and approach towards personal problem and so on. In the broad sense, the friendly organizational climate will result in increased quantity and quality performance of productivity, task performance and job satisfaction. Societal approach of organizational climate benefits the employees’ mental health and lowers the rates of anxiety. Poor organizational climate also leads to high stress among the employees; therefore, the researcher has formed the model to measure the stress in respect of organizational climate.

OBJECTIVES OF THE STUDY

1. Examine the relationship among the dimension of occupational stressors.
2. Validate and analyse the hypothetical model of occupational stressors.

HYPOTHESES OF THE STUDY

H1: There is a relationship between EOWSP and Occupational stressors

H2: There is a relationship between EORSP and Occupational stressors

H3: There is a relationship between EOPWSP and Occupational stressors

H4: There is a relationship between EOIRSP and Occupational stressors

H5: There is a relationship between EOWSP and Occupational stressors

RESEARCH METHODOLOGY

The present study is based on both primary as well as secondary data. The face and content validity of the instrument is evaluated with the panel of experts. The panel consists of

two Associate Professors, who are well versed in bank marketing and consumer behavior, research supervisor and two externals from outside; one of them from banking institution and; another one experts from physiology. The panel members are asked to offer recommendation about the scale items adopted for the study from past literature. After availing panel members' opinion, the researcher has made appropriate changes in the scale item in the latent construct which is measuring the occupational stressors. After the panel recommendation, the data collection instrument reliability and validity are measured through pre-test. The pre-test is conducted with 30 respondents. The internal consistency of the scale measurement Alpha value is found to be more than 0.7. This indicates a good internal consistency of scale item used for this study.

SAMPLING DESIGN

The bank employees' data are easy to collect, because it is a finite population. Therefore, the researcher has planned to apply census study. For this purpose, the researcher has chosen a sample of 414 respondents of bank employees' to collect data regarding occupational stress in Bank employees' of Perambalur district. All respondents are asked to fill the questionnaire, only 366 questionnaires are brought by the researcher to analyse (as the rest of them were incomplete). The sample response rate is achieved and its critical limit is found to be more than 70 per cent.

RESULT AND DISCUSSIONS

In the present study, the researcher has formed the five factor model of stressors perception in bank employees where the second order CFA is constructed with the variable extracted from the first order CFA. Before going to the analysis, the researcher should fulfill the validity criterion to form the final model without error.

Validity of the Model

The convergent validity is originally a measure of construct that is expected to correlate. To get adequate coverage the measurement model correlate strongly with its theoretical construct model. In order to measure the convergent validity, the inter correlation among the factor in each construct should be high. Otherwise the indicators of a construct should converge a high proportion of variance in common. The indicator of reflective dimension should be such that each factor's standardized factor loading should be more than 0.60 which is considered to be an acceptable level (Barclay et.al, 1995). In CFA, the convergent validity that is measured through

standardized factor loading and Average Variance Extracted should be greater than 0.5 (Fornell and Larcker,1981). The calculated AVE values are presented in Table 1. It is a easy way to calculate the AVE (Average Variance Extracted) manually by using the following formula:

$$AVE = \frac{\text{Sum of each squared factor loading}}{\text{No. of Indicators}}$$

TABLE 1
Average Factor Extracted

Dimension	Sum of squared factor loading/ No of indicators	AVE
EOWSP	3.199/6	0.533
EORSP	3.336/5	0.667
EOPDSP	3.511/5	0.702
EOIRSP	2.938/5	0.587
EOCSP	2.279/5	0.569

Source: Computed Data

From Table 1 all the Average Factor extracted value is greater than 0.5. So the researcher has constructed five factor dimension models of stressors to fulfill the convergent validity. The standardized factor coefficient value is considered for computing the AVE and also the R² value is considered for computing the composite reliability.

Each observed variable in the latent construct path co-efficient are significant at p value of 0.01 and 0.05. Moreover, the factor loading values are also higher than 0.5. The standardized regression weights of second order CFA for five factor dimension are presented in Table 2.

TABLE 2
Standardized Regression Weights of Second Order CFA for Five Factor Dimension of Stressors Perception in Banks

			Estimate	S.E.	C.R.	P	Label
EOWSP	<---	STRESSORS	1.665	.141	11.820	***	par_24
EORSP	<---	STRESSORS	-1.847	.141	-13.109	***	par_25
EOPDSP	<---	STRESSORS	.392	.109	3.605	***	par_26
EOIRSP	<---	STRESSORS	.625	.068	9.170	***	par_27

			Estimate	S.E.	C.R.	P	Label
EOCSP	<---	STRESSORS	1.000				

Source: AMOS Output

From the Table 3, it is clear that EOWSP dimension co-efficient value is 1.665 which is higher than the other dimension in the same model. As far as EORSP dimensions are concerned, the co-efficient value negatively impacts the stressors in banks. Thus, the stress perception goes to 1 and the EORSP dimension goes down by -1.847. All the construct p value is significant at 0.01 per cent level. Hence, the researcher concludes that except EORSP dimension all other dimensions positively influence the stressors in bank employees of Perambalur district.

GFI is one of the most commonly reported measures of model fit. The GFI value ranges from 0 to 1. If the values are close to one, the researcher considers the data fits the measurement model. The present measurement GFI value is .936, which is higher than the threshold value of 0.9. CFI is another one measure of fitness of the measurement model. The CFI index uses the Chi-Square distribution. Just like GFI, CFI value also ranges between 0 and 1. The value of CFI is 0.90 or above and is considered to indicate a good fit. The CFI value is 0.921 so the data is considered as the best fit for the model. RMSEA is a supplementary fit of CFA model. It is used widely to provide a mechanism for adjusting sample size where Chi-Square statistics are used. If RMSEA value is less than or equal to 0.05, it is considered as good fit for the measurement model. The RMSEA value for the present model is obtained 0.021 which is less than the critical value of RMSEA 0.05.

The value of CMIN is smaller and it indicates that it is better fit for the model. The Chi-Square would be non-significant indicating no significant discrepancy between model and data. The value of CMIN in the present measurement model is less than 5 which shows better fit of five factor dimension of stressors model. The second order Confirmatory Factor Analysis (CFA) proves that the underlying components are mutually exclusive, which means the five factor dimensions have discriminated each other. The entire factor indexes have achieved the required level which indicates the validity of the construct forming the five factor dimension of Stressors perception in banks. Figure 1 shows the pooled CFA model and Figure 2 shows the Structural Relationship among the dimension of stressors perception.

TABLE 3

CFA Results

Name of Category	Name of Index	Index value	Critical value	Comments
Absolute Fit	RMSEA	0.021	<.08	The Required level is achieved
	GFI	.936	>0.90	
Incremental Fit	CFI	.921	>0.90	The Required level is achieved
Parsimony Fit	Chi.Sq/df (CMIN)	880.475/262	>5	The Required level is achieved

Source : AMOS output

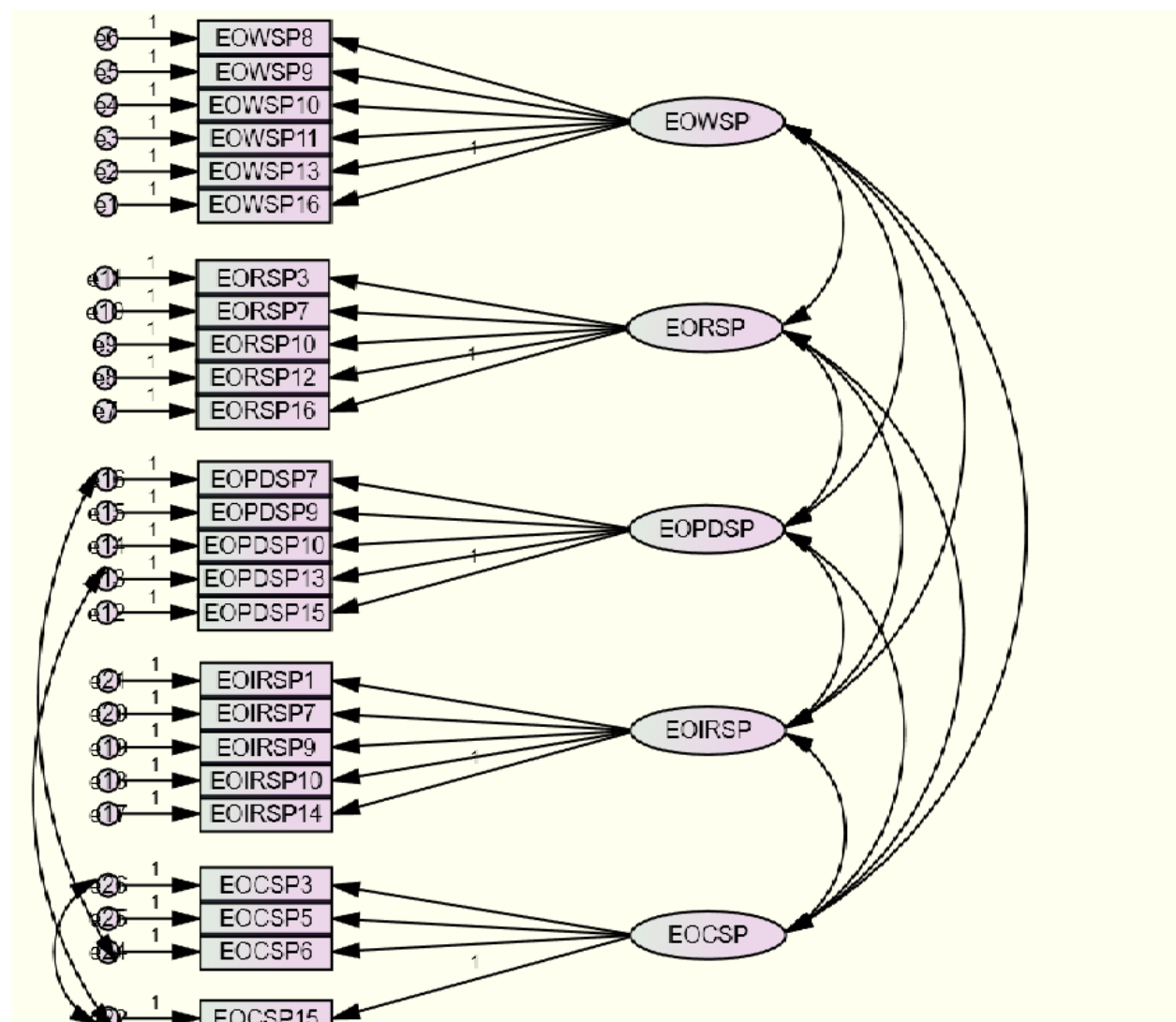


Figure 1 Pooled CFA Model to confirm the mutually exclusive Relationship

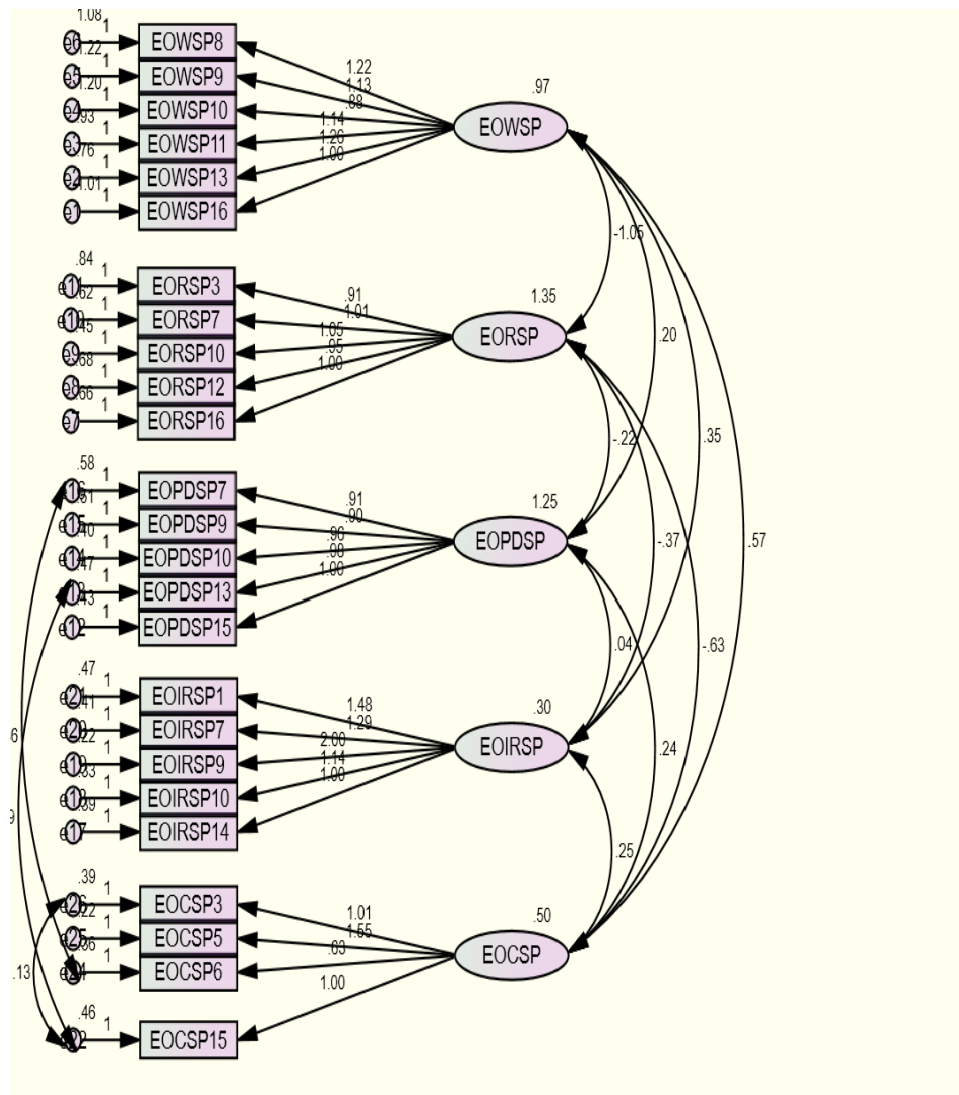


Figure 2 Standardized Regression output of Pooled CFA Model to confirm the mutually exclusive Relationship

The Results of Hypothesis 1

Work related stress is the type of stress which has ability to manage the work demands and pressures that are not matched to the knowledge and technical abilities of an employee”. The work related stress arises by poor working environment, design and work systems, lack of supports from superiors and colleagues. The work stress is not only related to working environment, employee who fails to be competent with stressful events at workplace which also affects rest hours of employees. Therefore, the researcher has identified that, “There is a relationship between Employment Organization Work Stressors Perception and Occupational

Stressors”. The p value of the construct is significant and therefore, the researcher has identified that the framed hypothesis that “There is a relationship between Employment Organization Work Stressors Perception and Occupational stressors” is accepted.

The Results of Hypothesis 2

Each and every sector of business tries to hike the productivity, due to technological growth and unhealthy competitions. The task of achieving productivity affects the employees with high stress especially on role stressors. In order to exclude the role stressors first the organizations and their employees should be aware of role stress variables and manage it in a significant and efficient way. Those variables existed in organization in the terms of the expected role, the perceived role and the actual role of the employees’. Therefore, the researcher has formed the hypothesis that, “There is a relationship between Employment Organization Role Stressors Perception and Occupational Stressors”. The co-efficient value of EORSP dimension is -1.847, which means occupational stressors goes up by 1 and that of the role stressors goes up by -1.847. The p value of the construct is significant and therefore, the researcher has identified that the framed hypothesis that, “There is a relationship between Employment Organization Role Stressors Perception and Occupational Stressors” is accepted. Hence, the researcher concludes that the role stress will never account to occupational stress in the banking atmosphere.

The Results of Hypothesis 3

Personal stress is conquered or incurred solely based on personal factors and conditions. Most personal factors and conditions include health related issues to behaviors such as exercise, meditation and healthy eating habits, leisure activities and social support from family and colleagues. The organisation must consider stress interventions outside the workplace. It is important to emphasize the power of such interventions to curb the personal development stress. Therefore the researcher has formed the hypothesis that, “There is a relationship between Employment Organization Personal Development Stressors Perception and Occupational Stressors”. The p value of the construct is significant and therefore, the researcher has identified that the framed hypothesis that “There is a relationship between Employment Organization Personal Development Stressors Perception and Occupational Stressors” is accepted.

The Results of Hypothesis 4

Interpersonal relationships are simply associations between people; managing interpersonal relationship stress is nothing but simple. The mechanisms are interpersonal stressors increase the risk of depression and provide evidence for their relationships. Therefore, the researcher has formed the hypothesis “There is a relationship between Employment Organization Interpersonal Relations Stressors Perception”. The p value of the construct is significant and therefore, the researcher has identified that the framed hypothesis that “There is a relationship between Employment Organization Interpersonal Relations Stressors Perception” is accepted.

The Results of Hypothesis 5

The organizational climate is the broad concept, which compasses quality and suitability of the working environment offered by the organization. Many factors affect the organization are organizational structure, working culture, working environment, behavior pattern of top management and so on. The poor organizational climate leads to account of high stress to the employees, therefore the researcher has formed the model to measure the stress in respect of organizational climate. Therefore, the researcher has framed the hypothesis that “There is a relationship between Employment Organizational Climate Stressors Perception and Occupational stressors”. The p value of the construct is significant and therefore, the researcher has identified that the framed hypothesis that “There is a relationship between Employment Organizational Climate Stressors Perception and Occupational stressors” is accepted.

Conclusion

The banking sector is an important sector of Indian economy and occupational stress is one of the major hurdles in curbing its turnover. Thus, understanding of specific determinants of occupational stressors in different constituent factors in this study provides very great insights in giving solution to stress. The Confirmatory Factor Analysis (CFA) test results of this study indicates that, five dimension of occupational stressors such as Work Stressors, Role Stressors, Personal Development Stressors, Interpersonal Relations Stressors and Climate Stressors Perceptions are hypothetically significant with collected data. The regression co-efficient values are surprising to the researcher that, except role stressors all other dimensions positively influence the occupational stress. Thus, the Occupational stress goes to 1 and the Role Stress goes down by -1.847. From this study, the researcher found that role stress will never amount to occupational stress in the banking atmosphere. The present work is carried by the researcher to find the pooled relationship among the dimensions of occupational stressors. For managerial

implication, the bank should come forward to take stress relief program to minimize the stresses of their employees.

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