Emotional Labour at Workplace in metropolitan families: Logit analysis

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"The state of literature shows that affect (another term for emotion used in organizational behavior studies) matters because people are not isolated "emotion islands" rather they bring all of themselves to work including their traits , moods and emotion and their affective experiences influence others." according to paper coauthoredby*Donald Gibson*of Fairfield university Dolan School of Business. An affective revolution has occurred over the last 30 years of academics and managers alike have come to realize that Emotions in the workplace play a large role in an organization says *Barsade* who has been doing research in the area of emotions and work dynamics for 15 years. Everybody brings their emotion to work. You bring your brain to work you bring your emotions to work feelings drive performance they drive behavior and other feelings, think of people as emotion conductors". (**Ashkanasy, 2000**)

Emotion in the workplace plays an efficient role in how an organization communicates within itself and to the outside world." Events at work have real emotional impact on participants. The consequences of emotional states in the workplace both behavioral and attitudinal have substantial significance for individuals, groups and society .Positive emotions in the workplace help employees obtain favorable outcomes such achievement, job enrichment and higher quality social status.Negative emotions such as fear anger stress hostility sadness and guilt however increase the predictability of workplace deviance and how the outside world views the organization.

In the past emotions were ignored in the study of organizational behavior (**Arvey ,Renz & Watson ,1998,Putnam & Mumby 1993).**The workplace was viewed as a rational environment where emotions would get in the way of sound judgement.thus emotions were not even considered as explanations for workplace phenomeneon.This view is being dismantled as more researchers are finding how workplace emotions help to explain important individual and organizational outcome (**Arvey et al ,1998)**

Gender differences are often a topic of interest and the area of emotional labour is no exception. **Hoschild 1983** pointed out that majority of service jobs are performed by women and as such gender becomes an issue for emotional labour.**Wharton and Erickson 1993** also discussed how women are more likely to manage emotions at work as well as home. If women engage in more emotion management situations perhaps they are better at managing emotions (so performance would be better) but they would be engaging in more suppression of true feelings (so stress would be higher) **Kruml and geddes (1998)** found a relationship between gender and emotional dissonance in that women were more likely to report feeling differently than they expressed .it is unclear if this means that men are showing emotions that are inappropraiate for the job or simply not feeling discrepant emotions.In line with the first poiunt one study suggested that men and women have different motivesv for regulating emotions in that women are more concerned with getting along whereas men are more motivated to stay in control and express powerful emotion such as anger or pride (**Timmers ,Fischer &Manstead 1998)** however in customer service sretting men need to manage their emotions.

Sociologists have measured emotion management in many ways –from using occupational characteristics (eg. service oriented or not) to items measuring the extent to which workers mask their feelings and act friendly or nice ,to analyzing the specific types of emotions that workers manage at work. The general emotional management measures assess the extent to which the emotional labour is defined as the management of feelings to create a publicly worker hide their true feelings while working and act friendly and pleasant around others, regardless of how they genuinely feel. Respondents were asked to indicate how much they agree or disagree with the following statements mentioned in Table.

Table:

Gender
Nature of Job
I express my feelings freely when I go to work
I am unable to express my true feeling to the people I work with
At work I keep my emotions to myself
There is lot of variety in the kinds of things I do at work
I keep learning new things in my job
My job requires that I do same things over and over
My supervisor decides how my work tasks should be done
The way I act at work is very different from the way I act at home
I feel that I cannot express my true self when I am at work
I basically have to become a different person when I at work
I often have trouble understanding my emotions sometimes
I am in touch with my emotions and when I am at work

Categorical Analysis of the Respondents in the Respect of Emotional Labour

Two sections (Emotional labour of the Male and Female) appear in the output: **Group Statistics** and **hypothesis Test**. The first section, **Group Statistics**, provides basic information about the group comparisons, including the sample size (*500*), mean, standard deviation, and standard error for group. In this example, there are 250 male and 250 female (126 Reproductive and 124 Post Reproductive) effected by emotional labour of the government and private sectors Employees. The mean mile time for athletes is 6 minutes 51 seconds, and the mean mile time for non-athletes is 9 minutes 6 seconds.

The null hypothesis (H_0) and alternative hypothesis (H_1) of the Independent Samples *t* Test can be expressed in two different but equivalent ways:

H_0: $\mu_1 =$ μ_2 ("the   two   population   means   are   equal")
H_1: $\mu_1 \neq \mu_2$ ("the two population means are not equal")

   OR

H_0: μ_1 - μ_2 = 0 ("the difference between the two population means is equal to 0")

H_1: μ_1 - $\mu_2 \neq$ 0 ("the difference between the two population means is not 0")

where μ_1 and μ_2 are the population means for group 1 (Male) and group 2 (Female), respectively. Notice that the second set of hypotheses can be derived from the first set by simply subtracting μ_2 from both sides of the equation.

Group statistic of the Male and Female (Emotional Labour) in the Respect of Nature of Job, I am unable to express my true feeling to the people I work with, I keep learning new things in my job, I often have trouble understanding my emotions sometimes, &I basically have to become a different person when I at work. Having the mean values of male and female respectively (0.00 & 1.4920, 1.4920 & 1.5000, 2.5480 & 4.4960, 3.0160 & 4.6760, 3.2000 & 4.4960, 3.8440 & 4.000). We can see that the high values of means having high in the female respondents.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Women	Male	250	.000	.0000	.0000
	Female	250	1.4920	.51672	.03268
Nature of Job	Male	250	1.4920	.50094	.03168
	Female	250	1.5000	.50100	.03169
I am unable to express my true feeling to the people I work with	Male	250	2.5480	.98569	.06234
	Female	250	4.4960	.76178	.04818
I keep learning new things in my job	Male	250	3.0160	.60764	.03843
	Female	250	4.6760	.46894	.02966
I often have trouble understanding my emotions sometimes	Male	250	3.2000	.70569	.04463
	Female	250	4.4960	.76178	.04818
I basically have to become a different person when I at work	Male	250	3.8440	.89827	.05681
	Female	250	4.0000	.82628	.05226

Levene's Test for Equality of of Variances:

Recall that the Independent Samples *t* Test requires the assumption of *homogeneity of variance --* i.e., both groups (Male and Female) have the same variance. SPSS conveniently includes a test for the homogeneity of variance, called **Levene's Test**, whenever you run an independent samples T test.

The hypotheses for Levene's test are:

H_0: σ_1^2 - σ_2^2 = 0 ("the population variances of group 1 and 2 are equal")
H_1: σ_1^2 - $\sigma_2^2 \neq 0$ ("the population variances of group 1 and 2 are not equal")

This implies that if we reject the null hypothesis of Levene's Test, it suggests that the variances of the two groups are not equal; i.e., that the homogeneity of variances assumption is violated.

The output in the Independent Samples Test table includes two rows: Equal variances assumed and Equal variances not assumed. If Levene's test indicates that the variances are equal across the two groups (i.e., *p*-value large), you will rely on the first row of output, Equal variances assumed, when you look at the results for the actual Independent Samples *t* Test (under *t*-test for Equality of Means). If Levene's test indicates that the variances are not equal across the two groups (i.e., *p*-value small), you will need to rely on the second row of output, Equal variances not assumed, when you look at the results of the Independent Samples *t* Test (under the heading *t*-test for Equality of Means).

The difference between these two rows of output lies in the way the independent samples *t* test statistic is calculated. When equal variances are assumed, the calculation uses pooled variances; when equal variances cannot be assumed, the calculation utilizes un-pooled variances and a correction to the degrees of freedom.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Women	Equal variances assumed	2149.245	.000	-43.685	498	.000	-1.48000	.03388	-1.54656	-1.41344
	Equal variances not assumed			-43.685	285.977	.000	-1.48000	.03388	-1.54668	-1.41332
Nature of Job	Equal variances assumed	.064	.801	-.179	498	.858	-.00800	.04481	-.09604	.08004
	Equal variances not assumed			-.179	498.000	.858	-.00800	.04481	-.09604	.08004
I am unable to express my true feeling to the people I work with	Equal variances assumed	21.270	.000	-24.725	498	.000	-1.94800	.07879	-2.10280	-1.79320
	Equal variances not assumed			-24.725	468.235	.000	-1.94800	.07879	-2.10282	-1.79318
I keep learning new things in my job	Equal variances assumed	5.411	.000	-34.196	498	.000	-1.66000	.04854	-1.75538	-1.56462
	Equal variances not assumed			-34.196	467.940	.000	-1.66000	.04854	-1.75539	-1.56461

		F	Sig.	t	df	Sig.	Mean Diff	Std. Error	Lower	Upper
I often have trouble understanding my emotions sometimes	Equal variances assumed	6.822	.001	-19.734	498	.000	-1.29600	.06567	-1.42503	-1.16697
	Equal variances not assumed			-19.734	495.115	.000	-1.29600	.06567	-1.42504	-1.16696
I basically have to become a different person when I at work	Equal variances assumed	17.010	.000	-2.021	498	.044	-.15600	.07719	-.30766	-.00434
	Equal variances not assumed			-2.021	494.564	.044	-.15600	.07719	-.30766	-.00434

The *p*-value of Levene's test is in analysis table is .000, .801, .000, .000.001 .000 (but should be read as $p < 0.001$ -- i.e., *p* very small), so we we reject the null of Levene's test but nature of job is accepted the null hypothesis and conclude that the variance in Emotional labour for women (Reproductive and Post Reproductive) is significantly different than that of Male. **This tells us that we should look at the "Equal variances not assumed" row for the t-test (and corresponding confidence interval) results**.

Since $p < .001$ is less than our chosen significance level $\alpha = 0.05$, we can reject the null hypothesis, and conclude that the mean the variance in Emotional labour for women (Reproductive and Post Reproductive) is significantly different than that of Male. Based on the results, we can state the following:

1. **Female (Reproductive and Post Reproductive)**

- There is a significant difference in mean variance of Emotional labour for women (Reproductive is significantly different than that Post Reproductive). ($t_{285.977} = - 43.685$, $p < .001$).
- The average difference between decision about the emotional labour for Female Reproductive and Post Reproductive have -1.48000.

2. **I am unable to express my true feeling to the people I work with**

There is a significant difference in mean variance of I am unable to express my true feeling to the people I work with for female is significantly different from Male in the respect of emotional labor. ($t_{468.23}$= - 24.725, $p<$ .001).

The average mean difference between decision about the emotional labour "I am unable to express my true feeling to the people I work with" for Female have -1.94800.

3. I keep learning new things in my job

There is a significant difference in mean variance of "I keep learning new things in my job"
for female is significantly different from Male in the respect of emotional labor. ($t_{467.940}$= - 34.196, $p<$ .001).

The average meandifference between decision about the emotional labour "I keep learning new things in my job" for Female have -1.66000.

4.I often have trouble understanding

There is a significant difference in mean variance of "I often have trouble understanding" for female is significantly different from Male in the respect of emotional labor. (t_{498}= - 19.734, $p<$ .001).

The average mean difference between decision about the emotional labour "I often have trouble understanding" for Female have -1.29600.

4. I basically have to become a different person when I at work

There is a significant difference in mean variance of "I basically have to become a different person when I at work"for female is significantly different from Male in the respect of emotional labor. ($t_{194.564}$ = - 2.021, $p<$ .001).

The average mean difference between decision about the emotional labour "I often have trouble understanding" for Female have - .15600.

Factor analysis of Emotional labour at Work place

Factor analysis is a technique that is used to reduce a large number of variables into fewer numbers of factors. This technique extracts maximum common variance from all variables and puts them into a common score. As an index of all variables, we can use this score for further analysis. Factor analysis is part of general linear model (GLM) and this method also assumes several assumptions: there is linear relationship, there is no multicollinearity, it includes relevant variables into analysis, and there is true correlation between variables and factors.

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Gender	1.5000	.50050	500
Nature of Job	1.4960	.50048	500
I express my feelings freely when I go to work	3.0940	1.50122	500
I am unable to express my true feeling to the people I work with	3.5060	1.32116	500
At work I keep my emotions to myself	3.5020	1.12629	500
There is lot of variety in the kinds of things I do at work	3.3280	.94350	500
I keep learning new things in my job	3.8340	.99015	500
My job requires that I do same things over and over	3.5020	1.26221	500
My supervisor decides how my work tasks should be done	3.0940	1.44268	500
The way I act at work is very different from the way I act at home	2.9980	1.47321	500
I feel that I cannot express my true self when I am at work	3.8320	.98880	500
I basically have to become a different person when I at work	3.9160	.86397	500
I often have trouble understanding my emotions sometimes	3.8360	.98542	500

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My supervisor decides how my work tasks should be done	3.0940	1.44268	500
The way I act at work is very different from the way I act at home	2.9980	1.47321	500
I feel that I cannot express my true self when I am at work	3.8320	.98880	500
I basically have to become a different person when I at work	3.9160	.86397	500
I often have trouble understanding my emotions sometimes	3.8360	.98542	500
I am in touch with my emotions and when I am at work	3.5020	1.38630	500

The analysis of 500 Respondents is a table of descriptive statistics for all the variables under investigation. Typically, the mean, standard deviation and number of respondents (250 male and 250 female) who participated in the survey are given with the selected variables. Looking at the mean, one can conclude that "I basically have to become a different person when I at work" is the most important variable that influences the respondents (Male and Female) with Emotion in the workplace. It has the highest mean of 3.9160. Whereas the "I often have trouble understanding my emotions sometimes" explanatory variables have the 3.8360," I keep learning new things in my job" have the mean 3.8340. But the explanatory variables Nature of Job,

Gender, & I express my feelings freely when I go to work having the mean value of 1.4960, 1.5000, & 3.0940 respectively.

The correlation matrix;-

Correlation Matrix[a]

		Gender	Nature of Job	I express my feelings freely when I go to work	I am unable to express my true feeling to the people I work with	At work I keep my emotions to myself	There is lot of variety in the kinds of things I do at work	I keep learning new things in my job	My job requires that I do same things over and over	My supervisor decides how my work tasks should be done	The way I act at work is very different from the way I act at home	I feel that I cannot express my true self when I am at work	I basically have to become a different person when I at work	I often have trouble understanding my emotions sometimes	I am in touch with my emotions and when I am at work
Correlation	Gender	1.000	.000	.724	.756	.603	.110	.847	.287	.407	-.219	.680	.088	.679	.724
	Nature of Job	.000	1.000	-.281	-.505	.293	.359	.166	.328	-.525	.336	-.001	-.474	-.168	-.001
	I express my feelings freely when I go to work	.724	-.281	1.000	.821	.431	-.008	.523	-.006	.581	-.633	.466	.382	.518	.424

I am unable to express my true feeling to the people I work with	.756	-.505	.821	1.000	.288	-.251	.515	-.044	.465	-.506	.578	.464	.766	.504
At work I keep my emotions to myself	.603	.293	.431	.288	1.000	.114	.761	.448	-.016	.255	.833	-.309	.535	.384
There is lot of variety in the kinds of things I do at work	.110	.359	-.008	-.251	.114	1.000	-.017	.378	.089	-.020	.025	-.067	-.300	.128
I keep learning new things in my job	.847	.166	.523	.515	.761	-.017	1.000	.325	.249	.062	.663	-.218	.576	.554
My job requires that I do same things over and over	.287	.328	-.006	-.044	.448	.378	.325	1.000	-.132	.234	.447	-.208	.169	.066

My supervisor decides how my work tasks should be done	.407	-.525	.581	.465	-.016	.089	.249	-.132	1.000	-.503	.020	.265	.017	.480
The way I act at work is very different from the way I act at home	-.219	.336	-.633	-.506	.255	-.020	.062	.234	-.503	1.000	.177	-.855	.009	-.115
I feel that I cannot express my true self when I am at work	.680	-.001	.466	.578	.833	.025	.663	.447	.020	.177	1.000	-.124	.745	.494
I basically have to become a different person when I at work	.088	-.474	.382	.464	-.309	-.067	-.218	-.208	.265	-.855	-.124	1.000	.069	.027

I often have trouble understanding my emotions sometimes	.679	-.168	.518	.766	.535	-.300	.576	.169	.017	.009	.745	.069	1.000	.313
I am in touch with my emotions and when I am at work	.724	-.001	.424	.504	.384	.128	.554	.066	.480	-.115	.494	.027	.313	1.000

a. This matrix is not positive definite.

The correlation matrix Anlysis;-

The next output from the analysis is the correlation coefficient. A correlation matrix is simple a rectangular array of numbers which gives the correlation coefficients between a single variable and every other variables in the investigation. The correlation coefficient between a variable and itself is always 1, hence the principal diagonal of the correlation matrix contains 1 (See Red Line in the Table 2 below). The correlation coefficients above and below the principal diagonal are the same. The determinant of the correlation matrix is shown at the foot of the table below.

With respect to Correlation Matrix if any pair of variables has a value less than 0.5, consider dropping one of them from the analysis (by repeating the factor analysis test in SPSS by removing variables whose value is less than 0.5). The off-diagonal elements (The values on the left and right side of diagonal in the table below) should all be very small (close to zero) in a good model. the correlation between I basically have to become a different person when I at work & Gender having coefficient value 0.088, and most of the explanatory variable have the

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coefficient value are nearer to zero hence the model is strong and al the explanatory variables playing significant role to determine Emotion labour in the workplace in the respondants.

Communalities;-

Communalities

	Initial	Extraction
Gender	1.000	.913
Nature of Job	1.000	.662
I express my feelings freely when I go to work	1.000	.830
I am unable to express my true feeling to the people I work with	1.000	.963
At work I keep my emotions to myself	1.000	.815
There is lot of variety in the kinds of things I do at work	1.000	.803
I keep learning new things in my job	1.000	.818
My job requires that I do same things over and over	1.000	.658
My supervisor decides how my work tasks should be done	1.000	.848
The way I act at work is very different from the way I act at home	1.000	.922
I feel that I cannot express my true self when I am at work	1.000	.856
I basically have to become a different person when I at work	1.000	.887
I often have trouble understanding my emotions sometimes	1.000	.883
I am in touch with my emotions and when I am at work	1.000	.732

Extraction Method: Principal Component Analysis.

Communalities Analysis;-

The next item from the output is a table of communalities which shows how much of the variance (i.e. the communality value which should be more than 0.5 to be considered for further analysis. Else these variables are to be removed from further steps factor analysis) in the variables has been accounted for by the extracted factors. For instance over 96.3 % of the variance in "I am unable to express my true feeling to the people I work with" is accounted for, while 66.2 % of the variance in "Nature of Job" is accounted for Emotional labour at work place.

14 explanatory variables are playing to significant role to determine emotional labour at work place.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.506	39.327	39.327	5.506	39.327	39.327
2	3.429	24.496	63.823	3.429	24.496	63.823
3	1.597	11.405	75.227	1.597	11.405	75.227
4	1.058	7.556	82.783	1.058	7.556	82.783
5	.740	5.283	88.066			
6	.536	3.830	91.896			
7	.434	3.102	94.998			
8	.325	2.318	97.316			
9	.196	1.401	98.718			
10	.102	.730	99.448			
11	.053	.376	99.825			
12	.024	.168	99.992			
13	.001	.008	100.000			
14	1.779E-15	1.271E-14	100.000			

Extraction Method: Principal Component Analysis.

Total variance explained;-

Eigenvalue actually reflects the number of extracted factors whose sum should be equal to number of items which are subjected to factor analysis. The next item shows all the factors extractable from the analysis along with their eigenvalues.The Eigenvalue table has been divided into three sub-sections, i.e. Initial Eigen Values, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings. For analysis and interpretation purpose we are only concerned with Extracted Sums of Squared Loadings. Here one should note that Notice that the first factor accounts for 39.327 % of the variance, the second 24.496 %, the third 11.405% & the

Fourth 7.556. That have Extraction Sums of Squared Loadings percentage values are 39.32, 24.496, 11.405, & 7.556 respectively. And the Cumulative percentages of the all four variables have respectively 39.327, 63.823, 75.227 & 82.783. All the remaining factors are not significant.
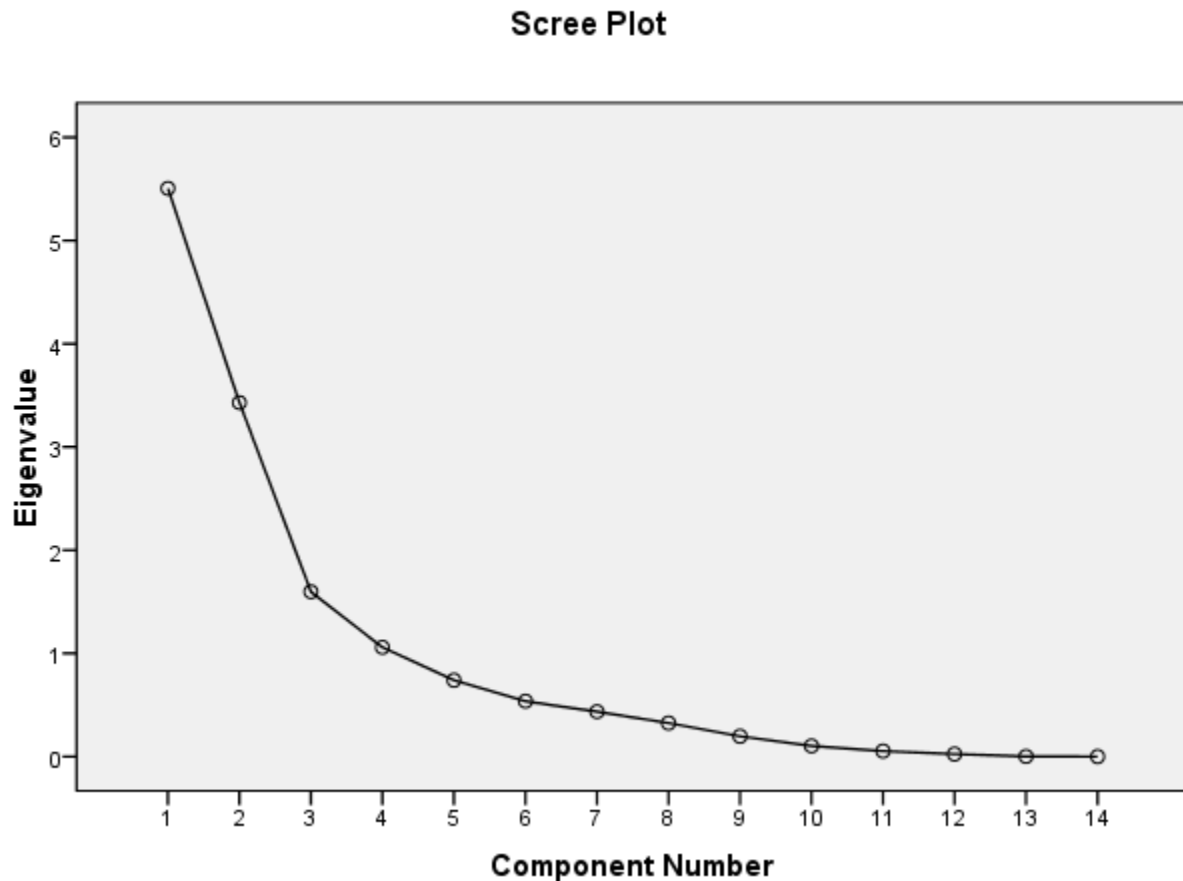
Scree Plot

Scree plot;-

The scree plot is a graph of the eigenvalues against all the factors. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between factors 3 and 4. Note also that factor 4 onwards have an eigenvalue of less than 1, so only four factors have been retained.

Component Matrix^a

	Component			
	1	2	3	4
Gender	.937	.098	.148	-.054
Nature of Job	-.181	.708	.327	.142
I express my feelings freely when I go to work	.825	-.354	.129	.087
I am unable to express my true feeling to the people I work with	.867	-.400	-.209	.086
At work I keep my emotions to myself	.674	.597	-.017	.066
There is lot of variety in the kinds of things I do at work	-.026	.255	.847	.138
I keep learning new things in my job	.807	.371	.011	-.170
My job requires that I do same things over and over	.242	.575	.304	.421
My supervisor decides how my work tasks should be done	.457	-.527	.366	-.477
The way I act at work is very different from the way I act at home	-.279	.807	-.329	-.290
I feel that I cannot express my true self when I am at work	.793	.417	-.179	.148
I basically have to become a different person when I at work	.174	-.791	.114	.467
I often have trouble understanding my emotions sometimes	.766	.115	-.488	.212
I am in touch with my emotions and when I am at work	.682	.040	.269	-.440

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Component Matrix analysis;-

The Above table below shows the loadings (extracted values of each item under 4 variables) of the 14 explanatory variables on the four factors extracted. The higher the absolute value of the loading, the more the factor contributes to the variable (We have extracted three variables wherein the 14 items are divided into 04 variables according to most important items which

similar responses in component 1 and simultaneously in component 2, 3 and 4). The gap (empty spaces) on the table represent loadings that are less than 0.5, this makes reading the table easier. We suppressed all loadings less than 0.5.

Conclusion:

It was observed that the high values of means were for female respondents which clearly indicated that they suffered from emotional labour at workplace more in comparision to men. However significant difference was observed between reproductive and post reproductive group among femalesFactorial analysis revealed that "I basically have to become a different person when I at work" is the most important variable that influences the respondents (Male and Female) with Emotion in the workplace. It has the highest mean of 3.9160. Whereas the "I often have trouble understanding my emotions sometimes" explanatory variables have the 3.8360," I keep learning new things in my job" have the mean 3.8340. But the explanatory variables Nature of Job, Gender, & I express my feelings freely when I go to work having the mean value of 1.4960, 1.5000, & 3.0940 respectively. Correlation matrix analysis revealed thatthe correlation between I basically have to become a different person when I at work & Gender having coefficient value 0.088, and most of the explanatory variable have the coefficient value are nearer to zero hence the model is strong and al the explanatory variables playing significant role to determine Emotion labour in the workplace in the respondants.Communality analysis revealed that over 96.3 % of the variance in "I am unable to express my true feeling to the people I work with" is accounted for, while 66.2 % of the variance in "Nature of Job" is accounted for Emotional labour at work place.

Being able to not only control your emotions but gauge the emotions of those around you and affective influence them is imperative to success in the workplace," Toxicity in the workplace is a regular occurrence and an occupational hazard .that is why the success of many projects and organizations itself depend on the handle one can conclude that the ability to effectively deal with emotion and emotional information in the workplace assist employees in managing occupational stress and maintaining psychological well being.

Resources

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