Occupational Stress Among Dual Career IT Families: A Cross Sectional Study

Abstract

Purpose of this study is to find out about the occupational stress among the dual career families working in the IT sector, Bangalore. Revised Occupational Stress Inventory (OSI-R) scale was employed for collecting the data of 600 samples from IT professionals. It was a cross sectional design with snow ball technique to collect data for the study. Findings are analysed using Statistical package for Social Science (SPSS.16). Occupational Stress Inventory has 140 items, with three main sections and 4 subscales or stressors. Three main sections are Occupational Roles, Personal Strain and Personal Resources. Findings were analysed with descriptive analysis using SPSS.16. T- scores were generated after generating Z- scores. Significant stressors in the Occupational Roles are, Role Boundary, Physical Environment, Personal/psychological Strain, Vocational Strain, Psychological Strain, Interpersonal Strain. In the Personal Resources, Self-Care, Social Support and Rational/Cognitive coping Resources have indicated significant lack among dual career families. Dual career families need coping skills such as physical exercise, reliance on God, meditating the Scriptures, music therapy to reduce or remove these stressors and maximise their marital satisfaction.
Brief introduction

Dual career families who work in the Information Technology seem to undergoing occupational stress for various reasons. On one side IT professionals want to give their best to the work and try to work hard to stay on the job, find favour from the leaders and grow in their career as well. On the other hand, role Overloads, work demands, time lines and competitions and many other stressors keep employees under stress. Most IT companies are situated in the cities and every company has its own job demands and requirements.

Bangalore being a capital city of Karnataka, is also known as a silicon city. Many Multi-National Companies (MNC) are situated in Bangalore and this city also has many dual career families working in the IT sector. There are several advantages in dual career such as financial stability, best school for children, social status, interaction with others in the society and making use of their skills and talents that they have developed over the years.

This article will help dual career families to know the occupational stress they are facing while they are investing their time and talent to the work, which is helping the economic growth of the nation at large along with their own growth as well. In the process of fulfilling their aims and using their talents in the work place, dual career families go through various stressors that impacts their physical, psychological health and eventually marital satisfaction. If these stressors remained unnoticed and dual career families perceive that they are healthy, these stressors can make huge negative impact on both health and family. If the stressors are identified and applied with right coping skills, then it can reduce or remove those occupational stressors and maximize marital satisfaction.

Objectives:

1. To identify the occupational stress and related issues of dual career families working in the IT sector.
2. To explore various stressors that significantly affect their marital life satisfaction.
Literature Review

Independent India has opened up the freedom for women to study, work and to have financial freedom (N. Krishna Reddy, M. N. Vranda, Atiq Ahmed, B. P. Nirmala, and B. Siddaramu, 2010). Technological development and modernization is influencing the family system in India which is the fabric of our nation, and new generation seem to be abandoning family norms and values of the past (George, 2007). In the urban sectors in India, dual career families seem to have become a common phenomenon and are growing. Hence, dual career families are prevalent the cities (G.Delina, R. Prabhakara Raya, 2013). The term dual career was first used and introduced by a European family Rapport which defined both husband and wife are bread winners and who get income (Rhona Rapport, Robert N. Rapoport, 1969). In the present days dual career seem to have become a known concept and urban educated couples seem to prefer dual career. Dual career brings several blessings such as financial stability, family investment, social status, providing the best education for the children (Majhi, 2016). People working in both public sectors and IT companies are affected with occupational stress due to increased work demands and competition to stay on the job (Shrivastava, 2015).

On the other hand, several researches have depicted that dual career families also face physical and psychological challenges (Cherpas, 1985), in particularly occupational stress. Occupational stress has more implications, and is considered negative, harmful and dangerous to body, mind and to marital satisfaction. It occurs when an individual is faced with much role overload in the work place, and not able to balance, cope or handle the situations (Babatunde, 2013). Various studies have indicated that Occupational stress has negative impact on health (Shultz Kenneth S, Mo Wang, 2010). The father of stress studies Hans Selye said that all people are regularly under stress (Selye, 1976). Dual career families are going through occupational stress, which is making adverse impact on dual career families. Occupational stress is also impacting on the marital satisfaction of these dual career IT families. Due to work, psychological problems in the dual career families seem to be increasing rapidly, due to work and family life conflicts (Shervin Ziabakhsh Tabary, Mohammad Rezaaii, Zibz javari Nia, Pegah Goodarzy, 2014). Occupational stress among the families has become a major problem, which is costing their family, physical and mental health and eventually affecting the society (Charles D Spielberger, Eric C Reheiser, 1994).

When role overload in the workplace and the demands of the domestic requirements are not balanced well, it creates stress and strain (Panda, 2011). Well educated Professionals working in the Information
Technology in Bangalore and other cities, are facing the growing divorce rates, disorganized family life and quality of marital life which is the sacred institution of society. (Kumar, 2013).

Occupational stress cannot be ignored. It can be controlled by applying right coping skills. Right coping skills can remove or reduce occupational stress and can maximise their work productivity and marital satisfaction as well. Both partners spend their long hours in the work place, and if they are in a stressful working environment, stress keeps on increasing, and sooner they might encounter various physical and psychological health issues if not handled.

Methodology

A cross-sectional design with a sample size 300 dual career families, which is 300 men and 300 women, who are working in the IT sector are the population of the study. The age group of between 25 to 40 are included in the study. Revised Occupational Stress Inventory (OSI-R) developed by Samuel H Osipow was used in this study (Osipow, 1998). This scale has 140 items with 14 sub scales with three broad sections, they are Occupational Roles, Personal Strain and Personal Resources. Validity and reliability of the scale, alpha coefficient for the scale scores were 0.88 for ORQ, 0.93 for PSQ, and 0.89 for PRQ (Osipow, 1998). And coefficients (multiplicative factor) for a particular property or individual scales ranges from 0.70 to 0.89 (Osipow, 1998)

A snowball technique was used to collect the needed data. The collected data was analysed using Statistical Package for Social Science (SPSS.16). Data was analysed with descriptive statistics; subscale items were totalled to the raw score, from raw scores the Z scores were generated using SPSS and through the Z scores, T scores are presented in the tables. T-scores were derived to have a mean of 50 and a standard deviation of 10 (Sam, 2020).

Findings

Occupational Roles

Occupational Role has six subscales which are also called stressors. While all the stressors are present at mild levels, few have shown highly significant stressor.
Table: 1 Role Boundary Score and Gender (N=600)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Relative Absence (0 to 40)</th>
<th>Mild (41 to 59)</th>
<th>Mild level (60-69)</th>
<th>Significant level (70 to 100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>80 (26.67)</td>
<td>144 (48.00)</td>
<td>66 (22.00)</td>
<td>10 (3.33)</td>
<td>300 (100.00)</td>
</tr>
<tr>
<td>Female</td>
<td>82 (27.33)</td>
<td>124 (41.33)</td>
<td>84 (28.00)</td>
<td>10 (3.33)</td>
<td>300 (100.00)</td>
</tr>
<tr>
<td>Total</td>
<td>162 (27.00)</td>
<td>268 (44.67)</td>
<td>150 (25.00)</td>
<td>20 (3.33)</td>
<td>600 (100.00)</td>
</tr>
</tbody>
</table>

Note: Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T-scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T-scores will have a mean of 50 and standard deviation of 10. Total T scores will help us to indicate the results of stressor into strong (70 above), mild level (60-69), normal range (40-59) and absence of occupational stress (40 and below). This will help to calculate the levels of occupational stress.

Table above depicts that dual career families are experiencing role conflicts, demands and facing loyalty issues in the workplace. The table above depicts that 27% of the respondents fall in the range of 0 to 40 T-scores, which relates to the absence in the occupational stress. For the T-score of 41 to 59 fall in the range of mild or normal, since they come under one standard deviation of the mean. Men are seen more in this normal range than women. The T-scores between 60 to 69 falls in the mild level of Role Boundary. About 25% of the participants are in the mild level, which is mild levels of maladaptive stress. The Table also depicts that more women are facing the Role Boundaries than men. The T-scores of 70 and above fall under the significant level of Role Boundary, clearly indicating 3.33 percent of the respondents have shown a strong probability of maladaptive stress and debilitating stress. If the Role conflict in the work environment is on, then a similar conflict can exist at home as well if it is not identified and handled with right coping skills.

Table: 2 Physical Environment Score and Gender (N=600)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Relative Absence (0 to 40)</th>
<th>Mild (41 to 59)</th>
<th>Mild level (60-69)</th>
<th>Significant level (70 to 100)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0 (0.00)</td>
<td>245 (81.67)</td>
<td>28 (9.33)</td>
<td>27 (9.00)</td>
<td>300 (100.00)</td>
</tr>
<tr>
<td>Female</td>
<td>0 (0.00)</td>
<td>247 (82.33)</td>
<td>26 (8.67)</td>
<td>27 (9.00)</td>
<td>300 (100.00)</td>
</tr>
<tr>
<td>Total</td>
<td>0 (0.00)</td>
<td>492 (82.00)</td>
<td>54 (9.00)</td>
<td>54 (9.08)</td>
<td>600 (100.00)</td>
</tr>
</tbody>
</table>

Note: Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T-scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T-scores will have a mean of 50 and standard
deviation of 10. Total T scores will help us to indicate the results of stressor into strong (70 above), mild level (60-69), normal range (40-59) and absence of occupational stress (40 and below). This will help to calculate the levels of occupational stress.

T-scores between 41 to 59 indicates normal level or very mild level of stress, which has been contributed by their Physical Environment (PE) in their occupational settings. A large percentage of the participants (82%) are within the normal range. T-scores of 60 to 69 indicate mild levels of maladaptive stress and strain. In this data, not much of a difference is observed between male and female Physical Environment of the occupational stress. The T-scores of 70 to 100 are in the significant level of Physical Environment. About 9.08 of the respondents have a significant or high levels of stress experience having experienced the resultant strain brought about by their occupational environment. The respondents who have scored above 70 T-scores have a strong probability of maladaptive stress, debilitating strain, or both according to OSI-R scale (Osipow, 1998). They require immediate medical attention to overcome this problem. If the workplace physical environment stressor is balanced, it will be carried home and impacts the marital relationship.

**Personal Strain**

**Table:3 Vocational Strain Score and Gender (N=600)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Vocational Strain (VS)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Relative Absence (0 to 40)</td>
<td>Mild (41 to 59)</td>
</tr>
<tr>
<td>Male</td>
<td>71 (23.67)</td>
<td>189 (63.00)</td>
</tr>
<tr>
<td>Female</td>
<td>69 (23.00)</td>
<td>186 (62.00)</td>
</tr>
<tr>
<td>Total</td>
<td>140 (23.33)</td>
<td>375 (62.50)</td>
</tr>
</tbody>
</table>

**Note:** Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T-scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T scores will have a mean of 50 and standard deviation of 10. Total T scores will help us to indicate the results of stressor into strong (70 above), mild level (60-69), normal range (40-59) and absence of occupational stress (40 and below). This will help to calculate the levels of occupational stress.

It depicts the poor attitude towards their work, that might result in an overall lack of interest towards day-to-day occupational endeavours, which might be repetitive in nature. They might attend to their occupational responsibilities with a sense of anxiety in their minds, because they might also lack the positive initiative to perform their day-to-day duties, which are allocated to them on account of their occupational enterprises. This might result in their superiors reporting that they make a lot more of errors and mistakes in
the work and also may have accidents due to a lackadaisical attitude and a general carelessness in the way they go about their occupational roles on a daily basis. The T-scores from 0 to 40 are in the range of relative absence. The T-score 41 to 59 are from the range of mild levels or normal personal strain. There are about 62.50% of the participants who fall within this range. The T-scores from 61 to 69 are in the range of mild levels of Vocational Strain. The table that about 5% of the participants are in the mild levels of Vocational Strain. And the T-scores of 70 and above fall in the range of significant level. Significant level indicates a strong probability of maladaptive stress and strain. About 9.17% of the participants have a strong maladaptive and debilitating strain, a psychological strain. If this stressor not dealt with, the similar attitude impacts and influence creeps into the family life and destroys the marital satisfaction.

Table: 4 Psychological Strain Score and Gender (N=600)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Psychological Strain (PSY)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Relative Absence (0 to 40)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>58 (19.33)</td>
<td>300 (100.00)</td>
</tr>
<tr>
<td></td>
<td>210 (70.00)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>50 (16.67)</td>
<td>300 (100.00)</td>
</tr>
<tr>
<td></td>
<td>223 (74.33)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108 (18.00)</td>
<td>600 (100.00)</td>
</tr>
<tr>
<td></td>
<td>433 (72.17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relative Absence (0 to 40)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mild (41 to 59)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4 (1.33)</td>
<td>28 (9.33)</td>
</tr>
<tr>
<td></td>
<td>Mild (60-69)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0 (0.00)</td>
<td>27 (9.00)</td>
</tr>
<tr>
<td>Total</td>
<td>4 (0.67)</td>
<td>55 (9.17)</td>
</tr>
</tbody>
</table>

Note: Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T-scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T-scores will have a mean of 50 and standard deviation of 10. Total T-scores will help us to indicate the results of stressor into strong (70 above), mild level (60-69), normal range (40-59) and absence of occupational stress (40 and below). This will help to calculate the levels of occupational stress.

Psychological Strain would show up in feeling irritated and anxious in their daily work. They might also be hit severely by depression and may be feeling very unhappy, most of the time. These staff in an organisation would tend to complain a lot and would mostly have a cantankerous outlook towards life in general, and their occupation in particular. Even in the wake of routine occasions of day-to-day occurrences, they tend to respond with a negative approach towards arriving at suitable solutions to take the edge of the inconveniences, which arise from these day-to-day occurrences. With this stressor, a person comes home will continue to remain unhappy, bad tempered and depressed in the home as well. This would certainly affect the health of the family as well.
T-scores of 70 and above fall in this range of significant level Psychological strain. There are about 9.17% of the respondents who fall within this range. Both male and female are going through the significant level of Psychological strain. Those who have T-scores from 0 to 40, come under the range of relative absence of Psychological strain. There are about 18% of the participants including men and women who come under this range. Those with T-scores from 41 to 59 come under the mild or normal range. This data implies that a majority of the total (72.17) percentage of the respondents have been located within the mild or normal. T-scores from 60 to 69 are in the mild level range. Participants who fall in this range will have mild levels of maladaptive stress and strain according the OSI-R scale. T-scores 70 and above, will come under the significant levels of Psychological Strain. Analysing this data, there are about 9.17% of dual career families working in the IT sector falling in this range. The probability of maladaptive stress and debilitating strain or both are strong (Osipow, 1998).

Table: 5 Interpersonal Strain Scores and Gender (N=600)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Interpersonal Strain (IS)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Relative Absence (0 to 40)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56 (18.67)</td>
<td>205 (68.33)</td>
</tr>
<tr>
<td>Female</td>
<td>53 (17.67)</td>
<td>206 (68.67)</td>
</tr>
<tr>
<td>Total</td>
<td>109 (18.17)</td>
<td>411 (68.50)</td>
</tr>
</tbody>
</table>

Note: Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T- scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T scores will have a mean of 50 and standard deviation of 10. Total T scores will help us to indicate the results of stressor into strong (70 above), mild level (60-69), normal range (40-59) and absence of occupational stress (40 and below). This will help to calculate the levels of occupational stress.

Inter personal strain is, a person’s interpersonal relationship with the people in the workplace or home and in personal relationships with others measuring whether he/she withdraws or becomes more aggressive towards it (Osipow, 1998).

Table depicts the person’s interpersonal relationship with the people in the workplace or home and in personal relationships with others measuring whether he/she withdraws or becomes more aggressive towards it (Osipow, 1998). Those who score T-scores from 0 to 40 come within the range of relative absence in Interpersonal Strain. There are about 18.17% of participants who fall in this range. T-scores between 41 to 59, come within the range of mild or normal in their Interpersonal strain. From this data, it can mean that
the majority (68.50) have been detected within this range, which indicates that it falls within one standard deviation of the mean. Hence it indicates that participants are within the normal range in the personal strain. And the T-scores from 60-69 fall in the range of mild level of maladaptive personal strain. The table above indicates that 13.17% of the participants are going through mild maladaptive strain and T-scores of 70 and above are considered significant level. Those who come under this range will indicate a strong probability of maladaptive stress and debilitating strain according the OSI-R scale (Osipow, 1998).

**Personal Resources**

This section is a domain of coping resources measured by four sub scales. All the four sub scales together constitute Personal Resources. Findings of the four sub scales are discussed below:

**Table: 6 Self-Care Scores and Gender (N=600)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Self-Care (SC)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significant (0 to 29)</td>
<td>Mild deficits (30 to 39)</td>
</tr>
<tr>
<td>Male</td>
<td>69 (23.00)</td>
<td>157 (52.33)</td>
</tr>
<tr>
<td>Female</td>
<td>87 (29.00)</td>
<td>133 (44.33)</td>
</tr>
<tr>
<td>Total</td>
<td>156 (26.00)</td>
<td>290 (48.33)</td>
</tr>
</tbody>
</table>

**Note:** Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T- scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T scores will have a mean of 50 and standard deviation of 10. For Personal Resources T-scores indication is significant lack (30 and below), mild deficits (31 to 39), average coping (40 to 59), strong coping (60 and above).

The T-scores are 0 to 29, would pinpoint to the fact that there is a substantially noteworthy lack of efficient coping strategies. It is striking to observe that many of the participants (26.00) fall in the range of significant lack of coping skills or resource. The table above indicates that more women significantly lack their Self Care than men. And T-scores from 30 to 39, fall in the range of mild deficits of coping resources. Majority of the participants (48.33%) fall majorly towards the mild deficit of coping skills. Men are more in the mild deficit of coping skills than women. This can be worked out as the considerable class of IT professionals having a severe lack of any effective means of coping against stress causing sources, in their occupational environment. And the T-scores from 40 to 59, fall in the range of average coping skills. The
The table above depicts that quarter size of the total samples (25.65%) fall in this range. T-scores of 60 to 100, fall in the significant level of coping skills. The Table indicates that there is no dual career person who has significant or strong coping resources. This can also be concluded saying that dual career IT professionals do not have Self Care personal activities to reduce or alleviate chronic stress.

**Table: 7 Social Support Scores and Gender (N=600)**

| Gender | Social Support (SS) | | | | | Total |
|--------|---------------------|------------------|------------------|------------------|------------------|
|        | Significant lack (0 to 29) | Mild deficit (30 to 39) | Average coping (40-59) | Significant level (60 to 100) |        |
| Male   | 38 (12.67) | 194 (64.67) | 68 (22.67) | 0 (0.00) | 300 (100.00) |
| Female | 39 (13.00) | 188 (62.67) | 73 (24.33) | 0 (0.00) | 300 (100.00) |
| Total  | 77 (12.83) | 382 (63.67) | 141 (23.50) | 0 (0.00) | 600 (100.00) |

**Note:** Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T- scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T scores will have a mean of 50 and standard deviation of 10. For Personal Resources T scores indication is significant lack (30 and below), mild deficit (31 to 39), average coping (40 to 59), strong coping (60 and above).

The participants who have T-scores from 0 to 29, fall in the range of significant lack of coping resources or skills according OSI-R scale. The table above depicts that there are 77 participants out of 600 (12.83%) lacking coping skills significantly. They need immediate help in getting the right coping skills to overcome occupational stress and strain. Statistically, there is not much difference between men and women in these stress related issues. T-scores from 30 to 39, indicate that the participants fall in the range of mild deficits of coping skills. The table above depicts that more than half of the participants (63.67%) have mild lack of coping skills.
T-scores from 40 to 59 (23.50) of them fall in having average coping skills. T-scores from 60 and above, fall in the range of significant levels Social Support. The table shows there is no one in the significant level with this coping skill.

Table: 8 Rational/Cognitive Coping Scores and Gender (N=600)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Rational/ Cognitive (RC)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Significant lack (0 to 29)</td>
<td>Mild deficits (30 to 39)</td>
</tr>
<tr>
<td>Male</td>
<td>63 (21.00)</td>
<td>176 (58.67)</td>
</tr>
<tr>
<td>Female</td>
<td>52 (17.33)</td>
<td>190 (63.33)</td>
</tr>
<tr>
<td>Total</td>
<td>115 (19.17)</td>
<td>366 (61.00)</td>
</tr>
</tbody>
</table>

Note: Occupational Stress Inventory (OSI-R) scale converts the raw score into z scores, from the z scores T-scores were generated. In other words, it is a linear transformation of raw scores (Osipow, 1998). T scores will have a mean of 50 and standard deviation of 10. For Personal Resources T scores indication is significant lack (30 and below), mild deficit (31 to 39), average coping (40 to 59), strong coping (60 and above).

T-scores from 0 to 29 indicate that the respondents have a significant lack of resources to cope with occupational stress and there might be an insufficiency in the availability of enough coping skills to the IT professionals of Bangalore. There is a quite a lot (19.17) of participants including men and women who are in the significant lack of coping skills. And the T-scores from 30 to 39, fall in the range of mild deficits of coping skills. There is a large (61.00) percentage of dual career IT professionals are going through mild deficit of coping resources. The T-scores 40 to 59 fall in the range of average coping skills. It indicates that about 19.83 of the IT professionals have average coping resources. It clearly indicates the need of the coping resources for the IT professionals to reduce occupational stress.

Conclusion and recommendations

Significant occupational stressors are present among the dual career families. They also have significant lack of Personal Resources. Occupational stress impacts the marital satisfaction. Applying the right coping skills that are suggested can remove, reduce or handle the stress well.

- This study has focused on the age group of 25 to 40. There can be further study on the age group of 40 and above since their stressors might be different.
• Revised Occupational Stress Inventory was used in this study to measure occupational stress of dual career families working in the IT sector; however, there are other scales also available for studying occupational stress.

• This study opens up innovation and indicates detailed study in various aspects of the dual career families, hence it is not an end of this study.

References


