

<https://doi.org/10.33472/AFJBS.6.4.2024.415-428>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

OCCUPATIONAL STRESS AMONG EMPLOYEES IN AUTOMOBILE INDUSTRY

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Article History

Volume 6, Issue 4, Feb 2024

Received: 17 Feb 2024

Accepted : 01 Mar 2024

doi: 10.33472/AFJBS.6.4.2024.415-428

ABSTRACT

The auto sector in India is considered one of the most important industries in the globe. After Japan, South Korea and Thailand, India is the fourth biggest automobiles exporter. In India this industry mainly involves the making of two wheelers, three wheelers, passenger cars and commercial vehicles. The automobile manufacturing industry in India is dominated by two wheeler production. The second largest manufacturing is passenger vehicles. Work Culture is an environmental determinants or situational determinants which affect seriously the behavior of an individual. This term reflects psychological and sociological thoughts about organizations. It also refers to the internal environment of every organization appears from the rules, values, norms and beliefs of the organization followed and involved in the employee behavior inside the organization. Stress is a kind of negative energy circulated in the human body due to various reasons. Stress at work place is a well-known factor for less motivation, self- confidence, poor performance, business competition and health issue, natural calamity, less satisfaction in current job, poor communication within the department and between the departments. The stress is divided into two categories. One is Eustress and other is Distress. The regression analysis result obtained the influence of PO-Fit on organizational role stress with the effect of mediating factor organizational climate. The management should take effective steps to match the role and expectation of employees in their role. Role expectation conflict should be reduced to avoid unnecessary stress creation. During the recruitment stage, the employer has to define the required competency matrix for the particular position and hire the employee appropriately using PO-fit. It helps the organization to reduce the Role stress among employees.

Key words: *auto sector, distress, eustress, natural calamity, organizational climate, Role expectation, recruitment stage.*

INTRODUCTION

The automotive/automobile sector started in the year 1808 by Francois Isaac de Rivaz. Karl Benz introduced a petrol engine car in 1885. After that, United States of America developed this sector in 1890s with hundreds of manufacturers. This country showed the highest automobile production in past decades. In 1929, worldwide 32,028,500 automobiles are in use. United States have single vehicle per 4.87 individuals at that time. After II World War, America manufactured on 75 percent of world's car making. USA was overtaken Japan in the year 1980 and also developed into world's leader for a second time in 1994. Japan in 2006 hardly crossed United States in production and detained this position up to 2009. Since 1970 to 2012 the number of auto models has increased frequently from 140 models to 684 models in America.

Automobile Industry in India

The auto sector in India is considered one of the most important industries in the globe. After Japan, South Korea and Thailand, India is the fourth biggest automobiles exporter. This sector provides employment to 12.5 million people directly and indirectly and also this industry contributes 7.1 per cent to country's GDP. In India this industry mainly involves the making of two wheelers, three wheelers, passenger cars and commercial vehicles. The automobile manufacturing industry in India is dominated by two wheeler production. The second largest manufacturing is passenger vehicles. This sector is the key drivers of financial development in our nation. The overall automobile industry is produced 25 million units in the year 2017.

According to the CII Report the Indian automobile industry is as in keeping with following:

- Biggest 3-wheeler marketplace
- 2nd leading two-wheeler segment
- Fourth leading tractor marketplace
- Fifth place in commercial vehicle
- 5 th biggest truck and bus sector
- Tenth major passenger car market region

Indian government plans to build automobile production is the key driver of „Make in India“ scheme, because it expects passenger motors promote to 94 lakhs units by 2026, as initiated in the AMP 2016-26.

Challenges Faced by Automobile Industry in India

The auto sector in India is one of the important and leading industries across the world. But this industry also faces different level of problems and challenges in the recent days. They are very much focused and developing new market trends, which is to build vehicles that are considerably more fuel efficient and less polluting. Competition, export market demand, investment rates, fuel cost, input cost are the major challenges faced by Indian automobile industry.

Work Culture

Culture is a broad concept in an organization. “Work culture concept is the part of Work culture. Work culture describes values, beliefs, norms, rules, assumption, principles and ways of networking that gives to the unique physical and mental atmosphere of an organization”. Culture also represents the personality of an organization (Cartwright and Cooper, 1993).

Lewin et al., (1939) analyzed the term culture to define the feelings, attitudes and social movements that occurred among the employees working in the organization. They found

particular involvements identified in the group activities based on different effects on culture. For example, a perceptive company manager forced their employees directly to increase the turnover. But this functions indirectly forced by management of the organization. This situation is called Work culture.

Work culture is an environmental determinants or situational determinants which affect seriously the behavior of an individual. This term reflects psychological and sociological thoughts about organizations. It also refers to the internal environment of every organization appears from the rules, values, norms and beliefs of the organization followed and involved in the employee behavior inside the organization. Every organization having unique organization culture compares to other Work behavior. Work culture is useful to know and determine because there are individual and Work gains in a good culture and dominant difficulties of several kinds of bad culture.

Work Stress

Stress is a kind of negative energy circulated in the human body due to various reasons. Stress at work place is a well known factor for less motivation, self-confidence, poor performance, business competition and health issue, natural calamity, less satisfaction in current job, poor communication within the department and between the departments. (Schabracq and Cooper, 2000; Murphy, 1995; McHugh, 1993).The stress is divided into two categories. One is Eustress and other is Distress.

Work stress is the work/role related pressure experienced in the organization. Work Stress is not unique in every organization. The important reasons behind the problem is culture or culture of an organization, lacking of individual performance, lack of training and learning for new role.

Work Stress in Automobile Industry

Worldwide automotive sector is the very fast growing sectors. This sector is experiences the problems of consumer demand and competition in the market. In general, people think that IT industry employees experienced more stress than other sector. Employees in all the field experiencing role or work related stress 14 because of various reasons. For example, the peer - poor relationship at work, new role conflict, heavy work load, lack of resource, monotony, employee poor performance and new challenges etc. They also face family related problems, personal health issues and social problems apart from organization.

Background of the Study

Organizations are experience more challenges and problems in the 21st century than before. These challenges and problems are not same toward particular organization/ enterprise. It affects overall the organization based on their structure and size. An Work culture in a specific industry is frequently faced by the increasing number of changes affecting on companies these days. It is mostly related to merging and acquisitions of firms, technological trends, company restructure as well as domestic and global economy. An organization not properly handles this Work changes means that they face employee dissatisfaction, increased turnover, absenteeism and poor Work performance.

Stress is unavoidable one in modern complex life. The position is defined as a system in every organization. Individual point of view role are divided into two systems. The first system is work space and next one is particular job set. Role space means the person occupies and plays

various roles. These roles represent the task space of that human being. The second position systems role set is an outline of interrelationship between one role along with many others.

Statement of the Problem

The Statement of the Problem will be “**COMPARATIVE STUDY OF WORK CULTURE AND JOB STRESS OF ENGINEERS IN SEMI AUTOMATED AND FULLY AUTOMATED AUTOMOBILE INDUSTRY**”

REVIEW OF LITERATURE

Raghunadan et al. (2016) had conducted a study about the public and private enterprises consequences of work culture. Nine factors were identified and analyzed the consequence of managerial behaviour. The activities of employees on OC sometimes optimistic or pessimistic. The result concluded from this study that better work culture presents more productivity, regular attendance, employee unity, and turn over, less stress, loyalty, smooth activities and high level of satisfaction. Environment of an organization changed only when the OC was weak and unhealthy.

Juris et al. (2015) investigated the changes of work culture effect on OC through some specific factors. The researcher took Yin (1994) research design model for this study. The model based on data analysis and validation for case study. For data analysis Cronbach’s alpha and chi-square test was used. The result of the statistical analysis test was taken by ten experts from the social sciences field. Second method was case study. In this stage the researcher compared two firms which just reconstructed and alters made due to market shifts. This case study result found that the employees’ satisfaction considered as the important factor for managerial changes.

Angela et al. (2014) identified the association among leadership and OC in South African fast moving goods industry. African leadership concept was unique in values. The result of the study showed that there was a affirmative association among leadership and organisational culture in FMCG organization. This study contributed to learn about leadership activity moving in the South African organizations. The researcher suggested that the African leadership helps to improve organisational atmosphere.

Khaja et al. (2014) study addressed culture factors of organisational context, organization structure, relationship between peer and poor in the organization, physical environment and values and norms. 500 employees were selected as a respondent for this study from various banks. The result suggested that the improving techniques like open communication (two-way communication) between the employer and employees, concern for people, participative decision making, the employer changed policies, rules and regulation as favorable to employees and technological changes helped the employees to improve working conditions.

Nasser (2014) research analyzed about the physical education teachers burnout. Population of the physical education teachers of Ramian City consists of 37. OC questionnaire and Persian version of Maslach Burnout Inventory questionnaire were used. 34 respondents were properly filled and returned the questionnaire. The data was analyzed with statistical measures using percentage, mean, SD and correlation. The results found that school management behaviour were significantly related with physical education teachers’ burnout. The study suggested that the school organization has to consider and support their teachers need. The physical education teachers also involved in all school activities.

Jeevan (2013) in his article measured an “impact of work culture on job satisfaction, job commitment an intention to leave”. Work culture scale and job satisfaction scale was used to get the data throughout questionnaire method. 820 respondents were taken for this study from various universities. To analyze the effect between the variables the regression analysis was used. The result found that most of the University teachers had low intention to leave their job. But eight percentages of the employees are not satisfied at their level. So, they are interested to change their job.

Shobha et al. (2011) assessed the job satisfaction level of the call centers customer service representatives through work culture and job satisfaction scale. 120 respondents were selected randomly from two call centers located at Noida. Frequency and percentage analysis was used to identify the levels of role stress. The satisfaction level of employees measured by low, medium and high. The findings showed that 9.17 employees were highly satisfied, 46.67% were moderately satisfied and 44.16 % of the employees were less satisfied on the current job. Rani (2017) focused Work Stress among the employees working in Sakthi auto motors. The research taken from 120 employees with simple random sampling method. Weighted average method was used to identify the Work role stress. Ten role stressors from Work role stress scale were used. The analysis inferred that role overload creates highest stress to the employees and the least stress was role expectation conflict from the employees. The researcher suggested from this study that the employer should create healthy working environment.

Priyanka (2016) found the Work Stress amongst Indian Professionals. The result found from this study is that the employees from the level of highest qualification facing more stress, the employees from post graduate level under the second most stressed group and finally the least stressed employees belong to the category of senior secondary level. The data were collected from 180 respondents in different working sector. For this study Udai Pareek (1993) Work Stress scale was used. They finally concluded that the effect of organization force to create more stress to the employees depends on their qualification.

Sayeeduzzafar et al. (2016) studied Work Stress and Work commitment. The study is conducted with the faculty members of India and Saudi Arabia University. The main objective was to analyze the level of role stress and Work commitment and also study the influence of each variable. The information were gathered both faculties through Work Stress scale by Udai (1983) and Work commitment scale developed by Meyer and Allen (1997). Sustat – VII statistical package was used to calculate the mean, median, Standard deviation, critical ration and correlation between the variables. The result finally concluded that the Indian universities faculty members were facing high level of Work Stress and dominant stress than faculty from Saudi Arabia. The study suggested that all the universities should inspect the faculties stress on routine basis, proper rules and regulations must be implemented strictly and also check all the faculties growth. These recommendations were given from this study to reduce the stress level among the faculty members and increase the Work commitment among them.

Kamala et al. (2015) identified there was no “significant difference found in Work role stress among degree college teachers and bus conductors of public sector in Bangalore” and also they identified that there was a significant difference found between gender along with college faculties and bus conductors of public sector in Bangalore. The researcher collected the data from 40 college teachers and 40 bus conductors both men and women. Work role stress scale by Pareek (2005) was used. The result found that both college teachers and bus conductors

were facing same level of role stress. Men had more role pressure in inter role difference and women female in role stagnation. Equally male and female had high stress under role erosion. Singh (2015) study revealed that private school principal experiencing higher Work role stress than govt. school principal. Ten dimensions from Work Stress scale were used. Mean, Standard deviation and t-test were used to found the level of difference. From the result proved that seven dimensions from Work role stress significantly influence the private school principals. Remaining variables role erosion, role isolation and role expectation conflict are higher in government school principals. Compare to government schools environment, private schools work load was very high in nature.

Maduree et al. (2014) identified the effects of emotional labour on Work Stress in the service sector in India. 411 respondents were taken for this study. “Path analysis model with Smart PLS software (Wright, 1918) was used”. The result stated that the model showed 17% of the variance explained overall and also that there was optimistic and modest association identified among the emotional labour and Work role stress.

Santhosh (2014) analysed Work Stress factors in his study. The study explored various ORS factors affected the teachers working in higher education sector. Exploratory factor analysis was used to identify the ORS factors. Nine factors were extracted from the analysis which determines the ORS of teachers. The result showed that all the selected factors were significantly influence the role stress of teachers from higher education sector.

Sneha et al. (2014) assessed the Work Stress and challenges experienced by private college women staffs. Due to organization culture changes, education institution faced many challenges. Organization forces the employees to improve the quality and growth. For this study, the researcher had taken 75 working women from ten different colleges. The result concluded that this study helped the women employees working in private colleges in Mangalore. They could identify the various stressors actually they were faced.

Vidya et al. (2014) investigated the intensity of Work Stress among men and women managers of Indian hospitality industry. The study explored the level of role stress between 45 women and 32 men respondents from five star luxury hotels and five star hotels. The ten role stressors from ORS scale was under taken to gather the information from respondents. This study revealed that the female managers working in hotels experienced the high stress levels compared to male managers, because women managers struggled to face work-life balance.

Research Gap

Based on the review of literature, a few research works are related to Work Stress in the organization without considering the Work culture. Some studied that “stress” depends on the Work culture and culture without considering the roles of the employees. There is no research related to Work role stress with interlink of Work culture in the Automobile Sector. Hence the present study focuses on this gap and intense to analyze the influence of Work culture on Work Stress in automobile sector in Karnataka.

Research Questions

- 1) What are the factors affecting the Work culture and Work role stress?
- 2) How do the socio demographic factors affect the employees stress level in automobile industry?
- 3) How does Work culture influence the Work role stress?

4) How does person organization fit influence the Work role stress with the effect of Work culture?

Purpose of the Study

The intention of this research is to examine the impact of Work culture on organization role stress among employees working in the automobile industry. This study appears how fourteen dimensions of organization culture influence ten dimensions of Work role stress. A Work role stress is the dependent variable for this study and Work culture is the independent variable for this study. Here the research analyzes the climatic conditions of automobile industry how it will affect the employees' role/designation in the particular company and also how it creates the role stress among the employees.

Objectives of the Study

The main focus of this research is to identify the effect of Work culture on Work role stress among the employees particularly working in OEM companies of automobile industry in Karnataka. The study requires the following objectives to attain the above research.

- 1) To identify the factors of Work culture and Work role Stress level in OEM companies of automobile industries.
- 2) To assess the effect of socio-demographic factors on employees stress levels in OEM companies of automobile sector.
- 3) To make the comparison of Work Stress and Work culture among employees at OEM Companies of Semi-Automated and Fully-Automated Automobile Industry.

Hypotheses of the Study

H01: Socio demographic factors do not influence the Work role stress among the employees working in OEM companies of automobile industry.

H02: There is no significant difference in the stress level among the employees of different OEM companies

H03: WC variables are not significant predictors of Work Stress experienced by employees of OEM companies in automobile industry

H04: PO-fit does not significantly influence the Work Stress with relates to WC.

H05: There is no difference between the Work Stress and Work culture among employees at Semi-Automated and Fully-Automated Automobile Industry.

RESEARCH METHODOLOGY

Research Design

The descriptive and analytical research proposes will be used here. Descriptive research will explain the characteristics of people being taken for this research. This research design will be used to analyze the factors suited to Work culture and Work stress for employees of automobile industry in Karnataka, while analytical research will be used to test the hypotheses using statistical techniques. The above two research designs will be adopted for the present study.

Methodology

A survey of well-rounded production engineers working in the automotive sector in the state of Telengana was undertaken. On 100 production engineers and technical operators working in different workshops in the automobile sector, a typical questionnaire was given (G. Sureshkrishna et al.). The workers in the automobile business who are regarded as production engineers and operators. The sample size for this study is 100 people who operate on the shop floor in various automotive sectors. The Cochran formula, which is $\alpha = K/K-1[1-s_2 y/ s_2 x]$

with a 5% threshold of significance, was used to determine the sample size. By Using stratified random sampling, the sample responses were collected. A five-point scale (Likert scale) from 1 (Strongly disagree) to 5 was used to quantify the job stress of production engineers in the automotive industry (Strongly agree). A pilot research was used to test the structured questionnaire before it was changed depending on the findings. The updated questionnaire was then distributed to 100 respondents who worked on the factory floor of automobile businesses in and around Telangana. For the purpose of the study, 100 sample respondents were chosen, and incomplete surveys were discarded. The constructs of the stress factors (stressors), such as physical stressors, psychosocial stressors, social stressors, high job demands, and high management tasks, make up the conceptual model. The stress concerns mentioned above are confronted by the production engineers who operate in the completely automated and digitalized vehicle industry.

Survey Analysis

The demographic factors (Table 1) of the study specify that 75 percent of the respondents are male and 25 percent of female production engineers and operators, and 10 percent of the age of the respondents fall under the age category of 18-25 years, 40 percent of the age of the respondents fall under the age category of 25-35 years, 20 percent of the age of the respondents fall under the age category of 35-50 years, 20 percent of the age of the respondents fall under the age category of 50-60 years, 10 percent of the age of the respondents fall under the age category of 60-65 years. Additionally, in terms of ability 30 percent of respondents have certifications that are equivalent to diplomas, 30 percent have certifications that are equivalent to B.Tech degrees, 30 percent have certifications that are equivalent to PG/MBA degrees, and 10 percent have certifications that are equivalent to research degrees. In addition to work history Thirty percent of respondents have experience ranging from 0 to 5 years, thirty percent have experience ranging from 5 to 10 years, twenty percent have experience ranging from 10 to 15 years, ten percent have experience ranging from 15 to 20 years, and ten percent have experience spanning more than 20 years. Twenty percent of respondents work on heavy machinery, forty percent work on moderate machinery, thirty percent work on light machinery, ten percent work on computers, and sixty percent of respondents work from 0 to 6 hours, thirty percent work from 6 to 9 hours, and ten percent work from 9 hours and beyond.

Table 1: Demographic Factors

Sl. No.	Demographic Factors	Frequency	Percentage
GENDER			
1	Male	75	75
2	Female	25	25
AGE			
3	18-25	10	10
4	25-35	40	40
5	35-50	20	20
6	50-60	20	20
7	60-65	10	10
QUALIFICATION			

8	Diploma	30	30
9	B.Tech	30	30
10	PG/MBA	30	30
11	Others	10	10
EXPERIENCE			
12	0-5	30	30
13	5-10	30	30
14	10-15	20	20
15	15-20	10	10
16	20 PLUS	10	10
WORK EQUIPMENT			
17	Heavy Machines	20	20
18	Moderate Machinery	40	40
19	Light Machinery	30	30
20	Computers	10	10
WORK HOURS			
21	Below 6hrs	60	60
22	06-09	30	30
23	Above 09	10	10

According to the survey, the Cronbach's alpha values for mental oppression, job insecurity, lack of technological affinity, involvement of artificial intelligence, lack of predictability or control of the work process, lack of software knowledge, training, performance monitoring and feedback, and anxiety are all relatively high, with alpha values of 0.90, 0.89, 0.79, 0.89, 0.80, 0.89, 0.89, 0.89, 0.92, and 0.90, respectively. The results of the questionnaire survey on the stress at work experienced by production engineers in the automobile sectors demonstrate that none of the stress components had a p-value greater than 0.05 (Table 2). With further research, it can be deduced that the components based on physical factors, psychosocial factors, social factors, technical demand, and managerial duties likewise have reasonably high Cronbach's alpha values, with respective alpha values of 0.91, 0.79, 0.89, 0.85, and 0.91

Table 2: Significance of Mean Values of Individual Stress Factors

Sl. No.	Stressors	Cronbach α	t	p
1	Robotisation work conditions	0.90	2.01	0.005
2	Mental oppressiveness	0.89	2.46	0.004
3	Job insecurity	0.79	2.33	0.016
4	Lack of technological affinity	0.89	2.46	0.022

5	Artificial intelligence	0.80	1.88	0.004
6	Lack of predictability/ control of the work process	0.89	1.68	0.019
7	Lack of software knowledge/ Training	0.79	2.05	0.009
8	Performance monitoring and feedback /High responsibility	0.92	2.03	0.002
9	Social relations/Anxiety	0.90	2.31	0.013

Table-3:One way ANOVA

S.No	Stress Factors	F-Values p- values	F-Values p- values
Physical Stressors			
1	Sudden changes in enterprise	4.01	0.003
2	Work routines controlled by Machines	3.91	0.011
3	Technical problems/ Vulnerability to hacker attacks	3.70	0.012
4	Ventilation in work place	3.80	0.009
5	Attitude optimistic or pessimistic	3.50	0.010
Psychosocial Stressors			
6	Corporate culture/ Internal pressure to understand new developments	4.50	0.002
7	Electrical Shutdowns	4.53	0.005
8	Irregular working times/ Lack of time for training	4.51	0.015
9	Lack of technological affinity	3.90	0.015
Social Stressors			
10	Lack of Interaction/ Lack of predictability	4.90	0.012
11	Conflicts between peers/ Social exclusion	4.85	0.020
12	Stressful initial phase of digitalization/Isolation	4.55	0.025
13	Job insecurity	4.90	0.015
14	Challenge to keep up with developments	4.55	0.023
Technical Demand			
15	Time pressure, hectic activities / Loss	3.90	0.002

	of individual control		
16	Dependency on technology	4.98	0.005
17	Enterprise Scale/High Production	4.65	0.007
18	Communication and Decision making	4.30	0.009
19	Mechanical artificial intelligence involvement/Robotisation of humans	3.95	0.005
20	Lack of software knowledge/Training	3.50	0.018
Management Tasks			
21	Quick implementation of new technologies	4.60	0.020
22	Constant availability /High responsibility	4.90	0.010

One-way Analysis of Variance was used to assess the respondent's data and test the hypotheses. All of the p-values for the stress factors are less than 0.05, according to the results shown in Table 3. This shows that the mean values of the stress components varied significantly from one another. The physical pressures, such as abrupt changes in the business, machine-controlled work routines, technical issues/vulnerability to hacker attacks, workplace ventilation, positive or negative outlook. The production engineers would actually experience considerable stress due to the psychological stressors such as Corporate Culture/ Internal Pressure to understand new developments, Electrical Shutdowns, irregular working times/ lack of time for training, lack of technological affinity. The effects of job stress will eventually result in weariness and job burnout, which are thought to be extremely dangerous on the assembly lines of vehicle manufacturers. Since even the smallest error by an employee could result in the creation of auto parts that are defective, the entire batch would have to be discarded, costing the company money. The pressures in society lacking interaction, being unpredictable, Peer conflict and social isolation initial digitalization phase that is stressful, isolation, and job insecurity. The replies will be able to disconnect from the traditional social life thanks to the challenge of keeping up with advances, but it will also put them under a lot of stress. The productivity in the industry will be directly impacted by technical factors such as time constraints, hectic activities/loss of individual control, dependence on technology, enterprise scale/ high production, communication and decision making, mechanical artificial intelligence involvement, lack of software knowledge and training (J. Rengamani *et al.*).

CONCLUSION

The automobile sector is undergoing a rapid worldwide landscape shift as a result of digital transformation. The factors and actions that the players believe are necessary to support the digitization process are presented in this work, and questions about how effectively it will affect the processes of production, sales, and connectivity with the user or

customer are raised as a result. When preparing for and deploying new digital technologies, organisations should take their employees' concerns very seriously. Based on our findings, we suggest various measures to stop or lessen digitalization anxiety and to further enhance employees' attitudes toward digitalization. A satisfying work environment makes employees feel devoted to their jobs because it gives them a sense of satisfaction. To motivate employees to strive toward reaching the organization's goal, the top management should take an active part in addressing employee needs and putting an emphasis on employee welfare. To be productive in the current competitive world, a healthy balance between work and life must be preserved. Work-life balance can only improve an employee's satisfaction and morale. Comparative studies may be the main focus of future research in order to generalise the results. A number of issues related to the stress that production engineers experience at work may be to blame for the tension that they feel. The stress at work may be psychological, emotional, social, or work-related. A number of stress-related factors, including job security, a lack of technical aptitude, the use of mechanical artificial intelligence, dependence on technology, the stressful initial phase of digitalization, work routines controlled by machines, and others, may have an impact on production engineers. lack of awareness and training time, Since production engineers may handle physical stress considerably better than mental stress, the majority of stress factors may be psychological in character.

According to the report, production engineers in completely automated vehicle factories frequently deal with demanding work schedules, constant supervision, nervousness, managing delicate equipment and large machinery, and a lack of knowledge of cutting-edge technology. The production engineer's ability to perform at work, their level of awareness due to sophisticated machinery, and their capacity for problem-solving and decision-making can all be negatively impacted by job stress. Production engineers who are worried about losing their jobs to robot replacements may exhibit low morale at work, which will have an impact on production. Production engineers' job happiness will be directly impacted by how stressed out they are at work. By giving production engineers and operators the proper training about the methods and technology used, job stress in automated and digitized industries can be prevented and decreased. Later, offering competent support for a period of time may lower stress and enhance morale. There are a few additional variables as well, such as highlighting the advantages of digitalization and helping staff members become accustomed to new technologies and reduce anxiety.

REFERENCES

1. Alexander-Stamatios, A., Aikaterini, P. and Marina, N. (2013), „Occupational Stress and Professional Burnout in Teachers of Primary and Secondary Education: The Role of Coping Strategies“, *Scientific Research* 4(3),349-355.
2. Ardic, K., Oymak, O., Ozsoy, T. and Uslu, O. (2016), „Comparing Person Organization Fit and Person Job Fit“, *Journal of Economics and Management* 25, 5- 13.
3. Bai, N. (2014), „The relationship between school work culture and physical education teachers' burnout“, *European Journal of Experimental Biology* 4(1), 600-602.
4. C.Anil Kumar Reddy and G.Swathi “Effect of Automation and Digitization on Occupational Stress in Automobile Industry” *International Journal of Social Sciences*, Vol 11, Issue 3 September 2022.

5. Castro, M. L. and Martins, N. (2010), „The relationship between organisational culture and employee satisfaction in a South African information and technology organization“, SA Journal of Industrial Psychology 36(1), 1-26.
6. Eustace, A. and Martins, N. (2014), „The Role of Leadership in shaping Organisational Culture: An example from the Fast Moving Consumer Goods Industry“, SA Journal of Industrial Psychology 1-13.
7. Farokhi, K. M. and Murty, T. N. (2014), „Factors Influencing Organisational Culture“, International Monthly Referred Journal of Research in Management & Technology 3, 74-82.
8. Farooqui, M. S. and Nagendra, A. (2014), „The Impact of Person Organization Fit on Job Satisfaction and Performance of the Employees“, Procedia Economics and Finance 11, 122-129.
9. Gebrekirstos, H. A. (2015), „Occupational Stress among Secondary School Teachers and their Coping Strategies: The Case of Central Zone of Tigray Region“, International Journal of Academic Research in Education and Review 3(6), 143-157.
10. Gulavani, A. and Shinde, M. (2014), „Occupational Stress and Job Satisfaction among Nurses“, International Journal of Science and Research, 3, 733-740.
11. Iljins, J., Skvarciany, V. and Gaile-Sarkane, E. (2015), „Impact of Work Culture on Work Culture during the Process of Change“, Procedia Social and Behavioral Sciences 213, 944-950.
12. Jeyaraj, S. S. (2013), „Occupational Stress among the Teachers of the Higher Secondary Schools in Madurai District, Tamil Nadu“, Journal of Business and Management 7, 63-76.
13. Jyoti, J. (2013), „Impact of Work Culture on Job Satisfaction, Job Commitment and Intention to Leave: An Empirical Model“, Journal of Business Theory and Practice 1(1), 66-82.
14. Kamala, H. and Jayasankar, K. (2015), „Work Role Stress among Government College Teachers and Bus Conductors of Public Transport in Bangalore: A Comparative Study“, International Journal of Recent Scientific Research 6(3), 3186-3189.
15. Kauts, A. and Kumar, V. (2013), „Occupational Stress in Relation to Emotional Intelligence, Age and Qualification among Secondary School Teachers“, International Journal of Education and Psychological Research 2, 60-74.
16. Lazar, I., Osoian, C. and Ratiu, P. (2010), „The Role of Work – Life Balance Practices in order to Improve Work Performance“, European Research Studies 13, 201-214.
17. Madhusudhan, V. and Nagaraju, K. (2013), „Work Life Balance of Teaching Faculty with Reference to Andhra Pradesh Engineering Colleges“, Global Journal of Management and Business Studies 3(8), 891-896.
18. Merez-Kot, D. and Andysz, A. (2017), „Socio-Demographic Predictors of Person Organization Fit“, International Journal of Occupational Medicine and Environment Health 30(1), 133-149.
19. Naveen, P. Y. (2016), „Work Role Stress among College Teachers in Relation to Gender“, Airo International Research Journal 7, 1-15.
20. Neal, M., Wilderom, P. M. and Perterson, F. (2000), „Handbook of Work Culture and Culture“, Sage Publication Ltd 18.

21. Ophelia Janefer, M. (2014), „A Study on Stress among 8th – 12th Std. School Teachers (In Selected Schools in Chennai)“, *IOSR Journal of Humanities and Social Science* 77-83.
22. Panisoara, G. and Serban, M. (2013), „Marital Status and Work – Life Balance“, *Procedia – Social and Behavioral Sciences* 21-25.
23. Punia, N. and Balda, S. (2016), „Emotional Intelligence and Occupational Stress among School Teachers in Haryana, India“, *Research Journal of Recent Sciences* 5(7), 31-35.
24. Sheppard, G. (2016), „Work – Life Balance Programs to Improve Employee Performance“, *Walden Dissertations and Doctoral Studies*, Walden University.
25. Siddiqui, F. A. (2013), „Occupational Stress in Teachers: A Comparative Study of Public and Private Schools in Hyderabad City“, *The Sindh University Journal of Education* 42, 62-73.
26. Tugal, F. N. and Kilic, K. C. (2015), „Person – Organization Fit: It’s Relationships with Job Attitude and Behaviors of Turkish Academicians“, *International Review of Management and Marketing* 5, 195-202.
27. Udai, P. and Surabhi, P. (2002), „Training Instruments in HRD and OD“, *Tata McGraw-Hill Education* 536 – 547.