Research Paper

Work-Life Balance of Oil & Gas Public Sector Employees in India: A Survey

Kareena Sant

Department of Psychology, Panjab University, Chandigarh, India

ABSTRACT

This paper provides an insight into the Work life balance of Oil & Gas Public Sector Employees. Work-life balance has been one of the main topics of research in the academic and business field over the last few years. One of the ways to increase turnover and improve efficiency would be to enhance the work-life balance of an organisation's employees. The general hypothesis stated in the research pertains to the relationship between Work life balance, Job stress, Role expectation, Co-worker support and Work-family relation. The control variables assessed in the design was the participants' gender. A quantitative research method is selected and questionnaire is used as the research instrument to collect data. The questionnaire contained 24 close-ended items-focusing on four domains, mainly, Job stress (anxiety and time stress); Co-worker support; Role expectation conflict and Work-family conflict. There are 129 samples randomly selected from 5 Oils & Gas Public Sector Units (males= 99, females=30). The data collected is analysed by using Statistical Packages for Social Science Version 21.0 (SPSS Version 21.0) software. Hypothesis was tested by adopting statistical techniques such as mean, standard deviation, regression analysis and ANOVA. The results showed that Anxiety Stress and Time stress, being sub-domains of Job stress had an impact on the respondents, especially those with a work experience of more than 15 years in their current organization.

Keywords: Public Sector Unit, Employees, Work Life Balance, Conflict

INTRODUCTION

The International Labour Organisation estimates that nearly 6 million people are directly employed by the petroleum industry and over ten times that number of jobs are indirectly created by the industry. The oil and gas industries are highly capitalized; much of the manual work has been replaced by automation, but significant parts of oil and gas operations still rely on human input. Sound employer-employee relations are therefore crucial to the stable production and supply of oil and gas (Ian Graham, 2021). The Oil and Gas sector is facing a number of sector-internal challenges, including shortage of skilled workers, accessing oil and gas reserves in geographically remote areas, promoting occupational safety and health standards, and respect for the fundamental principles and rights at work. How the industry approaches these challenges and concerns has significant social, economic and environmental implications.

The recent outbreak of the Covid-19 Pandemic, led to employees making a shift from office spaces to working from their respective homes. "Work From Home" is a concept that was introduced in the post Pandemic era. The current work scenario is marked by the fast pace of change, intense pressure, constant declines, changing demographics and increased use of technology. This developed interest in the work–family interface, producing a number of concepts to explain the relation between these two dominant spheres of life: accommodation, compensation, resource

drain, segmentation, spill over, work–family conflict, work–family enrichment, and work–family integration (Barnett, 1998; Edwards & Rothbard, 2000; Friedman & Greenhaus, 2000; Greenhaus & Beutell,1985; Greenhaus & Parasuraman, 1999; Lambert, 1990). Many changes in the workplace and in employee demographics in the past few decades have led to an increased concern for understanding the boundary and the interaction between employee work and non-work lives (Hochschild, 1997; and Hayman, 2005).

The concept of Work-life balance has become extremely significant in the fast changing work environment. Garg and Dawra (2017) suggested that WLB is a very relevant research topic and it is the main concern for employers and employees, as lack of balance may affect individuals' performance at work and their personal lives. Eby et al. (2005) suggested that exploring WLB should respond to this question: Whether peoples' expectations toward their job and life roles compatible or not? Work-Life Balance(WLB)is defined by Kirchmeyer et. al.(2000) as the achievement of fulfilling experiences in the different aspects of life that require various resources, like energy, time and commitment and these resources are spread across all the domains. Work-life balance is the extent to which an individual is equally engaged in –and equally satisfied with –his or her work role and family role. Employees who experience high work-life balance tend to invest similar amount of time and commitment, to work and non-work domains (Greenhaus, Collins, Shaw et. al., 2003) Moreover, others defined this as "an individual's ability to meet work and family commitments, as well as other non-work responsibilities and activities" (Parkes and Langford et.al, 2008).That is, these three definitions for work-life balance imply establishing an acceptable combination of work and personal life (Thornthwaite, 2004).

LITERATURE REVIEW

Some research studies have explored work-family balance, a concept theoretically close to WLB, and related to career satisfaction (Saraih et al., 2019), job satisfaction, and organizational commitment (Carlson, Grzywacz, & Zivnuska, 2009). Aryee, Srinivas, and Tan (2005) stated that work-family balance is related to increased organizational commitment and job satisfaction. In their study titled "Impact of working hours on Work Life balance" (Sarah Holly and Alwine Mohnen, 2012) the main objective was to examine the influence of the working hours of the employees on their job satisfaction. Their study result showed that generally the long working hours have a positive impact on the employee's overall well-being and life satisfaction. The study done by Russo et al. (2015) suggested that social support in work and non-work increase work-life balance by regulating the multiple roles of employees. Furthermore, the supervisor shows supportive in term of decentralizing decision-making to make employees feel comfortable with the working environment (Mas-Machuca, Berbegal-Mirabent, & Alegre, 2016). A strong social network can decrease stressors and improve perceived work-life balance. Social support can stem from family and friends or colleagues in the workplace (George et.al., 2015). While focussing in Indian context, according to Mohan and Ashok (2015), work stress is often developed when an individual is assigned to an important project or responsibility without the proper ability and delegation of power to handle the specific task.

METHODS
Hypothesis
H1: There is relationship between Anxiety Stress (AS) and Work-Life Balance (WLB)
H2: There is relationship between Time Stress (TS) and Work-Life Balance (WLB)
H3: There is relationship between Work-Family conflict (WF) and Work-Life Balance (WLB)

H4: There is relationship between Role Expectation Conflict (RC) and Work-Life Balance (WLB)
H5: There is relationship between Co-worker Support (CS) and Work-Life Balance (WLB)

Sample

A cross-sectional survey research design was selected. The data was collected in quantitative by distributing closed-ended questionnaire. Participants (n=129) were employees from various departments, across 5 Oil & Gas Public Sector Units in India, including Hindustan Petroleum Corporation Ltd.(HPCL) , Indian Oil Corporation Ltd. (IOCL), Bharat Petroleum Corporation Ltd. (BPCL), GAIL India and Oil and Natural Gas Corporation (ONGC). The employees belonged to various parts of the country, thus, making this study Pan-India. The employees were assured that their identity would be kept confidential and anonymous. The data was collected through Questionnaires distributed (in-person) among HPCL employees (n=57). The rest of the sample (n =72) included workers from other Oil & Gas PSUs, who had been recruited via social media platforms like LinkedIn, WhatsApp and Facebook. Some questionnaires were also sent through E-mail. Google forms were used to collect data using online social media platforms. The participants of other Oil & Gas PSUs were recruited in order to have a more diverse group with different experiences in terms of work-life balance, which would allow better generalization of the results. Participants consisted of 99 males and 30 females between the ages of 18 and 60 years. All participants in this study were volunteers, working in their respective organizations for more than 1 month. In this study, simple random sampling method was utilized and respondents were selected.

Table1. Demographic details of the participants

Age	Frequency	Percent
below 20	1	.8
20-30	30	23.3
30-40	44	34.1
40-50	26	20.2
50-60	28	21.7

Gender	Frequency	Percent
Male	99	76.7
Female	30	23.3

Marital Status	Frequency	Percent
Married	93	72.1
unmarried/single	36	27.9

No. of Dependents	Frequency	Percent
zero	30	23.3
one	5	3.9
two	32	24.8
more than two	62	48.1

Work Experience in current Organization	Frequency	Percent
0-5	29	22.5
5-10	18	14.0
10-15	35	27.1
15+	47	36.4

Instruments

Informed consent forms were used containing information about benefits and risks of participating, reimbursement details, confidentiality of participants' details and voluntary participation. The purpose of the study was also on the consent form. Additional materials that the survey included were 6 demographic questions like age, gender, marital status, no. of dependents, current organization, Work Experience in the current organization(in Years) and Current department. The Work-Life Balance Questionnaire included 4 Domains- Job Stress scale, Role expectation conflict, Co-worker Support and Work-Family Conflict. Each item was measured on a five point Likert scale, varying from 'Strongly Disagree' to 'Strongly Agree'. The **Job stress** scale (**Anxiety** *denoted by 'AS'* and **Time stress** *denoted by 'TS'*) contained 9 items. Job stress is defined as the harmful physical and emotional responses that occur when role (job) requirements do not match with the employees' capabilities, resources, and needs (National Institute for Occupational Safety & Health, 1999). Factor analyses

have shown that time stress and anxiety are the two distinct sub- dimensions (Melamed et al.,1991; Xie & Johns, 1995) The Cronbach Alpha reliability for AS is 0.814 and TS is 0.775.The **Role expectation conflict** domain (*denoted by 'RC'*) contained 5 items. The Cronbach Alpha reliability for RC is 0.784. The **Co-worker support** domain (*denoted by 'CS'*) contained 4 items. The Cronbach Alpha reliability for CS is 0.789. The **work-family conflict** domain (*denoted by 'WF'*) adopted from *Nair M. and Kaushik A.(2020)*, containing 6 items. These included, item 22-"It is difficult to concentrate at work because of family responsibilities and commitments" , item 25- "My family member's co-operates in balancing my family life and work life", item 26- "My family understand my job demands and supports me in different circumstances", item 28-"I miss family and social occasion because of extended work schedule", item 29- "The amount of time my job takes up makes it difficult to take time out for physical fitness" and finally, item 30- "The amount of time my job takes up makes it difficult for me to get sufficient time for myself, my family, relatives and friends." The Cronbach Alpha reliability for WF is 0.721. The former 3 domains (Job stress

scale, Role expectation conflict and Co-worker support) were adopted from New Job Stress Scale computed by *Abhishek Shukla & Rajeev Srivastava*.The last domain of Work-family conflict, is adopted from the psychometric instrument constructed by *Nair M. and Kaushik A*. to measure WLB.

RESULT

Table2. (given below) indicates that all the 5 subscales were found to have high reliability with Cronbach alpha in excess of 0.700

Table2. Cronbach Alpha Reliability test

Domains of Work-Life Balance	Cronbach's Alpha Reliability
Anxiety Stress (AS)	0.814
Time Stress (TS)	0.775
Work-Family Conflict (WF)	0.721
Role Expectation Conflict (RC)	0.784
Co-worker support (CS)	0.789

Table 3. Shows that Regression and ANOVA results indicating that Anxiety Stress and Time stress, being sub-domains of Job stress had an impact on the respondents, especially those with a work experience of more than 15 years in their current organization.

Hence, it indicates that work experience in current organization, with p-value=0.00 (i.e.<0.001) affects Anxiety stress and Time stress (Job stress), which in turn is responsible for changed Work-Life Balance of respondents.

Table3. Regression analysis and ANOVA results								
Hypothesis	**Regression weights**	**Demographic Variables**	**Beta Coefficients**	**R square**	**F**	**t-value**	**p-value**	**Hypothesis results**
H1: There is relationship between Anxiety stress and Work-Life Balance	**AS→ WLF**	Age of the respondent	.377	.166	4.960	2.550	.012	-
		Marital status of the respondent	-.761			-2.322	.022	-
		No. of dependents of respondents	-.128			-1.521	.132	-
		Work experience in current organization	-.675			-3.974	.000	Reject Null, Accept Alternate.

Hypothesis	**Regression weights**	**Demographic Variables**	**Beta Coefficients**	**R square**	**F**	**t-value**	**p-value**	**Hypothesis results**
H2: There is relationship between Time stress and Work-Life Balance	**TS→ WLF**	Age of the respondent	.368	.228	7.382	2.281	.025	-
		Marital status of the respondent	-1.017			-2.845	.005	-
		No. of dependents of respondents	-.121			-1.322	.189	-
		Work experience in current organization	-.851			-4.601	.000	Reject Null, Accept Alternate.

DISCUSSION

Table 1. summarizes the profile of the respondent. It is seen that 76.7% respondent are male, and 21% respondents are female. Also, 34.1% of the respondents belonged to age range 30-40, followed by 23.3% belonging to 20-30 age range. 21.7% of participants belonged to age range 50-60 and 20.1% being a part of range 40-50 age. With the frequency of 1, 0.8% of total age range was the lowest of all. 76 individuals were married and 29 were single/unmarried. Finally, 36.4% people have a work experience of 15+ years in their current organization, followed by 26.1% having 10-15 years of experience. This indicates that most of the employees are a part of their respective Public Sector Unit for a very long period. 22.5% of respondents being newbies in their organization, working for 0-5 years. And 14% of employees having 5-10 years of work experience, being the lowest percentage.

The independent variables of this study comprise of Job stress, co-worker support and; role conflict and work-family conflict; whereas the dependent variable in this study is Work-life Balance. The control variables assessed in the design was the participants' gender. The dependent variables were initially analysed through a inter-item correlation matrix. Regression analysis of the overall domains was also done. Regression analysis of individual items of each domain was done separately to understand which item under Anxiety stress and Time stress sub-domains affected Work-Life Balance. The results indicated that item AS2: "The effect of my job on me is high" and AS5: "I feel guilty when I take a leave", under Anxiety stress sub-domain, affected WLB considerably. Similarly, Ts3: "I feel that I rarely take a leave" and TS4: "Many people at my office are tired of company demand.", under Time Stress sub-domain, affected WLB. Overall, we can say that employees working in their respective organizations for 15+ years, experience Job Stress, which has a disturbing effect on their Work-Life Balance.

IMPLICTIONS AND LIMITATIONS

This research has the potential to assist organisations with work-life balance of their employees and could result in retaining employees in the corporate environment. This is one of the first studies to use this scale among public sector professionals and specifically of Oil and natural gas industry; therefore, further evaluation of the psychometrics of the scale are needed among samples of professionals. This study helps the future researchers to develop a research instrument that fits to the Indian context. It reveals the most significant factor that drives employees to achieve higher work-life balance. This can be the guideline for the organization to develop vision, mission or business strategy plan.

One of the limitations is the fact that this study is focused on a single objective, namely investigating Work-life balance in the corporate environment throughout India. However, most of the participants belonged to Mumbai and Chandigarh, thus, being confined to majorly two geographical areas. The questionnaire was distributed physically only among Hindustan Petroleum (HPCL) employees, based in Chandigarh; whereas other respondents (including HPCL employees at other locations) filled an online questionnaire circulated through social media platforms. The method of investigation is a quantitative method and this kind of data collection method is sometimes misleading. The study only focuses on one sector (Public) and one industry (Oil and Natural Gas). Moreover, only 5 firms or companies are highlighted in this study, employees of other Oil & Gas PSUs are ignored. This leads to a need for further research to be conducted in other sectors and industries as a means of enhancing the generalizability of studies such as the present one.

CONCLUSION

Balancing of professional and personal roles is one of the key problems of the recent times. By addressing this issue and implementing support group and training

sessions, organizations can certainly improve in terms of employee work stress, role-expectation problems and work-family relationships. The firms should improvise and innovate the ways to cater the employees' diverse needs and these should be made integral to core business. Utmost care should be taken in making decisions of adoption and implementation of policies or principles, as it affects both employees and the employers. In a way, this paper opens the field of research on the relation between demographics, and work life balance when working from office (in post-pandemic era) and what traits could predict successful work and personal life balance over time and when it is mandatory or recommended.

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