IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A STUDY ON THE OCCUPATIONAL HEALTH AND SAFETY PRACTICES IN FOOTWEAR AND LEATHER INDUSTRIES

[1]G.Kamaladevi, [2]Dr.R.I.Sathya

[1]Technical Assistant, [2]Senior Professor &Course Coordinator

[1,2] B.Voc (Footwear and Accessories Design), DDU -KK, Gandhigram Rural Institute-Deemed to be University, Gandhigram, Dindigul, Tamilnadu, India.

Abstract

The leather and footwear industry is a significant sector in many countries, providing employment opportunities and contributing to economic growth. In Tamil Nadu, major clusters are located in Ambur, Ranipet, Vellore, Vaniyambadi, Pernambut, Chennai, Tiruchirappalli, Erode, and Dindigul. Workers in this industry face numerous occupational health and safety (OHS) risks, including hazardous chemical exposure, heavy machinery, and occupational injuries and illnesses. This study investigates OHS practices in the leather and footwear industry, focusing on hazard identification, challenges, safety protocol implementation, and recommendations for improvement. A comprehensive analysis reveals that workers are primarily exposed to chemical hazards (35%), machine guarding risks (25%), Musculoskeletal Risk (17%), biological hazards (23%), psychosocial hazards (13%), and other hazards (20%). Promoting a good workplace with skilled, safe, and healthy workers is crucial. This study aims to highlight the importance of OHS, understand the challenges and opportunities, and propose recommendations for creating a healthier, safer, and more productive work environment.

Keywords: **occupational hazard, footwear, leather industry**

1.INTRODUCTION

The leather and footwear industry is a significant sector globally, providing employment to millions of workers. The industry involves various processes, such as tanning, cutting, stitching, and finishing, each with its unique set of hazards. Workers in this industry are exposed to numerous occupational health and safety (OHS) risks, including Chemical hazards, Physical hazards, Ergonomic hazards, Machine hazards. The consequences of these hazards can be severe, resulting in occupational injuries, illnesses, and even fatalities. Therefore, it is essential to investigate OHS practices in the footwear and leather industry to identify areas for improvement and develop strategies for promoting a safe and healthy work environment.

Occupational Health and Safety (OHS) practices refer to the policies, procedures, and protocols designed to protect the health, safety, and well-being of employees, contractors, and visitors in the workplace. The primary goal of OHS practices is to prevent work-related injuries, illnesses, and fatalities by: Identifying and controlling hazards, Promoting a safety culture, Ensuring compliance with relevant laws and regulations

This study aims to investigate OHS practices in the footwear and leather industry, focusing on:

1. To identify the hazards of footwear and leather industry
2. To do the risk assessment of various hazards affecting the workers
3. To implement control measures to mitigate the hazards

By examining the current state of OHS practices in the industry, this research seeks to contribute to the development of evidence-based strategies for improving worker health and safety.

2. METHODOLOGY

The methodology of the current study **"A Study on the Occupational Health and Safety Practices in Footwear and Leather Industries"** is as below**.**

2.1. Statement of the Problem:

To identify the occupational hazards including chemical hazards, machine guarding risks, ergonomic risks, biological hazards, psychosocial hazards, and other hazards in footwear and Leather Industry.

2.2. Sample selection:

For the chosen research, convenience sampling was employed as a sample strategy. Respondents or samples were gathered from various locations. The authors of this article used a sample size of 100 people who answered, which are shown below by age groups, genders, and other factors. The samples were selected from various leather and footwear industries located at Vaniyambadi and Ambur.

2.3.Data Collection:

The data for this research are from a primary source, a survey with a variety of questions. Primary data is acquired directly from Footwear and leather industry respondents, as well as data from people in the area around the footwear and Leather Industry. Random sampling technique was followed with a structured questionnaire. The samples were explained well about the current study and the data were analyzed using SPSS software tool.

3.RESULTS AND DISCUSSION:

Table1: Respondents based on Gender.

Gender	No.of Respondents		Percentage
	Footwear Industry	Leather Industry	
Male	15	30	45
Female	35	20	55
Total	50	50	100

Table 1 show out of 100 sample size of workers from Footwear and Leather Industry, 45 % of male give response and 55 % of female give a response based on Gender.

Table2: Respondents based on Age Groups.

Age Group	No. of Respondents	Percent
20-25	25	25
25-30	45	45
30-35	30	30
Total	100	100

Table 2 show that out of 100 respondents based on age groups, 25% of the respondent in the 20-25 age group, 45% of the respondent in the 25 - 30 age group, and 30% of respondent belong to the 30-35 age group for Footwear and Leather Industry workers.

Table3: Chemical Hazard Caused by Working in Footwear & Leather Industry.

Name of the Risk	No. of Respondents	Footwear Industry	Leather Industry	Percentages
Chemical hazards	**35**	**12**	**23**	**35**

Table 3 presents data shows that out of 100 respondents, 12 workers from Footwear Industry and 23 workers from Leather Industry which account for 35% of worker affected by chemical Hazards like chromium, lead and Mercury.

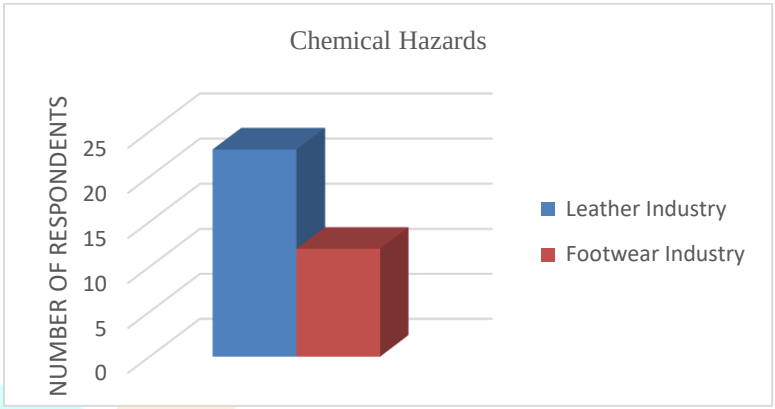

Figure:1

Table 4: Machine Guarding Risk Caused by Working in Footwear & Leather Industry.

Name of the Risk	No. of Respondents	Footwear Industry	Leather Industry	Percentage
Machine Gua1rding Risk	25	13	12	25

The above table indicates that around thirteen workers of footwear and twelve workers of leather industry affected from the risks caused by guarding the machines, which accounts for 25 percent of the whole. The heavy machinery of leather industry like Tannery drum, and cutting equipment, Lasting equipment are very heavy in footwear industry.

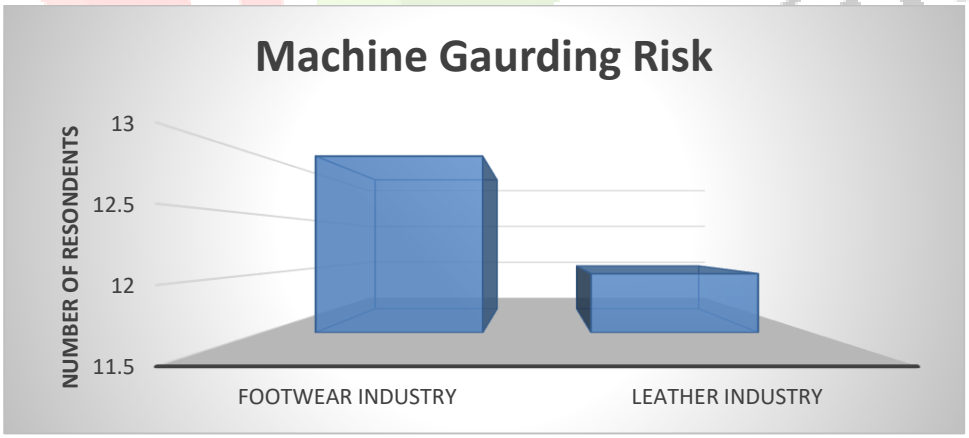

Figure:2

Table 5: Musculoskeletal Risk Caused by Working in Footwear & Leather Industry.

Name of the Risk	No. of Respondents	Footwear Industry	Leather Industry	Percentages
Musculoskeletal Risk	**17**	**10**	**7**	**17**

Table 5 presents data shows that out of 100 respondents, 17 percent of workers affected by musculoskeletal risk, 10 workers from Footwear Industry and 7 workers from Leather Industry.

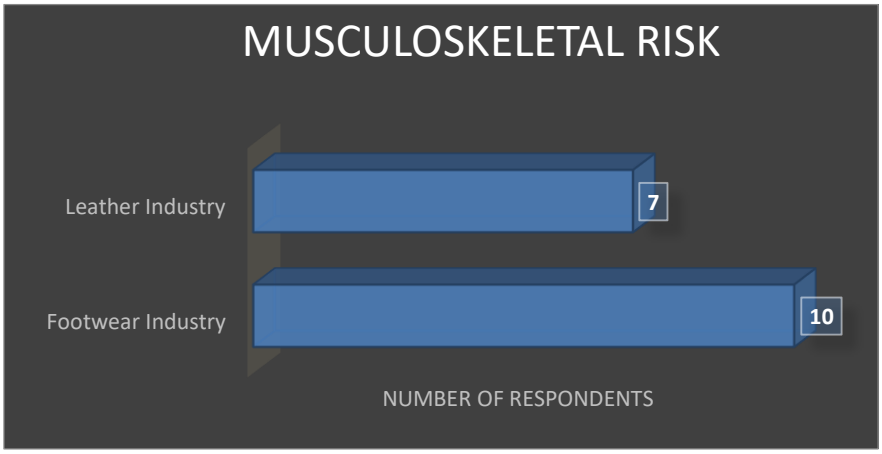

Figure:3

Table 6: Biological Hazard Caused by Working in Footwear & Leather Industry.

Name of the Risk	No. of Respondents	Footwear Industry	Leather Industry	Percentages
Biological hazard	**23**	**11**	**12**	**23**

The above Table indicates the data shows that out of 100 respondents, 11 workers from Footwear Industry and 12 workers from Leather Industry which account for 23% of worker affected by Biological Hazards.

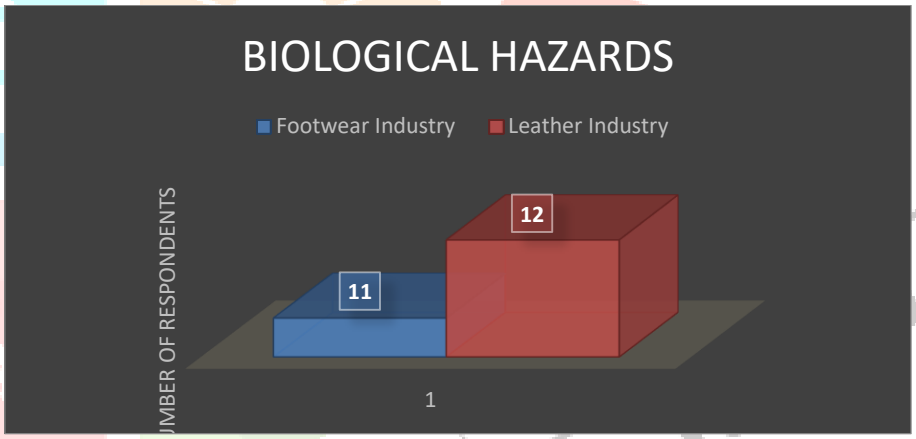

Figure:4

Table 7: Psychosocial Hazard Caused by Working in Footwear & Leather Industry.

Name of the Risk	No. of Respondents	Footwear Industry	Leather Industry	Percentage
Psychosocial hazard	**13**	**7**	**6**	**13**

Table 7 presents data shows that out of 100 respondents, 7 workers from Footwear Industry and 6 workers from Leather Industry which account for 13% of worker affected by psychosocial Hazards.

Figure:5

Table 8: Other Hazards Caused by Working in Footwear & Leather Industry.

Name of the Risk	No. of Respondents	Footwear Industry	Leather Industry	Percentage
Other Hazard	**20**	**10**	**10**	**20**

The above table indicates that around 10workers of footwear and 10workers of leather industry affected by other Hazards which accounts for 20 percent of the whole. It includes temperature related hazards like heat stroke, due to excess heat and frost bite, hypothermia due to extreme cold that may alter the health status of the workers.

Figure:6

The current research is based on a survey of workers who work in footwear and leather industry. The respondents' views of their health concerns are the basis for this research. As a consequence, the responses are grouped in the tables above. The study's emphasis is on the risk factor profiles of respondents who work in the leather and footwear industry.

4.CONCLUSION:

The current study highlights the significance of OHS practices in the footwear and leather industries. While there is existing research on OHS risks and management, there are gaps in the literature that need to be addressed. This study aims to contribute to the existing literature by investigating OHS practices in the footwear and leather industries, with a focus on hazard identification, challenges, safety protocol implementation, and recommendations for improvement.

References:

1.Choudhary, D., et al. (2019). Machine guarding in footwear industry: A review. Journal of Occupational Health and Safety, 8(2), 1-9.
2.Kumar, P., et al. (2018). Chemical exposure in footwear industry: A review. Journal of Chemical and Pharmaceutical Research, 10(4), 1-8.
3. Mandal, S., et al. (2017). Ergonomic risks in footwear industry: A study. Journal of Occupational Health and Safety, 6(1), 1-9.
4. .Singh, R., et al. (2020). Chemical exposure in leather industry: A review. Journal of Environmental and Occupational Science, 9(1), 1-9.