

An exploratory study of Occupational Stress Index of Non-Governmental Workplace during Covid-19 virus in Erbil, Kurdistan region.

Karwan Hushyar Sherwani

Department of Business and Management, Tishk International University, Erbil Iraq

Correspondence: karwan.sherwani@tiu.edu.iq

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Abstract

Occupational stress can be defined as the variation of an individual's mental and / or physical state in response to occurrences at their workplace. Occupational stress can happen when there is an inconsistency between the physiological and mental demands within an organization and the inability of the employees to successfully handle and/or cope with the requested work demands. This research is a quantitative study and was conducted during the period of COVID-19 spread across the world and specifically in Kurdistan region. The samples were taken from two different non-governmental-organizations, SWEDOaid, previously known as QANDIL and Human Appeal both based in Erbil, Iraq. A web-based survey was created based on the Occupational Stress Index (OSI) and was distributed of the surveys collected, all 128 were reliable sources of information since all the questions were mandatory for completion. The results show that the level of occupational stress among the employees was moderate and there was not difference between genders of the study in terms of perceiving the stress and the number of factors in the scale can be reduced to nine factors according to the current sample of the study.

Keywords: Occupational Stress Index, Non-governmental organizations, NGO, Kurdistan, Stress Level.

1. Introduction

The primary aim of this study was to analyse the level of occupational stress experienced by employees and to identify the main sources of occupational stress among the 12 sub-dimensions of Occupational stress, and finally to assess if there are significant difference between males and females in terms of levels of perceiving occupational stress. Moreover, to assess the possibility of factor reduction using Principal Component Analysis. Non-for-profit humanitarian organizations in Erbil, Iraq An important aspect of our lives is directly dependent on our health and wellbeing. When an individual is exposed to feeling of pressure or tension which is placed on the individual by other people, certain incidents or particular events; a person needs to attempt to cope, adapt and adjust to these pressures, (Niosh, 1998). According to the Merriam-Webster Dictionary, "stress can be defined as a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation". (Merriam-Webster, 2020). Hans Seyle, one of the founding fathers in stress

research introduced the word 'stress' to define both psychological and physical responses to rigorous situations or stimuli. The word stress itself an engineering term; is used to describe the responses of an object to a force that when applied, causes some sort of deformation. (Seyle, 1946) Seyle proposed that stress is not necessarily a negative occurrence, but it depends on how an individual takes on the stress. When stress results into successful, creative and exciting work it is beneficial, however when it causes humiliation or failure it is damaging to the individual. Thus, stress can be classified into two types:

- a) Eustress: Constructive, pleasant or beneficial stress
- b) Distress: Dysfunctional or undesirable stress

Occupational stress has become an increasing in the modern world since not only does it affect an employee's physiological, behavioural and physical health. When employees are weighed down with excessive loads of work and long hours of work, this may result in employees not being able to perform to the best of their abilities and thus negatively influences an employee's efficiency, performance, error rates and work quality and also is a factor that is associated with high staff turnover and absenteeism hence not only affecting the employee but also the company/organization (Antonova, 2016). If an organization can effectively manage the stress placed on employees, it can be a source of stimulation and induction of growth and improved performance in the workplace, this results in goals being accomplish which in turn be a source of positive morale for staff. (Lewig, et al., 2003). It is crucial to distinguish between three terms: stress, stressors and strain. Stress is identified as an individual's response a stressor. stressors are the external events in the workplace such as difficult relationships at work or too many assignments. Strain is defined as the long term psychological and physiological effects of stress, these may include anxiety, depression, obesity and even suicide (Francis, et al., 2005). Table 1 below discusses the physical, psychological and behavioural symptoms associated with occupational stress.

Table 1.1: Symptoms of occupational stress in employees (Rakshit, et al., 2016: 99) (WHO, 2005:5)

Physiological	Psychological	Behavioural
<ul style="list-style-type: none"> • Headaches • Chest pain • Grinding teeth • Clenched jaws • Shortness of breath • Pounding heart • High blood pressure • Muscle aches • Indigestion • Constipation or diarrhoea • Increased perspiration • Fatigue • Insomnia • Frequent illness 	<ul style="list-style-type: none"> • Anxiety • Irritability • Sadness • Defensiveness • Anger • Mood swings • Hypersensitivity • Apathy • Depression • Slowed thinking or racing thoughts • Feelings of helplessness, hopelessness, or of being trapped 	<ul style="list-style-type: none"> • Overeating or loss of appetite • Impatience • Procrastination • Increased use of alcohol / drugs • Increased smoking • Withdrawal or isolation from others • Neglect of responsibility • Poor job performance • Poor personal hygiene • Change in religious practices • Changes in close family relationships

2. Literature Review

2.1 Concept of Occupational Stress

Occupational stress is a complex psychological concept and must be initially understood by its parent concept known as stress. According to (Krantz et al., 1985), stress can be described as the change in the physical or mental state of an individual in response to certain circumstances (stressors) that the individual may find to pose a challenge or a threat.

(Colligan, et al., 2006) states that stress can be understood in terms of general psychological reactions that incite confrontational physical or mental health conditions in which an individual's adaptive abilities are strained. Different people experience stress at different levels based on their tolerance levels and what their interpretation of stress. Injustice in organizations lead to frustration and stress, which at their end it affects the relationship between the employee and the organization (Ismail, Sherwani, 2018).

In the fundamental form, stress is divided into two categories, eustress (pleasant stress) and distress (negative stress) (Seyle, 1946). Since stress is a reaction to something, a stressor; which is the external factor causing the stress can be identified as either progressive or damaging. An example of a eustress would be a job promotion, or a new manager in charge. These sorts of situations influence an individual to work productively through possibly challenging situation. Distress, on the other hand is the reaction to stressors that are considered negative. When people think of the word 'stress' they identify it periods of time when they are under unhealthy levels of pressure to complete a task, when a devastating event befalls them, or when they are dealing with the daily, routine stressors that cause general frustration. To understand these two types of stress is to prove that stress can be beneficial and help a person meet goals and ambitions whilst promoting positive productivity. However, if left at a certain amount of intensity and period of time, stress becomes crippling and generally leads to emotional chaos, exhaustion, and physical ailment (Colligan, et al., 2006).

Occupational stress can thus be defined as the variation of an individual's mental and / or physical state in response to occurrences at their workplace, (Fonkeng, 2018). Occupational stress can happen when there is an inconsistency between the physiological and mental demands within an organization and the inability of the employees to successfully handle and/or cope with the requested work demands (Kenny, et al., 2003).

2.2 Types of Stress

To understand the concept of stress better, the concept is categorized into different types; these include acute, episodic, traumatic and chronic. Each type of stress has various emotional, physical and psychological symptoms associated with it (Lazarus, 1991).

1.2.1 *Acute Stress*

Acute stress is the most common type of stress. It is frequently short-lived and does not cause any permanent bodily damage. It may be the consequences of a busy day at work, however once an individual ends their day at work, their stress is relieved. Acute stress occurs when the pressure of receiving impractical work demands, unanticipated meetings and other situations may cause frustrations; however, they only last a short period of time (Zimbardo et al., 2003).

1.2.2 *Episodic Stress*

Episodic stress has symptoms similar to those of acute stress, however episodic stress tends to happen more frequently and on regular basis; episodically. Individual's that experience episodic stress tend to display symptoms of aggressiveness, impatience, and low tolerance (Lazarus, 2000).

1.2.3 *Traumatic Stress*

As stated in (Fonkeng, 2018), traumatic stress results from a distressing experience or a devastating event such as an accident or a natural disaster. An individual's mind and body may find it difficult it resumes to equilibrium / normal life prior to the incident, and they suffer greatly.

1.2.4 *Chronic Stress*

Chronic stress is when an individual suffers from long-term exposure to stressors which persist and accumulate over a long period of time, these may include stressors such as job strain, poverty, relationship or family conflict (strained marriage) (Lazarus, 2000). An individual may find these situations to be never ending and the accumulated stress may end up being life-threatening as it destroys an individual emotionally as well wellbeing which may lead to death (MacKay, et al., 2004).

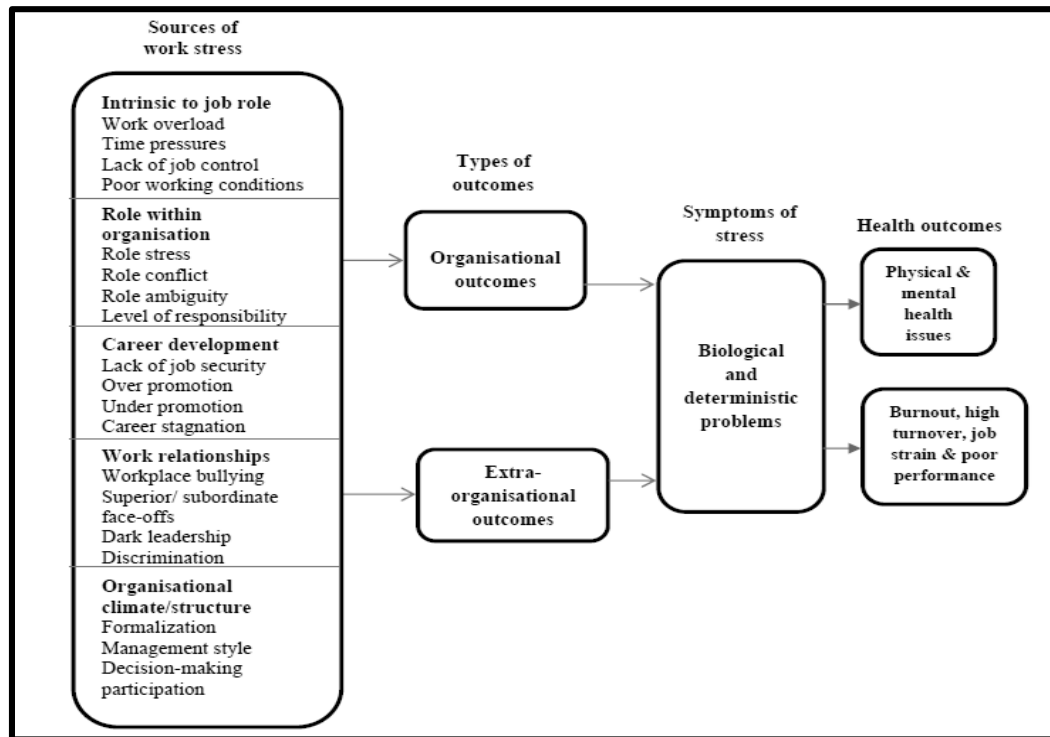
2.3 Causes of Occupational Stress

The types of stress mentioned in the previous section set the paradigm through which individuals (employees) and organizations / managers should understand stress. Occupational stress is not only a physiological response to a certain situation. Stress is an interaction between an individual the challenge in their environment (Long, 1995). Many scholars agree with (Arnold, et al., 1991) and (Murphy, 1995) and their identification of the five major sources of stress. These include

1. Factors intrinsic to a job
2. Role in the organization
3. Interpersonal relationships at work
4. Career development

5. Organizational structure and climate

Figure 2.1: A schematic framework of factors associated with work-related stress and outcomes (Rakshit, et al., 2016), (Murphy, 1995), (WHO, 2005)



2.3 Symptoms of Occupational Stress

According to (Murphy, 1995), stress can be shown in various forms which can be divided into three categories: physiological, psychological and behavioural symptoms.

2.4.1 Psychological Symptoms and its Effects

When an employee is threatened by high levels of stress and suffers from poor mental health, the employee may suffer from symptoms such as anxiety, nervousness, irritability, anger, aggressiveness, and inability to concentrate, job dissatisfaction and boredom. The response an individual may have to stress may decrease work ability, effective interaction with colleagues and inability to make good decisions (Gyamfi, et al., 2017).

2.4.2 Behavioural Symptoms and its Effects

(Michie, 2002) states that occupational stress can also present itself as behavioural symptoms; these can be displayed as neglect of nutrition, usage or increase of cigarette smoking, drug and alcohol abuse, fidgeting. It can also be overuse of television, computer or videogames. This may lead to absenteeism from work and performance deterioration.

2.4.3 Physiological Symptoms and its Effects

When an individual is exposed to stress, their body produces hormones that trigger the fight or flight response. These hormones allow humans to run faster or fight harder and increase

heart rate and blood pressure. When an individual is exposed to stressors, it causes changes in metabolism such as increase in heart rate and blood pressure, etc. when this occurs, the deterioration of the body become obvious and difficult to handle. (Blix, et al, 1994).

2.5 Management of Stress

In organizations and higher education institutions, employers apply performance management systems which in return they expect employees to achieve the outcomes and that puts pressure on the employees (Sherwani, 2014). As stated by (Le Ferve, 2003) stress can be managed using stress management interventions (SMIs) which are intentional actions that are prepared and completed to reduce and alleviate occupational stress that is experienced by the employees of an organization during work.

Primary SMIs (stressor reduction) are identified as an organization's best procedures that assist in decreasing, adjusting or eradicating stressful work demands that cause health and performance difficulties. These can be identified as redesigning jobs that remove stress factors, flexibility in working hours, removing environmental annoyances, encouraging autonomy, changing organizational culture that prioritises and ensure employee health and wellness as well as training and development in stress management (Srivastava, 1997).

Secondary SMIs (stress management) are recognized to assist employees in coping with work stress. These could be cases of wellness programmes, organizational social gatherings, providing recreational facilities or activities. Secondary interventions are framed to assist employees to cope with work and can include development of personnel policies such as better welfare packages, pension schemes and incentives (Clarke & Cooper, 2000).

3. Methodology

This research is a quantitative study, since the source of collecting information in depth and comparing the information of a standard questionnaire of the participants over a specific period of time. It is also a cross-sectional study due to the limited time in which it was conducted, cross-sectional studies often utilize a standard survey / questionnaire and are used to compare factors or describe a trend; in this case – occupational stress (Saunders, et al. 2009).

3.1 Subjects

This study was conducted by obtaining permission from two different non-governmental-organizations, SWEDOaid, previously known as QANDIL and Human Appeal both based in Erbil, Iraq. These organizations are high stress environments since they have a large number of employees that work on relief programmes in emergency response and sustainable development. Surveys were distributed and 128 were collected. Of the surveys collected, all 128 were reliable sources of information since all the questions were mandatory for completion.

3.2 Instrument

The instrument used in this research is Occupational Stress Index – developed by Srivastava and Singh developed in 1984 (Srivastava and Singh, 1984). It has been one of the reliable instruments to measure occupational stress at workplace. The instrument is consists of 46 items, each to be rated on the five-point scale (1 for Strongly Disagree to 5 for Strongly Agree). From the 46 items, 28 items are true-keyed and 18 items are reversed. After the data collections the false-keyed items will have reversed weights. The items are generally about all the aspects of Occupational stress at the workplace. The sub-dimensions of Occupational stress are role over-load, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for persons, under participation, powerlessness, poor peer relations, intrinsic, impoverishment, low status, strenuous working conditions and unprofitability. The validity of the instrument showed 0.935 Cronbach's Alpha, by the developers of the scale, and it found to be suitable to be used in Non-Governmental Organizations as well.

3.3 Procedure

Due to the health crisis situation of COVID-19, the survey was turned into a google form for employees to complete whilst working from home and was evidently found that online forms are superior to hard copy surveys since not only they are more reliable; due to the fact that the collected data is collected together, is more convenient to distribute, but they also are environmentally friendly since no paper is used in the process.

3.4 Data Analysis

The items have been transformed to one variable to form sub-dimensions of Occupational Stress, in order to compare between the sub-dimensions of Occupational index and to identify the sub-dimensions which are the main sources of Occupational stress. The researcher used descriptive analysis, Independent sample t-test to compare one continuous variable between two categorical variables. Moreover, under factor analysis, Principal component Analysis has been used to assess the possibility of reducing the factors of the scale and how many components is suitable to be retained in the current sample of the study.

4. Findings and Interpretation

4.1 Demographics

The demographics of the study was analysed, and it showed that there were in total 125 respondents, 79 male and 46 Female cases. Moreover, the age distribution was as the table below. Majority of the respondents were young and under 29 years old.

Table 4.1 Descriptive of Demographics

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 18-23	5	4.0	4.0	4.0
	2 24-29	71	56.8	56.8	60.8
	3 30-25	14	11.2	11.2	72.0
	4 36-41	22	17.6	17.6	89.6
	5 +42	13	10.4	10.4	100.0
Total		125	100.0	100.0	

4.2 Descriptive analysis of the occupational stress dimensions

Table 4.2 Descriptive of OS dimensions

	Descriptive Statistics								
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
RoleOverload	125	2.00	4.33	3.3440	.55711	-.375	.217	-.365	.430
RoleAmbiguity	125	1.25	4.50	2.8220	.68892	.216	.217	-.067	.430
Roleconflict	125	1.80	4.20	3.0208	.52965	-.114	.217	-.507	.430
Politicalpressure	125	1.75	4.50	2.9840	.55788	.104	.217	-.378	.430
Responsibilityofpersons	125	1.33	5.00	3.1067	.89061	.073	.217	-.672	.430
Underparticipation	125	1.50	4.75	3.0500	.62217	.001	.217	-.273	.430
Powerlessness	125	1.67	4.67	3.5387	.80521	-.254	.217	-.958	.430
Peergrouprelations	125	1.50	5.00	3.1680	.66507	.135	.217	-.192	.430
Intrinsicimpoverishment	125	2.00	5.00	3.5420	.58865	-.111	.217	-.190	.430
Lowstatus	125	1.67	4.67	3.3733	.58598	-.159	.217	.037	.430
Strenuousworkingcondition	125	1.25	4.50	2.9700	.70896	-.206	.217	-.278	.430
Unprofitability	125	1.00	5.00	3.2080	.94225	.305	.217	-.324	.430
Valid N (listwise)	125								

According to Table 4.2, it shows the level of each sub-dimension of Occupational stress. The main sources of occupational stress according to the means of the sub-dimensions are Intrinsic impoverishment, Powerlessness, Low status, Role overload, and peer group relations. The data of all the sub-dimensions are normally distributed as the statistic under skewness are in between +1 and -1.

Table 4.3 Descriptive analysis of Total occupational stress index

	Descriptive Statistics								
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TOccupStr	125	2.64	3.68	3.1773	.21555	-.072	.217	-.222	.430
Valid N (listwise)	125								

Table 4.3 shows the total occupational stress index mean is 3.17, which basically does not show a high level of stress but still within the ranges of concern, among the employees of the two Non-governmental employees and the data is asymmetrically distributed.

4.3 Sub-dimensions Comparison of Means

The table below 4.4 is the comparison of means between genders of the study. The sub-dimensions with the total occupational index have been compared using Independent Sample T-test. The results show

that there are no significant difference between male and female in terms of occupational stress index as the T-test of all the sub-dimensions of occupational stress was insignificant $P>0.05$.

Moreover, another comparison using one-way ANOVA has been used to test whether there is a significant difference between the different groups of Age in terms of Total occupational stress Index, Table 4.5 shows also there is no significant different among the different groups of Age in terms of total Occupational stress. Since the ANOVA table is insignificant, all the comparison of post-hoc test between the groups of ages is also insignificant $P>0.05$.

Table 4.4 Independent sample T-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
RoleOverload	Equal variances assumed	.415	.521	-.667	123	.506	-.06912	.10356	-.27410	.13587
	Equal variances not assumed			-.681	100.308	.497	-.06912	.10143	-.27034	.13211
RoleAmbiguity	Equal variances assumed	3.457	.065	-.655	123	.514	-.08386	.12807	-.33736	.16964
	Equal variances not assumed			-.704	114.570	.483	-.08386	.11916	-.31991	.15218
Roleconflict	Equal variances assumed	3.454	.065	-1.066	123	.288	-.10468	.09818	-.29902	.08966
	Equal variances not assumed			-1.131	111.296	.260	-.10468	.09253	-.28803	.07867
Politicalpressure	Equal variances assumed	.019	.889	-.161	123	.872	-.01672	.10388	-.22233	.18890
	Equal variances not assumed			-.161	94.469	.872	-.01672	.10379	-.22278	.18935
Responsibilityofpersons	Equal variances assumed	3.998	.048	.119	123	.906	.01972	.16584	-.30855	.34799
	Equal variances not assumed			.111	76.887	.912	.01972	.17702	-.33277	.37221
Underparticipation	Equal variances assumed	.120	.730	.535	123	.594	.06192	.11572	-.16715	.29099
	Equal variances not assumed			.529	90.926	.598	.06192	.11707	-.17063	.29446
Powerlessness	Equal variances assumed	.273	.602	.408	123	.684	.06118	.14984	-.23542	.35778
	Equal variances not assumed			.399	87.416	.691	.06118	.15350	-.24390	.36626
Peergrouprelations	Equal variances assumed	.443	.507	-.214	123	.831	-.02655	.12382	-.27166	.21855
	Equal variances not assumed			-.221	103.334	.825	-.02655	.12004	-.26461	.21150
Intrinsicimpoverishment	Equal variances assumed	1.359	.246	1.003	123	.318	.10945	.10917	-.10665	.32555
	Equal variances not assumed			1.041	105.225	.300	.10945	.10515	-.09903	.31793
Lowstatus	Equal variances assumed	.748	.389	-.261	123	.795	-.02844	.10909	-.24437	.18750
	Equal variances not assumed			-.248	80.820	.805	-.02844	.11459	-.25643	.19956
Strenuousworkingcondition	Equal variances assumed	.056	.813	-.164	123	.870	-.02167	.13201	-.28297	.23963
	Equal variances not assumed			-.163	92.248	.871	-.02167	.13292	-.28565	.24231
Unprofitability	Equal variances assumed	.258	.613	.898	123	.371	.15713	.17489	-.18906	.50331
	Equal variances not assumed			.903	95.853	.369	.15713	.17392	-.18810	.50236
TOccupStr	Equal variances assumed	.146	.703	.121	123	.904	.00486	.04014	-.07459	.08431
	Equal variances not assumed			.123	98.125	.903	.00486	.03961	-.07373	.08346

Table 4.5 – One-way ANOVA

ANOVA

TOccupStr

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.208	4	.052	1.126	.347
Within Groups	5.553	120	.046		
Total	5.761	124			

Table 4.6 – Post Hoc test using Tukey

Multiple Comparisons

Dependent Variable: TOccupStr

Tukey HSD

(I) Age Age	(J) Age Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
1 18-23	2 24-29	.16513	.09953	.463	-.1105	.4408	
	3 30-25	.20474	.11207	.363	-.1057	.5151	
	4 36-41	.13702	.10658	.701	-.1582	.4322	
	5 +42	.21566	.11320	.320	-.0979	.5292	
	2 24-29	1 18-23	-.16513	.09953	.463	-.4408	.1105
2 24-29	3 30-25	.03962	.06291	.970	-.1346	.2138	
	4 36-41	-.02810	.05249	.983	-.1735	.1173	
	5 +42	.05054	.06489	.936	-.1292	.2303	
	3 30-25	1 18-23	-.20474	.11207	.363	-.5151	.1057
3 30-25	2 24-29	-.03962	.06291	.970	-.2138	.1346	
	4 36-41	-.06772	.07354	.888	-.2714	.1360	
	5 +42	.01092	.08285	1.000	-.2186	.2404	
	4 36-41	1 18-23	-.13702	.10658	.701	-.4322	.1582
	2 24-29	.02810	.05249	.983	-.1173	.1735	
4 36-41	3 30-25	.06772	.07354	.888	-.1360	.2714	
	5 +42	.07864	.07525	.834	-.1298	.2871	
	5 +42	1 18-23	-.21566	.11320	.320	-.5292	.0979
	2 24-29	-.05054	.06489	.936	-.2303	.1292	
5 +42	3 30-25	-.01092	.08285	1.000	-.2404	.2186	
	4 36-41	-.07864	.07525	.834	-.2871	.1298	

4.4 Factor Analysis

The 46 items of Occupational Stress Index (OSI) were analysed using principal components analysis (PCA). According to Table 4.7 shows a low value of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .406, probably because the sample is less than 150 cases, but Bartlett's test of sphericity is significant with $P=.000$, which supports the factorability of the correlation's matrix.

Table 4.7 – KMO and Bartlett's test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.407
Bartlett's Test of Sphericity	Approx. Chi-Square	1318.863
	df	1035
	Sig.	.000

PCA analysis showed the presence of 20 components with eigenvalue exceeding 1 according to Kaiser's criterion explains %71.1 of the variance as %cumulative. Moreover, reference to Table 4.8, when checking the component Matrix, more factors are loaded on the first 9 components which can also indicate 9 components to be suitable as number of factors to be retained in the study, Table 4.10 shows the item loadings of the factors on the 9 components. The 9 factors compared to the number of factors in the original scale was 12 factors. However, the sample used in this study shows 9 factors to be more suitable to be retained. The 9 components of factors if retained, it explains %40.1 of total variance.

Table 4.8 – Component Matrix – Kaiser's Criterion with 20 components

	Component Matrix ^a																			
	Component																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
OSI33 33	-.666																			
OSI4555 45	-.644					-.316														
OSI31 31	.567			.444																
OSI4666 46	.546			.436	-.315							.314								
OSI23 23	-.397						.326													
OSI2 2	.387							-.331												
OSI14 14		-.419						.351												
OSI34 34		-.390						.315										.340		
OSI25 25		.371		.308					-.324			.320								
OSI28 28		.355			.336		.327													
OSI9 9			.515																	
OSI12 12		-.302	-.472		.373															
OSI433 43			.435															.316		
OSI444 44			-.324							.300										
OSI400 40			.319			-.305														
OSI3 3				-.466																.335
OSI22 22				.438										.403						
OSI17 17				.348								.308								
OSI4 4					-.561															
OSI7 7					.409													.351		-.341
OSI29 29				.322	.365	.338			.327			-.312								
OSI32 32						-.394				.383	-.320									
OSI11 11		.323				.392							-.331							
OSI24 24			.324			.385														
OSI388 38		.304				-.334														
OSI399 39				-.306		.333														
OSI1 1		.406					.451													-.305
OSI18 18	-.328						.338	.303							.329					
OSI10 10								.447						-.385						
OSI37 37								.333							.304					
OSI36 36									.402											
OSI422 42								-.358		.463										
OSI20 20		.354										-.409								
OSI26 26		.306							.314	.323		.370								
OSI16 16							-.304					.342								
OSI6 6								.309					.314							
OSI30 30								-.320	.357					.423						
OSI4111 41			-.316								-.369		.386							
OSI21 21			-.311		-.312		-.332													
OSI19 19	.321														.459					
OSI27 27			.445												.390					
OSI15 15						.397	-.390								.456					
OSI13 13															.413	.317				
OSI8 8																.693			.352	
OSI35 35				-.313		.326			.338			-.329								.413
OSI5 5																				.304

Extraction Method: Principal Component Analysis.
a. 20 components extracted.

Table 4.9 – Component Matrix – Fixed number of factors as 9 Factors

	Component Matrix ^a								
	1	2	3	4	5	6	7	8	9
OSI33 33	-.666								
OSI4555 45	-.644								
OSI31 31	.567			.444					
OSI4666 46	.546			.436	-.315				
OSI23 23	-.397						.326		
OSI2 2	.387							-.331	
OSI19 19	.321								
OSI14 14		-.419						.351	
OSI34 34		-.390					.315		
OSI25 25		.371	.308						
OSI28 28		.355			.336		.327		
OSI20 20		.354							
OSI9 9			.515						
OSI12 12		-.302	-.472		.373				
OSI27 27			.445						
OSI433 43			.435						
OSI444 44			-.324						
OSI400 40			.319			-.305			
OSI4111 41			-.316						
OSI3 3				-.466					
OSI22 22				.438					
OSI17 17				.348					
OSI35 35				-.313					
OSI4 4					-.561				
OSI7 7					.409				
OSI29 29				.322	.365	.338			.327
OSI15 15						.397	-.390		
OSI32 32						-.394			
OSI11 11		.323				.392			
OSI24 24				.324		.385			
OSI388 38		.304				-.334			
OSI399 39				-.306		.333			
OSI1 1		.406					.451		
OSI18 18	-.328						.338	.303	
OSI21 21			-.311		-.312		-.332		
OSI16 16							-.304		
OSI5 5									
OSI13 13									
OSI10 10								.447	
OSI422 42								-.358	
OSI37 37								.333	
OSI36 36									.402
OSI8 8						.326			.338
OSI26 26		.306						.314	.323
OSI30 30									-.320
OSI6 6									.309

Extraction Method: Principal Component Analysis.
a. 9 components extracted.

Conclusion

According to the data analysis of the findings of this study, it shows the main sources of Occupational stress comes from Intrinsic impoverishment, the feeling of being Powerlessness, having the feeling of having Low status compared to the superior, having more than one duty and role which is Role overload, and issues that occur between the co-workers and peer group relations. Moreover, the total mean of occupational stress index is 3.17, which in fact is not a high level of stress level, but it needs to be considered as it is within the concern range. Based on the tables of Independent sample t-test shows there is no significant difference between the genders of the study in terms of the sub-dimensions and total dimension of occupational stress. Finally, One-Way ANOVA has been performed to test whether there is a significant different among the groups of age of employees in terms of Stress level, results showed no significant difference. Overall, the results indicate a moderate level of stress exists among the employees of Non-Governmental Employees during the Pandemic Covid-19 virus and Factor analysis result show that the number of factors according to the current sample can be reduced to nine

factors. The researcher recommends the NGOs to pay close attention to the sources of stress and work on the reducing the stressors which comes from the workplace. Moreover, to further research can focus on the post-covid workplace stress of the employees of NGOs and compare to compare the findings with the findings of the current research results.

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