

Depression - An Indication of Work- family Conflict among Academic Women Employees.

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Abstract:

This study deals with the relationship and the effect of the demographic profile (namely age, no of children / dependents, education and designation) with depression. Data was collected from university teaching faculty with the sample size of 123. Questionnaires were distributed and statistical analysis was carried out on the collected data. Results prove that depression exists among all age groups, of no of children, educational background, no of dependents with significant differences.

Keywords: Depression, Demographic profile

Introduction:

An individual's life is filled with emotional fluctuations. When these ups and downs are long lasting and interfere with the individual's ability to function normally we may say that the person is suffering from a serious psychological problem, namely depression. Depression may be called as a whole body illness, involving both physical and mental aspect.

Researchers have proved for long time that women are subjected to higher degree of depression than men. The factors that contribute to the above phenomenon include reproductive, hormonal, gender and other biological factors.

Role Conflict arises when there are more than one role, conflict between or among of several roles results in Role Conflict. (Pearlin 1983). The study is concerned with the relationship of Depression and work family conflict (roles between work and family domains). This includes major responsibilities at home and at work.

Employment pressures in the work domain and care for the children, elderly and other dependents in the family domains are often highly demanding and invariably incompatible with each other. (Chisholm 199; Hallman & Joseph 1999).

Review of Literature:

Work life balance centre has conducted 24/7 survey which came out with an alarming high increase in the depression symptoms for women in stressful working environment. This increase rose to 49% in 2005/06 from 40 % in 2004 /05.

Work and family roles strains the psychological well being of women (Davis & McAlphine 1918), resulting in role conflict. Study conducted by Allen (2000) states that this conflict results in dissatisfaction, depression and bad physical health. In another community study of women with higher educational attainment, having child / children and maternal role were to be selected to study work family conflict among employed women. . Stress is linked to depression in women (Googins 191) and also to physical distress such as insomnia, changes in appetite, tension related aches and pains (Guelzow, Bird & Koball 1991). In addition, several studies have already demonstrated the detrimental effects of work-family conflict on psychological distress and depression, demonstrating that increased conflict is associated with decreased psychological health (e.g., Beatty, 1996; Frone, 2000; Frone, Russell,

& Cooper, 1991; Kinnunen & Mauno, 1998; Major, Klein, & Ehrhart, 2002; Stephens et al., 1997; Thomas & Ganster, 1995). For example, Thomas and Ganster (1995) found that individuals with child-care responsibilities experienced more depression as their overall work-family conflict increased.

Contrarily in a study conducted by Kannai showed that work-family conflict was not at all significantly selected to depression. However most of the studies did not have information on demographic profile which includes Age. No of children, educational qualification and its effect on depression taking into consideration the role of work family conflict.

University employees tend to undergo greater dissatisfaction with work family interface than corporate employees because colleges and university lag far behind industry in adopting family friendly policies. (Thompson & Kline 1999/2000). Academic faculty enjoys high levels of autonomy and flexibility at the cost of ambiguous criteria for success and unfinished work load for ever (Bailyn 193. Gapa & MacDermid 1977).

Objectives of the study:

- To study the difference in the level of depression among various demographic factors of respondents.
- To study the relationship between work life conflict and depression. and
- To find out the impact of work life conflict on the level of depression

Method

Questionnaires were distributed to university teaching faculty under convenience sampling method. Nearly two hundred respondents were targeted at the population size of 620 employees the women faculty constituted nearly four hundred and odd out of which two hundred plus were married. Out of two hundred questionnaires distributed One hundred and forty five were collected of which only 124 was in a useful condition with the required filled in data.

The survey was anonymous and the privacy of the participants was guaranteed.

Symptoms of depression were evaluated using (CES_D) scale Centre for epidemiologic studies depression scale. This is a twenty item self reporting questionnaire which has been

tested, standardized and being widely used for measuring symptoms of depression in population. Respondents were asked to rate on a 4 point scale ranging from 0-3 how often they experienced each of the various depression symptoms

Sixteen of the symptoms are worded negatively and other four are positively put to avoid the possibility of a patterned response set. The CES-D is being reported to have a high internal consistency with co-efficient alpha ranging from 0.673 to 0.861. The statements are categorized into Physical, Social, Emotional and Behavioral Depressions based on the nature of the content.

Work Family Conflict Scale was made use of to collect data from the respondents. This standard set of questions consists of eighteen statements covering positive and negative statements that represent family to work conflict and work to family conflict. To test the reliability of scale, Cronbach's alpha is calculated which shows high reliability with the value of 0.772.

Demographic Profile of the Respondents

<u>Age</u>	<u>Marital Status</u>	<u>Number of Children</u>
20-29 = 84	Single/divorced - 33	1 --- 48
30-39 = 30	Married --- 90	2 -- 18
40-49 = 3		0 --- 57
50-59 = 6		
Designation		
Professor—3		
Assistant Professor----21		
Lecturer-----99		

Analysis:

Analysis of variance shows there is significant difference among the different depressions and the age groups. Age groups and Depression.

ANOVA

Table: 1

Factors		Sum of Squares	df	Mean Square	F	Sig.
Physical depression	Between Groups	24.392	3	8.131	2.151	.078
	Within Groups	307.071	119	2.580		
	Total	331.463	122			
Social depression	Between Groups	11.415	3	3.805	1.065	.367
	Within Groups	425.121	119	3.572		
	Total	436.537	122			
Emotional depression	Between Groups	57.949	3	19.316	2.521	.065
	Within Groups	508.393	119	4.272		
	Total	566.341	122			
Behavioral depression	Between Groups	69.372	3	23.124	2.396	.072
	Within Groups	1148.336	119	9.650		
	Total	1217.707	122			

In the given ANOVA depression is categorized as Physical, Social, Emotional, and Behavioral Depressions. The above table depicts that there is no significant difference between different age group of respondents at five percent significant level. It explains that because of age the level of depression does not vary. However the difference in case of social depression is less comparing to the difference level in other type of depressions that is evident from the lowest F value for social depression.

Number of children and Depression:

For finding out whether there is any significant difference between various segments of respondents based on number of children, the ANOVA test has been applied. The respondents are classified into three categories.

Table: 2
ANOVA

Factor		Sum of Squares	df	Mean Square	F	Sig.
Total Depression	Between Groups	263.904	2	131.952	2.972	.055
	Within Groups	5328.681	120	44.406		
	Total	5592.585	122			
Physical depression	Between Groups	14.950	2	7.475	2.834	.063
	Within Groups	316.513	120	2.638		
	Total	331.463	122			
Social depression	Between Groups	9.773	2	4.887	1.374	.257
	Within Groups	426.763	120	3.556		
	Total	436.537	122			
Emotional depression	Between Groups	11.763	2	5.881	1.273	.284
	Within Groups	554.579	120	4.621		
	Total	566.341	122			
Behavioral depression	Between Groups	120.395	2	60.197	6.583	.002
	Within Groups	1097.313	120	9.144		
	Total	1217.707	122			

It is inferred from the above table that except behavioral depression, there is no variation between different respondents group based on children. It shows that physical, social and emotional depressions are not depending on number of children the respondents have. At the same time the behavioral depression differs significantly between respondents with number of children. To ascertain how it varies, Duncan post hoc method is applied.

Behavioral depression			
Duncan			
Subset for alpha = 0.05			
Number of children	N	1	2
0	18	3.6667	
1	48	4.1875	
2	57		6.0000
Sig.		.493	1.000

The Duncan post hoc result reveals that respondents with a child and respondents without child belong to same category in terms of Behavioral level while respondents with two children falls in to other category. Besides, the mean value explains that those who have two children are with more behavioral depression than other two segments. Though with one child and no child categories are not significantly different, the former has scored more than the later in terms of behavioral depression level. Hence, the behavioral depression seems to increase with number of children.

Education:
Table : 3

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Total Depression	Between Groups	111.228	1	111.228	2.455	.120
	Within Groups	5481.357	121	45.300		
	Total	5592.585	122			
Physical depression	Between Groups	.906	1	.906	.332	.566
	Within Groups	330.557	121	2.732		
	Total	331.463	122			
Social depression	Between Groups	8.479	1	8.479	2.397	.124
	Within Groups	428.057	121	3.538		
	Total	436.537	122			
Emotional depression	Between Groups	11.541	1	11.541	2.517	.115
	Within Groups	554.800	121	4.585		
	Total	566.341	122			
Behavioral depression	Between Groups	10.793	1	10.793	1.082	.300
	Within Groups	1206.914	121	9.974		
	Total	1217.707	122			

In the study of variance among the educational category it is evident from the analysis that there is no significant variation on the level of depression for the various categories of educational level.

Number of Dependents:
Table : 4

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Physical depression	Between Groups	65.770	4	16.442	7.302	.000
	Within Groups	265.694	118	2.252		
	Total	331.463	122			
Social depression	Between Groups	42.162	4	10.541	3.154	.017
	Within Groups	394.374	118	3.342		
	Total	436.537	122			
Emotional depression	Between Groups	67.827	4	16.957	4.014	.004
	Within Groups	498.515	118	4.225		
	Total	566.341	122			
Behavioural depression	Between Groups	303.673	4	75.918	9.801	.000
	Within Groups	914.034	118	7.746		
	Total	1217.707	122			

The analysis of variance with the No of dependents and the depression levels show that there are significant differences within the categories. The values signify that all the four different types of depressions vary significantly among one another. To make it more evident how the depression varies with the number of dependents The Duncan post hoc is administered.

Table:4.1

Physical depression			
Duncan			
Number of dependents	N	Subset for alpha = 0.05	
		1	2
2	33	.7273	
1	39	.7692	
4	12	1.5000	
3	15	1.6000	
5	24		2.6250
Sig.		.094	1.000

The Duncan post hoc shows that that the respondents who have one , two, three, and four dependents differ significantly with the respondents with five dependents in the Physical Depression. However there is some variations in the first category but since the values are negligible it can be grouped into one and nullified.

Table:4.2

Social depression			
Duncan			
Number of dependents	N	Subset for alpha = 0.05	
		1	2
4	33	.4545	
5	39	1.4615	1.4615
1	24		1.7500
3	15		2.0000
2	12		2.0000
Sig.		.083	.402

The Duncan posthoc for the number of dependents on Social depression depicts that there is significant difference between the two categories of one, two and three dependents and four and five dependents respectively. However the respondents with five dependents fall into both the categories signifying not much variation in the Social depression.

Table : 4.3

Emotional depression			
Duncan			
Number of dependents	N	Subset for alpha = 0.05	
		1	2
3	15	2.2000	
2	33	2.4545	
1	39	2.6923	
4	12	3.0000	
5	24		4.3750
Sig.		.266	1.000

The Duncan post hoc for Emotional depression with the Number of dependents show a significant difference between the respondents with one, two, three, and four dependents and the respondents with five dependents. Though there is slight variation in the former category the Emotional depression is not prominent.

Table : 4.4

Behavioral depression				
Duncan				
Number of dependents	N	Subset for alpha = 0.05		
		1	2	3
1	33	3.3636		
2	15	3.6000		
3	39	4.7692	4.7692	
4	12		6.2500	6.2500
5	24			7.6250
Sig.		.133	.094	.119

And for the no of dependents which includes children, non earning adults and parents there is significant variation in the behavioral depression. Respondents with one, two and three dependents , respondents with three and four dependents and the respondents with four and five dependents fall into separate categories respectively significantly differing in behavioral depression . However the respondents with three dependents do not vary in its behavioral depression with the second category similarly respondents with four dependents show no significant variation in behavioral depression within the second and the third category.

Analysis of variance shows that there are significant differences in the Social, Emotional, and Behavioral Depression. However the F values signify that Emotional depression have the highest variation followed by Social and Behavioral Depression.

Table : 5

ANOVA						
Variable		Sum of Squares	df	Mean Square	F	Sig.
Total Depression	Between Groups	458.897	2	229.449	5.363	.006
	Within Groups	5133.688	120	42.781		
Physical Depression	Total	5592.585	122			
	Between Groups	5.178	2	2.589	.952	.389
	Within Groups	326.286	120	2.719		
Social Depression	Total	331.463	122			
	Between Groups	25.705	2	12.853	3.754	.026
	Within Groups	410.831	120	3.424		
	Total	436.537	122			
Emotional Depression	Between Groups	51.796	2	25.898	6.040	.003
	Within Groups	514.545	120	4.288		
	Total	566.341	122			
Behavioral Depression	Between Groups	64.590	2	32.295	3.361	.038
	Within Groups	1153.117	120	9.609		
	Total	1217.707	122			

Table : 5.1

Social depression			
Duncan			
Designation	N	Subset for alpha = 0.05	
		1	2
Professor	3	.0000	
Assistant Professors	21	1.2121	1.2121
Lecturers	99		2.2857
Sig.		.202	.258

The Duncan post hoc for the three different designations on Social depression shows significant difference and divides into two categories. However the assistant professor category respondents show no difference in the social depression within the two categories.

Table : 5.2

Emotional depression			
Duncan			
Designation	N	Subset for alpha = 0.05	
		1	2
Professor	3	.0000	
Lecturers	99		2.7879
Assistant Professors	21		4.0000
Sig.		1.000	.254

As far as emotional depression is concerned, it is evident from the above table that lecturers and assistant professors have more depression than professors. It may be because of age factor that professors are matured enough to balance their emotions. But mean value of emotional depression for assistant professors is greater than that of lecturers which is resulting from family pressures.

Table : 5.3

Behavioral depression			
Duncan			
Designation	N	Subset for alpha = 0.05	
		1	2
Professor	3	1.0000	
Lecturers	99		4.8788
Assistant professors	21		5.8571
Sig.		1.000	.538

The result of Duncan post hoc table for behavioral depression exhibits the same pattern like the result of emotional depression. Assistant professors and lecturers fall in to one set and professors in to another set. Professors have comparatively less behavioral depression than other two designations that is apparent in mean values from the above table.

Correlation of depression and work Life Conflict

It is learnt from review of literature that one of causes for depression is role conflict of a person. The bivariate correlation is adopted to understand the level and direction of relationship between role conflict and various types of depression as well as the relationship within types of depression.

Table : 6

Variable	WF	FW	TDP	Physical depression	Social depression	Emotional depression	Behavioural depression
WF	1						
FW	.323**	1					
TDP	.279**	.023	1				
Physical depression	.145	.074	.686**	1			
Social depression	.166	.082	.749**	.470**	1		
Emotional depression	.363**	.068	.716**	.283**	.447**	1	
Behavioural depression	.177	.091	.848**	.475**	.456**	.437**	1

**Correlation is significant at .01level (2 tailed)

The relationship between types of depression is highly significant and positive. The output from correlation table confirms that all types of depressions are interrelated. With reference to the relationship between work family conflict, family work conflict and types of depression, only work family conflict has significant and positive relation with total depression and emotional depression.

Regression

To measure the level of impact of role conflict on depression, the simple linear regression model is used. The total depression is taken as dependent variable and both work to family conflict and family to work conflict as dependent variables.

Table : 7

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.288 ^a	.083	.068	6.53720
a. Predictors: (Constant), fw, wf				
b. Dependent Variable: total depression				

The adjusted R square value means that only 6.8 percent of depression is explained by role conflict this is very less in terms of influence.

Table : 7.1

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	46.556	3.312		14.056	.000
	wf	.464	.141	.303	3.286	.001
	fw	.073	.090	.075	.809	.420
a. Dependent Variable: total depression						

$$\text{Total depression} = 46.556 + 0.303WF + 0.075FW$$

The regression coefficient table exposes the level of influence made by work to family conflict and family to work conflict. It confirms the correlation result as the degree of impact of work to family conflict on total depression of respondents is higher than that of family to work conflict. Moreover coefficient of work to family is significant whereas coefficient of family to work conflict is not so.

Findings:

The findings of the study reveals that there is no significant difference between the different age groups and people do not differ in their depression levels because of the age as the factor.

The Number of children does not affect the depression types except behavioral depression. The Physical, Social, and Emotional do not depend on the number of children. Infact there is some variation in the behavioral depression among the respondents with no children and one child and with those with two and more children. It is evident from the study that there is no significant variation among the respondents in their depression belonging to various educational categories.

The number of dependents as a factor taken for study reveals there is significant difference in each category of depression. Those who have found to have five dependents which can be stated as the non earning member of the family and less than that which includes one, two, three, and four dependents do have an impact on the Physical depression, Social Depression, Emotional and Behavioral depressions.

It has been observed that there is significant difference in the types of depression among the designation levels. The professor grade seems to differ from the lecturer category with assistant professor sharing both the components in the Social Depression. As far as Emotional and Behavioral Depression is concerned the lecturers and the assistant Professor do not differ much but together they differ from the Professor category.

It has been identified that there is positive and very high correlation among the different types of depression and between the work life conflict and depression. Moreover the work to family conflict is having a higher impact on total depression than family to work.

Conclusion:

Thus the present study proved that the different antecedents of demographic profile like age, designation. No of dependents was significantly related to depressive symptoms The findings from this study are useful to practitioners in a variety of ways. For instance, interventions to lessen employees' work-family conflict may reduce their depressive symptoms. Moreover, programs focusing on identifying ways not only to decrease inter role conflict but also to improve the positive spillover between work and family may benefit employees who exhibit depressive symptoms. Second, our findings highlight the need for organizational policies and programs designed to assist employees in managing their multiple work and family role demands. By implementing alternative work schedules, providing more flexibility in work schedules, and providing more dependent-care assistance, to name just a few mechanisms, employee work-family conflict may decrease, leading to decreased levels of depressive symptoms reported in the workplace. Future research is needed to examine the potential for beneficial effects of these family-friendly policies and programs on work-family positive spillover, as research suggests that the resultant decreases in depression have positive effects on employee attitudes and behaviors (Johnson & Indvik, 1997), and thus have a positive impact on organizational. This research study is confined to one organization and may not hold true for the entire industry. The respondents and the study are restricted to Indian context only. The analysis is based on the responses given and genuinity of the responses is not tested and the study is time bound and may not hold true for ever.

References :

Allen TD, Herst DEL, Bruck CS, Sutton M. Consequences associated with work-to-family conflict: A review and agenda for future research. *J Occup Health Psychol.* 2000; 5(2):278-308.

Bailyn, L. (1993). *Breaking the mold: Women, men and time in the new corporate world.* New York: The Free Press.

Chisholm, J. F. (1999). The sandwich generation. *Journal of Social Distress and the Homeless*, 8, 177-191

Davies, L., & McAlpine, D. D. (1998). The significance of family, work, and power relations for mothers' mental health.

Canadian Journal of Sociology, 23, 369-387.

Googins, B.K. (1991). *Work/family conflicts: Private lives—public responses.* New York:Auburn House.

Guelzow, M.G., Bird, G.W., & Koball, E.H. (1991). An exploratory path analysis of the stress process for dual-career men and women. *Journal of Marriage and the Family*, 53, 151-164. 12.

Gappa, J.M., & MacDermid, S.M. (1997). *Work, family, and the faculty career* (Inquiry No. 8). Washington, DC: American Association for Higher Education.

Johnson, P. R., & Indvik, J. (1997). The boomer blues: Depression in the work- place. *Public Personnel Management*, 26, 359-365.

Kanai A. Examining determinants of work-family conflict and their effects on the mental health of male and female workers. *Sangyo Soshiki Shinrigaku Kenkyu.* 2002; 15(2): 107-122. (in Japanese).

Kinnunen, U., & Mauno, S. (1998). Antecedents and outcomes work-family conflict among employed women and men in Finland. *Human Relations*, 51, 157-177.

Pearlin, L. I. (1983). Role strains and personal stress. In H.H. Kaplan (Ed.), *Psychosocial stress: Trends in theory and research* (pp. 3-32). New York: Academic Press.

Thompson, D. J., & Kline, C.E. (2000). Work/life balance: Six levers for change. *CUPA Journal*, 50 (3-4), 13-16.

Appendix:

Centre for Epidemiologic studies Depression Scale

- 0 - Most or all the times 5-7 days a week
- 1 - Occasionally or a moderate amount of time 3-4 days a week
- 2 - Some or little of the time 1-2 days a week
- 3 - Rarely or once of the time less than once week

Statements	0	1	2	3
I was bothered by things that usually don't bother me				
I felt that everything I did was an effort				
I felt I was just as good as other people				
I had trouble keeping my mind on what I was doing				
I felt sad				
I felt fearful				
I felt lonely				
I had crying spells				
I talked less than usual				
My sleep was restless				
I enjoyed life				
I felt that I could not shake off the blues even with the help of my family				
I thought my life had been a failure				
I was happy				
I could not get going				
I felt hopeful about the future				
People were unfriendly				
I did not feel like eating my appetite was poor				
I felt depressed				
I felt that people disliked me				

Work Family Conflict Scale	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My work keeps me from my family activities more than I would like.					
The time I must devote to my job keeps me from participating equally in household responsibilities and activities.					
I have to miss family activities due to the amount of time I must spend on work responsibilities.					
The time I spend on family responsibilities often interfere with my work responsibilities.					
The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.					
I have to miss work activities due to the amount of time I must spend on family responsibilities.					
When I get home from work I am often too frazzled to participate in family activities /responsibilities.					
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.					
Due to all the pressures at work sometimes when I come home I am too stressed to do the things I enjoy.					
Due to stress at home I am often preoccupied with family matters at work.					
Because I am often stressed from family responsibilities I have a hard time concentrating on my work.					
Tension and anxiety from my family life often weakens my ability to do my job.					
The problem solving behaviors I use in my job are not effective in resolving problems at home.					
Behavior that is effective and necessary for me at work would be counter productive at home.					
The behavior I perform that make me effective at work do not help me to be a better parent and spouse.					
The behavior that work for me at home do not seem to be effective at work.					
Behavior that is effective and necessary for me at home would be counter productive at work.					
The problem solving behavior that works for me at home does not seem to be useful at work.					

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