

Demographic Factors - Discriminators of Role Conflict Segments: An Empirical Study among Women Employees in Information Technology Sector in Chennai

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Abstract

The previous researches have explored the role of work family conflict in the lives of working women. Though impact of demographic factors on work family conflict has been analyzed in the earlier studies, little attempt has been made in identifying the demographics which act as discriminators. This study attempted to examine the selected demographic variables namely number of children, working hours, educational background and the number of dependents in the family as factors discriminating the different conflict segments. A sample of 598 women IT employees were selected to test the influencing nature of the variables taken for the study. Results indicated that all factors discriminate significantly between the segments of respondents based on role conflict. However, the level and the segments for which it discriminates are not same among the factors.

Key Words: Work life conflict, segments, dimensions of conflict

Introduction

The traditional nuclear family where the husband works out side and the wife cares for the home and children is the system which no longer apply to majority of families in the recent few decades, (Bond, Galinsky, and Swanberg 1998). There has been an accelerated influx of women into paid employment roles that have taken place in the recent past (Spurlock, 1995). Now more women are entering the labor work force which was once considered to be meant for men only (Collins, Hollander, Koffman, Reeve, and Seidler 1997; Frone and Yardley, 1996). The growth rate for women entering the workforce is expected to be greater than for men. A majority of women want everything that men have traditionally wanted success, power, status, money, as well as committed relationship, love, children and happiness.

An important issue facing our society is the changing work and family roles of Indian women. Because many women occupy both work and family roles their experiences in work and family represent primary social contexts for examining women's lives (McBride, 1990). Women today function within multiple roles simultaneously operating in both work and family domains as, a mother, a spouse, a housekeeper, and as well maintain a full time employment outside the home (McLaughlin, Melber, Billy, Zimmerle, Wintges and Johnson, 1988; Zedeck, 1992). The relationship between these dual roles has thus become a topic of interest among organizational researchers. In most studies researchers have found that carrying out these dual roles often leads to work family conflict for both men and women. The

profound demographic trends has elevated the need to understand and manage the interface between work and family. (Fraser.J.A. 2001). Although women are working more outside the home than ever before and in home division of labor is more equal now than in the past (Barnett and Hyde, 2001; Gilbert and Rader, 2001). Working mothers still are expected to be responsible for the majority of house hold and child care works (Riggs, 1998). The social belief that women should work and care for their families often conflicts with the limited choices and social realities women face (Covin and Brush, 1991; Gilbert and Rader, 2001; Paden and Buehler, 1995; Phillips and Imhoff, 1997). Work responsibilities and family obligations compete for time and attention in most working adults. Successfully negotiating the interface of these life domains is challenging.

The boundaries between work and family were asymmetrically permeable when the demands from one domain intruded into the other domain with unequal frequency (Ford, Heinen and Langkamer, 2007). Among women family demands would intrude into the work role than work demands would intrude into the family role because they assumed primary responsibility for managing home related demands. A widely accepted perspective of work family conflict describes it as a form of inter role conflict in which role pressures from the work and family domains are mutually incompatible in some respect (Ford et al., 2007).

The Context of Work life conflict in Indian information technology sector.

Software profession has been considered as the key occupation to examine in studies of 'knowledge workers'(Aziz, 2004) and they also present an interesting case for work life conflict issues. Software workers have to generally work for long hours (Perlow, 1998), but they also have a tendency to expect flexible work arrangements coupled with a high degree of autonomy and generous rewards in return for their efforts (Barrett, 2001). In the recent past, the information technology enabled services/business process outsourcing (ITES / BPO) sector of India has been the center of attention of some research studies in the west. Hence, the present study focuses on software professionals for whom the boundary between work and life is generally thought to be distorted and tries to find out their perceptions regarding work life conflict. Work life conflict has become perceptible as a strategic concern for the management of human resources and a significant element of an organization's employee retention strategy (Ramesh, B.P., 2004).

About the Industry

Over the last 20 years the IT BPO industry has evolved from being a niche sector with a limited number of companies to one of the largest contributors to the Indian economy in general and the services in particular. The industry has been on a constant high growth path and the scenario have grown over 15 times from FY 1998 to FY 2009. The

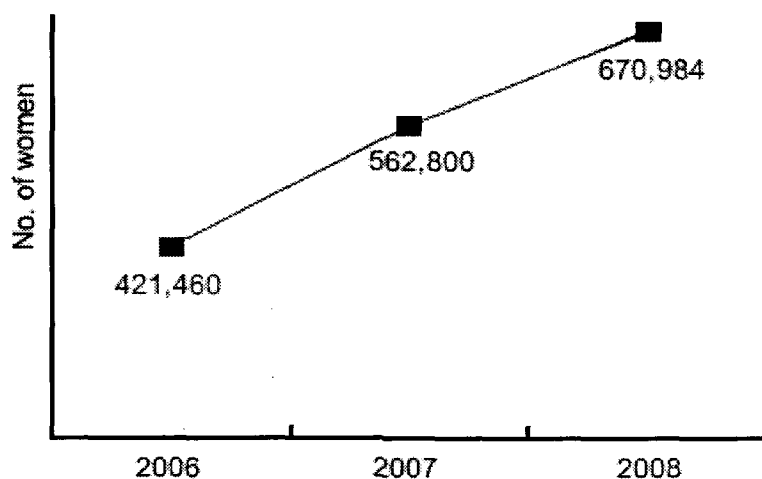
Industry employs a relatively younger work force when compared with other Indian Industries. From the fact that around 35 per cent of employees are in the age group 18-25 around 41 per cent belongs to the 25-30 age bracket. The total IT software and services employment in hardware sector as against 2.20 million in 2008-09 a growth of 4 percent year on year. This represents a net addition of 90,000 professionals to the industry employee base in 2009-10. The indirect employment attributed to the sector is estimated to be about 8.2 million. Tamil nadu has been amongst the top three states in terms of ICT (Information Communication Technology). Investments and production it has emerged as a hub for software, hardware and research and development. The number of Indian and multinational organizations having presence in Tamil Nadu is a testimony to this.

Women employees in IT industry

The IT-BPO industry has remained fairly gender neutral from the onset providing equal opportunities for both men and women and the participation of women in the work force is seen as a critical enabling factor for continued growth of the industry. The industry has taken a lead in adopting best practices in the areas of HR to promote the growth and increased employment of women. India has more working women than does any other country in the world. Of the entire work force of 400 million 30-35 per cent are females, and of these women only 20 per cent work in urban India.

Figure : 1

Chart 1: Women in the IT workforce



Source: Mercer - NA55COM Gender Inclusivity: Building Empowered Organisations study 2008

This figure can largely be attributed to the growth of the IT-BPO industry which is one of the largest recruiters of a qualified work force in the recent times. A number of global initiatives have already recognized the role of women in weaving the fabric of society and the economy. The Indian IT industry mirrors the availability of women engineers in professional colleges. Approximately 25-30 per cent of the population entering the IT industry were women. The dramatic growth of the IT industry in the mid 90's inspired a larger percentage of women to obtain higher education and by 2005, 40.4 percent of the entrants into institutions of higher education were women.

Statement of the Problem

With women engaged in so many multiple roles, the effect of these social roles is the problem examined in the study.

One of the fastest growing business sector that is contributing to an unprecedented economic growth in India since 1990 is Information Technology. A report presented by the National Association of Software and Service Companies 2009 stated that 30 percent of the total work force in IT is Women professionals.

A conflict between work and family has real causes and consequences, which influences both these domains for women, who play varied roles and reconciling between tradition and modernity.

Work life conflict touches every Occupational area. However Software professionals may be more prone to its effect because of the demanding work with extended work schedules, unrealistic deadlines and aggressive time lines, have a boundary between work and life, which is generally thought to be distorted.

Literature Review

Work Life Conflict

Greenhaus and Beutall (1985) defined work and family conflict as a form of inter role conflict in which the role pressures from the work and family domains are mutually non compatible in some respect.

Work and family are two central domains in most adult's lives. In the recent decades social and demographic changes have led to an increase in the number of women in the work force and thus led to an increase in dual earner families in turn these changes have stimulated research interest in work family issues. Particularly work family conflict (Allen, Herst, Bruch and Sutton, 2000; Geurts and Demerouti 2003).

Role theory proposes that responsibilities from different separate domains compete for limited amounts of time, physical energy and psychological resources resulting in interrole conflict (Greenhaus and Beutall, 1985). When expectations stemming from the two domains are incompatible a persons well being will suffer.

Researchers in this area have distinguished between two types of work family conflict, work interfering with family and family interfering with work. Work interference family conflict occurs when work related activities interfere with home responsibilities and family interference work conflict occurs when familial activities and thoughts interfere with work responsibilities. Although strongly correlated with one another they are conceptually and empirically distinct constructs. (Duxbury, Higgins, and Lee 1994; Frone, Russell, and Cooper, 1992).

Greenhaus and Beutall (1985) identified three major types of work family conflict. The first is time based; time spent on role performance in one domain often precludes time spent in the other domain. The second work family conflict strain based conflict arises when strain in one role affects ones performance in another role. The last type is behavior based conflict which refers to incompatibility between the behaviors patterns that are desirable in the two domains.

Some of the more prevalent antecedents and outcomes of work life conflict identified in the literature include role commitment, role salience and satisfaction (Barch and Barnett, 1986; Cleary and Mechanic, 1983) parenting (Barnett and Baruch, 1985; Rousseau, 1984), Marriage and spousal support (Barnette and Marshall, 1991; Burley, 1994) and supervisory and company support (Bowen, 1988).

Grandey and Cropanzano (1999) and others have discovered relationship between work family conflict and overall physical health. Many researchers (Netemeyer et al ., 1996, Thomas and Ganster, 1995) have concluded that increased work family conflict is related to increased depression and other psychological issues. Good, Page, and Young (1996) found an indirect relationship between work family conflict and organizational commitment.

Carlson et al (2000) also discovered that work involvement does significantly correlate with work to family conflict. In addition Aryee and Leung (1999) found that work overload is strongly related to both work to family and family to work conflict. He also found that work social support is related to work to family conflict. Thomas and Ganster (1995) found that supervisor support reduced work family conflict.

Anderson, Goffey and Byerly (2002) found that managerial support was negatively and significantly correlated with work to family conflict and family to work conflict while Frone, Yardely and Markel, (1997) concluded that supervisor support was related to work to family conflict and not family to work conflict and co worker support was related to neither. High levels of family involvement (Duxbury and Higgins, 1991) spouse support (Aryee, 1992) and family satisfaction (Stoner et al, 1990) have been found to be related to low levels of work family conflict.

Multiple roles have a negative effect that is imposed on womens health and well being. This may be manifested in the form of chronic fatigue and exhaustion and in some women more extreme psychological stress and depression (Greenglass et al., 1988).

Organizationally relevant out comes include job satisfaction (Bedeian et al., 1988), Turn over intentions (Greenhaus; Parasuraman, and Collins, 2000), Job distress (Grandley and Cropanzano, 1999) and less career satisfaction (Martins, Eddleston, and Veign, 2002).

Multiple roles can result in positive outcomes which lead to increased self esteem and social identity (Sieber, 1974). Multiple roles lead not only to increased obligations but also to increased privileges. Rewards such as self esteem, recognition, prestige and financial remuneration offset costs of work roles thus enhancing well being. Intention to withdraw from work force (Aryee, 1992) is a work out come which has been found to be related to high levels of work family conflict.

Dependents in the family

Dependents refer to the non earning member in the family. Mothers who are professionals are referred to as the sandwich generation, who are caught between caring for their children and older parents. Winsensale argued that more number today's average married couple has parents than children. He further argued that women is expected to spend more years caring for an aging parent than for a dependent child.

Early research on care givers for elderly family members revealed that some women quit their jobs, rearrange schedule hours or take time off without pay to care for elderly dependent parents (Brody, 1985). It was also found that female caregiver continue to provide most of the care for disabled mothers (Brody and Schoonover, 1986). Further

although being employed reduced the hours of care giving among sons, this was not the case for daughters of elderly parents (Stoller, 1983).

Education

Education is non material benefits equip individuals with the needed psychological and cognitive skills to achieve solutions to conflict (Bowen , 1997; Ross and Wu 1995; Berkowitz; 1990; Kessler and Wortman 1989; Ross and Microwsky, 1989). Education enhances the sense of control. The increased sense of control associated with education may help smooth out interpersonal rough spots and by extension reduce the risk of conflict that involves family and co workers . A low sense of control and the perception of anger that is out of control may hand in hand. Therefore the association between education and anger shows that he increased level in education can assist in the management of anger (Schieman, 2000). There has been research done in the area of job satisfaction with education as a moderating variable (Igbaria, 1993).

Education literature has studied relationships between education level and various work out comes (GlennandWeaver,1982). Education level is related to greater participation in the work force among women whether married or not (Houseknecht and Spainer,1980).

Children

Researchers have found significant results for number of children for both work interference family (WIF) and family interference work (FIW) (Frone, 2000); however there is no significant results for number of children (Goff et al., 1990). Netemeyer et al (1996) found significant relationships for number of children living at home for WIF. Researchers have also found significant relationships when considering the age of the children Vodadoff, 1988). Younger children should require more care and are less likely to contribute physically or financially to the fulfilling of family responsibilities. Age of the children is expected to directly impact one's level of perceived family demand. Bedeian et al (1988) created a parental demand variable that included age and presence of children in the home. Undoubtly the greater dependency of young children results in more family care giver, time demands. However number of children was not associated with restructuring (Brett and Yogev, 1988) leading one to conclude that number of children by itself is not a deciding factor for restructuring work.

Working Hours

Brett and Yogev (1988) predicted that the longer hours a person worked the less restructuring he or she would be doing. However they found that number of hours worked per day was not related to restructuring for men or women. Researchers have looked at the number of hours worked for WIFFIW and when using a global measure of work and family conflict. It has been argued that as an employee experiences an increase in work demand as the result of working more hours, a positive relationship is expected with WIF. This is widely supported by research findings (Gutek et al., 1991). While some researchers have found positive significant relationships between hours worked and a global measure of work and family conflict (Stoner, Hartman, Arora, 1991), none have found a significant relationship with FIW.

Scope of the study

This study has covered the IT and ITES companies which have been the member of NASCOM in Chennai city. It is also restricted to women employees in the IT industry during the period of 2009-10. Moreover, only time, strain and behavior related role conflicts are taken in to consideration for this study.

Objectives

Primary

To analyze the demographic variables that discriminate the different conflict segment of women employees in IT sector in Chennai.

Research Methodology

Research Design

The design applied in the study is descriptive research design. It is appropriate to use this method as this research describes the relationship among different demographic variables with the role conflict segments.

Data Collection

Both primary and secondary data are used in this study to attain the objectives. The first hand information for the study was collected from respondents regarding demographic variables. The secondary data was collected from information technology related articles and journals from the previous studies.

Structured questionnaire is used for gathering data from respondents for the study. A set of questions pertaining to the objectives of the study has been identified and adapted with the help of previous studies for the selected variables.

Scale

Work family Conflict scale: Statements containing contains 18 items designed to assess work to family (work interference with family) and Family to Work Conflict (Family Interference With Work). Carlson, Kacmar and Williams, 2000). Each of the two conflict scales is further divided into three subscales (yielding a total of six subscales) which assess three specific forms of work family conflict (Time based, Strain based and Behavior based).

Sampling

As the population size is very large (0.21 million), sampling technique is applied to conduct this study. In this study, simple random sampling technique is adopted for selecting IT firms. Further, judgment sampling technique is used to select sample units due to the fact that all women IT employees are not able to understand and answer the questions. In this study, population refers to women employees in IT and ITES firms located in Chennai city. Sample unit of this study is only women both married and unmarried employed in IT industry in Chennai city. A total of 1000 questionnaire have been distributed among respondents but only 735 have been received after continuous follow up. Among collected filled questionnaires only 598 are in the usable condition.

The margin of error (d) has been calculated using the formula $\frac{\sigma^2 p(1-p)}{d^2} = n$

n stands for sample size (598), σ (1.96) stands for standard deviation at 95% confidence level, P – proportion of women employees in total IT employees that is 0.31. Margin of deviation is 0.037 which is less than the acceptable limit of 0.05.

Tools Used For Analysis

Exploratory factor analysis is applied to ascertain the dimensions of work family conflict. Cluster analysis is use to segment the respondents based on work family conflict. Discriminant analysis is used for identifying the significant discriminators between role conflict segments.

Analysis and Interpretation

Demographic profile

Introduction: The study comprises of only women employed in IT sector in Chennai city only. But all the respondents do not have homogenous characteristics in terms of various demographic factors. Therefore an attempt is made to classify the respondents in the above mentioned factors. More over previous studies (Kelly and Voydanoff, 1985, Frone, Russell and

Cooper, 1992; Yardely and Markel, 1997; Grandey and Cropanzano, 1994) have revealed that the role conflict of employed women is being influenced by the various demographic factors like age, income, (personal and family) designation, marital status,

number of children, number of dependents, educational qualification, experience in one organization, total experience, and age of the children.

The total number of respondents from whom the data collected is 598.

Table 1

Educational Qualification	N	Percentage	Working Hours	N	Percentage
School	34	5.7	Less than 8 Hours	146	24.4
Graduate	338	56.5	9 Hours	217	36.3
Post graduate	212	35.5	10 Hours	161	26.9
Others	14	2.3	Above 10 Hours	74	12.4
Total	598	100.0	Total	598	100.0

With regard to the educational background, majority of the women in the IT sector are graduates and the next highest is contributed by the post graduates as shown in the sample. Respondents in the others and school education category is very less.

Majority of the women employed in IT sector work for nine hours per day which constitutes about 36.3 per cent followed by 26.9 percent of employees who work for ten hours. Around 24.4 percent of the employees work less than eight hours per day and the minimum of

Table 2

Children	N	Percentage	Dependents	N	Percentage
0	316	52.84	None	13	2.2
1	221	36.95	One	161	26.9
2	59	9.86	Two	311	52.0
3	2	0.33	Three	82	13.7
4	0	-	Four and Above	31	5.2
Total	598		Total	598	100.0

12.4 percent of the employees work above 10 hours per day as shown by the respondents in the sample.

It is observed from the sample that majority of the respondents do not have children (52.84%).

The next highest number of respondents has one child and a very minimum number of them have two children. Only two respondents of the sample found to have three children and no respondents have more than three children.

The number of dependents refers to a non earning member in the family other than the children. Majority of the respondents have two dependents and the next highest percentage is having one dependent. Families having three or more dependents are considerably less.

Factor analysis

Work life conflict occurs when role pressures in one domain (namely work /family) limit an individual from meeting the obligation in another (Greenhaus and Beutall,1985).

For this purpose a set of statements assumed to measure work life conflict were devised on a five point likert scale. Explorative factor analysis is applied to reduce the number of statements and also to measure the validity of the scale and the statements. Principle component analysis and varimax method is used for extraction of factors and rotation respectively. Factors with more than one eigen value are considered for further analysis and the statements scoring loading value of less than 0.5 are suppressed.

Table 3**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.914
Bartlett's Test of Sphericity	Approx. Chi-Square	4.885E3
	df	120
	Sig.	0.000

In order to find out the sample adequacy for conducting factor analysis KMO Barlett's test has been applied. Kaiser-Meyer-Olkin sampling adequacy value is more than 0.5, so it is considered as useful for conducting factor analysis. The value 0.914 indicates that 91.4 percent of the total variables are caused by the underlying factor. Besides the chi-square value and the significant value received that the factor analysis is useful for this data. Finally the set of statements were categorized into three factors as follows.

The table 5 consists of six statements which represent the role conflict of employed women arising because of time. The eigen value for this factor is 7.198 and it accounts for 22.347 percent of variance. Six statements in the table have very strong relationship among them and grouped under the single factor. Based on the meaning of the statements this factor is named as work life conflict time-based. Factor loading for work life conflict time varies from .763 to .595. The reliability is measured with Cronbach alpha is found 0.867 which is acceptable limit.

Table 4**Time**

S.No	Statement	Loading	Eigen value	% of variance	Cronbach alpha
1	The time I must devote to my job keeps me from participating equally in household responsibilities and activities.	0.763			
2	My work keeps me away from my family events too much.	0.754	7.198	22.347	0.867
3	I have to miss family activities due to the amount of time I must spend on work responsibilities.	0.750			
4	The time I spend on family responsibilities often interfere with my work responsibilities.	0.703			
5	I have to miss work activities due to the amount of time I must spend on family responsibilities.	0.663			
6	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.	0.595			

Table 5**Strain**

S.No	Statement	Loading	Eigen value	% of variance	Cronbach alpha
1	I am often stressed from family responsibilities so I cannot concentrate on my work.	0.786			
2	Due to stress at home I am preoccupied with family matters at work.	0.775	1.476	20.564	0.863
3	Tension and anxiety from my family life often weakens my ability to do my job.	0.757			
4	I am often so emotionally drained due to work that it prevents me from contributing to my family.	0.650			
5	Due to pressure at work, at home I am too stressed to do the things I enjoy.	0.607			

The second factor contains five statements in table 5 that have significant correlation between them. Factor loading for these statements are high which have scored between 0.786 and 0.607. Meaning of all five statements reveals that the work life conflict that arises is strain based. The strain encountered in one domain (work) makes it difficult to fulfill the needs of the domain (family). Therefore this factor is called work

life conflict (strain based). Eigen value for this factor is 1.476 and explains 20.564 percent variance. The reliability coefficient is 0.863.

The third factor consists of five statements which represents the work life conflict because of the behavior. These statements are highly correlated with each other and are grouped together and called as work life conflict -Behavior based.

Table 6

Behavior

S.No	Statement	Loading	Eigen value	% of variance	Cronbach alpha
1	The behaviors that work for me at home do not seem to be effective at work.	0.817			
2	The problem solving behavior that works for me at home does not seem to be as useful at work.	0.742	1.189	18.730	0.816
3	Behaviors that are effective and necessary for me at home would be counter productive at work.	0.654			
4	The behaviors that work for me effective at work do not help me to be a better parent and spouse.	0.620			
5	The problem solving behavior I use in my job is not effective in resolving problems at home.	0.613			

The loading factor for these five statements ranges from 0.817 to 0.613 and the eigen value is 1.189 and it accounts for 18.730 percent of variance. The reliability is 0.816 which is considered to be acceptable.

Out of the total eighteen statements taken for the study two statements with the loading factor less than 0.5 is suppressed and the remaining sixteen statements have been taken for the study.

Table 7

Cluster analysis

Final cluster centers	Cluster		
Type of role conflict	1	2	3
Work family conflict time	2.53	3.57	4.30
Work family conflict strain	1.91	2.89	4.07
Work family conflict behaviour	2.48	3.16	4.18

Table 8

ANOVA

	Cluster		Error		F	Sig.
	Mean square	df	Mean Square	df		
Work Family Conflict Time	115.896	2	0.258	595	449.891	0.000
Work Family Conflict Strain	161.533	2	0.242	595	667.080	0.000
Work Family Conflict Behaviour	98.596	2	0.292	595	337.301	0.000

Table 9

Clusters

Name of cluster	Number of Cases in each Cluster
No conflict segment	114.000
Moderate conflict segment	311.000
High conflict segment	173.000

Cluster analysis is to partition a set of objects into two or more groups based on the similarity of the objects for a set of specified characteristics, a technique for quantifying the structural characters for asset of observations. This logical description of the raw data was used to measure cluster centroid which is the mean profile of the cluster on each clustering variables. In order to segment the respondents based on the work life conflict k means cluster analysis is applied. Clustering process generated three cluster solutions based on the cluster seed points, by hierarchical cluster analysis. The cluster solutions were more similar in cluster in size and demonstrated more significant differences between clusters on the set of clustering variables.

For ascertaining the number of clusters hierarchical cluster analysis is used. Dentogram hierarchical cluster exhibits three clear segments and this is also confirmed by the step cluster analysis. The above table shows the mean value of each factor in different clusters. Work family conflict time has scored the highest mean value in cluster one and the lowest mean value in cluster three, similarly work family conflict strain and work family conflict behavior has scored the highest mean value in one and the lowest in the cluster three. Therefore the cluster three is comprising of very high values of work life

conflict time, strain and behavior and moderately contributed in cluster two and the least in cluster one.

The mean of four and above shows the cluster three is highly influenced by time, strain and behavior. The mean value of three denote neutral is neither they are highly influenced nor having totally not influenced. The mean value of three less than three in cluster one depicts that work family conflict time, strain and behavior does not influence the cluster respondents.

The f values in the ANOVA shows that work family conflict time, strain and behavior are significantly different and is statistically right. The clusters based on their origin can be labeled as no conflict segment, moderate conflict segment and high conflict segment. The above table shows that nearly half of the respondents are in the midpoint between high conflict and no conflict. It means that the respondents belonging to this segment have moderate work life conflict.

Nearly 28.94% of the respondents contribute to the high conflict segment which is the next to the moderate conflict segment but is higher than the nil conflict segment which contribute to 19.06%.

Discriminant analysis

Table 10

Eigen values

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	0.107 ^a	54.7	54.7	0.311
2	0.089 ^a	45.3	100.0	0.285

Table 11

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	0.830	110.810	8	0.000
2	0.919	50.408	3	0.000

Table 12***Standardised Canonical Discriminant Function Coefficients***

	Function	
	1	2
No of Children	0.393	0.887
Working Hours	0.626	-0.486
Educational Background	-0.502	0.193
No. of Dependents	0.451	0.034

Table 13***Structure Matrix***

	Function	
	1	2
Working Hours	0.665*	-0.403
Educational Background	-0.435*	0.235
No. of Dependents	0.426*	0.077
No of Children	0.442	0.853*

Table 14***Canonical Discriminant Function***

	Function	
	1	2
Working Hours	0.436	0.983
Educational Background	0.665	-0.517
No. of Dependents	-0.815	0.313
No of Children	0.544	0.041

Table 15***Functions at Group Centroids***

Role conflict based segments	Function	
	1	2
High conflict	0.473	0.435
Moderate conflict	0.081	-0.276
No conflict	-0.457	0.209

This statistical technique is used for testing the hypotheses that the group means of a set of independent variables for two or more groups are equal. By averaging the discriminant scores we arrive the group mean which is referred to as centroid.

In this study four groups namely number of dependents in the family, Education level, number of children, and working hours are taken as independent variables and the dependent variables fall into three categories of high conflict, moderate conflict and no conflict which is mutually exclusive.

Box M's test is used to assess the similarity of the dispersion matrices of the independent variables among the groups. It tests the assumptions of equality of covariances across groups.

Wilks lambda agrees that the first function and the second function is significant. Discriminant analysis calculated two separate functions number of groups minus one. The Z scores are calculated for the two discriminant function.

In the standardized canonical discriminant function, the first function working hours (0.626) has the highest discriminating function. The second highest

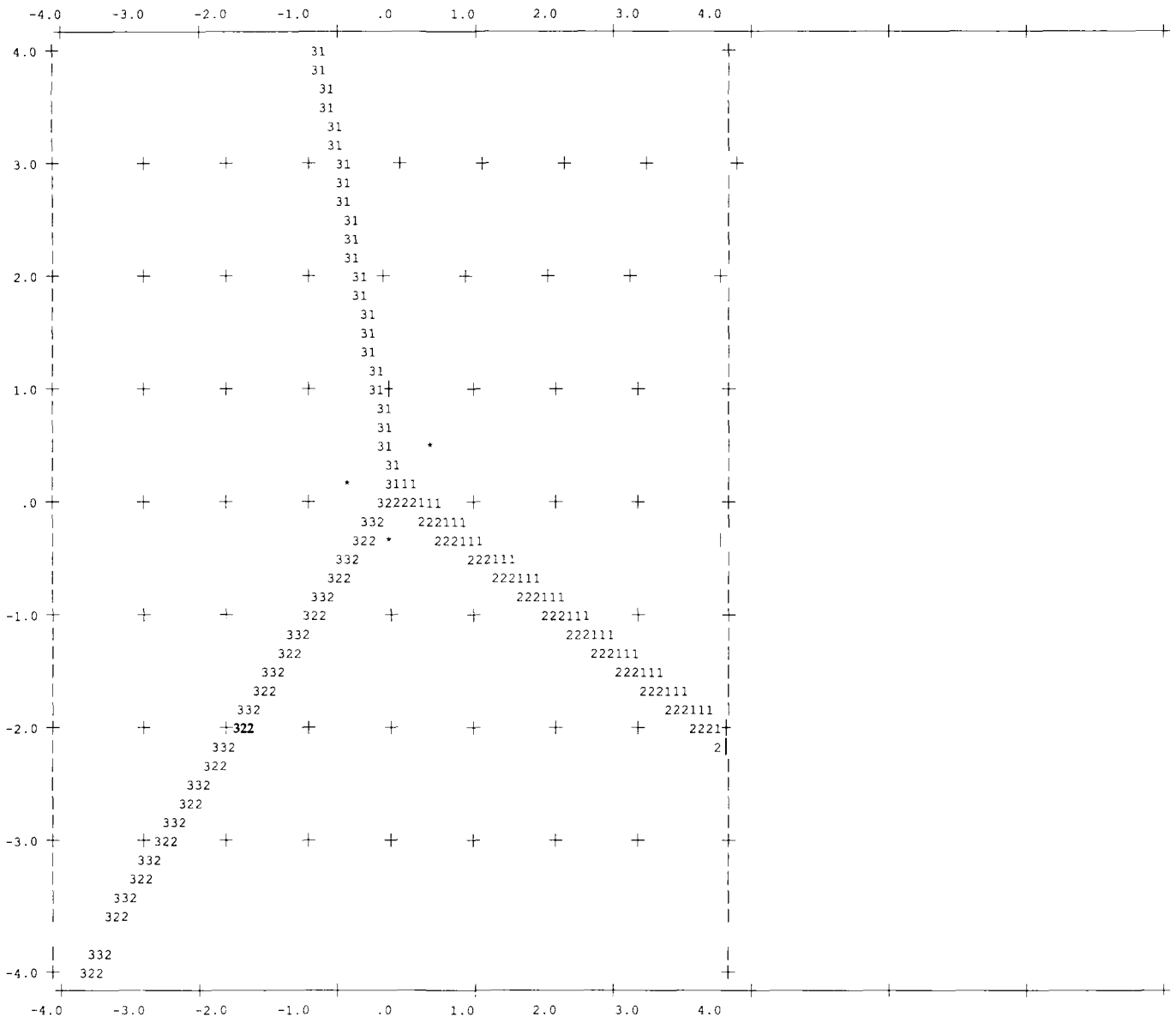
discriminating function is educational background followed by the number of dependents and the least discriminating function is number children.

The second function the number of children as the highest discriminating function. The next highest discriminating function is working hours followed by educational background and the lowest is number of dependents.

Figure 2
Territorial Map

Canonical Discriminant

Function 2



Canonical Discriminant Function 1

The figure shows the plot of each respondent in a two dimensional representation. The separation between the groups now becomes quite apparent and each

group can be easily distinguished based on the Z scores. The functions results in different group centroids, the difference between centroids are

measured with Mahalanobis D^2 measure which are assumed more representative of the group than those far away. From the map it is evident that the first function described in the horizontal axis differentiates between 1 and 3 namely no conflict and high conflict respectively. It is evident from the structural matrix table that the significant discriminators in the first function are working hours, educational background, and number of dependents. It means that respondents with increased number of working hours, higher educational background, and increased number of dependents belong to high conflict segment and vice versa.

The second function differentiates between 3 and 2 as well as 2 and 1 that is high conflict and moderate conflict segment and moderate conflict and no conflict segment respectively. The second function is significantly influenced by number of children. As the number of children has high positive correlation with the second function, segment with high number of children fall in the high conflict segment and less number of children in the moderate conflict segment and the similar relationship between the moderate conflict who are having more children and in the no conflict segment who have less children.

Summary of findings

Demographic profile

Among the 598 respondents demographic profile that were selected is only four namely educational qualification, working hours, number of children and number of dependents.

It is observed that graduates form the majority of the IT sector among women. With regard to working hours the number of people who work for nine and ten hours form the majority and very few work for more than ten hours. Highest number of respondents have no children(52.84%) and 36.95% of the respondents have one child. The number of respondents having more than one child is very minimal.

Almost 50% of the total respondents have two dependents in the family which refers to the parents of the working women. The next highest number of respondents has one dependent. There are very few respondents who have no dependents.

Conflict Groups

The high conflict segment group consists of employees who are affected by time dimension of

work life conflict. Respondents who fall in the no conflict segment are not affected by work life conflict time.

Work life conflict strain has the highest influence on the high conflict segment and considerably no effect on the moderate, and the no conflict segment. Work life conflict behavior influence the high conflict segment the highest than moderate or the no conflict segment. Respondents in the high conflict segment are highly affected by time. Same is the case with the moderate and the no conflict segment.

Time dimension has the major role to play in determining the composition of the conflict segments.

Discriminators

Working hours, educational background, and number of dependents act as discriminating factors responsible for the respondents to fall in the no conflict or the high conflict segment.

When the number of working hours, educational qualification and the number of dependents increases the conflict level increases and the respondents fall in the high conflict segment and vice versa.

The number of children decides whether the respondents fall in the moderate conflict when less number of children or the high conflict segment when having more number of children and the moderate conflict and the no conflict segment in the same direction.

Conclusion

In summary, this study provides a comprehensive frame work of the demographic profile and the possible discriminators of the different conflict segments of the respondents. This theoretical and empirical study of work and family conflict are in conformity with some of the previous research works conducted in different industries and countries. The findings derived from this research would help Organizations in general and IT Sector in particular, to manage and reduce the work family conflicts among their employees, thereby they can increase their employees' efficiency. Further the scope and coverage of the study would help the women employed to realize the dimension of this conflict and that the aberration are not entirely her making, it is at best inbuilt in the situation. With this insight she can build defense and correctives.

Limitations

- The researcher's mistakes and biases could be inadvertently associated with the limitation of the data in the study.
- The analysis is based completely on the responses given by the respondents in the questionnaire. The authenticity of the responses is the limiting factor.
- The number of the variables included for the study is limited. There can be an underlying

factor which is not taken up for the study influencing the hypotheses and the findings of the study.

Scope for further research

The future work family conflict research should embrace a more inclusive definition of work with various other dimensions of demographic profile. It may be extended into the different industrial sectors. The future studies can widen the dimensions of work family conflict in gender differences and coping mechanisms can be examined.

References

- Ackroyd S. G. I, and Currie W. (2000), 'The triumph of hierarchies over markets: information system specialists in the current context', in I Glover and M Hughes (eds), *Professions at Bay*, Avebury, Aldershot, pp 267-305.
- Allen, T. D., Herst, D. E. L., Bruck, C. S., and Sutton, M. (2000). Consequences associated with work to- family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, 5, 278–308.
- Anderson, S. E., Coffey, B. S., and Byerly, R. T. (2002). Formal organizational initiative and formal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of Management*. 28(6), 787-810.
- Aryee, S (1992). Antecedents and outcomes of work-family conflict among married professional women: Evidence from Singapore. *Human Relations*. 45 (2), 813-837,5.
- Aryee, S., Luk, V., Leung, A., and Lo, S. (1999). Role stressors, inter role conflict, and wellbeing: The moderating influence of spousal support and coping behaviors among employed parents in Hong Kong. *Journal of Vocational Behavior*, 54, 259-278.
- Aziz, M. (2004) "Role stress among women in the Indian information technology sector", *Women in Management Review*, Vol. 19 Issue: 7, pp.356–363.
- Barnett, R.C. and Hyde, J.S. (2001). Women, men, work, family: An expansionist theory: *American Psychologists*, 56, 781-796.
- Barnett, R.C., and Marshall, N.L.(1991).The relationship between women's work and family roles and subjective well-being and psychological distress. In M.Frankenhaeuser, U.Lundbert, and M. Chesney (Eds.), *Women, Work and Health: Stress and Opportunities* (pp.111-136).New York: Plenum.
- Barnett,R.C.,and Baruch,G.K.(1987).Social roles, gender, and psychological distress. In R.C.Barnett, L.Biener, and G.K. Baruch (Eds.) *Gender and stress*(pp.122-143).New York: Free Press.
- Barrett, R. (2001). Labouring under an illusion?The labor process of software development in the Australian information industry. *New Technology, Work and Employment* 16, 1, 18-34.
- Baruch, G.K., and Barnett, R.C. (1986). Role quality, multiply role involvement, and psychological distress. *Journal of Personality and Social Psychology*, 49, 135-145.
- Bedeian, A. G., Burke, B. G., and Moffett, R. G. (1988).Outcomes of work–family conflict among married male and female professionals. *Journal of management*, 14(3)475-491.
- Berkowitz, L. (1990).On the formation and regulation of anger and aggression: A cognitive –neo associationistic analysis. *American psychologist*, 45, 494-503.
- Bond, J. T., Galinsky, E., and Swanberg, J. E. (1998). The 1997 National Study of the Changing Workforce. New York: Families and Work Institute.
- Bowen, G. L. (1997). Poverty, neighborhood danger, social support, and the individual adaptation among at-risk youth in urban areas. *Journal of Family Issues*, 17, 641-666.
- Bowen, G.L. (1988). Corporate supports for the family lives of employees: A conceptual model for program planning and evaluation. *Family Relations*, 37,183-188.
- Brett, J.M. and Yogev, S. (1988). Restructuring work for family : how dual earner couples with children manage, *Journal of social behavior and personality*, Vol.3, pp.159-174.
- Brody, E. M. (1985). The Donald P. Kent Memorial Lecture. Parent care as a normative family stress. *Gerontologist*, 25(1), 19–29.
- Burley, Kim.(1994).Family variables as mediators of the relationship between work –family conflict and marital adjustment among dual –career men and women. *The Journal of Social Psychology*, 483-497.
- Carlson, D.S., Kacmar, K. M., and Williams L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior* 56, 249-276.
- Cleary, P.D., and Mechanic, D.(1983).Sex Differences in psychological distress among married people. *Journal of Health and Social Behavior*, 24, 111-121.
- Collins, B., Hollander,R., Koffman, D., Reeve, R. and Scidler, S. (1997).Women, work and health: Issues and implications for work site health promotion. *Women and Health*, 25(4), 3-38.
- Covin, T.J., and Brush, C.C. (1991). An examination of male and female attitudes toward career and family issues.*Sex Role*, 25, 393-415.
- Duxbury, L., Higgins, C., and Lee, L. (1994).Work - Family conflict. *Journal of Family Issues*, 15(3).449-466.
- Ford, M., Heinen, B., and Langkamer, K. (2007). Work and family satisfaction and conflict: A Meta –analysis of cross –domain relations. *Journal of Applied Psychology*, 92, 57-80.
- Fraser, J.A. (2001), *White-Collar Sweatshop: The Deterioration of Work and Its Rewards in Corporate America* (New York: W.W. Norton and Company).

- Frone, M. R., Russell, M., and Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of work-family interface. *Journal of Applied Psychology*.
- Frone, M.R. (2000). Work-family conflict and employee psychiatric disorders: The national comorbidity survey, *Journal of Applied Psychology* 85(6): 888-895.
- Frone, M. and Yardley, J. (1996). Workplace family supportive programmes: Predictors of employed parents' importance ratings. *Journal of Occupational and Organizational psychology*, 69, 351-366.
- Geurts, S. A. E., and Demerouti, E. (2003). Work/non-work interface: a review of theories and findings. In M. J. Schabracq, J. A. M. Winnubst and C. L. Cooper (Eds.), *The Handbook of Work and Health Psychology*. Chichester: John Wiley and Sons, Ltd.
- Gilbert, L.A. and Rader, J. (2001). Current perspective on women's adult roles: Work, family, and life. In R. Unger (Ed.), *Handbook of the psychology of women and gender* (pp. 156-169). New York: John Wiley and Sons.
- Glenn, N.D. and Weaver, C.N. (1982). Further evidence of education and job satisfaction. *Social Forces*, 61(1), 46-55.
- Goff, S.J., Mount, M. K. and Jamison, R.L. (1990). Employer supported child care, work /family conflict and absenteeism: A field study. *Personnel Psychology*, 43, 793-809.
- Good, L. K., Page, T. J. and Young, C. E. (1996). Assessing Hierarchical differences in job-related attitudes and turnover among retail managers. *Journal of the Academy of Marketing Science*, 24(2), 148-156.
- Grandey, A. A., and Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior*, 54, 350-370.
- Greenglass, E. R., and Burke, R.J. (1988). Work and family Precursors of burnout in teachers: Sex differences. *Sex Roles*, 18, 215-229.
- Greenhaus, J. H., Parasuraman, S., and Collins, K. M. (2001). Career involvement and Family involvement as moderators of relationships between Work-Family conflict and withdrawal from a profession. *Journal of Occupational Health Psychology*, 6(2), 91-100.
- Greenhaus, J.H., and Beutall, N.J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88.
- Gutek, B. A., Searle, S., and Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology*, 76, 560-568.
- House Knecht, S. K. and Spainer, G. B. (1980). Marital disruption and higher education among women in the United States. *The Sociological Quarterly*, 21, 375-389.
- Igbaria, M. (1993). Antecedents and consequences of job satisfaction among information centre employees. *Journal of Management Information Systems*, Spring, 145-165.
- Kelly, R. F., and Voydanoff, P. (1985). Work /family role strain among employed parents. *Family Relations*, 34, 367-374.
- Kessler, R. C., and Wortman, C.B. (1989). *Social and Psychological Factors in Health and Illness*. New Jersey. Prentice Hall.
- Martins, L. L., Eddleston, K.A. and Veiga, J.F., (2002). Moderators of the relationship between work-family conflict and career satisfaction. *Academy of Management Journal*, 45, 399-409.
- McBride, A.B. (1990). Mental health effects of women are multiple roles. *American Psychologist* .45, 381-384.
- McLaughlin, S.D., Melber, B.D., Billy, J.O.G., Zimmerle, D.M., Wings, L.D., and Johnson, T.R. (1988). *The changing lives of American women*. Chapel Hill, N.C.: The University of North Carolina Press.
- Netemeyer, R. et al., (1996) : Development and validation of work-family conflict and family work conflict scales," *Journal of Applied psychology* 81, no 4.
- Paden, S. L., and Buchler, C. (1995). Coping with the dual income lifestyles. *Journal of Marriage and the Family*, 57, 101-110.
- Perlow, L. A . (2001), 'Time to coordinate: toward an understanding of work-time standards and norms in a multi country study of software engineers', *Work and Occupations*, 28, 1, 91-111.
- Phillips, S.D., and Imhoff, A.R. (1997). Women and career development: A decade of research. *Annual Review of Psychology*, 48, 31-59.
- Ramesh, B. P. (2004). "Cyber Coolies in BPO- Insecurities and Vulnerabilities of Non-Standard Work", *EPW*, Jan 31-Feb 6, 492, at page 496.
- Ross, Catherine E., and John Mirowsky (1989). Explaining the Social Patterns of Depression: Control and Problem-solving or Support and Talking." *Journal of Health and Social Behavior*. 30 (2, Jun): 206-19.
- Ross, C.E., and Wu, Chia-ling (1995). The link between education and health. *American Sociological Review*, 60, 719-745.
- Rousseau, D.M. (1978). Relationship of Work to Non work. *Journal of Applied Psychology*, 63, 513 - 517.
- Schieman, S. (2000). Education and the activation cause, and management of anger. *Journal of health and Social Behavior*, 41, 20-39.
- Sieber, S. (1974). Towards a theory of role accumulation. *American Sociological Review*, 39, 567-578.
- Spurlock, J. (1995). Multiple roles of women and role strains. *Health Care for Women International*, 16(6), 501-508.
- Stoller, E. P. (1983) Parental care giving by adult children. *Journal of marriage and the family* 851-858.
- Stoner, C.R., Hartman, R.L., and Arora, R. (1991). Work / family conflict: A study of women in management. *The Journal of Applied Business Research*, 7 (1), 67-74.
- Thomas, L.T., and Ganster, D.C. (1995). Impact of family-Supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 81(1). 6-15.
- Voydanoff, P. (1980). *the implications of work family relationships for productivity*. Scarsdale, New York: Work in American Institute.
- Wisensale, S (2003) two steps forward, one step back: the family and medical leave Act as retrenchment policy. *Review of Policy research*, 20 p 135-152.

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