

Factors Influencing Quality of Work Life of Bus Drivers of Public Transport in Punjab

Dr. Gurpreet Randhawa

Associate Professor,
University Business School,
Guru Nanak Dev University, Amritsar,
Punjab, India.

Dr. Summi Arora

Assistant Professor,
Guru Gobind Singh Khalsa College,
Sarhali, Tarn Taran, Punjab, India.

Abstract

This study aims to examine the factors influencing quality of work life among bus drivers of public transport in Punjab state of India. Data was collected from 483 bus drivers using purposive and convenience sampling technique. With the help of factor analysis the study identified 14 key factors influencing quality of work life of bus drivers, namely adequate pay and job security, work environment, advancement opportunities and career growth, physical working conditions, safety at work place, social support, clothing facilities and attendance, inadequate rest intervals, time pressures, participation in decision making, need for stress relieving program, leisure, work and home life balance and transfer policy. Findings of the study will be useful for management and policy makers in public road transport undertakings while formulating various policies and procedures for the growth and development of bus drivers and creating such working environment that enhances their quality of work life.

Key Words: Quality of Work Life (QWL), State Road Transport Undertakings (SRTUs), Bus Drivers, Punjab.

Introduction

A robust public transport system reflects a nation's infrastructural development and plays a pivotal role in the overall economic advancement too as it serves dual purpose of providing for mobility of people and also generates employment (Ramanayya et al., 2007). Buses constitute famous mode of public transport on road network, however, driving a bus is characterized as low control, low support and high demand occupation that include high risks of physical and mental sickness, which results in absenteeism and reduced productivity of drivers as well as their organization (Kompier & Martino, 1995). India being a highly populated nation, roads stay congested most of the time. In real time, bus drivers need to cope with time pressures, negotiating heavy traffic and confrontations with other road users and uncooperative/violent passengers (Payal and Deepa, 2011). Apart from few cities, traffic rules are not followed truly, that often results in careless driving and one puts his own and others' life at risk. Moreover, conditions of Indian roads especially those of rural areas are terrible due to menace of potholes, to the extent that "total number of casualties from the year 2013 to 2017 due to pothole related accidents was 14,926 which was probably more than those killed on border or by the terrorists" (Rautray, 2018). In 2019 also, more than 2000 people

were killed due to same reason¹. Further, bus drivers have to drive under difficult situations like unreliable and not routinely serviced vehicles, comparatively long working hours, and meagre salary especially for beginners². This sort of working environment of bus drivers often results in psychosocial strain which further leads to anxiety, dissatisfaction, distress, depression and ultimately impacts driving performance and further lead to more accidents and fatalities (Kirschenbaum et al., 2000; Rabbani et al., 2009; Apostolopoulos et al., 2011). Thus, it is of utmost importance that working environment of employees must be designed in such a way that enables them with exultant working lives (Nayak et al., 2016). The present study makes a modest attempt to understand the underlying

factors associated with quality of work life (QWL) of bus drivers in public transport.

Literature Review

QWL represents a construct that was put forward towards humane considerations in the organizations (Randhawa and Arora, 2016) and it includes “whole of the actual working conditions that promote full satisfaction of physical, economic, social, psychological needs of the employee in harmony with the success of the organization” (Monkevicius, 2014). To get more insight into the research topic reviews of related studies have been mentioned in table 1.

Table 1: Studies Showing Factors Influencing QWL

Sr. No.	Author (year)	Objective	Sample	Factors
1.	Wyatt and Wah (2001)	To examine perceptions of QWL of employees working in different organizations in Singapore.	332 managerial executives	Supportive management and favourable work environment; personal growth and autonomy; nature of job, and stimulating opportunities and co-workers.
2.	Saklani (2004)	To assess importance of various QWL factors to employees from 24 organizations in Delhi, India.	294 employees	Opportunity for continued growth, opportunity to use & develop human capacity, adequate & fair compensation, work load, human relations & social aspects of life, work & total life space, reward & penalty system, fringe benefits & welfare measures, job security, participation in decision making, image of organization in society, equity, justice & grievance handling, and safe & healthy physical work environment.
3.	Hsu and Kernohan (2006)	To examine perceptions of QWL of nurses in Taipei, Taiwan.	65 nurses	Socio-economic relevance, demography, organization aspects, work aspects, human relations aspect and self-actualization.
4.	Wichit (2007)	To determine predictors of QWL among bus drivers of Bangkok Mass Transit Authority, Thailand.	460 bus drivers	Job characteristics, age and work duration.

5.	Dhar (2008)	To explore experiences of bus drivers with respect to QWL in Pune Municipal Corporation, Maharashtra, India.	15 bus drivers	Time pressures, deteriorating condition of buses & increasing pollution, lack of professional relationship, temporary nature of job and lack of recognition and appreciation.
6.	Stephen and Dhanpal (2012)	To measure perceptions regarding QWL from the perspectives of employers and employees of small scale industries in South India.	317 employees and employers	Social support, inter-personal relationship and recognition.
7.	Gupta (2013)	To examine QWL among employees working in hospitals in Delhi and Noida, India.	600 employees	Work & family balance, relationship between management and employees, career development, communication flow, equal distribution of work and planned night shifts.
8.	Mazloumi et al. (2014)	To evaluate QWL of train driver's working in Iran Railway.	100 train drivers	Working conditions and home-work interface.
9.	Kumari and Sidhu (2016)	To identify factors affecting QWL of taxi drivers in Punjab, India.	300 private taxi drivers	Accidental & environmental risk factor, safety, health & well-being, ergonomics risks, unsocial working hours, job & social security, interpersonal relations, occupational stress, human relations & social aspects of work life, work & life space, adequate & fair compensation, social relevance of working life and grievance handling.
10.	Nayak et al. (2016)	To examine predictors of perceived QWL in healthcare units of Odisha, India.	158 health care employees	Work life balance, communication, teamwork and empowerment.
11.	Yadav & Naim (2017)	To examine QWL in Indian power sector.	300 power sector employees	Salary, stress free work, job security, relations with colleagues, & communication.
12.	Kwahar & Iyortsuun (2018)	To explore dimensions of QWL in hotel industry of Nigeria.	355 hotel employees	Job security and career satisfaction, remuneration and benefits, home-work balance, training and opportunities for personal autonomy, and safe and healthy environment.
13.	Singh & Maini (2019)	To investigate factors associated with QWL.	317 faculty members	Management policies, work environment, fair salary and rewards, training and development opportunities, job design and life space, job security and grievance handling.

Source: Authors' compilation on the basis of literature review.

Data in table 1 shows that although various studies have examined factors influencing QWL of employees in different disciplines but there is a paucity of research in examining factors influencing QWL of bus drivers in public transport in India especially in Punjab. Thus, the present study aims at filling the niche in the existing literature. The paper aims to identify key factors influencing QWL of bus drivers of public transport.

Methodology

A structured questionnaire was framed after reviewing the existing measures of QWL and adapted for the

requirements of present study. Each statement was measured on a five point scale from strongly disagree (1) to strongly agree (5). The reliability coefficient of scale was found to be .892 by alpha method which is considered as fairly acceptable (Malhotra and Dash, 2012). Appropriateness of data for application of factor analysis was assessed using KMO measure of sampling adequacy and Bartlett's test of sphericity. The KMO value was found to be .830 (refer table 2) which is considered meritorious (Kaiser, 1974). Similarly, value of Bartlett's test of sphericity was also found significant. Thus, data was found to be fit for factor analysis.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.830
Bartlett's Test of Sphericity	Approx Chi-square	1.599E4
	Df	1770
	Significance	.000

Source : Calculated through SPSS.

Universe

Universe of the study consisted of 3356 bus drivers employed, during the period of study, in state road transport undertakings (SRTUs) in Punjab that comprises Punjab Roadways, PUNBUS and PEPSU Road Transport Corporation.

Sample

Data were obtained from a sample of 483 bus drivers of SRTUs by using purposive and convenience sampling technique. Most of the respondents were 10th pass and belong to the age group of 31 to 40 years and had driving experience of 10-19 years. Also, most of them worked on contractual basis with monthly earning up to Rs. 10,000

and spent 58-67 hours per week on driving.

Results

Principal Component Analysis of factor analysis was applied to extract minimum number of factors which explain maximum variance (Malhotra and Dash, 2012). Orthogonal rotation technique using varimax rotation was applied. Factors with eigen values greater than one were considered important and all variables which have factor loading of .45 or above were considered for inclusion in final solution of the study. Final factor solution resulted in fourteen factors which contained 60 items and accounted for 66.759 per cent of total variance

Table 4: Summary of Factors Influencing QWL of Bus Drivers

Labels	Items	Factor Loadings	Communalities	Mean Value (SD)	Cronbach's Alpha (Eigen Value)	Explained Variance (%)			
Factor 1: Adequate Pay and Job Security									
A ₃	Compensation is provided according to experience.	.829	.734	31.50 (10.280)	0.912 (7.075)	11.792			
A ₂	Compensation is provided according to responsibility.	.821	.763						
A ₄	My total compensation package is fair.	.798	.744						
A ₁	I get adequate compensation to maintain reasonable standard of living.	.766	.706						
A ₆	My organization provides retirement benefits to its employees.	.708	.669						
A ₅	My organization has a fair overtime wage policy.	.644	.618						
A ₅₁	Employees in this organization are not terminated without proper reasons.	.635	.695						
A ₅₀	My job security is good.	.584	.672						
A ₈	I am getting fair amount of house rent allowance from the organization.	.578	.762						
A ₇	Group insurance scheme facility is provided to employees.	.540	.644						
A ₁₀	I am getting fair amount of mobile allowance from the organization.	.529	.767	26.39 (6.229)	0.828 (4.337)	7.228			
A ₉	I am getting fair amount of medical allowance from the organization.	.510	.639						
Factor 2: Work Environment									
A ₇₃	Grievance handling procedure enables to sort grievances effectively.	.723	.709						
A ₇₂	Grievance handling procedure enables to sort grievances timely.	.703	.716						
A ₂₅	My physical work environment is comfortable from viewpoint of space.	.675	.556						
A ₂₆	My physical work environment is comfortable from viewpoint of temperature level.	.672	.695						
A ₂₀	Proper washroom facility is available for employees.	.636	.686						
A ₇₇	Rules regarding taking leave are fair.	.595	.586						
A ₁₂	Canteen facility is provided to employees.	.580	.690						
A ₆₂	While performing the job my state of mind remains peaceful.	.534	.508						

Factor 3: Advancement Opportunities and Career Growth						
A ₅₃	Advancement opportunities available in this organization are better than opportunities available elsewhere.	.763	.737	9.58 (3.720)	0.866 (3.311)	5.518
A ₅₂	I am satisfied with career opportunities available for me.	.737	.743			
A ₅₄	It is not difficult for employees to move to higher positions.	.736	.693			
A ₅₅	Promotions facilities are fair.	.604	.738			
Factor 4: Physical Working Conditions						
A ₂₈	My work place is free from air pollution.	.814	.774	12.66 (3.780)	0.723 (2.969)	4.948
A ₂₉	My work place is free from noise pollution.	.754	.751			
A ₂₄	My work place is overcrowded.	.535	.566			
A ₃₆	My work does not affect my health badly.	.522	.516			
A ₂₂	I am contended with the physical work environment in which I work.	.475	.611			
Factor 5: Safety at Work Place						
A ₃₃	The risk of life hazards at the work place due to accidents is low.	.814	.776	11.26 (3.493)	0.745 (2.931)	4.885
A ₃₂	Ambulance facility is provided during emergency.	.728	.662			
A ₃₄	The risk of life hazards at the work place due to diseases is low.	.597	.560			
A ₁₇	Proper sitting facility is provided when not performing the duty.	.570	.617			
A ₁₆	When away from home, facility for night stay is provided.	.516	.652			
Factor 6: Social Support						
A ₆₄	My colleagues are important source of personal support.	.663	.710	12.57 (3.603)	0.754 (2.789)	4.648
A ₆₅	My superior pays attention to what I am saying.	.631	.665			
A ₆₆	People at the workplace are helpful in getting the work done.	.604	.649			
A ₆₃	Relations between management and employees are good.	.471	.595			
Factor 7: Clothing Facilities and Attendance						
A ₁₄	Facility for storing clothes is provided.	.705	.712	6.28 (2.181)	0.736 (2.694)	4.490
A ₁₅	When away from home, facility for washing clothes is provided.	.697	.693			
A ₇₈	My organization is very particular about attendance of the employees.	.575	.503			

Factor 8: Inadequate Rest Intervals						
A ₄₁	Total rest breaks are less in number.	.692	.600	6.12 (1.803)	0.676 (2.371)	3.952
A ₄₀	Break periods in my work are of short time.	.680	.594			
A ₄₈	My job involves repetitive work.	.586	.594			
Factor 9: Time Pressures						
A ₆₉	My job requires to do work at night hours also.	.802	.748	8.72 (2.721)	.635 (2.286)	3.810
A ₆₈	My organization is very particular about punctuality of the employees.	.635	.714			
A ₆₁	My job requires high attention continuously for long time.	.509	.610			
A ₆₇	My job requires me to work at weekends also.	.501	.695			
Factor 10: Participation in Decision Making						
A ₅₈	Management consults employees whenever a decision affecting their day to day work life is made.	.720	.696	7.71 (2.518)	.676 (2.205)	3.675
A ₅₆	I am able to voice my opinion in matters affecting my area of work.	.693	.667			
A ₅₇	I am involved in decision making that affect my area of work.	.664	.621			
Factor 11: Need for Stress Relieving Programs						
A ₆₀	I think my organization should design stress relieving programs for employees.	.827	.747	2.08 (.777)	* (1.825)	3.042
Factor 12: Leisure						
A ₁₈	When not performing the duty, recreational facility is provided.	.731	.704	3.76 (1.200)	.497 (1.824)	3.040
A ₁₉	Holiday home facility is provided to employees.	.605	.535			
Factor 13: Work and Home Life Balance						
A ₄₅	I have to face difficulties with family due to long working hours.	.725	.748	10.78 (3.064)	.672 (1.790)	2.984
A ₄₂	Time pressures keep me away from developing good social relations.	.654	.676			
A ₄₃	I am able to achieve a healthy balance between my work and home life.	.527	.583			
A ₄₆	My work leaves me enough time to discharge family responsibilities.	.495	.694			
Factor 14: Transfer Policy						
A ₇₅	My job involves frequent transfers.	.759	.676	5.93 (1.211)	.533 (1.648)	2.747
A ₇₆	Equitable treatment is given to employees regarding transfer policy.	.665	.670			

Source: Compiled from the results of SPSS.

Note: *Only one variable has loaded on Factor 9 so its Cronbach's alpha cannot be calculated.

Assessment of Extracted Factors

Factor 1: Adequate Pay and Job Security

Factor one represents the most important dimension of QWL of bus drivers and was named as adequate pay and job security. This factor explained 11.792 per cent of variance with highest eigen value of 7.075 and $\alpha = .912$. Twelve items loaded on this factor with factor loadings ranging from .510 to .829. It contains items like compensation is paid according to one's experience and responsibility. Pay is often considered as most important factor for those jobs which offer less chances of promotion like that of bus drivers. Findings of this study are in conformity with earlier studies (e.g. Garg and Dhingra, 2014; Arora & Randhawa, 2019; Singh & Maini, 2019).

Factor 2: Work Environment

This factor explained 7.228 per cent of variance with eigen value of 4.337 and $\alpha = .828$. Factor loadings for this factor ranged from .534 to .723. Eight items loaded on this factor which includes items related to comfortable work environment, proper washroom and canteen facilities etc. These findings are supported with the studies of Saklani (2004), Arif and Ilyas (2013) and Sharma and Jyoti (2013).

Factor 3: Advancement Opportunities and Career Growth

This factor explained 5.518 per cent variance, with an eigen value of 3.311, $\alpha = .866$ and factor loadings varied from .604 to .763. Four items loaded on this factor related to availability of career advancement opportunities and fair promotions. A just promotion system enhances employee morale. These findings are in agreement with the study of Mohamad and Mohamed (2012).

Factor 4: Physical Working Conditions

This factor explained 4.948 per cent of variance and is a combination of five items with an eigen value of 2.969 and $\alpha = .723$. The factor loadings on this factor ranged from .475 to .814. Job of bus drivers has been considered as challenging job with variations in temperature, noise, pollutants, exposure to dangerous machinery etc. Existence of good working conditions lead to reduction in fatigue of bus drivers thereby prevents accidents (Abdullah and Von, 2011) and also significantly contribute to health and well-being of workers (Kalimo et al., 2003) and increased productivity (Ajala, 2012).

Factor 5: Safety at Work Place

This factor explained 4.885 per cent of variance with an eigen value of 2.931 and $\alpha = .745$. Factor loading on this factor ranged from .516 to .814. Five items loaded on this

factor related with risk of life hazards at work place due to accidents and diseases. The findings of this study are supported by Krishna and Murthy (2015), Kwahar & Iyortsuun (2018) and Useche et al. (2018).

Factor 6: Social Support

This factor explained 4.648 per cent of variance, having an eigen value of 2.789 and $\alpha = .754$. The factor loadings ranged from .471 to .663. The four items loaded on this factor highlight the significance bus drivers' attach to support from colleagues, superiors and top management. Support system at workplace can prepare an individual to face strenuous situations without much difficulty and infuse feelings of belongingness and helpful in relieving stress and mitigating feelings of inequity at work (Truchot and Deregard, 2001). Past studies also confirmed the finding (Leiter and Maslach, 2004; Stephen and Dhanpal, 2012).

Factor 7: Clothing Facilities and Attendance

This factor explained 4.490 per cent of the variance and have an eigen value of 2.694 and $\alpha = .736$. The factor loadings ranged from .575 to .705. Three items loaded on this factor relates to availability of washing and storing facility at workplace along with organizations' particularity about attendance of bus drivers. Provision of clothing facilities are very much essential for bus drivers as they have to perform their duty in proper uniform and may have to stay away from their home for long durations.

Factor 8: Inadequate Rest Intervals

This factor comprised of three items and elucidated 3.952 per cent of variance with eigen value of 2.371 and $\alpha = .676$. The factor loadings ranged from .586 to .692. The items draw attention to less number of rest breaks and that too of very short duration. Considering the fact that job of bus drivers is of repetitive nature and requires continuous attention and alertness for long time, importance of appropriate rest breaks cannot be overlooked. Evans (1994) and Kantan and Sadullah (2012) also found rest intervals to be a major constituent of work life of bus drivers and Tse et al. (2006) concluded that improper rest breaks lead to stress.

Factor 9: Time Pressures

This factor explained 3.810 per cent variance with four items loaded on it with eigen value of 2.286 and $\alpha = .635$. The factor loadings ranged from .501 to .802. Time pressures are one of the main constituent of work environment (Karasek, 1976) and it act as source of stress and depression (Gospel, 2003; Taylor and Dorn, 2006) and may also lead to physiological and psychological ill health

(Sparks et al., 1997).

Factor 10: Participation in Decision Making (PDM)

Three items loaded on this factor sharing 3.675 per cent of total variance with an eigen value of 2.205 and $\alpha = .676$. The factor loadings ranged from .664 to .720. PDM has been considered as one of important consideration in inculcating feeling of belongingness for organization. Lee and Ashforth (1993) and Agwu and Olele (2014) also emphasised that when employees are allowed to participate in decision making it increases their efficacy, lowers exhaustion and hence improves their productivity.

Factor 11: Need for Stress Relieving Program

Only one item loaded on eleventh factor that emphasised need for appropriate stress relieving programs for employees. This factor explained 3.042 per cent of variance and eigen value of 1.825 and factor loading of .827. Job of a bus driver is stressful due to reasons mostly beyond their control, for instance, ergonomic conditions in which they work. In this context, provision of stress relieving programs may help them in coping with stressful situations (Dorn, 2005).

Factor 12: Leisure

This factor explained 3.040 per cent of variance with eigen value of 1.824 and $\alpha = .497$. Two statements loaded on this factor showing significance employees attach to provision of recreational facilities as these facilities inculcate feeling among employees that organization value their free time. This finding is in agreement with study of Krishna and Murthy (2015) that also identified recreational facilities to be an important variable of QWL. Further, Dhar (2008) suggested that get together parties should be arranged for relaxing drivers.

Factor 13: Work and Home Life Balance

Thirteenth factor explained 2.988 per cent of variance with eigen value 1.790 and $\alpha = .672$. Four items represented this dimension of QWL and factor loadings varied from .495 to .725. Irregular work schedules and rotating shifts have been recognized as one of the major reasons of disruptive home life of bus drivers (Evans, 1994). Other studies also reported work-home life balance as an important dimension of QWL (Rethinam and Ismail, 2008; Saad et al., 2008; Kwahar & Iyortsuun, 2018).

Factor 14: Transfer Policy

Two statements are loaded on this last factor which explained 2.747 per cent of variance with eigen value of 1.648 and $\alpha = .533$. The factor loadings ranged from .665 to .759. Certain jobs require transfer of employees in a

routine manner and bus driving is one of them. Bus drivers have to perform duty on different routes as allotted to them by their supervisors. In this regard, Evans (1994) suggested that rotation of employees on different shifts should be as limited as possible to lower fatigue.

Conclusions and Managerial Implications

To conclude, the study identified fourteen key factors influencing QWL of bus drivers of SRTUs. All these factors reflect different aspects of work life of bus drivers which are essential to be taken care. The public transport undertakings are required to draft driver friendly policies that ultimately imbibe these factors and augment their QWL. For instance, efforts can be made to ensure regularisation of their contractual services so that they can enjoy a dignified life. Special attention should be paid to their physical work environment so that they can operate under reasonably comfortable conditions. Bus drivers spend most of their time in polluted, noisy and unsafe environment that wrecks their schedules, disrupts family life, makes social activities hard to plan and execute (Whitelegg, 1995; Dhar, 2008). Thus there is an imperative need to create space for drivers so that they can take a break from their regular hectic work schedules. Drivers' job stress can be minimised with the help of even small efforts like organising periodic yoga classes, celebrating their anniversaries, organising health and safety awareness camps, workshops etc. Furthermore, as bus drivers' working hours are long thus organizational policies need to provide sufficient space so that they can maintain the work-family balance.

Limitations and Agenda for Future Research

The major limitation of the present study is that it is confined to public road transport of only one state of India. Future research may explore the other states of India. Also, other variables can be examined in relation to QWL like stress, absenteeism, fatigue, organizational climate etc.

Weblinks

1. <https://www.financialexpress.com/india-news/more-than-2000-people-killed-in-road-accidents-caused-by-potholes-3-states-account-for-maximum-deaths/1782391/>
2. <https://scroll.in/article/930305/unreliable-vehicles-long-hours-low-pay-what-it-is-like-being-a-bus-driver-in-india>

References

- Abdullah, D. N. M. A., & Von, H. L. (2011). Factors of fatigue and bus accident. In International conference on innovation, management and service. Singapore (p p . 3 1 7 - 3 2 1) . Retrieved from

- <http://www.ipedr.com/vol14/57-ICIMS2011S30010.pdf>
- Agwu, M. O., & Olele, H. E. (2014). Perception survey of employees' participation in decision making & organizational productivity in Julius Berger Nigeria PLC Bonny Island. *British Journal of Economics, Management & Trade*, 4(4), 620-637.
- Ajala, E. M. (2012). The influence of work place environment on workers' welfare, performance and productivity. *The African Symposium*, 12(1), 141-149.
- Apostolopoulos, Y., Peachey, A., & Sönmez, S. (2011). The psychosocial environment of commercial driving: Morbidities, hazards, and productivity of truck and bus drivers. In J. Langan-Fox & C. L. Cooper (Eds.), *Handbook of stress in the occupations* (pp. 431-447). Massachusetts, USA: Edward Elgar Publishing.
- Arif, S., & Ilyas, M. (2013). Quality of work-life model for teachers of private universities in Pakistan. *Quality Assurance in Education*, 21(3), 282-298.
- Arora, S. and Randhawa, G. (2019). Socio-economic variables and quality of work life: Public transportation bus drivers. *SCMS Journal of Indian Management*, 16(3), 67-76.
- Dhar, R. L. (2008). Quality of work life: A study of municipal corporation bus drivers. *The Journal of International Social Research*, 1(5), 251-273.
- Dorn, L. (2005). Professional driver training and driver stress: Effects on simulated driving performance. In G. Underwood. (Eds.), *Traffic and transport psychology* (pp. 431-442). Amsterdam: Elsevier.
- Evans, G. W. (1994). Working on the hot seat: Urban bus operators. *Accident Analysis and Prevention*, 26(2), 181-193.
- Garg, A. K., & Dhingra, V. (2014). Employees' perception about quality of work life: Insight of handicraft sector. *New York Science Journal*, 7(12), 36-52.
- Gospel, H. (2003). Quality of working life: A review of changes in work organization, conditions of employment & work-life arrangements. Retrieved from www.ilo.org/travail/whatwedo/publications/WCMS_TRAVAIL_PUB../index.htm
- Gupta, V. (2013). Constructs of quality of work life: An empirical evidence from Indian hospitals. *International Journal of Human Resource Management*, 2(2), 7-16.
- Hsu, M. Y., & Kernohan, G. (2006). Dimensions of hospital nurses' quality of working life. *Journal of Advanced Nursing*, 54(1), 120-131.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Kalimo, R., Pahkin, K., Mutanen, P., & Toppinen-Tanner, S. L. (2003). Staying well or burning out at work: Work characteristics and personal resources as long-term predictors. *Work and Stress*, 17(2), 109-122.
- Kanten, S., & Sadullah, O. (2012). An empirical research on relationship quality of work life and work engagement. *Procedia- Social and Behavioral Sciences*, 62, 360-366.
- Karasek, R. A. (1976). The impact of the work environment on life outside the job. Retrieved from <http://files.eric.ed.gov/fulltext/ED142717.pdf>
- Kirschenbaum, A., Olgenblick, L., & Goldberg, A. I. (2000). Well being, work environment and work accidents. *Social Science and Medicine*, 50(5), 631-639.
- Kompier, M. A. J., & Martino, V. D. (1995). Review of bus drivers' occupational stress and stress prevention. *Stress Medicine*, 11(1), 253-262.
- Krishna, K. S., & Murthy, Y. S. (2015). A study on perception of quality of work life among textile manufacturing workers in East Godavari District. *International Journal of Science and Research*, 4(10), 1487-1491.
- Kumari, L., & Sidhu, A.S. (2016). Factors affecting quality of work life of private taxi drivers. *Management and Labour Studies*, 41(4), 331-354.
- Kwahar, N., & Iyortsuun, A.S. (2018). Determining the underlying dimensions of quality of work life (QWL) in the Nigerian hotel industry. *Entrepreneurial Business and Economics Review*, 6(1), 53-70.
- Lee, R. T., & Ashforth, B. E. (1993). A further examination of managerial burnout: Toward an integrated model. *Journal of Organizational Behaviour*, 14(1), 3-20.
- Leiter, P. M., & Maslach, C. (2004). Areas of work life: A structured approach to organizational predictors of job burnout. In P. L. Perrewe & D. C. Ganster (Eds.), *Research in occupational stress and well-being* (pp. 91-134). Oxford: Elsevier.
- Malhotra, N. K., & Dash, S. (2012). *Marketing research: An applied orientation*. New Delhi: Pearson Publications.

- Mazloui A., Kazemi Z., Nasl-Saraji G., & Barideh S. (2014). Quality of working life assessment among train drivers in Keshesh section of Iran railway. *International Journal of Occupational Hygiene*, 6(2), 50-55.
- Mohamad, M., & Mohamed, W. N. (2012). A model of quality of work life, life satisfaction and service quality. *Asian Journal of Business Research*, 2(2), 38-51.
- Monkevicius, A. (2014). Quality of working life concept and empirical indicators. *Intellectual Economics*, 8(1), 8-24.
- Nayak, T., Sahoo, C. K., Mohanty, P.K., & Sundaray, B.K. (2016). HR interventions and quality of work life of healthcare employees: An investigation. *Industrial and Commercial Training*, 48(5), 234-240.
- Payal, R., & Deepa, V. (2011). Public transport operators: Burden and consequences upon the human operator. *International Journal of Advanced Engineering Research and Studies*, 1(1), 190-191.
- Rabbani, E. R. K., Junior, B. B., Lago, E. M. G., Parahyba, A. F. M., & Oliveira, M. Q. (2009). Evaluation of occupational health and environment of city bus drivers, considering ergonomic factors. Retrieved from www.abepro.org.br/biblioteca/enegep2009_TI_ST_094_636_13403.pdf
- Ramanayya, T. V., Nagadevara, V., & Roy, S. (2007). Impact of employee motivation on passenger satisfaction levels – a case study in the state of Karnataka (India). Retrieved from www.ses-library.usyd.edu.au/handld2123/6051
- Randhawa, G., & Arora, S. (2016). An insight into conceptualization of quality of work life. *Pacific Business Review International*, 8(10), 93-99.
- Rautray, S. (2018). More die due to potholes than terror: supreme court. Retrieved from [//economictimes.indiatimes.com/articleshow/66966367.cms?from=mdr&utm_source=contentofinterest&utm_medium=te xt&utm_campaign=cppst](http://economictimes.indiatimes.com/articleshow/66966367.cms?from=mdr&utm_source=contentofinterest&utm_medium=te xt&utm_campaign=cppst)
- Rethinam, G. S., & Ismail, M. (2008). Constructs of quality of work life: A perspective of information and technology professionals. *European Journal of Social Sciences*, 7(1), 58-70.
- Saad, H. S., Samah, A. J. A., & Juhdi, N. (2008). Employees' perception on quality of work life and job satisfaction in a private higher learning institution. *International Review of Business Research Papers*, 4(3), 23-34
- Saklani, D. R. (2004). Quality of work life in Indian context: an empirical investigation. *Decision*, 31(2), 101-135.
- Sharma, R. D., & Jyoti, J. (2013). Impact of quality of work life on job related attitudes: Structural modeling approach. *Metamorphosis*, 12(2), 20-34.
- Singh, A., & Maini, J. J. (2019). Factors associated with quality of work-life among faculty of technical institutes in Punjab. *Management and Labour Studies*, 44(3), 225-247.
- Sparks, K., Cooper, C., Fried, Y., & Shirom, A. (1997). The effects of hours of work on health: A meta analytical review. *Journal of Occupational & Organisational Psychology*, 72, 219-229.
- Stephen, A., & Dhanpal, D. (2012). Quality of work life in small scale industrial units: Employers and employees perspective. *European Journal of Social Sciences*, 28(2), 262-271.
- Taylor, A. H., & Dorn, L. (2006). Stress, fatigue, health, & risk of road traffic accidents among professional drivers: The contribution of physical inactivity. *Annual Review Public Health*, 27, 371-391.
- Truchot, D., & Deregard, M. (2001). Perceived inequity, communal orientation and burnout: The role of helping models. *Work and Stress*, 15(4), 347-356.
- Tse, J. L. M., Flin, R., & Mearns, K. (2006). Bus driver well-being review: 50 years of research. *Transportation Research*, 9(2), 89-114.
- Useche, S. A., Gómez, V., Cendales, B., & Alonso, F. (2018). Working conditions, job strain, and traffic safety among three groups of public transport drivers. *Safety and Health at Work*, 9(4), 454-461.
- Whitelegg, J. (1995). Health of professional drivers. Retrieved from www.eco-logica.co.uk/pdf/HealthProDrivers
- Wichit, N. (2007). Factors related to quality of work life among bus drivers under Bangkok Mass Transit Authority (Doctoral dissertation, Mahidol University, Thailand). Retrieved from mulinet11.li.mahidol.ac.th/thesis/2550/cd400/4736320.pdf
- Wyatt, T. A., & Wah, Y. C. (2001). Perceptions of QWL: A study of Singaporean employees development. *Research and Practice in Human Resource Management*, 9(2), 59-76.
- Yadav, M., & Naim, M. F. (2017). Searching for quality in the quality of work life: An Indian power sector perspective. *Industrial and Commercial Training*, 49(4), 164-174