

**A study of occupational safety, health and  
environment practices in textile industry of  
Pakistan  
(A Case Study of Spinning Sector)**



**By**

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## **Statement of Submission**

The research dissertation titled “A Study of Occupational Safety, Health and Environment Practices in Textile industry of Pakistan(A Case Study of Spinning Sector)”is being submitted for completion of MS Textile degree from School of Textile and Design, University of Management and Technology, Lahore, Pakistan.

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## **Dedication**

I dedicate this research thesis to my honorable teachers Sir, Mumtaz Hassan Malik, Sir. Naveed Akhtar and my beloved parents.

## **Declaration**

I hereby affirm that all the information in this thesis is the product of my intensive hard work and my innovative work. This research work, to the best of my comprehension and credence, imitate no material earlier published or written, or that has been accepted for the award of any other degree or diploma, except where due acknowledgement has been made in the text.

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## Abstract

Dissimilar customary instrument used to determine present environmental hazards as light level, dust level, vibration level, noise, ventilation and temperature, humidity in all process sections of spinning mills which effect worker's health, safety and workplace environment to dangerous extent. With use of instruments as dosimeter, lux meter, anemometer, hygrometer etc. present workplace environment practice calculated. It is observed that entire spinning sector have low level of light, high level of noise, dust and temperature which is not in compliance with set international standard organizations such as average of noise level present in textile spinning mills is 101-105dB which is much higher than ISO set standard of noise 75-85dB, similarly average light level measured is 178lux in compliance with international standard it must be 300-1000lx in textile spinning sector.

Constructed interview questionnaire showed very poor health, safety and environment practice which came in satisfactory zone due to survey questionnaire filled by workers which could be bias due to workers poor knowledge and psychosocial pressure. Hazards such as organizational, worker welfare, fire, health, physical, mechanical, electrical, biological, psychosocial, ergonomically identified and its present percentage calculated as per occupational safety, health and workplace environment practice observed, such as health hazards present up to 46% and occupational safety, health and environment practice in this regard is just 54% indicating that Pakistan spinning mills lie in red zone of safety.

All observations noted down on standard report format and recommendations made with international OSHA, ILO Standards checklist compliance at end of report to ensure the implementation of detail study, thus contributing part as to lessen the accidents ratio, hazards level and risk percentage and providing safe, healthy environment to all textile workers of spinning sector with recommended application of this paper in studying OSHE practices of other textile departments.

**KEYWORDS:** Textile, Spinning, Occupational Safety, Occupational Health, Workplace Environment, ISO standards compliance, Red Zone.

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# **Chapter 1 Introduction**

## 1.1 Background

Occupational Safety, health and environment is significant to intact textile industry. Study focused on spinning sector as it has many hazards, risks for workers. The Health, Safety and environment believes that effective management of OSHE:

- is vital to employee well-being;
- has a role to play in enhancing the reputation of textile industry businesses and helping them achieve high performance teams;
- Is financially beneficial to business [1].