Synopsis: Ph.D. Thesis

A Comparative Study of Quality of Work Life in Manufacturing and Service Sector Industries in Karnataka

Ashwini J*

Introduction

Quality of work life (QWL) has recently gained momentum in the academic research. Its importance has been greatly stressed by HR managers in the corporate world. Several studies have been published in the past decade ever since the term “quality of work life” became popular. Nadler and Lawler (1983) state that QWL has been studied in various circumstances, and lately gathered interest among the managers and media.

Several studies were conducted on QWL after the concept was introduced and found that the work life had a serious impact on the workers and their families (Lewis & Cooper, 1987; Kossek & Ozeki, 1998; Greenhaus & Powell, 2006). The workers get negatively affected when the work environment is fluctuating; this is reflected in the form of low motivation and morale, low performance, reduced productivity and increased attrition and burnout (Galinsky & Stein, 1990; Benedict & Taylor, 1995).

The increased responsibility both at home and work has resulted in the inability of the worker to balance the challenging demands of family and work contributing to increased stress and conflict within present workers (Edwards & Rothbard, 2000). This inner conflict has also resulted in several health problems in individuals and financial burden on the individuals, employers and the government (Frone, Russell, & Cooper, 1997; Johnson, Duxbury, & Higgins, 1997).

The interrelation between the factors of QWL and the workers are significant. If a balance is maintained at home and work, it can result in the following benefits - Increased employee performance and productivity, Enhanced morale, Reduced attrition, Decreased absenteeism and sickness, Lowering of burnout and stress, Retention of staff, and Rise in company image in society.

Seashore (1975) and Walton (1975) conceptualized the quality of work life by proposing eight major concepts relating to QWL. Those concepts are (1) fair and adequate compensation, (2) healthy working conditions in the organization, (3) opportunity to develop human capabilities, (4) chances for continued growth and security, (5) work organization with social integration,
(6) constitutionalism in the work organization, (7) work and total life space and (8) social relevance of work life. These factors determined the work climate of an organization. QWL can be assessed by combining the amount and the degree of stress and satisfaction experienced by the individual performance role. Walton (1975) also postulated a model of QWL for the improvement of living and working conditions.

**Problem statement**

Job satisfaction occupies a prominent role in both the life of an employee and an organization as each of them contributes for that simultaneously. Since the economic reforms in India, there is a growing disparity in terms of socio-economical, psychological and personal wellbeing among the employees in the conventional manufacturing industries and the fast growing knowledge-based industries. These factors necessitate the research on the factors contributing for the employee satisfaction and the resultant productivity in these two types of industries, where the workforce is vastly varying with different mindsets and their perceptions about QWL.

**Objectives**

- To analyse the quality of work life and their determinants in the selected manufacturing and service sector industries.
- To measure the level of employee satisfaction and its determinants in the selected industrial units.
- To evaluate the employees opinion on the organizational policies with respect to compensation, career prospect, occupational stress and participation in management.
- To identify the areas that need improvement and to make suggestions to improve the QWL in the organizations under study.

**Hypotheses**

For the following research, alternate (a) and null (b) hypotheses are formulated in the study to evaluate the factors that affect QWL and to draw accurate conclusions.

- Hypothesis 1(a): There is a significant difference between the Job Satisfaction of the employees of manufacturing and service sectors.
- Hypothesis 1(b): There is no significant difference between the Job Satisfaction of the employees of manufacturing and service sectors.
- Hypothesis 2(a): There is a significant difference between the Opportunity for Growth of the employees of manufacturing and service sectors.
- Hypothesis 2(b): There is no significant difference between the Opportunity for Growth of the employees of manufacturing and service sectors.
- Hypothesis 3(a): There is a significant difference between the Social Integration in the Work Organization of the employees of manufacturing and service sectors.
- Hypothesis 3(b): There is no significant difference between the Social Integration in the Work Organization of the employees of manufacturing and service sectors.
- Hypothesis 4(a): There is a significant difference between the Safe and Healthy Working Conditions of the employees of manufacturing and service sectors.
- Hypothesis 4(b): There is no significant difference between the Safe and Healthy Working Conditions of the employees of manufacturing and service sectors.
- Hypothesis 5(a): There is a significant difference between the Adequate and Fair Compensation of the employees of manufacturing and service sectors.
- Hypothesis 5(b): There is no significant difference between the Adequate and Fair Compensation of the employees of manufacturing and service sectors.
- Hypothesis 6(a): There is a significant difference between the Training and Development of the employees of manufacturing and service sectors.
- Hypothesis 6(b): There is no significant difference between the Training and Development of the employees of manufacturing and service sectors.
- Hypothesis 7(a): There is a significant difference between the Overall Satisfaction of the employees of manufacturing and service sectors.
- Hypothesis 7(b): There is no significant difference between the Overall Satisfaction of the employees of manufacturing and service sectors.
**Scope of the Study**

The present study is designed to cover the aspects necessary for measuring the employees (middle level) opinion about the various QWL programs offered in their respective organizations. As already mentioned in this study, the organizations will have to recognize the importance of developing jobs and working conditions that would ensure the highest performance and productivity of the employees, who in turn will support the organization to meet its business objectives.

The present study is designed to analyze the factors which lead to high QWL in today’s fast-developing world and to study whether these factors change with respect to manufacturing and service sectors. The study will identify the QWL criterion that is different in the manufacturing and service sectors and how it affects the employee's well-being. The outcome of the study is based on the opinion expressed by the managers and executives about QWL programs deployed in their organizations. The study also intended to uncover the hidden factors behind high QWL in selected conventional manufacturing industries and fast growing knowledge based service industries. This study collected opinion of the managers and the executives of the seven companies of manufacturing sector and nine companies of service sector. The companies selected were a combination of private and public sector industries.

**Research Gap**

Lots of studies on the relationship between QWL and work related factors are available. Few studies discuss only the benefits of working in groups and the involvement of the workers in organizational design. There are number of researches being conducted on QWL, but there is less research about the Overall satisfaction of employees working in manufacturing and service sectors in Karnataka and the various factors which affect the QWL of workers in manufacturing as well as service sector industries in Karnataka.

**Quality of Work Life**

Organization’s success depends on its employees, their attitude towards work and their involvement and dedication to their work. QWL can be considered as a set of approaches, methods, or technologies to develop and enhance the work environment to ensure a more productive and satisfied employees. A constant effort has been made to improve the work life ever since industrial revolution. A study conducted by the U.S. Congress, Robert F. Hozie reported the fight for scientific management techniques by unions, especially the mechanists. Thus, the Labor Union activities in 1930s and 1940s brought about improvement in work conditions through collective bargaining and legislation. QWL is measured by assessing an individual’s reaction to work or personal consequences of the work experience (Nadler & Lawler, 1983). While discussing humanization, Delamotte and Walker (1974) emphasize the need for the protection of the workers against hazards to health and safety, the wage-work bargain, threats of illness and unemployment and as well as from the impulsive behavior of the authority of management.

**Conceptual Analysis of QWL**

The concept of QWL is inexact and, therefore, highly debatable to be operationalised. The term “QWL” refers to the workplace conditions which are favourable or unfavourable for an employee. QWL programs were conducted in the industries to take care of employee needs and requirements. Higher the QWL, the better the performance of the employee is reflected in the growth of the organization.

A survey of the available literature on QWL leads to the conclusion that there is no universally accepted definition for QWL. Each author defines QWL in his/her own perspective.

A few of the definitions pertaining to QWL was assessed to understand the QWL. Sirgy, et al. (2001): “Employee satisfaction with a variety of needs through resources, activities, and outcomes stemming from participation in the workplace”.

Rose et al. (2006): “Focusing on a person’s job satisfaction as the key determinant”.

Mejbel, Almsafir, Siron, & Alnaser (2013): “The quality of work life is a multidimensional concept that affects a person’s satisfaction and gratitude and is most important for leading a happy life”.

Dharana - International Journal of Business from M. P. Birla Institute of Management, Bengaluru
Jaikumar and Kalaiselvi (2012): “The impressions of the attributes of one’s work life in every possible angle which includes monetary rewards and benefits, growth in the workplace, guarantee of continuity in the job, relationship with the company and colleagues, and the effect of all these parameters on one’s life.”

Talebi (2013): “The resourcefulness, inclusion or rendition of physical and psychological goodness at the job environment”.

**Approaches to QWL**

Many organizations are conducting programmes like organizational structure, job redesign, supervision, group support, physical environment, etc. to reduce job stresses and burnout and to improve quality of work life. According to Nadler & Lawler the types of QWL activities can be listed as follows: 1. Participative problem solving, 2. Work restructuring, 3. Innovative reward systems. 4. Improving the work environment (Nadler & Lawler, 1983, p. 27). Some of the approaches used to improve quality of work life are (1) Flexibility in work schedules, (2) Freedom in forming a work group or autonomous work group, (3) Opportunity for growth, (4) Participation of employees in decision-making, (5) Job enrichment, (6) Implementing suggestion system, (7) Work redesign and (8) Better QWL. These approaches are explained in detail in the chapter.

**Dimensions of QWL**

Several key variables have been identified by many authors to enhance QWL. Walton (1975) proposed eight conceptual categories that make up the quality of work life. These factors include Adequate and fair compensation, Safe and healthy working conditions, Immediate opportunity to use and develop human capacities, Opportunity for continued growth and security, Social integration in the work organization, Social integration in the work organization, Work and total life space, and Social relevance of work life. The factors of QWL used in this study is derived from Walton’s model.

**Review of Literature**

Cherns (1978, p. 39) stated that “QWL owes its origins to the marriage of the structural, systems perspective of organizational behaviour with the interpersonal, human relations, supervisory-style perspective.”

It is a continuing process, not something with a beginning, middle and an end that could be turned on today and turned off tomorrow (Brooks & Gawel, 2001). Van Der Doef and Maes (1999) and Hade, et al. (2007) also regards job satisfaction as an outcome variable of QWL. Sergey, 2006, observed in his research on QWL that career growth opportunity is a crucial factor determining constructs of QWL. Koonmee, 2010, QWL is treated as a reformist movement that is concerned with the function and working of a good organization. Bharathi, 2011, found that QWL perception by the employees and its implementation has a positive role in the changing scenario and has been shown to improve the life of the employee along with the organization. McNall et all, 2014, studied the relationship between flexible work arrangements and job satisfaction. Tabassum et all, 2014, found that opportunity for continued growth and security is positively correlated with job satisfaction.

**QWL in India**

Ayesha et al, 2011, demonstrated a significant difference between male and female employees working in bank in the way they perceive QWL. Sandhu and Prabhakar, 2012, observed that remuneration for the employees is an important determinant of QWL. Balchander et al, 2013, studied the impact of personal factors on QWL of the respondents in Insurance Sector. They found that there was no significance difference between male and female category officers wrt QWL. Battu and Chakravarti, 2014, found that low QWL had an adverse effect on the nature of behavior, responses to others, handling critical situations and on the personal life.

Several scholars and HR practitioners have studied the QWL from different angles and have arrived at factors affecting QWL. Yet, an attempt to conduct a comprehensive study to objectively measure the various dimensions of QWL that affects the workers of India is not studied. Hence, an attempt has been made to provide the perception of QWL by the workers in the Indian context in general. Special attention has been paid to understand the QWL perception by the manufacturing and service sector employees.
QWL in Manufacturing Sector
- Mohanraj et al (2010) in their study observed that QWL factors are essential for promoting a strong work culture. In (2012) Aggarwal’s studies indicated that organizations can benefit by adopting WLB, wherein the employees become more responsive to the support provided which adds to their performance. Jagatheesh (2013) assessed that socio-economic background of the employees in the industrial estate is not satisfactory for economic development and employees were not satisfied with Opportunity for continued growth. Mohanraj and Sankar (2013) studied the relationship between QWL and work environment and wellness of workers.

Private Sector
Kavoussietal. (1978)studied the absenteeism in two textile factories in Iran. Poor working conditions in the factories led to the high absenteeism rate, which the authors say could be improved by improving the quality of working life as absenteeism have widespread consequences across the factory.

Public Sector
In 2012, Aggarwal investigated the ‘work life balance’ amongst the workers in the Gujarat refinery, Indian Oil Corporation Limited, Vadodara, Gujarat. The major constructs used in the study were perception of life by the employees, effect of stressors in work place and at home, effect of constructs which are related to professional and personal life, mind-set of the employees toward the regulations of the organization. The employees wanted the organization to be more worker-friendly and understanding to the problems of the employees’ needs and support them with good work-life balance (WLB) and relaxing atmosphere. A good WLB can bring a positive attitude in the minds of the employees towards the company. From this result, it is understood that organizations can benefit by adopting WLB, wherein the employees become more responsive to the support provided which adds to their performance.

QWL in Service Sector

Private Sector
Schneider and Bowen (1985) indicated that the attention to employee wellbeing serves as a foundation for a climate for service. Hence, the ability of the organization to deliver higher quality service is enhanced if employees are satisfied resulting in higher performance (Berry, The employee as customer, 1981).

Saklani (2004) stressed that with the advancing technology and easily accessible information, the study of organizations with respect to productivity, efficiency and quality of services is very crucial in order to improve the performance of work in India.

Mosadeghrad (2013) investigated the QWL of nurses in Iranian hospital as the nurses are subjected to high levels of stress due to the nature of their jobs. The main stressors are high physical strain, low degree of staffing, lower pay packages, lack of promotional opportunities, greater work load, which takes a heavy toll on them. He suggests that concepts like good and decent participation, treatment by the management, proper environment, increased income, and monetary benefits be given to the nurses to increase the QWL.

Coburn and Hall (2014) studied the perception of QWL between four generations in the nursing workforce. Due to a different set of values held by each generation, the perception of QWL, psychological empowerment, and job satisfaction were better among the baby boomers suggesting a need to create a work environment by manager that is supportive of multiple generations of nurses. On the contrary, Han et al (2014) observed that high quality initial training provided to the nurse produced better job satisfaction. Therefore, they have recommended that training be given priority to arrest high turnover rate among the nurses.

Further, Skinner et al (2014) extended the work life challenges across the life course in healthcare professionals. She found a significant difference in the perception of work life balance at different stages of life. Such a pattern was also observed with respect to work demand and flexibility. However, the existing policies of the companies do not meet these demands which in turn lead to reduced work hours and increased turn-over rates.

Public Sector
Kamel(2013) has studied the relationship between
QWL and the intention to leave the job in Saudi Arabian Business Administration College and stated that the level of QWL among the faculty members was just above average and their intention of continuing with college jobs were affected by the commitment to the job. The results of the study helped in gaining knowledge about the level of QWL in the academic sectors in Saudi Arabia.

QWL is practiced in most of the developed countries; however, in India, where there is a wide gap between employed and the unemployed, QWL is yet to be taken up seriously in many of the sectors. Multinational companies operating in India have implemented the practices that have greater impact on the productivity and general well-being of the employees. In the early stages of conception of the QWL in India, many studies were conducted only in public sector companies. Nevertheless, a comprehensive study of manufacturing and service sector is still not available. This gap in the research has elicited the conduct of this particular study. The Walton’s dimensions of QWL would be the main focus of this study while the opinions of the employees of the manufacturing and service sector about QWL are collected. Recommendations will be brought on the basis of the survey.

**Methodology**

The research philosophy adopted guides the important assumptions made about the way in which the research is conducted from a researcher’s point of view, that includes what constitutes the acceptable knowledge and how it is developed (Saunders, et al., 2011). These assumptions forms the basis for the research approaches and the methods adopted as part of that strategy. The methodology consists of survey method, and aims to study the perception of QWL among the manufacturing / service sector employees. Sample collection was done by Questionnaires which were used to collect information from manufacturing / service sector employees. The questions were based on the Likert scale which was used for all the questions other than demographic information. Method of analysis used comprised Data analysis done using pie, line and bar charts were used. Statistical analysis was conducted. The samples consisted of industries and enterprises from the Manufacturing sector, 154 in number and 160 samples from Service Sector were used to test Descriptive statistical analysis and Reliability and validity of the questionnaire was tested and regression analysis was used for the hypothesis. Convenience sampling method was used to select the industries.

**Results and Discussions**

The results were noted and analysed as per the statistical analysis. This chapter presents the analysis of the data collected and its interpretation pertaining to quality of work life in manufacturing sector and in service sector. A special focus will be on comparing the quality of work life on these two sectors and discuss the results based on the prevalent trend. The results would be analysed with regard to the dimensions of quality of work life as measured by the questionnaires that were used in this study. Focus will also be placed on the discussion of the results as well as the overall conclusions with specific reference to the literature study, research methodology and the results of the study. The results of are presented in three main sections- Section 1 will discuss the quality of work life in manufacturing sector; Section 2 about quality of work life in service sector and finally, Section 3 about comparison of quality of work life in manufacturing and service sectors.

From the results of the current study, the following model has been proposed, which clearly indicates that different factors are essential to achieve the balance in QWL among the manufacturing and service sectors.

**Significant Findings**

- As expected, a significant gender parity among those working in the manufacturing companies is seen. These companies employ more men than women with 81% men working in this sector. On the other hand, an almost equal distribution of men and women were found to be working in the service sector.
- Manufacturing sector had more employees working in the age group of 31 to 45 years age. Service sector was most preferred by those in the age group of 20-30 years.
• Both sectors had almost equal number of married people, although the service sector had more number (78%) of married employees than manufacturing sector (71%).

• Employees of service sector had more graduates (that includes even post graduates) (89%) than manufacturing sector (77%). Others who were not involved in this group had completed their diploma. The difference in educational qualification was significant (T = 2.54; p = 0.012).

• Service sector had more number of graduates (90%), while manufacturing sector lesser number of graduates (70%).

• A significant number (51%) of those working in Manufacturing sector were at a junior position in comparison with service sector.

• Manufacturing sector had more number of employees with >10 years of experience (47%), while the service sector had more employees in 2-5 years experience group.

• The maximum number of employees in both the sectors were in the group of Rs.11,000 to Rs.20,000 monthly income (32% and 29%, respectively). While a significant parity was found in the Rs.21,000 to 30,000 group, where there were large number of employees from service sector (28%) compared to manufacturing sector (17%).

• In manufacturing as well as service sector half of the employees had 5 or more number of years of experience.

• The overall consistency of the measures were tested using reliability analysis. For the manufacturing industry, the Cronbach’s alpha value for different constructs ranged from 0.620 to 0.928 indicating a high internal consistency among the items, while in Service sector it ranged from 0.67 to 0.81.

• The objective to analyze the quality of work life and their determinants in the selected manufacturing and service sectors was achieved through the Factor Analysis that revealed the factors perceived to play a role in QWL.

• Factor Analysis extracted seven factors with Eigen value more than 1 that explained 70% of the variability of the data for the manufacturing sector. Varimax (variance maximising method) rotation of the extracted factors produced the 41.760% variance for Job satisfaction, 8.009% for Adequate and fair compensation, 5.978% for Opportunity for growth, 4.633% for Training and development, 3.861% for Work load, 3.074% for Safe and healthy working conditions, and 2.705% for Social integration in the work organization.

• In the service sector, eight factors were extracted with Eigen value more than 1 that explained 61% of the variability of the data. The factors in the order of importance perceived by the employees are Commitment to work place (32.25%), Adequate and fair compensation (6.59%), Job satisfaction (5.53%), Training and development (4.12%), Safe and healthy working conditions (3.78%), Skill utilization and opportunity for growth (3.44%), Social integration in the work organisation (3.094%), and Work environment (2.7%).

• The second objective to measure employee satisfaction and their opinion on the organizational policies with respect to compensation, career prospect, occupational stress and participation in management was achieved by conducting the regression model that arrived at identifying the influencing factors on overall satisfaction of the employees.

• In the manufacturing sector, the linear regression model established that the independent variables, Job satisfaction, Work load, Opportunity for growth, Training and development, Adequate and fair compensation, Safe and healthy working conditions, and Social Integration could predict the QWL of the employees working in manufacturing organizations. Job satisfaction accounted for 32.5%; Work Load, 17.3%; Opportunity for growth, 35.8%; Training and development, 9.7%; Adequate and fair compensation, 42.8%; Safe and health working conditions, 33.7%; and Social integration, 47.4% of the explained variability in overall satisfaction of the employee with the company. The research models proposed were highly statistically significant at a confidence level of 95% with p values less than 0.000.
• In the service sector, Commitment to the work place could explain 46.1% of the variation in the overall satisfaction, Adequate and fair compensation, 31.2% Job satisfaction, 23.8%; Training and development, 20.7%; Safety and healthy working conditions, 21.4%; Skill utilization and opportunity for growth, 35.8%; Social integration in the work organisation, 25%; and Work environment, 31.4%.

• Correlation analysis was conducted to evaluate the pair-wise relationship between the constructs studied. All the factors in the manufacturing sector were found to be correlated with the overall job satisfaction, with Opportunity for growth, \( r = .602 \); Work load, \( r = .422 \); Training and development, \( r = .321 \); Adequate and fair compensation, \( r = .657 \); Safe and healthy working conditions, \( r = .584 \); and Social Integration, \( r = .691 \).

• In the case of service sector too, the QWL factors were highly correlated with the Overall satisfaction of the employees. The correlation values were found to be .679 for Commitment to workplace, 0.559 for Adequate and fair compensation, 0.488 for Job satisfaction, 0.455 for Training and development, 0.463 for Safe and healthy working conditions, 0.598 for Opportunity for growth, 0.499 for Social Integration, and 0.560 for Work environment.

• Comparison of the QWL factors of the manufacturing and service sectors indicated that there is no difference of opinion among the employees of both manufacturing as well as the service sector.

Overall, it can be said that manufacturing sector perceive Job satisfaction to be most important criteria for QWL, while commitment to the workplace is considered as an important criteria for service sector. Both the sectors give equal weightage for Adequate and Fair Compensation and Training and Development factors.

**Recommendations**

Since both sectors placed greater importance on Opportunity for Growth, the organisations should make performance appraisal transparent and conduct training programs to enhance skills and abilities of the employees. To achieve job satisfaction, the companies should ensure that Employees have clear job description, without ambiguity. Employees should be allowed to participate in decision making with regard to their role. Employees opinion on improvement of the working process should be considered positively. The companies should give importance to career development and create career path with succession planning. The companies should make safe and healthy working conditions as their priority as these factors have a greater impact on the productivity and performance of the employees. The companies studied in this research should adopt welfare measures and programs to satisfy the employees. Participative Decision Making, Implementing Suggestion System, Innovative Reward System, were analysed. This study has identified the positive and negative factors that influence the way employees perceive the quality of work life. As a practical implication, these factors can aid organizations to conceptualize strategies that strive to positively assimilate quality of work life and career development of the employees, thus guaranteeing long term competitive gain.