

K. Umachandran<sup>1</sup>



## AUTONOMUS WORK TEAMS ON A HIGH PERFORMANCE MODE

### Introduction

The Japanese concepts of Teams vis-à-vis the American Orientation of Individualism has taken a convenient position in organizations to bridge over the valencies in the required skill-sets observed or identified in individuals as well as over team. Stephan P Robbins (Organization Behaviour 7<sup>th</sup> Edition Pp 349) claims that Self Managed work teams are empowered teams which take over the responsibilities from the supervisors to collectively exert control over their work space. Thus the work based relationships lead to a LEAN-MEAN organization structure and setting. This approach suits well for an evolving organization in an aggressive market space.

### HPWS Evolution

I had learnt through a hard way “the evolution of SMT’ incorporating my industrial experience of 12 years and empathising myself in the members shoe (offcourse a lot of environment scanning was done prior to these initiatives). All the lessons learnt SEEN – FELT – LEARNED – OTHER’s FAILURE – RESEARCHES etc., were dosaged throughout these initiatives.

As a HR Head in organizations, I had experienced “How vital is the work force contribution to the Bottom line” and know “How much is spent on the welfare and upkeep”. The importance given to other resources such as Machine, Materials, Methods, Money, and Market etc was not equally reciprocated towards MAN. People were controlled more by the McGregor’s X Theory than the Y Theory (of belief). Pyramidal structures of control which any Organogram follows count the manning ratio but misses many attributes of TASK matrix and SKILL matrix.

---

<sup>1</sup> Prof., Head of the Department – International School for Management Studies, Madras School of Social Work, Egmore, Chennai. He is also the Consultant – Organization Development for NELCAST Ltd.,

K. Umachandran



The potential of Human Resource is astounding and has no barriers. If an organization wants to maximise its ROI ie., the return on investment then HPWS is opted.

### Background

After having 12 years of Industrial Experience and having implemented Employee Involvement & Lean Manufacturing Techniques such as Suggestion Scheme, Quality Circles, Small Group Activities, Cost Reduction Teams, Weight Reduction forums, SMEDT (Single Minute exchange of Dies & Tools), Cross Functional Teams, Task Forces, Committees, 5 S, Kanban (JIT), Kaizens etc., I moved on to become a OD consultant - practicing implementation of HPWS in Manufacturing Organizations in India (Dr. Reddy's, Godrej, Regma Ceramics, Pepsi, Nelcast etc.,) for the past 9 years.

### Interventions

Over the past 9 years i.e since 2001 onwards, I have implemented Self Managed Team (SMT) structures in four big Organizations in India

1. Dr. Reddy's – Pharma major specialised in Bulk drugs and formulations. DRL (F 4) has only 35 people as against any other organization with same infrastructure would work with 400 plus people. (Greenfield at Yanam)

2. Pepsi – Soft drink beverage; at its SONARPUR and MAHUL plants had implemented HPWS as part of handling the industrial relations towards involvement and collaborative culture as against aggressive and opposition.

3. Regma – Asia's largest Tile (Ceramic) Manufacturer at its Greenfield plant at Karaikal has 110 people as against 1000 plus that would normally require

4. Mercury Godrej – Exporters of Steel Storage solutions. This organization is at Tambaram near Chennai was closed due to Labour unrest. The plant was reopened; members were selected afresh; groomed as per the technical requirements of the process;

K. Umachandran



psychologically inducted through attitudinal exercises and involvement activities at work. The productivity of the plant was tripled within 6 months.

5. Now, AWT is being evolved at NELCAST, a leading Grey & SG Iron Foundry. The team members are Diploma & Graduate engineers identified after exposing them first to the place of work (foundry environment has heat, dust and dirt); film on company profile; Aptitude test ; Psychometric test; Panel Interview and Personal Interview. Initially for a month the trainees were given theoretical training and observation in the first half of the day, while in the second half they work hands-on for 3 hours on-the job. Daily Quality review meeting, Weekly review and learning evaluations through Tests, Group presentations and Quiz etc., reinforced the learning. Now 16 members per shift produce better quality output substantial control on the time loss (derailers such as Core Setting, Fixture change and breakdowns)

#### Approach:

HPWS encompasses various factors of OCCUPATION, initiatives of ORGANIZATION DEVELOPMENT (OD) and finally lands on an enriched QUALITY OF WORK LIFE (QWL). Occupation is constituted by Job Characteristics, Empowerment and Job Satisfaction. Prominent Organization Development initiatives such as Knowledge Management (KM), Training and Development (T&D), Performance Management (PM) and Leadership Development (LD) find place in taking care of the valencies identified in the TASK and SKILL matrices. These areas are the nurturing aspects for the individuals to become contributors to the organization within the shortest time frame possible.

HPWS implementation normally takes the following path.

1. The organization will be first subjected to a scan and “AS-IS” status will be first obtained.
2. Then the “TO-BE” picture will be drawn as an end position visioning by involving the leadership team of the organization.
3. The GAP ANALYSIS done and the variables to be intervened is identified

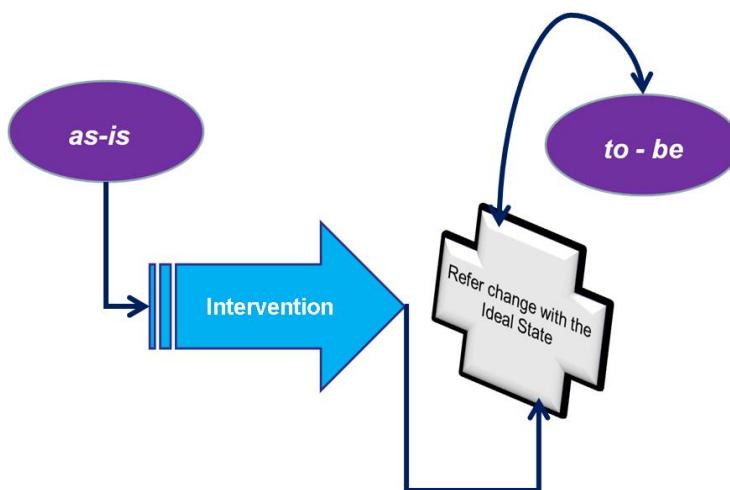
K. Umachandran



4. The ROAD MAP is arrived based on the organizational requirement and affordability.

5. Alignment with the STAKE HOLDER is obtained and then the initiative is processed through.

During the “as-is” analysis POSITION & ROLE Clarifications (PCRC) will be done on the existing members in the organization so that the “to-be” delivered / expected TASK and SKILLS can be clearly identified. The study will test the efficacy of the perception among various classifications of its members towards interpersonal relationships for Organizational effectiveness..



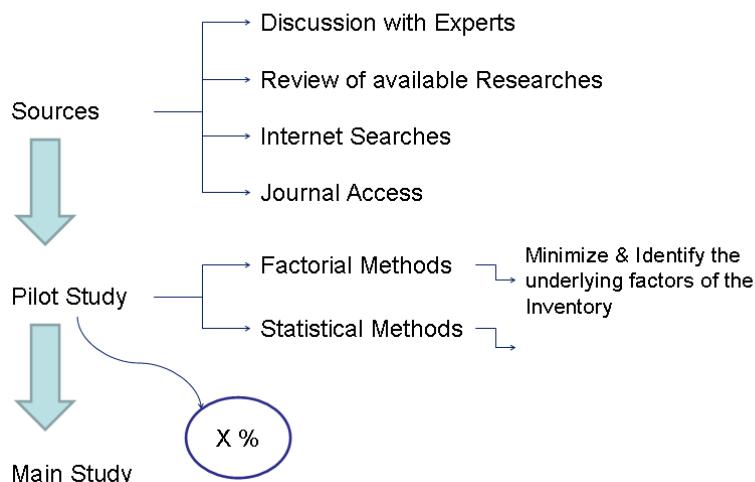
The concept of QWL as per Likert (1961), Davis (1983), McGregor (1960) acknowledge the positive element in reorganization of industrial system and is based on the logic that any productive system has a technical dimension interdependent on the socio-economic and psychological variables. Lawler (1982) metamorphosis the concept and stated that QWL as a variable and everything what an organization did for the welfare of the employees. Indeed any conscious effort that is aimed at improving the working conditions,

K. Umachandran



work content, and its attendant conditions like salary, safety, security, fringe benefits can legally be entitled to qualify for QWL. It is a concept which outreaches its scope both inside and outside the work related life.

### Research Process Planned

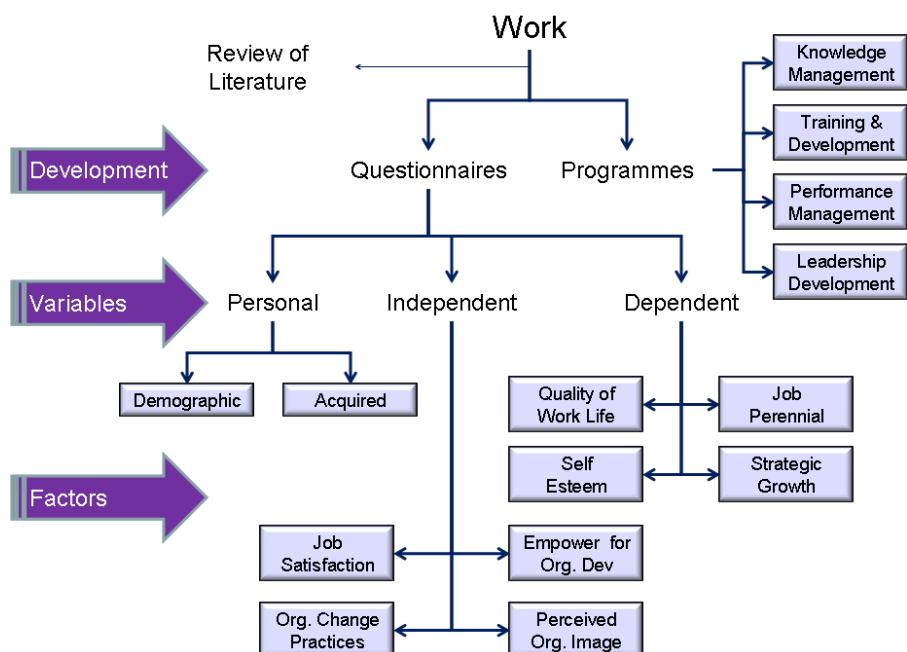


Davis (1983) states that the quality depends on the relationship between employees and the total working environment with human dimensions added to the usual technical and economic considerations. The balance theory on the stress load by Smith and Carayon – Sainfort (1989) identifies the sources of occupational stressors and psychological factors that influence behaviour at work. Therefore work life is influenced by the Job Characteristics, Freedom at work and its decisiveness leading to individual satisfaction at work. These variables are influenced by determinants such as knowledge, Skills, Performance and leadership congruent on work. The cognitive disposition of these in a facilitating way to the employees will segment towards better management facilitations in favor of the organizational goal.

K. Umachandran

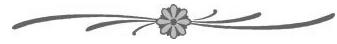


Walton (1974) on QWL proposed eight dimensions which included healthy environment, development of human capacities, growth and security, social integration and constitutionalism. These dimensions can be structured as facilitating environment for "Shared contribution" which is captured by intrinsic and extrinsic knowledge collation, develop the human capacities by facilitating "Experience sharing", growth based and coordinated through "Contributions" and skill of deriving work through the mastery of "getting done". These are Organization development (OD) variables commonly known as Knowledge Management, Training and Development, Performance Management and Leadership development.



These variables have varied portrayal of meaning and doctrines embedded in them based on two broader segmentations such as Knowledge based and Product based organizations. Many factors influence an employee's Quality of Work Life (QWL) which

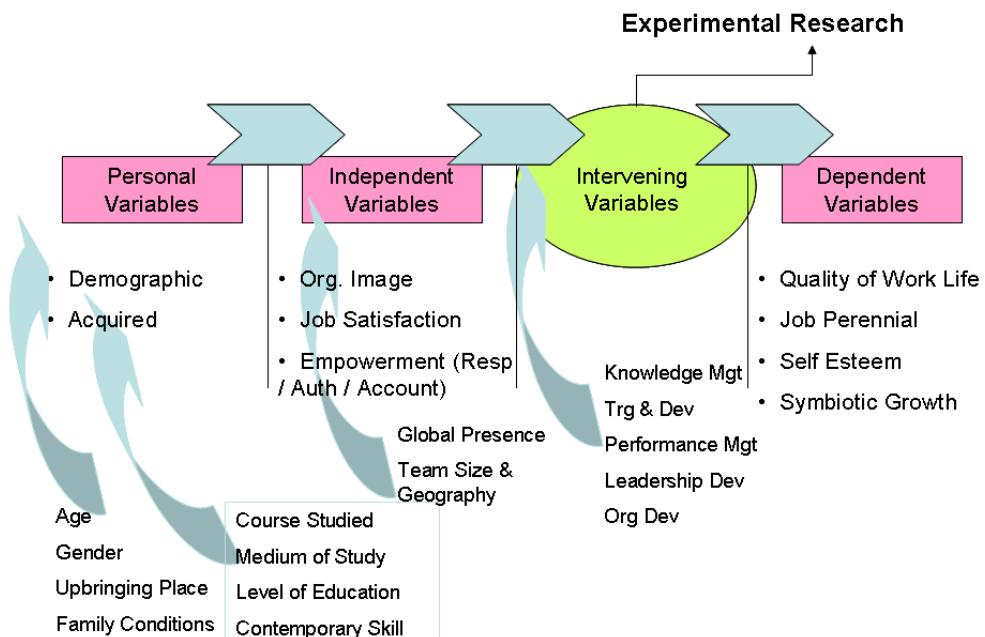
K. Umachandran



ultimately impacts on the commitment to the organization. Single scrupulous influential factor that the aforementioned researchers have repeatedly shown to be significantly correlated to the Quality of work life is namely occupation support and organization development facilitators, Moore (2000); Moore & Bruke (2002).

Brief (1998) states that Job satisfaction has been defined as a pleasurable emotional state resulting from the appraisal of one's job an affective reaction to one's job and an attitude towards one's job. Therefore Job Satisfaction can be an important indicator of how employees feel about their jobs and a predictor of work behaviors such as organizational citizenship. It serves as Sense of inner fulfillment and pride achieved when performing a particular job. Job satisfaction occurs when an employee feels he has accomplished something having importance and value worthy of recognition; sense of joy.

### Variables to be studied -



K. Umachandran



Sirgy et al.; (2001) Suggested that the key factors in quality of working life are: Need satisfaction based on job requirements, Need satisfaction based on Work environment, Need satisfaction based on Supervisory behaviour, Need satisfaction based on Ancillary programmes, Organizational commitment. They defined quality of working life as satisfaction of these key needs through resources, activities, and outcomes stemming from participation in the workplace. Maslow's needs were seen as relevant in underpinning this model, covering Health & safety, Economic and family, Social, Esteem, Actualization, Knowledge and Aesthetics, although the relevance of non-work aspects is play down as attention is focused on quality of work life rather than the broader concept of quality of life.

Though the study is narrow and have a limited scope of confining the reach within an organizational context, it is an attempt to identify and measure the dimensions of QWL from socio-economic and psychological point of view and compare it among management cadre employed in the organization, selected for the study. In a way, the study has both narrow and broader perspectives. The logic for narrowing down the scope is to have an in depth analysis of the study inter-alia attempt to add a literature on QWL in organizations where the Autonomous Work teams have a uniqueness of the Occupation which is affected more by the Job Characteristics, Empowerment and Job Satisfaction. Each Organization through its Organization development initiatives such as Knowledge Management, Training and Development, Performance management & Leadership evolution create Centers of Excellence to groom and develop the competencies in its talent pool. The current research focuses on the how these factors of the Independent and Intervening variables have an impact on the dependent variable.

### Objectives of the study

Based on the reviews available in the field, the investigator has proposed the following objectives.

K. Umachandran



1. To develop a comprehensive scale identifying the factors related Occupation and Organization Development.
2. To find out the effect of personal variables such as age, marital status, nativity, position, family, medium of study, course, level of education, gender orientation and organization on the factors of Occupation namely
  - a. Job Characteristics
  - b. Empowerment
  - c. Job Satisfaction
3. To find out the effect of personal variables such as age, marital status, nativity, position, family, medium of study, course, level of education, gender orientation and organization on the factors of Organization Development (OD) namely
  - d. Knowledge Management
  - e. Training & Development
  - f. Performance Management
  - g. Leadership Development.
4. To find out the effect of personal variables such as age, marital status, nativity, position, family, medium of study, course, level of education, gender orientation and organization on the factors of Quality of Work Life (QWL).
5. To examine the contribution of personal variables to Occupation factors and Organization Development variables.
6. To examine the association among the variables of Occupation, Organization Development and Quality of Work life.

## METHODOLOGY

For the purpose of the present study and fulfillment of the objectives formulated in the present study, both primary & secondary data have been collected.

- a. Research Design

K. Umachandran



I had selected the ex-post factor research design which can be highly suitable for the present study. The main characteristics of the ex-post factor are that I do not have any control over the variable studied and I can report only what has happened or what is happening.

#### b. Sample of the Study

In the present study, 183 male respondents were randomly selected from 5 different organizations mainly manufacturing sector. Their age ranges from 25 to 40 years with mean age of 31.5 years.

### PILOT STUDY

The pilot study was conducted among the 25% of the total sample ( $N = 183$ ) of male respondents in the present study. During the pilot study, the investigator has developed two questionnaire namely Occupation Factor Scale and Organization Development Questionnaire. These were further subjected to Factor analysis method. Reliability measure was done for the dependent variable of Quality of Work life questionnaire. Both face and content validity were established with the opinion of the experts in the field of investigation.

### TOOLS USED

To fulfill the objectives and hypothesis framed in the present study the I had developed the following questionnaire after brief discussion with experts in the field and reviews related to the field of study. The tools used are personal data sheet, Occupation factor scale, Organization development questionnaire and Quality of work life questionnaire.

#### a. OCCUPATION FACTOR SCALE

40 items of the Occupation factor Scale developed by the investigator and during the pilot study with the sample of 45 respondent data were subjected to Factor analysis and items were merged with independent factors namely Job Characteristics, Empowerment and Job Satisfaction. Both face and content validity were established.

K. Umachandran



#### b. ORGANIZATION DEVELOPMENT QUESTIONNAIRE

65 items of the Organization development questionnaire developed by the investigator during the pilot study with the sample of 45 respondent data were subjected to Factor analysis and items were merged with independent factors namely Knowledge Management, Training and Development, Performance Management and Leadership development. Both face and content validity were established.

#### c. QUALITY OF WORK LIFE QUESTIONNAIRE

25 items of Quality of Work Life questionnaire developed by Saravanan (2008), the questionnaire was used by the investigator with the established reliability and validity for the purpose of the study. The questionnaire measures the overall quality of work life of employees and classifies them as poor, moderate and high levels.

### MAIN STUDY

During the main study the sample of 183 male respondents comprising of IT and Manufacturing personnel were randomly selected in 4 private sector organizations in and around the city of Chennai. They were administered the following tools namely

1. Personal data sheet,
2. Occupation Factor Scale,
3. Organization Development Questionnaire and
4. Quality of Work Life Questionnaire.

The data were statistically analyzed by using SPSS package for the hypothetical testing in the study

### STATISTICAL ANALYSIS USED

1. Factor Analysis
  - a) For Occupation Factor Scale 3 independent factors were emerged.

K. Umachandran



	b) For Organization Development Questionnaire 4 independent factors were emerged.
2. "t" Test	Used to find out the significance of mean difference between the Demographic variables and Independent and Dependent variable.
3. One way ANOVA	Used to find out the significance of mean difference among the demographic variables with Independent and Dependent variables.
4. Multiple Regression Analysis	Used to find out the contribution of personal variables with Independent and Dependent variables.
5. Correlation Co-efficient	Used to find out the association on the study variables.
6. Alpha Reliability Co-efficient of Correlation	Used to find out the reliability measure for a) Occupation Factor Scale b) Organization development Questionnaire c) Quality of Work Life Questionnaire

## MAJOR FINDINGS OF THE STUDY

Based on the statistical Analysis the following findings emerged.

1. In the present study, the investigator has developed the comprehensive scale of Occupation Factor Scale measuring 3 Occupational factors and Organization Development Questionnaire by measuring 4 independent factors.
2. Significant difference was found among the 3 different age group of respondent on the factors of Job characteristics, Empowerment, Job Satisfaction, Knowledge Management, Training and development, Performance Management and Leadership Development.

K. Umachandran



3. No significant difference was found among the different age group of respondent on Quality of Work Life.

4. Significant difference was noticed between Married and Unmarried group of employees on Knowledge Management, Performance Management and Quality of Work Life. The Unmarried group of respondent scored higher value than married life.

5. Comparison of Rural and Urban respondent significant difference was noticed on Job Satisfaction and Performance Management.

6. Significant difference was found among the 4 different personal on all variables in the study (Occupation, Organization Development and Quality of Work Life).

7. Comparison of 3 different family group of respondent, significant difference was found on the variables of Job Characteristics, Job Satisfaction, Knowledge Management, Performance Management and Quality of Work Life.

8. Comparison of Medium of Instruction studied by the respondent in their Higher Secondary School Levels, significant difference were noticed on the variables on Knowledge Management, Training and Development.

9. A comparison was made of the employees who studied different course in Engineering disciplines. A significant difference was notices on all seven variables studied (three factors of Occupation and four factors of Organization development).

10. Significant difference was notices in the educational background of the correspondent on the variables of Job Characteristics, Empowerment, Jon Satisfaction, Knowledge management, Performance management and Quality of Work Life.

11. Significant difference was noticed between Co-ed and Uni-sex gender orientation on the variables of Job Characteristics, Job Satisfaction, Knowledge Management, Performance Management and Quality of work Life.

K. Umachandran



A high degree of positive relationship was found among the variables in the study. The multiple regression analysis was carried out to find out the contribution of personnel variables on Independent and dependent variables. The result found that the demographic variables such as Age, Family, Organization, Marital Status, Nativity, Position, Education, Gender orientation, Organization, course and family highly contributed to the present study. Overall the present study emphasis the lead for periodical training programmes to sustain motivation of employees for facilitating Quality of Work life.

## References

1. In addition to the researched published Articles, Books on Industry, People & Self Managed Teams, Websites such as following was referred.
2. <http://findarticles.com/p/articles>
3. <http://hbr.harvardbusiness.org>
4. Industries Online Publishing content
5. Industrial Tribunals
6. Fair Practises at Work places
7. <http://managementhelp.org>
8. <http://www.amazon.com/Business-Without-Bosses-Self-Managing-Performing/>
9. <http://executiveeducation.wharton.upenn.edu/open-enrollment/leadership-development-programs/creating-leading-teams.cfm>
10. Published works by Similar researchers such as Peter Boxall and Keith Macky, Department of Management, Auckland University of Technology etc.,

## Articles Published by the author

1. Nurturing a dream - Implementing Empowered Work Culture in Dr Reddy's Laboratories. . human capital. Jan 2003, Pp 36 - 41.

K. Umachandran



2. Attitudinal development. The Indian Journal for Training & Development (Published by ISTD), Vol XXVIII No.1 Jan – Mar'1998
3. Punitive Actions in Labour Liberal Period. Current Labour Reports. Oct 1999, Vol 15 Part 10 , 61-63.
4. The Numbers Game - A practical scientific tool to identify and convert indiscipline towards productive utilisation. human capital. Feb 2000, Vol 3 No 9 , 42-45.
5. Beyond Simple Negotiations - Wage settlements can be about productivity, participation and involvement too, as examples of leading companies prove. human capital. Mar' 2000, 26-30.
6. Jack of all Trades – Multiskilling can be the new answer to empowering Organizations and employees. human capital. May' 2000, 22-27.
7. Attrition who's fault? Current Labour Reports Sept'2000
8. Skill Development – Specialized Training on dealing Statutory Officials. Current Labour Reports April'2001
9. Organization Development – Interventions in Indian Business, 2005, Pages 280, (Book)
10. Human Resource Accounting – Quality & Quantity, 2007, Pages 223, (Book)
11. Social Entrepreneurship – Empowering Women (Below Poverty line Community), 2009, Pages 240, (Book)