

**QUALITY OF WORK LIFE PROGRAMS AND ITS IMPACTS ON EMPLOYEES'
QUALITY OF LIFE IN THE POWER SECTOR, WITH PARTICULAR
REFERENCE TO ODISHA, INDIA**

Subhamanasini Nayak

Ph.D Research Scholar, Dept. of Business Management, C.V. Raman Global University,
Bhubaneswar, Odisha, India, nayaksubhamanasini007@gmail.com,

Dr. Sanjita Lenka

Associate Professor, slenka@cgu-odisha.ac.in, Dept. of Business Management, C.V. Raman
Global University, Bhubaneswar, Odisha, India

Abstract:

The aim of this study is to find out how Quality of Work Life (QWL) programs affect employees' Quality Of Life (QOL) in Odisha, India's power sector. The research also looked at the elements of QWL programs as a significant component of QOL, which may affect employees' productivity. The study was conducted among 216 employees working in the power sector in Odisha. The respondents have chosen at random, and the information has acquired by questionnaire distribution. According to the data collected, there are more males than females in the workforce. In this study, QWL programs and QOL are shown to be significantly correlated. The findings also showed that QWL programs have a favourable and substantial influence on QOL. Psychological health, personal growth, social inclusion, and interpersonal relationships are very important variables of QOL programs, which have the ultimate impact on QOL. Because of this, the researcher strongly advises such organizations to create high-quality QWL programs by concentrating on certain service features that would further improve the overall QOL of employees. This study came to the conclusion that QWL programs improve QOL and there is a positive and significant relationship between them. Future studies can be conducted in diverse populations, qualitative research, other components of QWL programs, and QOL, as well as in various industries.

Keywords: *Quality of Life (QOL), Quality of Work Life (QWL) Programs, Power Sector, Odisha*

Introduction:

To stand in today's modern competitive world, Organisations are compelled to enhance all of the crucial factors that contribute to their performance. Whether it is service quality, the quality of human resources, the quality of raw materials, delivery efficiency, or marketing efficiency. Human resources are among the most essential of these variables (Pravin, B., et al, 2020). Human resources are regarded as the lifeblood of every organisation; hence, it is essential that employees feel happy, motivated, and content with their positions. Human resources, as the

primary factor responsible for effective resource utilisation and strategic decision-making, gives organisation a competitive advantage (Thakur, et al; 2019). Therefore, the workforce is becoming an organization's most important asset. QWL is a crucial strategy for preserving environmental and human values that have been neglected as a result of technological development's impact on Productivity and Economic growth (Walton; 2007). QWL is one of the top concerns that organisations should take into account. According to Howard (1993), QWL is both a goal and an ongoing process for being achieved. According to Howard (1993), organisations should be committed to QWL of employees in order to improve their work and create favourable and beneficial jobs and work environments. However, this will require work and the active participation of employees from all levels of the organisation throughout the process.

As women join the workforce, additional workplace requirements and conditions are also necessary. In this modern era employers are becoming more conscious of their requirements and making adjustments to working hours, pay, child care, and other factors to meet them.

A study was conducted by Akdere in 2006, in that study the researcher found that of working moms and working dads were reported experiencing tension between the responsibilities of their jobs and their desire to spend time with their family with 83% and 72% respectively. According to a study of working people done by the New York Times in 1998, employees who had been with the company for a while had important expertise and abilities that helped the company make successful. In respect to the relation between the workplace environment and workers' personal needs, Hackman and Oldhams (1980) suggested certain conceptual aspects of QWL. It was believed that a workplace that met employees' personal needs would foster healthy interactions and result in outstanding QWL. The workplace has to be comfortable since it is where employees will spend the majority of their time at work place. When employees discover that their workplace is enjoyable, they will continue to work diligently to fulfil their tasks, regardless of the burden. It is a smart strategy for keeping employees in an organisation for long period of time and if their pay is higher and they have nice perks that satisfied their personal demands.

Maslow's hierarchy of need, in which he divided human needs into five categories such as, (1) Physiological need, (2) Safety need, (3) Belongingness and love, (4) Esteem need , and (5) Self-actualization need. All of these have emphasised on recognising an individual's needs. To move up in the hierarchy, priority should be given to the most basic of needs. Every human being has different need since what is significant to one person could not be significant to another Rethinamand Ismail (2008).Therefore, organisations try to maintain a high QWL to increase its productivity and to retain employees for a longer time, etc.

According to previous researches, there were a positive correlation between QWL and QOL. Theory of QOL was developed in Europe and US in the 1960s (Pukeliene, et al.; 2011). Life satisfaction was shown to be significantly and strongly predicted QWL scale (Withey, et al.; 1976) (Sirgy, et al; 2006). Through spill over, segmentation, and compensation, QWL enhanced overall QOL (Rain, et al.,; 1991). According to Sirgy et al. (2006), the segmentation effect describes how people can keep their feelings contained within one area of their lives without them spilling into other areas of their lives, while the spill over effect describes how the process and final result of one's afflictive experiences at work can have an impact on how

one feels about their life in general. The more general part of QWL is referred to as QOL. QWL is a very crucial factor which needed to be given priority in organisations.

A concise definition of QWL would be a broad notion that encompasses adequate and fair compensation, social integration, and safe and healthy working circumstances in the workplace which allow employees to make use of and expand all of their talent(s). Many programmes have been developed to enhance the benefits of QWL programmes on QOL, making QWL the smallest part of QOL that needed to be explored further. In a study conducted by Royuela, Tamayo, and Surinach in 2008 claimed that QWL is connected to QOL.

QWL and QOL are two of today's organisations' most fundamental concerns. Manpower is the most essential subsystem, and organisations see it as one of their top concerns. Organizations, like systems, required cooperation and efficiency across their subsystems (Asgari and Dadashi, 2011). Aside from that, people nowadays strive to attain a higher education, a profession, and success in life, which has led to severe issues with QOL, such as an ageing population and an increase in people getting married in their late 30s due to their busy careers. A research was conducted by two Japanese researcher named Inoguchi and Fujii's in 2009 on Quality of Life in Japan, which highlighted concerns about the nations' ageing populations due to the progress of society and made Japanese society more preoccupied with concentrating on their careers and employment than on starting their own families.

Many of the prior researches have concentrated on QWL, but paid a little attention to QWL programmes that were helpful in putting their findings and recommendations into practise. In Odisha, A few researches have conducted how QWL Programs affect employees' QOL.

Review of Literature:

Generally "Quality of Work Life" is typically included working hours and pay, benefits, working circumstances and career opportunities that affected employee satisfaction, work ethics, working conditions, motivation and managerial worries about the effectiveness of Productivity. The purpose of QWL in the organisation is to increase employees' well-being and get more productivity. QWL is connected to job factors or characteristics and work environment. Then, Beukema (1987) defined QWL as the degree to which workers might construct their occupations in accordance with their alternatives, interests, and requirements inside the organisation.

Employees are given the authority by their employer to create their own work based on their needs, giving them the flexibility to complete the task. Serey (2006) said that QWL is linked to purposeful and fulfilling employment. The people in the organisation should engage in this activity because it gives them the chance to make use of their abilities and talents as well as to face difficulties and circumstances that call for self-initiative and self-direction. QWL has also significant on turnover intention (Rokhman, W., 2023). According to Muftah (2011), there are some important factors of HRM (Human Resource Management) which are garnering interest and research emphasis on QWL. It is the mind-set which saw employees as the organization's most valuable resource and as an "asset" rather than a "cost". QWL is a multi-dimensional concept which incorporates employee's job-related wellness as well as how gratifying and stress-reducing their work experiences (Shamir and Solomon ; 1985) and enhances QOL. QWL

and QOL are both the indicators of how satisfied the employees are with the professional and personal lives. Satisfaction of both immediate and long-term requirements in the areas of job, family, leisure, and spirituality are just some of the ways in which QWL programmes possible enhancement of QOL. The feeling connected to the many different spheres that make up one's life outside of work is the glue that holds a QWL programme together with QOL. The most common symptom of this feeling is contentment one experiences oneself (Sirgy, 2008).

Programs for QWL:

Since the early 1970s, many of the researchers have studied QWL in an effort to better understand how to increase employee happiness and productivity. According to Martel and Dupuis (2006), the earliest QWL programmes in the US, they gave employees a voice in choices affecting their working environment with the aim of gauging employee happiness and using the results to create a number of initiatives to boost employee productivity. Klein's (1986) QWL programmes shows that several employee-centred programmes aimed at boosting productivity. According to Klein (1986), the QWL programmes include profit-sharing programmes, Scanlon Plans programmes, employee participation in management programmes, quality circles, and productivity teams. Moreover, they consist of profit-sharing plans, labour-management productivity committees, communication programs, general cost- depletion plans, horizontal or vertical workplace studies, reward schemes based on group or unit productivity, and self-managed teams or groups of workers. According to Shareef (1990), the goal of the QWL and employee participation programs in the 1990s is to increase the productivity. There are a number of QWL programs that are connected to the workplace (Sirgy et al; 2008). The QWL programs included quality circles, cooperation, parallel structures, decentralised organisational structures, and ethical organisational culture. Motivation towards work and performance, employee loyalty and dedication to the organisation, a low turnover rate, decreased absence rates, and less industrial conflict enhanced by QWL programs (Sirgy et al., 2006).

Impact of QWL on Employees' working environment:

Studies on the workplace have shown that both the physical and social environments have an impact on workers' emotional wellness (Cummings, et al.,; 1977) (Glaser; 1980) (Lawler;1986) Simmons and Mares, et al.;1985). QWL included how the workplace and its features affected employees' work life (Bagtasos ; 2011). QWL was the term used to describe the favourable working circumstances and settings that prioritise employee welfare and well-being (Huang, 2007). According to Knox, et al., (2001), QWL is significantly influenced by the strengths and shortcomings of the workplace. The state of the workplace should get greater consideration since it has an impact on employee productivity and organisational commitment (Gnanayudam & Dharmasiri, 2007) (Trau & Hartel, 2007). According to Ahmad (2013), the key tenet of QWL has to provide a work environment where employees could collaborate with one another to accomplish organisational goals. Sirgy et al. (2006) reported that a number of programmes

were found to be connected to the workplace. The programs included cooperation, parallel organisational structures and ethical culture and quality circles.

Impact of QWL on job factors:

The obligations that employees have in relation to their jobs are referred to as job factors or job requirements. Employees felt let down when their workload became too much for them to handle (Loscocco, et al; 1990). In addition to completing their task, employees acquire a wide range of expertise by adhering to complete the specific task. Employees can easily become frustrated when job demands are too difficult for them to complete because they also have a variety of needs that must be met.

Numerous studies carried out in the past and discovered that, employees experienced emotional stress as a result of high workloads, overtime, and contradictory job expectations (House et al.,; 1979) (Caplan et al.,; 1980)(Menaghan, et al.,;1984) (Bacharach, et al.,;1990). Human expectations never satisfied, when one satisfied then another arises and the Needs Hierarchy theory given by Maslow is related to QWL. This theory is regarded as the reliable theory of the QWL. Then, Porter (1961) created a QWL based on the this theory satisfaction of needs can be in the organisational context. QWL measures employees' levels of satisfaction of needs in relation to the job. A model proposed by Sirgy in 2008, the characteristics of the employee, the workplace, and the affective reactions that result from the dynamic fit between the two are considered in the relationship between QWL programmes and QOL and further stated that enjoyable QWL programmes improve QOL by offering work resources that support the employee's expectations, decreasing conflict related to professional and professional life, enhancing multiple tasking, lowering stress related to both professional and personal, and increasing the significance of job factors. It provides a detailed description of the information pertaining to the QOL and QWL programs' spill over effects on employees' life; researchers chose the Work-Life identity that relates to QOL in this study. The goal of this study is to determine the impact of QWL programmes on QOL which promote a high QWL and Work Life Balance (WLB).

Quality Of Life (QOL)

QWL is the most comprehensive component of QOL. It is to assess the wellbeing of both individual and society. In the past, socioeconomic status, standard of living, and social status are composite indicators of families' living circumstances instead of the more often used term QOL. QOL is a phrase that denotes the quality of an individual's life, not simply certain part of life (Hagerty; 2001). An individual's contentment with his/her life's dimensions in comparison to their ideal life may be measured, as described by Gilgeous (1998). An individual's QOL is determined by the cultural context and the value system in which he/she lives.

In Odisha the term "Quality Of Life" (QOL) refers to an individual's ability to meet their basic requirements and flourish as a whole, including those for physical well-being, mental and emotional health, social connection, and safety, a pristine environment, and spiritual satisfaction. Factors such as income and distribution, level of education, health, and family life

were taken into account in a study by Azahan et al. in 2009 on QOL in urban residents. Verdugo developed the tool for measuring it which is known as the 'Schalock Model'. In this model there are eight factors they are (1)Rights, (2) Self-determination, (3) Personal growth, (4) Emotional wellbeing,(5) Interpersonal interactions,(6) Physical wellbeing, (Material wellbeing) and (8) Social inclusion are the eight first-order associated components that make up the 'Schalock Model'. The researcher concentrated on identifying relation between QWL Programs and QOL in Power Sector in Odisha by focusing on mental health, personal growth, interpersonal relationships, and social inclusion of the Schalock Model. The Schalock Model is considered to be the ideal model to reflect earlier research conducted by Gomez et al. (2010) on a correspondence of several models of individual's QOL.

This study attempted to investigate in power sector in Odisha. Odisha is the 8th largest state by area and 11st by population and in last September 2022 the electricity demanded by the people of Odisha was 5 249 megawatts. It has emerged as one of the major power surplus state in the Eastern Region. Various industries such as fertilizer, Thermal Power plant, manufacturing, mining, gas, construction, logistics and oil and gas. As a result, the individuals who work in the Power Sector in Odisha come from different cultures they do their jobs in different locations, with a wide range of expertise and experience. The presence of QWL programs in the Power sector is vital for the purpose of retaining valuable personnel since these programs also impact the employees' QOL.

Research Methodology

A quantitative research approach has taken, which determines the nature of the relation that exists between QWL programs and overall QOL among the employees working in Power sector with particular reference to Odisha. The aim of the research is to gauge how closely the variables under investigation are related (Hall, 2009). Cherry (2008) claims that correlational studies are often used to find correlations between QWL programs and QOL that they may provide results that are either positive, negative, or without a correlation.

Techniques for Sampling

Sampling is a method where a researcher methodically chooses a smaller number of representative objects or people (a subset) from a previously established population to serve and respondents (data sources) for experimentation or observation in alignment with the objectives of the research. Sampling can be thought of a procedure(Sharma, G., 2017). To ensure that the sample is the representative of the whole population, it is crucial to choose the appropriate sample components. Simple Random sampling is used here because all population factors were taken into account and that each factor had an equal probability of being picked in the study.

According to Sirgy (2006), the concept of QWL programs includes aspects of both the working environment and the jobs themselves. The QWL scales that are used in this study was earlier used by Sirgy in 2006. The QWL scale consists of the following components: (1) Programs

that improve the work environment, including decentralized organizational structures, mutual trust, similar organizational structures, and quality circles; (2) Programs that improve job factors, such as employee participation in decision-making as well as high job involvement; (3) Programs that improve job enrichment; and (4) Programs that improve both professional and social status. Work environment and job factors are examples of the two aspects of QWL programs that are being used for the purposes of this study as a part of the QOL. Table 1 shows the components of QWL Program which are taken into consideration.

Analysis and interpretation:

To measure the dependent variable, the GENCAT scale is used. The GENCAT Scale is a questionnaire that is self-administered, and it asks experts to answer objective and observable questions on the QOL based on direct observation of individuals' lives. This scale was used by Laura, Verdugo, and Arias A, Arias V (2011) and it is adopted to ensure that the questions accurately measures the QOL. Table 2 provides the components of QOL which are taken into consideration.

Table 1 : Components of QWL Programs

Components
Number of Items
Work environment
16
Job Factors
16

Table 2 : Components of QOL

Components
Number of Items
Emotional Wellbeing
8
Interpersonal Relation
8
Personal Development
8
Social inclusion
8

Normality Test

The study of data is the first stage in data analysis. In this study the normality test is used. The normality test estimates the probability that a given random variable follows a normal distribution, and may be used to check whether a given data set is whether reasonable or not. For the vast majority of statistical analyses, normality must be assumed. Pallant (2005) presuppose that the scores on the dependent variable are distributed normally. The significance of skewness and kurtosis for QWL programmes and QOL are shown in Table 3 below. Thus, it is possible to draw the conclusion that the population's sample of data is regularly distributed.

Table 3 : Normality test

Variable	Skewness	Kurtosis
QWL Programs	-0.918	1.470
Job factors	-0.732	0.465
Work environment	-1.315	2.615
Quality Of Life	-0.805	0.154

The above table shows that it is possible to draw the conclusion that the population's sample of data is regularly distributed.

Reliability Test

In order to undertake the reliability study, the Cronbach's alpha for each measure was calculated. Nunally (1987) recommended that the dependability threshold be set at .60. The questionnaire's negative phrased questions were all initially reverse d-coded.

The Cronbach's alpha for independent variables is in the range of .87 to .93, as shown in Table 4 below. According to the data, the measure exhibited a good level of internal consistency and stability. Because of the high reliability of the measures utilised in this study, it was advised that further research was warranted.

Table 4: Reliability Test

Variable	No. of items
Cronbach's alpha	
I. QWL Programs	27
.934	
Job factors	13
.879	
Work environment	14
.931	
II. Quality Of Life	16

Bivariate Correlation Analysis

Bivariate correlation analysis is used to determine how strongly two additional variables are correlated. When two variables are positively correlated, it indicates that as one variable rises, the other rises as well, and when two variables are negatively correlated one variable rises, the other declines. Cohen's proposed method for interpreting the correlation coefficient is shown in Table 5 below (1988).

Table 5: Cohen (1988) guidelines for interpreting correlation based on *r* values

Degree of Correlation	values	<i>r</i>
Very Strong	and 1.0	± 0.8
Strong	and 0.8	± 0.6
Moderate	and 0.6	± 0.4
Weak	and 0.4	± 0.2
Very Weak		± 0.2

The Pearson product-moment correlation coefficient was used to analyse the relation between WLB and overall satisfaction with individual's life. In Table 5, we have seen that these variables are somewhat positively related ($r=.591^{**}$, $p < .01$). Thus, the above table conclude that, more respondents value QWL programmes, the greater their demands for QOL.

Table 6 : Correlation between QWL programs and QOL

QWL Programs	QOL	Work environment	Job factor
Work environment .922***	Pearson .579*** Correlation (Two-tailed)	1	.686***
216	N 216	216	216
Job Factors .914***	Pearson .508*** Correlation (Two-tailed)	.686***	1
216	N 216	216	216
QWL 1	Pearson .591*** Correlation (Two-tailed)	.922***	.914***
216	N 216	216	216
QOL .591***	Pearson 1 Correlation (Two-tailed)	.579***	.508***
216	N 216	216	216

* Correlation is significant at the 0.01 level (Two-tailed)

Multiple Regression Analysis

In Table: 6 below, the findings of the multiple regression study between both QWL and QOL are shown. It shows that independent factors are responsible for 18% of the variation in employee turnover (R^2), that is significant as shown ($F = 43.573$, $p.01$). Out of the two aspects of QWL programs in the workplace environment influence the most of QWL variation, accounting for 18% of it, with a total QOL of .403*.

Table 6: Summary of multiple regressions for relationship between components of QWL programs and QOL

Independent Variable	Beta Dependent Variable	
Turnover Intention	Beta Coefficient and	
Significance levels		
QWL Programs	.591	
Work environment		.403
Job factors		.205
<hr/>		
R^2	.171	
Significant of F value		.001
Durb in-Watson		1.521

*Significant at the .05 level

From the hypotheses findings, Table 7 below is the summarized results for this study.

Table 7: The summary of overall hypotheses

Hypotheses	Overall Outcomes	
	Relationship	Outcomes
HO₁: QWL Programs and QOL are positively and significantly related.	Moderate and Positive	Accepted ($r=.591^{***}$)
HA₁: Work environment and QOL are positively and significantly correlated.	Moderate and Positive	Accepted ($r=.577^{***}$)

<p>HA₁: Job factors and QOL are positively and significantly correlated.</p>	<p>Moderate and Positive</p>	<p>Accepted ($r=.506^{***}$)</p>
--	-------------------------------------	---

Discussions

The outcome of the correlational data analysis, which supported by the questionnaire study, showed a substantial and positive correlation between the quality of life (QOL) of workers and quality of work life (QWL) programmes working with Power sector in particular reference to Odisha. Work environment and job factors are the two main components of QWL, and they both are strongly connected with QOL . The study conclude that QWL programmes increased employees' QOL at the workplace. All of the QWL program's components, including the work environment and job factors, were discovered to be related to general QOL. The organisation's QWL programmes helped to enhance employees' QOL and lower staff turnover, the organisation should think about introducing, improving, and enforcing QWL programmes on a continual basis. The activity will aid organisations in improving their output, commitment, and employee satisfaction.

References

- Ahmad, S. (2013). Paradigm of Quality of Work Life. *Journal of Human Values*, 19(1), 73-82.
- Akdere, M. (2006). Improving quality of work-life: Implications for human resources. *The Business Review, Cambridge*, 6 (1), 173-177.
- Alderfer, C. P. (1969). *An Empirical Test of a New Theory of Human Needs. Organizational Behaviour and Human Performance*, 4 (2), 142–175.
- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: Americans' perceptions of life quality*. New York: Plenum.
- Asgari, M.H., & Dadashi, M.A. (2011). Determining the Relationship Between Quality of Work Life (QWL) and Organizational Commitment of Melli Bank Staffin West Domain of Mazandaranin. *Australian Journal of Basic and Applied Sciences*, 5 (8), 682- 687.
- Azahan, A., Jamaluddin. M. J., Lukman. Z.M., Kadaruddin.A., & Kadir. A. (2009). The Quality of Life in Malaysia's Intermediate City: Urban Dwellers Perspective, *European Journal of Social Sciences*, 9(1).
- Bagtasos, Rival.Maynard. (2011). Quality of Work Life: A Review of Literature. *Business and Economic Review*, 1-8.
- Ballou, B., & Goodwin, H. N. (2007). Quality of Work Life. Retrieved from Strategic Finance http://www.imanet.org/publication_sfm_bi_oct_2007.asp
- Berman, Y., & Phillips, D. (2000). Indicators of Social Quality and Social Exclusion at National and Community Level. *Social Indicators Research*, 50 (3), 329-350.
- Bovier, P. A., & Perneger, T. V. (2003). Predictors of work satisfaction among physicians. *European Journal of Public Health*, 13 (4), 299-305.
- Buekema, L. (1987). Quality of reduction of working hour. Groningen: Karstapel.

- Burke, P. J. (1991). Identity processes and social stress. *American Sociological Review*, 56, 836–849.
- Caplan, R.D., S. Cobb, J.R. French, R. Van Harrison and S.R. Pinneau. (1980). *Job Demands and Worker Health: Main Effects and Occupational Differences* (Survey Research Center, Institute for Social Research, Ann Arbor, MI).
- Cherry, Kendra. (2008). *Correlational Studies, Psychology Research with Correlational Studies*, retrieved from www.about.com
- Cohen, R. K. (1988). Qualitative methods in psychology : A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Coakes, S. J., Steed, L & Ong, C. (2010). *SPSS : Analysis without anguish : version 20 for Windows : 2nd ed.* Australia : John Wiley & Sons Australia, Ltd.
- Cummings, T.G. and E.S. Malloy. (1977). *Improving Productivity and the Quality of Work Life*. Praeger, New York.
- Dharmasiri, A. S., & Gnanayutham, J. (2008). Quality of work life and its influence on organizational commitment: A study of the apparel industry, *Proceedings of International Conference on Business Management*, 5.
- Efraty, D. and Sirgy, M.J. (1990). „The effects of quality of working life (QWL) on employee behavioural responses“, *Social Indicators Research*, Vol. 22, 1990, 31–47.
- Gilgeous, Vic. (1998). The Quality of Work Life. *Integrated Manufacturing System*, 9(1), 173-181.
- Green, S.B. & Salkind, N.J. (2005). *Using SPSS for Windows and Macintosh* (4th Ed. Upper Saddle River NJ: Prentice Hall.
- Guzzo, R.A. and Dickson, M.W. (1996), “Teams in organizations: recent research on performance and effectiveness”, *Annual Review of Psychology*, (47), 301-38.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hackman, JR. (1987). The design of work teams. In *Handbook of Organizational Behavior*, ed. JW Lorsch, Englewood Cliffs, NJ: Prentice-Hal, 315–42.
- Hagerty, M. (2001). Quality of life Indexes for National Policy: Review and Agenda for Research. *Social Indicator Research*, 55(1).
- Hair, J.F., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. 7th ed. New Jersey : Pearson Education. Inc.
- Heider, F. (1982). *The Psychology of Interpersonal Relations*. Hillsdale, New Jersey London. House, J. S., A. J. McMichael, J. A. Wells, B.H. Kaplan and
- L.R. Landerman. (1979). “Occupational stress and health among factory workers”, *Journal of Health and Social Behavior*, 20, 139–160.
- Hwang, J.-I. (2007). Characteristics of patient and healthcare service utilization associated with inappropriate hospitalization days. *Journal of Advanced Nursing*, 60 (6), 654–662.
- Inoguchi, T., & Fujii, S. (2009). The Quality of Life in Japan. *Social Indicators Research*, 227-262.
- Johnson, A. G. (2001). *The Blackwell dictionary of sociology a user's guide to sociological language* (2nd ed.). Boulder, Colo.

- Keyes, C. L. M., & Lopez, S. J. (2002). Toward a science of mental health: Positive directions in diagnosis and interventions. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* New York: Oxford University Press.
- Klein, G. (1986). "Employee centered productivity and QWL programs," *National Productivity review* (Autumn), 348-362.
- Knox, S., Irving, J. A., & Gharrity, J. (2001). The nursing shortage its back!. *Journal of Nursing Administration's Healthcare Law, Ethics & Regulation*, 3(4), 114-122.
- Laura E. Gomez ., Miguel A., Verdugo. B. A., & Victor. A. (2010). A Comparison of Alternative Models of Individual Quality of Life for Social Service Recipients. *Social indicator research*, 109–126.
- Lawler, E. E. & Hall, D. T. (1970). Relationships of job characteristics to job involvement, satisfaction and intrinsic motivation. *Journal of Applied Psychology*, 54, 305-312.
- Layard, R. (2007). Rethinking Public Economics: the Implications of Rivalry and Habit. In L. Bruni & P. L. Porta (Ed.), *Economics & Happiness: Framing the Analysis*, 147-170.
- Layard, R. (2005). *Happiness: Lessons from a new science*. New York and London: Penguin.
- Maria, J. Brunette. (2004). Work environment and Quality of working Life among the Cambodian Workforce: A Pilot Study, *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- Martel, J., & Dupuis, G. (2006). Theory of work life : Theoretical and methodological problems and presentation of a new model and measuring instrument. *Social Indicators Research*, 77(1), 333-368.
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370-96.
- Maslow, A. H. (1968). *Toward a Psychology of Being*. New York: D. Van Nostrand Company.
- Menaghan, E.G. and E.S. Merves. (1984). Coping with occupational problems: The limits of individual efforts, *Journal of Health and Social Behavior*, 406–423.
- Mohd.Hanefah, M., MdZain, A.Y., Mat Zain, R., & Ismail, H. (2003). Quality of work life and organizational commitment among professionals in Malaysia. *Proceedings of the 1st International Conference of the Asian Academy of Applied Business: Narrowing the competitive gap of emerging markets in the global economy*. 10-12 July 2003 Sabah, Malaysia.
- Muftah, Hend Al.Lafi, Hanan. Impact of QWL on employee satisfaction case of oil and gas industry in Qatar. *International Scientific Press*, 1 (2), 107-134.
- New York Times (1998), "Women and Their Work: How Life Inundates Art".
- Nguyen. D. Tho. & Nguyen. T. M. Trang. (2011). Psychological Capital, Quality of Work Life, and Quality of Life of Marketers : Evidence from Vietnam, *Journal of Macromarketin*, 32(1) 87-95.
- Omar, Dasimah. (2009). Assessing Residents' Quality of Life in Malaysian New Towns. *Asian Social Science*, 5(6), 94-102. Parker C. P., Baltes, B. ., Young, S. A. Hutt, J. W. Altmann,
- R. A., Lacost, H, , Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: A meta-analytic review. *Journal of Organizational Behavior*, 24 (4), 389-416.

- Porter, L.W. (1961). A study of perceived need satisfaction in bottom and middle management jobs, *Journal of Applied Psychology*, 1–10.
- Pravin Bhende, Nandakumar Mekoth, Varsha Ingalhalli, and Y. V. Reddy, 2020, Quality of Work Life and Work–Life Balance, *Journal of Human Values*, Vol. 26, Issue3, <https://doi.org/10.1177/0971685820939380>
- Pukeliene, V., & Starkauskiene, V. (2011). Quality of life: Factors Determining its Measurement Complexity. *Inzinerine Ekonomika-Engineering Economics*, 22 (2), 147-156.
- Rain, J.S., I.M. Lane & D.D. Steiner. (1991). A current look at the job satisfaction/life satisfaction relationship: Review and future considerations', *Human Relations*, 44, 287–307.
- Rathi, N., Rastogi, R., & Rangnekar, S. (2011). Quality of Work Life, Organizational Commitment, and Psychological Well-Being: A Study of the India. *Employees, International Journal of Contemporary Business Studies*, 2(5), 16-28.
- Rethinam, G and M. Ismail. (2008). “Constructs of Quality of Work Life: A Perspective of Information and Technology Professionals”. *European Journal of Social Sciences*. 7(1),58.
- Rice, R.W., McFarlin, D.B., Hunt, R.G. and Near, J.P. (1985). “Organizational work and the perceived quality of life: toward a conceptual model”, *Academy of Management Review*, 10 (2), 296-310.
- Rokhman, W. (2023, February). Pengaruh Quality of work life terhadap kepuasan kerja, Komitmen Organisasi, Turnover Intention dan stres kerja: Studi pada BMT di Kabupaten Kudus. In *Conference In Business, Accounting, And Management (CBAM)* (Vol. 1, No. 4, pp. 1135-1145).
- Roscoe, J.T. (1975). *Fundamental Research Statistics for the Behavioural Sciences*, 2nd edition. New York: Holt Rinehart & Winston.
- Royuela, V., Jordi Tamayo-Lopez, E. J. & Surinach, Jordi. (2008). Results of a Quality of Work Life Index in Spain. A Comparison of Survey Results and Aggregate Social Indicators. *Springer Science+Business*.
- Salkind, N. J., & Green, S. (2011). *SPSS Quick Starts* Pearson Publisher.
- Salkind, N. J. (2012). *Exploring Research* (8th ed.). Pearson Publisher.
- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach* (5th edition). New Jersey: John Wiley and Sons.
- Serey, T.T. (2006). “Choosing a Robust Quality of Work Life”. *Business Forum*, 27(2), 7-10.
- Schalock, R. L., & Verdugo, M. A. (2002). *Quality of life for human service practitioners*. Washington, DC : American Association on Mental Retardation.
- Shamir, B. & Solomon, I. (1985). Work-at-home and the quality of working life. *Academy of Management Review*, 10, 455-464.
- Shareef, R. (1990). QWL Programs Facilitate Change. *Personnel Journal*, 69, 50-67.
- Sheppard, H.L. & Herrick, N. O. (1972). *Where Have All the Robots Gone Worker Dissatisfaction in the 70's* (The Free Press, New York).
- Simmons, J. & Mares, W. (1985). *Working together: Employee Participation In Action* (New York University Press, New York).

- Sirgy, M. J., Nora R., Jiyun W., & David E. (2008). "A Work-Life Identity Model of Well-Being: Towards a Research Agenda Linking Quality-of-Work-Life (QWL) Programs with Quality of Life (QOL)," *Applied Research in Quality of Life*, 3(3), 181-202.
- Sirgy, M.J., Efraty, D., Siegel, P. and Lee, D.-J. (2001). „A new measure of quality of work life (QWL) based on need satisfaction and spill over theories“. *Social Indicators Research*, 55, 241–302.
- Sirgy, M. J., Michalos, A. C., Ferriss, A. L., Easterlin, R. A., Patrick, D., & Pavot, W. (2006). The Quality-of-Life (QOL) Research Movement: Past, Present and Future. *Social Indicator Research*, 343–466.
- Sirgy, M. Joseph, Nora P. Reilly, Jiyun Wu, & David Efraty (in press). A Review of Quality-of-Work-Life (QWL) Programs. In *Handbook of Social Indicators and Quality of Life studies*, edited by Kenneth Land, Springer Publishers.
- Smith S. (1980). The concept of the good quality of life. In: D.J. Depew. *The Greeks and the Good life*, 17-32.
- Srivastava, R., & Rangarajan, D. (2008). Understanding the salespeople's "feedback-satisfaction" linkage: what role does job perceptions play? *Journal of Business & Industrial Marketing*, 23 (3), 151 - 160.
- Staines, G. L. (1980). Spillover Versus Compensation: A Review of the Literature on the Relationship Between Work and Nonwork. *Human relations*, 33 (2), 111-129.
- Thaoprom, P. (2004). Relationship Between Quality of Work Life and Job Performance for Police Office-Crime Prevention and Suppression Division Case Study Thonglor Metropolitan Station.
- Ting, Y. (1997). "Determinants of job satisfaction of Federal Government employees". *Public Personnel Management*, 26(3), 313.
- Trau, R.N.C., & Hartel, C.E.J. (2007). Contextual factors affecting quality of work life and career attitudes of gay men. *Employee Responsibilities and Rights Journal*, 19, 207-219.
- Walton, R.E. (1975). Criteria for Quality of Working Life. In L.E. Davis, A.B. Cherns and Associates (Eds.). *The Quality of Working*. New York: The Free Press, Life, 1: 91-104.
- Wilensky, H. L. (1960). Work, careers and social integration. *International Social Science Journal*, 12 (4), 543-560.
- Wyatt, T. A. & Wah, C. Y. (2001). Perceptions of QWL: study of Singaporean Employees Development, Research and Practice in Human Resource Management, 9(2), 59-76.