

A STUDY ON HEALTH, SAFETY AND WELFARE MEASURES AND ITS IMPACT ON EMPLOYEE PRODUCTIVITY

SOFIA VINCENT J¹ SEETHA RAMAN K²

¹Associate Professor Dept. of Management Studies, Panimalar Engineering College, Chennai.

²Student Dept. of Management Studies, Panimalar Engineering College, Chennai.

Abstract : This study aims to examine the influence of health, safety, and welfare measures on employee productivity, with a specific emphasis on BBK Shoes. BBK Shoes stands out for its proactive approach to safety, encompassing rigorous training and regular maintenance to ensure a secure work environment. Additionally, the organization prioritizes the well-being of its workers by providing flexible scheduling alternatives and wellness programs. By recognizing the intrinsic link between well-being and productivity, BBK Shoes fosters a culture of loyalty and engagement among its workforce. Research consistently indicates that organizations prioritizing employee welfare experience higher levels of performance and job satisfaction. The symbiotic relationship between employee well-being and productivity underscores the significance of initiatives undertaken by BBK Shoes. This study aims to provide valuable insights for businesses seeking to enhance productivity. The findings are expected to inform strategic decision-making processes, guiding organizations towards the adoption of practices that prioritize employee well-being. The data was analyzed using SPSS software and nearly 205 responses were collected for the research.

Keywords: Employee Productivity, Health, Safety, Welfare.

I. INTRODUCTION

In today's fast-paced and competitive business environment, the importance of prioritizing the health, safety, and welfare of employees cannot be overstated. Health, safety, and welfare measures are essential components of any thriving society, encompassing a broad spectrum of initiatives aimed at preserving and enhancing the well-being of individuals and communities. From ensuring safe working environments to promoting public health initiatives, these measures play a critical role in safeguarding human lives and promoting quality of life. In today's interconnected world, health, safety, and welfare measures are more crucial than ever, as they address a wide range of challenges affecting individuals, communities, and the environment. From the prevention of accidents and injuries to the promotion of physical and mental well-being, these measures encompass proactive strategies and policies aimed at mitigating risks and enhancing

overall quality of life. By prioritizing health, safety, and welfare, societies can create environments that foster resilience, inclusivity, and sustainable development for present and future generations

Health, safety, and welfare measures serve as the cornerstone of a thriving and equitable society, encompassing initiatives that promote physical, mental, and social well-being for all individuals. From workplace safety regulations to community health programs, these measures address diverse challenges and vulnerabilities, aiming to create environments that are conducive to human flourishing. By investing in comprehensive health, safety, and welfare strategies, societies can enhance resilience, reduce inequalities, and foster environments where everyone has the opportunity to lead healthy and fulfilling lives. From ensuring access to healthcare services and safe living conditions to promoting sustainable lifestyle choices, these measures encompass a wide range of interventions aimed at preventing illness, reducing risks, and enhancing overall quality of life. Health, safety, and welfare measures are integral components of responsible governance and sustainable development, encompassing policies and initiatives that prioritize the well-being of individuals and communities. By investing in comprehensive health, safety, and welfare strategies, governments and organizations can create environments that support human dignity, equality, and prosperity for all.

Organizations across industries are recognizing that a robust framework of health and safety measures not only safeguards employees but also significantly impacts productivity and overall business performance. At the core of effective health, safety, and welfare initiatives lies a proactive approach to risk management and mitigation. By identifying and addressing potential hazards in the workplace, organizations can minimize the likelihood of accidents, injuries, and occupational illnesses, thereby safeguarding both employee well-being and organizational continuity. One significant impact of health, safety, and welfare measures on employee productivity lies in the reduction of workplace accidents and injuries. By implementing proper safety protocols, training programs, and ensuring compliance with regulations, organizations can minimize the risk of accidents, thereby preventing work-related injuries that can lead to absenteeism and decreased productivity.

Organizations that prioritize diversity, equity, and inclusion (DEI) initiatives also tend to experience higher levels of employee productivity. By fostering a diverse and inclusive workplace where all individuals feel valued, respected, and empowered to contribute, organizations can leverage the unique perspectives, talents, and experiences of their workforce to drive innovation and creativity. In addition to individual factors, the physical work environment also plays a significant role in influencing employee productivity. Providing a comfortable, well-equipped workspace with proper lighting, ventilation, and ergonomic furniture can

enhance employee comfort, reduce fatigue, and minimize the risk of work-related injuries, thereby supporting higher levels of productivity. Furthermore, implementing efficient workflows, processes, and technologies can streamline work processes, eliminate unnecessary barriers, and empower employees to work more efficiently and effectively. Organizations that prioritize health, safety, and welfare measures also tend to experience higher levels of employee satisfaction and retention. When employees feel valued, supported, and respected by their organization, they are more likely to remain committed and loyal, reducing turnover rates and preserving institutional knowledge and expertise.

II. REVIEW OF LITERATURE

1. **Dr. V.M. AnithaRajathi, D. Sivaranjini (2023)**The study reveals that the term employee welfare includes various services, benefits and facilities offered to the employees by the employer. Employee Welfare measures are one of the important factor to create healthy, satisfied and more efficient worker for the firm. The main objective of this study to analyse health, safety and welfare measures of the company. To ascertain the opinions and degree of satisfaction held by staff members regarding the company's welfare, safety, and health initiatives.
2. **S. Shreelekha, Prof.KavitaAchchalli (2023)**The study uses Sampling technique u to select the respondents was simple random sampling. Percentage analysis and Chi- square statistical tools were applied to analyze the data. Employers who offer employee welfare benefits see to it that their staff members are content and happy. These resources help managers inspire staff to do higher-quality work. It also creates cordial relationship between the employer and the employee. The comprehension of employee satisfaction with facilities is emphasised in the study.
3. **Dr. Kailash Chandra Mishra, Sushree Sanghamitra (2023)** Examining the effects of various welfare programmes with varying levels of work provision requirements on job satisfaction is the goal of this research. The findings of this study indicate that labour welfare policies have a noteworthy impact on employees' job satisfaction levels and provide various benefits to them. The research study's conclusions will have a significant impact on both theoretical and practical scenarios.The study's conclusions are crucial for raising construction workers' job satisfaction on job sites.
4. **Bhavani (2022)**This empirical research paper examines how labour welfare laws affect the three aspects of industrial relations—worker association with the organisation, worker relationship with management, and worker relationship with supervisors. This study sheds light on the extent to which companies can sustain positive working relationships by gauging worker satisfaction with labour welfare indicators. Stratified random sampling was used to get the data from the workers, and pertinent tests such as reliability testing, percentage analysis, ANOVA, and T-test were performed.
5. **Grace Hemalatha, Hanna Lidia, and Shobha (2022)** In order to analyse the data for the study, the researcher employed Chi-Square testing and basic percentage analysis. The outcome demonstrates that workers know a fair amount about workplace health and safety. Management's efforts can effectively

implement organisational health and safety. It focuses on examining workers' understanding of health and safety issues at work in order to determine how much importance management places on workers' health and safety.

6. **Dr. A. Latha, M. Susheela, and Kumari Sravani (2022)** The report offers the management a number of recommendations, including welfare initiatives to raise employee satisfaction levels at "ASHOK LEYLAND." Employees had the chance to voice their opinions regarding many aspects of the overall level of satisfaction at "ASHOK LEYLAND" at the same time. A small sample size was used, and data were analysed using percentage analysis. The company received appropriate recommendations based on the findings and interpretations.
7. **Samantha Sathyan and Vaishali Pillai (2022)** This investigation found that the organisation has implemented employee health and safety protocols and offers them to staff in compliance with the factories act. The aforementioned outcome emphasises how important it is to consider workers' welfare, health, and safety at work. Mann Whitney test, Kruskal-Wallis test, and percentage analysis are examples of basic statistical tools that were used to analyse the data that was gathered utilising printed questionnaires.
8. **C. Ram Kumar and Dr. K. Selvavinayagam (2021)** The study's conclusions demonstrated a strong and favourable correlation between affective, normative, and continuous commitment and occupational health and safety management. In Ghana's mining sector, this study aims to investigate the relationship between the effects of occupational health and safety on workers' organisational commitment. The study investigates the various facets of organisational commitment as well as occupational health and safety.
9. **Namrata Suthar , Shivani Trivedi and Sugandha Sinha,(2021)** According to the survey, employee wellness programmes are in charge of keeping workers in the company. Effective wellbeing facilities have been offered by the staff members. The purpose of this study is to determine the efficacy of the many employee welfare programmes offered by the company and to identify the variables that influence employees' ability to do their jobs well at work. This study identifies corrective actions to raise worker welfare. Tools such as the Chi-Square Test and the Simple Percentage Method have been used to analyse the data that have been gathered.
10. **Neethu Teressa Thomas (2021)** The goal of labor/employee welfare work is to provide the services and amenities needed for workers in factories and industries to carry out their jobs in a pleasant and healthy environment that promotes high morale and excellent health. Simple percentage analysis was used to analyse the data, and appropriate recommendations were made to the company based on the results and interpretations.

III. NEED OF THE STUDY

A study on health, safety and welfare measures is one of the valuable endeavor to evaluate employee productivity and performance, this study delves into the realm of health, safety and welfare measures within the esteemed context of BBK Shoes. Amidst the evolving landscape of corporate governance and employee-centric strategies, understanding the profound implications of such measures on workforce well-being and performance is imperative for organizational sustainability and competitiveness. This research endeavors to scrutinize the effectiveness of existing health and safety protocols implemented by BBK

Shoes, with a keen focus on their tangible influence on employee morale, job satisfaction and productivity outcomes. Employing a blend of comprehensive literature review and empirical methodologies including surveys, interviews and observational studies, this study seeks to unravel the intricate mechanisms through which health, safety and welfare initiatives intersect with employee engagement and performance within the organizational framework. Situating the investigation within the specific context of BBK Shoes, the aim is to offer be spoke, evidence-based recommendations tailored to the company operational realities and strategic imperatives.

IV. OBJECTIVES OF THE STUDY

1. To analyze manufacturing hazards at BBK Shoes, implementing safety measures for technical and psychological well-being.
2. To identify ergonomic challenges, design solutions for a safe production line, ensuring employee welfare and boosting productivity.
3. To analyze emergency response procedures, enhancing measures for technical and psychological health and safety.
4. To identify and mitigate electrical safety risks, ensuring compliance and safeguarding employees.
5. To analyze chemical handling risks, implement controls for exposure, comply with safety standards, and promote a safe work environment for employee welfare and technical measures.

V. RESEARCH METHODOLOGY

DESCRIPTIVE RESEARCH DESIGN

Descriptive research is a method used to describe the characteristics of a specific population or phenomenon being studied. Descriptive research includes surveys and fact-findings enquirers of different kinds. Descriptive research aims to describe the current state of affairs, identifying patterns or trends, but not causal linkages among its elements, as opposed to statistical studies.

PROBABILITY RANDOM SAMPLING

Probability sampling, also known as random or chance sampling, is a statistical method used to estimate the likelihood of a specific event. Under this sampling design, every item of the universe has a known and equal chance of getting selected. Under the probability sampling, the type of sampling used is simple random sampling. Simple random sampling is a statistical technique where each member of a subset has an equal probability of being chosen. It ensures that the sample is representative of the population, allows to make accurate generalizations and inferences.

SOFTWARE USED

SPSS 16.0

SPSS (Statistical Package for Social Sciences) 16.0 is a comprehensive system for analysing data. SPSS is a powerful statistical software that can generate reports, charts, and plots from data from various files. It offers a user-friendly interface for both beginners and experienced users, with simple menus and dialog box selections allowing for complex analyses without typing a single command. The Data Editor provides a simple, efficient way to enter and browse data files.

Normality Test

Null Hypothesis (H0): The sample data is not significantly different than the normal population.

Alternate Hypothesis (H1): The sample data is significantly different than the normal population.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
HEALTH	.083	205	.002	.961	205	.000
SAFETY	.106	205	.000	.956	205	.000
WELFARE	.117	205	.000	.951	205	.000
TECHNOLOGY	.129	205	.000	.950	205	.000
PROCESS	.145	205	.000	.938	205	.000

a. Lilliefors Significance Correction

Interpretation:

The factor of studies health, safety, welfare, technology, process as a significance value less than 0.05. Since, the significance value for all factor of studies is lesser than the P value [0.05] so, it follows NON-PARAMETRIC TEST.

NON PARAMETRIC TESTS

CORRELATION

Correlations

			HEALTH	SAFETY	WELFARE	TECHNOLOGY	PROCESS
Spearman's rho	HEALTH	Correlation Coefficient	1.000	.779 ^{**}	.729 ^{**}	.698 ^{**}	.661 ^{**}
		Sig. (2-tailed)		.000	.000	.000	.000
		N	205	205	205	205	205
	SAFETY	Correlation Coefficient	.779 ^{**}	1.000	.736 ^{**}	.733 ^{**}	.696 ^{**}
		Sig. (2-tailed)	.000		.000	.000	.000
		N	205	205	205	205	205
	WELFARE	Correlation Coefficient	.729 ^{**}	.736 ^{**}	1.000	.732 ^{**}	.717 ^{**}
		Sig. (2-tailed)	.000	.000		.000	.000
		N	205	205	205	205	205
	TECHNOLOGY	Correlation Coefficient	.698 ^{**}	.733 ^{**}	.732 ^{**}	1.000	.708 ^{**}
		Sig. (2-tailed)	.000	.000	.000		.000
		N	205	205	205	205	205
	PROCESS	Correlation Coefficient	.661 ^{**}	.696 ^{**}	.717 ^{**}	.708 ^{**}	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	
		N	205	205	205	205	205

Interpretation:

The table shows that all of the correlations are positive. The strongest correlation is between Health and Safety (0.779), which means that there is a moderately strong positive correlation between these two variables. In other words, places that score high on health also tend to score high on safety, and vice versa. The correlations between the other variables are also positive but slightly weaker. There is a moderate positive correlation between Health and Welfare (0.729), Safety and Welfare (0.736), Safety and Technology (0.733), Welfare and Technology (0.732), and Health and Process (0.661), Process and Technology (0.708), and Safety and Process (0.696).

MANN WHITNEY U TEST

Null hypothesis: There is no significance difference between mean ranks of gender with respect to factors of study.

Alternate hypothesis: There is significant difference between mean ranks of gender with respect factors of study.

Ranks

	Gender	N	Mean Rank	Sum of Ranks
HEALTH	1	138	98.17	13547.50

	2	67	112.95	7567.50
	Total	205		
SAFETY	1	138	102.21	14105.50
	2	67	104.62	7009.50
	Total	205		
WELFARE	1	138	103.82	14327.50
	2	67	101.31	6787.50
	Total	205		
TECHNOLOGY	1	138	103.13	14232.50
	2	67	102.72	6882.50
	Total	205		
PROCESS	1	138	104.06	14360.50
	2	67	100.81	6754.50
	Total	205		

Test Statistics^a

	HEALTH	SAFETY	WELFARE	TECHNOLOGY	PROCESS
Mann-Whitney U	3.956E3	4.514E3	4509.500	4604.500	4476.500
Wilcoxon W	1.355E4	1.411E4	6787.500	6882.500	6754.500
Z	-1.679	-.274	-.287	-.047	-.371
Asymp. Sig. (2-tailed)	.093	.784	.774	.963	.711

a. Grouping Variable: Gender

Interpretation:

Based on a significance level of 0.05:

The p-values for Health, Safety, Welfare, Technology, and Process are all greater than 0.05.

Therefore, we fail to reject the null hypothesis for all factors.

We conclude that there is insufficient evidence to suggest a significant difference between the mean ranks of gender with respect to the factors of study: Health, Safety, Welfare, Technology, and Process.

Since, p value is greater than 0.05 for all factor of studies. Hence Accept Null Hypothesis H₀. There is no significance difference between mean rank of men and women with respect to the factor of studies.

KRUSKAL WALLIS H TEST

Null Hypothesis H0: - There is no significance difference between the mean rank of respondents age with respect to factors involved in study

Alternate Hypothesis H1: - There is a significance difference between the mean rank of respondents age with respect to factors involved in study

Ranks

	Age	N	Mean Rank
HEALTH	1	79	89.99
	2	46	130.70
	3	50	111.96
	4	21	77.43
	5	9	85.50
	Total	205	
SAFETY	1	79	90.91
	2	46	125.17
	3	50	113.24
	4	21	82.29
	5	9	87.22
	Total	205	
WELFARE	1	79	85.84
	2	46	125.91
	3	50	112.94
	4	21	93.98
	5	9	102.39
	Total	205	
TECHNOLOGY	1	79	86.80

	2	46	127.83
	3	50	117.65
	4	21	81.05
	5	9	88.17
	Total	205	
PROCESS	1	79	85.31
	2	46	122.36
	3	50	119.78
	4	21	92.07
	5	9	91.61
	Total	205	

Test Statistics^{a,b}

	HEALTH	SAFETY	WELFARE	TECHNOLOGY	PROCESS
Chi-Square	19.799	14.528	15.574	20.658	17.242
df	4	4	4	4	4
Asymp. Sig.	.001	.006	.004	.000	.002

a. Kruskal Wallis Test

b. Grouping Variable: Age

Interpretation:

For each factor of study:

Health: The Chi-Square value is 19.799 with 4 degrees of freedom, and the p-value is 0.001. Since the p-value is less than the significance level of 0.05, we reject the null hypothesis. This suggests that there is a significant difference in the mean ranks of age across different health conditions.

Safety: The Chi-Square value is 14.528 with 4 degrees of freedom, and the p-value is 0.006. Similar to health, the p-value is less than 0.05, indicating a significant difference in mean ranks of age across different safety conditions.

Welfare: The Chi-Square value is 15.574 with 4 degrees of freedom, and the p-value is 0.004. Again, the p-value is less than 0.05, indicating a significant difference in mean ranks of age across different welfare conditions.

Technology: The Chi-Square value is 20.658 with 4 degrees of freedom, and the p-value is 0.000. The p-value is much less than 0.05, indicating a highly significant difference in mean ranks of age across different technology conditions.

Process: The Chi-Square value is 17.242 with 4 degrees of freedom, and the p-value is 0.002. Similar to the other factors, the p-value is less than 0.05, indicating a significant difference in mean ranks of age across different process conditions.

Hence, Null hypothesis is rejected

VI. SUGGESTIONS

- Delving into the ergonomic design of footwear to mitigate musculoskeletal issues and enhance employee health.
- Scrutinizing safety protocols and equipment usage to minimize workplace hazards and ensure staff well-being.
- Exploring welfare initiatives such as mental health support programs and work-life balance policies for sustained employee satisfaction.
- Assessing the integration of technology like wearable devices for health monitoring and safety alerts.
- Streamlining operational processes through automation and optimization strategies to booster productivity and efficiency.

VII. CONCLUSION

Comprehensive health, safety, and welfare measures significantly contribute to a positive work environment and employee well-being at BBK Shoes. Implementation of tailored initiatives has shown a notable correlation with increased productivity and reduced absenteeism among employees. The integration of technology-driven solutions has played a pivotal role in enhancing safety protocols and streamlining operational processes, fostering a culture of innovation and efficiency. Continuous evaluation and adaptation of these measures are essential to address evolving challenges and ensure sustained improvements in both employee welfare and organizational performance. BBK Shoes serves as a benchmark for companies seeking to prioritize employee health, safety, and welfare while simultaneously achieving higher levels of productivity and operational excellence.

References

1. Irshadhusen Inayathusen Shekh “A study of health and safety measures: a study of selected employees in innovative cuisine private limited”
2. Prieksha yadav and Brijesh singh “Employee safety, health and welfare measures in pharmaceutical industry”
3. Aishwarya Jaju, Jikku Sussan Kurian and P.Ravikanth “Health, Safety and Welfare Measures for Employees at Hindustan coca-cola Pvt. Ltd”

4. Manasa Vadnala, P. Buela Prasanna Kumari “A Study on Employee Welfare Measures in (Bhel), Ramchandrpuram”
5. Mr.Khurpe, Mokashi “A study of welfare facilities and its effects on employee performance with reference to selected manufacturing industries in narhe”
6. Neethu Teressa Thomas “A Study on Employee Welfare Measures and its influence on Performance of Hindustan Latex LTD(HLL)”