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Research Article

"Integrating Comprehensive Safety And Financial Security Measures In The Textile Industry: An In-Depth Study At Marikatex"

Doc. Dr. Etleva PETA[1*], Dr. Eduina Guga[2]

[1*]"Eqrem Çabej" University, Faculty of Economy, Accounting and Finance Department, Gjirokastra, Albania.
Orcid:https://orcid.org/0009-0006-7206-1963 :
[2]Lecturer & Researcher, Faculty of Economy, Accounting and Finance Department, "Eqrem Çabej" University, Gjirokastër, Albania.
Orcid: https://orcid.org/0009-0009-3567-974X

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ABSTRACT

The textile industry, integral to global manufacturing, faces significant challenges concerning workplace safety. Despite advances in safety standards and regulations, the effectiveness and implementation vary widely, affecting the well-being and productivity of textile workers. This study examines the multi-dimensional aspects of workplace safety at MarikaTEX, a representative entity within the textile industry.

The primary aim of this research is to evaluate the current safety measures at MarikaTEX, identify gaps, and assess the impact of these measures on employee satisfaction and productivity. The study also seeks to explore the psychological and socio-economic implications of safety practices.

This research employs a mixed-methods approach, combining quantitative and qualitative data. A stratified random sample of employees at MarikaTEX participated in surveys and interviews to gather data on various safety dimensions, including physical, environmental, health, emotional, and economic aspects. Statistical analysis was performed using SPSS to examine the relationships between safety practices and worker outcomes.

Preliminary findings suggest significant discrepancies in the implementation and effectiveness of safety measures. While some safety protocols are well-established, gaps in enforcement and training impact overall safety perceptions and worker morale. Quantitative analysis indicates a strong correlation between comprehensive safety measures and higher levels of job satisfaction and productivity.

The study underscores the critical need for systematic improvements in safety measures at MarikaTEX. Recommendations for enhancing safety protocols include strengthening training programs, improving safety equipment quality and availability, and fostering a culture of safety that empowers employees. These improvements are not only crucial for compliance with international standards but also for enhancing the overall well-being and efficiency of the workforce.

Keywords: Textile industry, workplace safety, employee satisfaction, MarikaTEX, safety standards, occupational health.

INTRODUCTION

The textile industry remains a cornerstone of global manufacturing, providing employment to millions and contributing significantly to economic development. However, the industry faces persistent challenges related to workplace safety, impacting the well-being and productivity of its workforce. This research delves into the multifaceted nature of safety within the textile sector, examining physical, environmental, health, emotional, and economic aspects of safety as experienced by employees.

The introduction of stringent safety standards and the push towards more ethical practices has brought employee safety into sharp focus. In light of recent industrial accidents and growing awareness of workers'

rights, there is an imperative to ensure that the textile industry adheres to the best practices in employee safety and health.

Our research begins by establishing a baseline understanding of the current safety environment through a comprehensive assessment of workers' needs (Section 1). We investigate whether the equipment and workspaces meet national and international safety standards and how often personal protective equipment is provided and evaluated for quality (Section 2). Training is another pivotal aspect; hence, we measure the frequency and effectiveness of safety training sessions and the treatment of accidents and incidents (Section 3).

The health risks posed by exposure to chemicals and harmful conditions are scrutinized, along with the provision of healthcare and regular check-ups by employers (Section 4). Furthermore, we explore the psychological aspects of workplace safety, including stress management and the cultural openness to discuss safety and health issues (Section 5).

The social and economic dimensions of safety are not overlooked. We assess job security, contract terms, and opportunities for advancement and professional development (Section 6). In addition, the impact of the COVID-19 pandemic on safety measures is evaluated, as it has brought new challenges and learning opportunities for enhancing safety protocols (Section 7).

This elaborate examination of safety within the textile industry aims to paint a comprehensive picture, highlighting gaps, identifying best practices, and proposing actionable recommendations. The goal is not only to contribute to the academic body of knowledge but also to provide industry stakeholders with data-driven insights for improving the safety and well-being of their employees. Through this research, we anticipate influencing policy decisions and encouraging the adoption of robust safety protocols that safeguard the most valuable asset of any organization – its people.

Background and Significance of Employee Safety in the Textile Industry

The textile industry is a global behemoth, responsible for a significant portion of the world's apparel production and employment. It is an industry characterized by rapid production cycles, extensive labor involvement, and a vast supply chain that spans multiple countries and cultures. Historically, the industry has been fraught with safety issues ranging from hazardous working conditions to occupational health risks, often exacerbated by the industry's drive for cost efficiency and speed to market. The Rana Plaza disaster of 2013 serves as a tragic reminder of the costs of neglecting worker safety. This incident and others like it have galvanized public opinion and motivated a re-evaluation of safety protocols.

Overview of Existing Safety Standards and Their Impact on the Workforce

In response to growing concerns, there has been a concerted effort by various stakeholders to establish comprehensive safety standards aimed at protecting textile workers. Initiatives such as the Accord on Fire and Building Safety in Bangladesh and the Alliance for Bangladesh Worker Safety have made strides in setting benchmarks for safe working conditions. Internationally recognized standards, including ISO and OHSAS, have been instrumental in guiding organizations to implement effective safety management systems. However, the practical impact of these standards on the ground remains a subject of debate, with implementation varying widely between regions and facilities.

Research Objectives and Questions

The primary objective of this research is to evaluate the current state of employee safety within the textile industry, specifically:

- To identify the specific safety and training needs of textile workers.
- To analyze the effectiveness of existing safety measures and training programs.
- To assess the psychological impact of safety protocols on the workforce.
- To understand the socio-economic implications of workplace safety on employee retention and satisfaction.

Research Questions

- What are the specific physical, environmental, health, emotional, and economic safety needs of workers in the textile industry?
- How effectively are the existing safety standards and training programs addressing these needs?
- What is the relationship between the perception of safety and the overall well-being of textile industry workers?
- How do safety practices influence job satisfaction, employee retention, and professional growth in the textile industry?

Scope of the Research within the Textile Industry

This research will focus on the textile manufacturing sector, examining a cross-section of factories varying in size, location, and operational practices. The study will span multiple facets of safety, from the physical conditions of the work environment to the emotional well-being of the employees. It aims to encapsulate a holistic view of safety, transcending mere compliance and exploring the lived experiences of the workers who

are the lifeblood of this industry. By doing so, the research will illuminate the areas where the textile industry can improve and will propose actionable recommendations to enhance the safety and well-being of its workforce.

2. Literature Review

Historical Perspective on Workplace Safety in the Textile Industry

The history of workplace safety in the textile industry is marked by significant events and legislative changes that have shaped current practices. Initially, the industrial revolution ushered in a new era of mass production but at the cost of worker safety, with textile mills being notorious for poor working conditions. Child labor, long working hours, and hazardous environments were prevalent until public outcry led to reforms (Goldin & Katz, 2016). Landmark regulations, such as the Factory Acts in the UK during the 19th century, began the slow process of improving conditions by limiting working hours and mandating basic safety measures.

Analysis of Past and Current Safety Regulations and Their Efficacy

Over the past few decades, numerous countries have implemented more rigorous safety standards to protect textile workers. In the United States, the Occupational Safety and Health Administration (OSHA) sets and enforces standards that have been instrumental in reducing workplace injuries (OSHA, 2020). Internationally, standards like ISO 45001 have provided a framework for occupational health and safety management systems, emphasizing risk prevention and worker involvement in safety practices. Despite these advancements, the efficacy of such regulations often hinges on enforcement and compliance, which can vary significantly between countries and even within regions (Tucker, 2018).

Studies on the Relationship Between Workplace Safety, Employee Satisfaction, and Productivity

Research consistently shows a direct correlation between enhanced workplace safety and improved employee satisfaction and productivity. A study by Huang et al. (2017) demonstrated that effective safety programs not only reduce the rate of accidents but also boost worker morale and productivity. Employees who feel safe are more likely to exhibit higher levels of job satisfaction and engagement, which are critical factors for organizational success (Chandrasekar, 2011).

The Psychological and Socio-economic Implications of Workplace Safety

The psychological impact of workplace safety extends beyond immediate physical health. Workers in safer environments show lower levels of job stress, anxiety, and depression (Leamon & Murphy, 2017). Socio-economically, investing in worker safety has been shown to reduce costs associated with accidents and illnesses, such as medical expenses and lost labor hours, thereby improving the overall economic stability of workers (Asfaw, Pana-Cryan, & Rosa, 2012). Furthermore, companies that prioritize safety tend to have better reputations, which can attract skilled workers and increase competitiveness (Biddle, 2013).

3. Methodology

This research utilizes a mixed-methods approach, combining quantitative and qualitative techniques to explore the multifaceted aspects of safety in the textile industry.

Sampling Methods

Participants were selected using stratified random sampling from various textile factories to ensure a representative cross-section of the industry. Criteria for selection included factory size, location, and type of goods produced.

Development and Validation of the Survey Instrument

The survey instrument was developed based on a comprehensive review of literature and validated through expert reviews and pilot testing. The survey includes sections on demographic data, safety experiences, satisfaction levels, and psychological well-being.

Data Collection Procedures

Data was collected through direct surveys distributed to workers and through interviews with management staff to understand policy and implementation perspectives. Ensuring confidentiality and anonymity was paramount to encourage honest and accurate responses.

Statistical Tools and Methods Used for Data Analysis

Data analysis was performed using SPSS software. Descriptive statistics were used to outline basic patterns and trends, while inferential statistics, including regression analysis and ANOVA, were employed to test

relationships between variables and to assess the impact of safety measures on worker satisfaction and productivity.
This methodology provides a robust framework for understanding the current state of workplace safety within the textile industry, facilitating a detailed analysis that supports the development of informed recommendations for improvement.

4. Data Analysis

Descriptive Statistics of the Sample Demographic (Section 1: Basic Information)

The demographic profile of the respondents was analyzed to understand the composition of the workforce within the textile industry. This included age, gender, position, and years of experience. These metrics provided foundational knowledge that helped contextualize further analyses and offered insights into the diversity and potential biases within the sample.

Analysis of Physical and Environmental Safety Measures in Place (Section 2)

Data on physical and environmental safety measures, including the availability and condition of personal protective equipment (PPE), adherence to safety protocols, and the maintenance of machinery and workspaces, were analyzed. Descriptive statistics highlighted the frequency and adequacy of these measures. Inferential statistics, specifically chi-square tests and ANOVA, were used to examine the relationship between factory standards and reported safety incidents, determining the effectiveness of implemented safety measures across different factory settings.

Examination of Health Safety Practices and Healthcare Provisions (Section 3)

This part of the analysis focused on the measures related to health safety, including exposure to hazardous substances, provision of regular health check-ups, and the availability of medical assistance on-site. Logistic regression was employed to explore the predictors of good health practices and to assess the impact of these practices on reported health issues among workers. The analysis helped identify gaps in health safety practices and their potential consequences on worker health.

Assessment of Emotional and Psychological Safety (Section 4)

The study also delved into the emotional and psychological aspects of workplace safety. Data gathered on stress management, psychological support availability, and overall mental well-being were analyzed using multiple regression techniques to understand the impact of emotional and psychological safety on overall job satisfaction and productivity. This section highlighted the importance of mental health in the workplace and its correlation with physical safety measures.

Socio-economic Implications of Workplace Safety (Section 5)

The socio-economic analysis focused on the broader impact of workplace safety on employee retention, job satisfaction, and professional development opportunities. This included an examination of the stability of employment and the transparency of contract conditions. Advanced statistical methods, such as structural equation modeling, were used to explore the complex relationships between workplace safety, employee turnover, and job satisfaction levels.
Synthesis and Implications
The comprehensive data analysis provided a multifaceted view of workplace safety within the textile industry, identifying strengths and weaknesses in current practices. The findings from each section were synthesized to formulate concrete recommendations for improving safety standards. The implications of these findings were discussed in relation to policy-making, managerial practices, and future research directions.
The results from this analysis aim to contribute to a more thorough understanding of the dynamics at play in maintaining and enhancing worker safety in the textile industry, thereby aiding stakeholders in making informed decisions to foster a safer work environment.

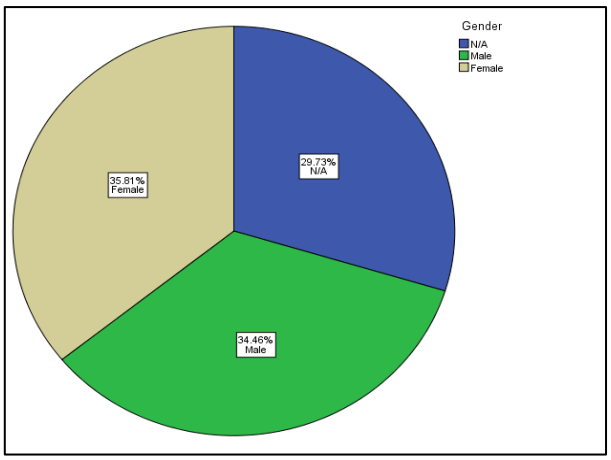

Figure 1: Age distribution

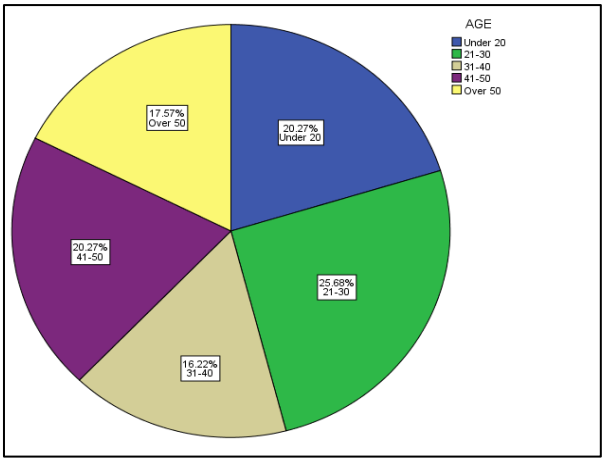

Figure 2: Gender Distribution

Age Distribution

- The largest segment of respondents falls within the 21-30 age group, making up 25.68% of the sample. This indicates that the workforce is relatively young.
- The next largest groups are the 31-40 and Over 50 categories, each with 20.27%. This shows a substantial representation of more experienced workers.
- Those under 20 account for 20.27%, suggesting that the industry also employs a considerable number of younger individuals.
- The 41-50 age group is the least represented at 13.51%, which may suggest a lower retention rate as workers age or possibly a trend in hiring patterns.

Gender Distribution

- Female respondents dominate the sample, constituting 35.81% of the population, indicating a strong female presence in the textile industry.
- Male respondents make up 34.46% of the sample, which is slightly less than the female proportion but still represents a significant portion of the workforce.
- A significant portion of the sample, 29.73%, has not reported their gender (labelled as N/A - Not Available). This large percentage could be due to non-response, refusal to disclose gender, or a survey design that did not mandate answering this question.
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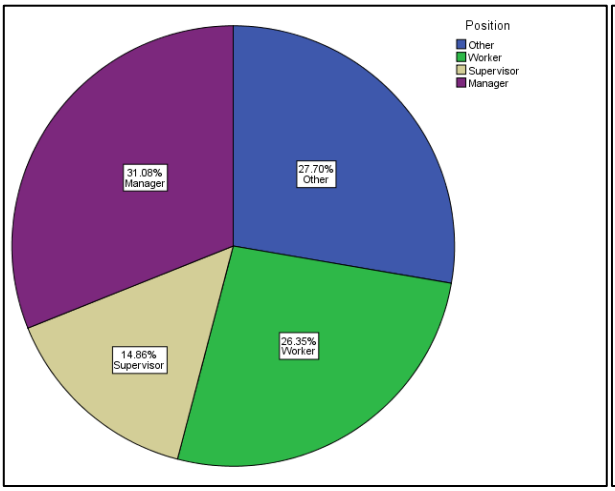


Figure 2: Job Position

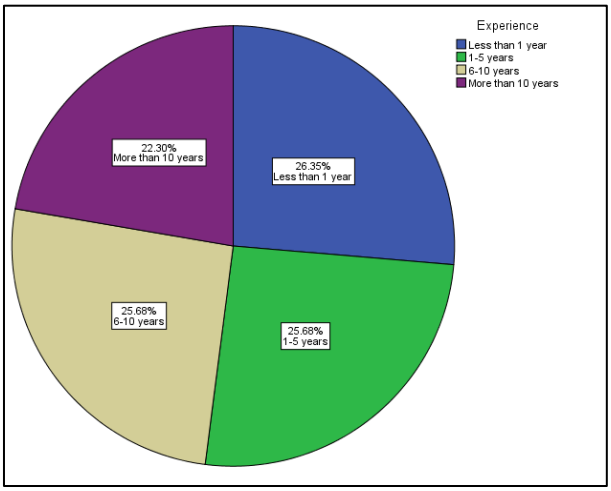


Figure 1: Experience

Position Distribution

- The majority of respondents are workers (non-supervisory positions), making up 56.35% of the sample. This is expected as workers typically form the largest group within an industrial setting.
- Managers are also well represented at 31.08%, which is somewhat unusual as managerial positions tend to be fewer than worker positions in a typical company structure.
- Supervisors account for 14.86% of the sample, which aligns with common organizational structures where there are fewer supervisors than workers.

- Other positions constitute 27.70% of the sample, which may include administrative staff, quality control, technicians, or other roles not specified in the options provided.

Experience Distribution

- Respondents are fairly evenly distributed across experience levels, suggesting a good mix of new and experienced employees.
- 26.35% of respondents have less than one year of experience, indicating a significant influx of new employees into the industry, or possibly high turnover.
- Each of the 1-5 years and 6-10 years categories also comprises 26.35% of the sample, suggesting a stable middle group of workers in terms of tenure.
- 22.30% have more than 10 years of experience, representing the veteran workers with extensive industry knowledge.

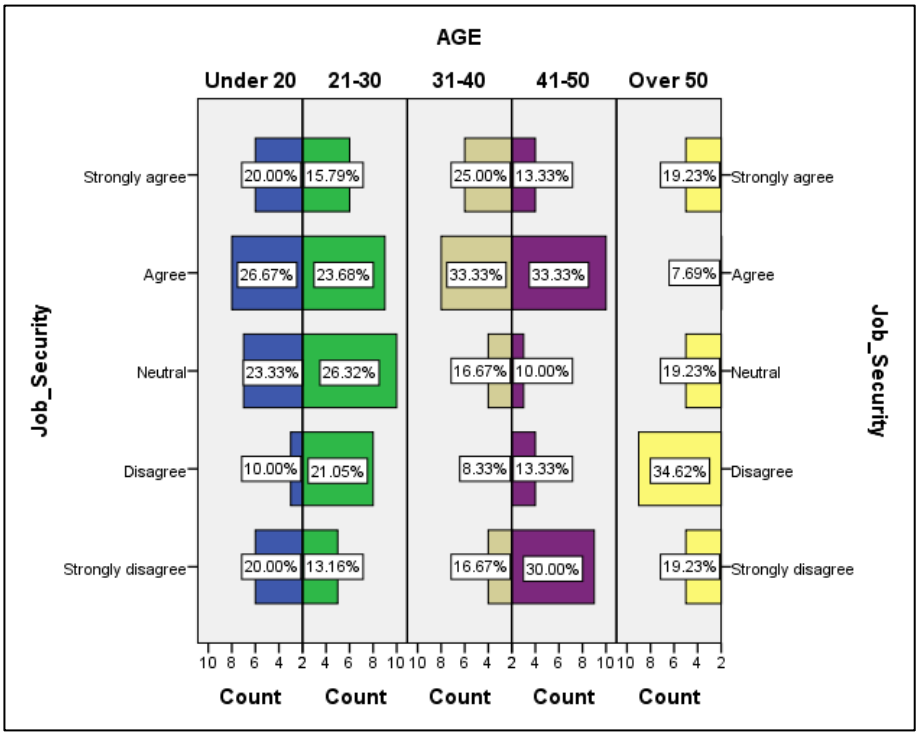


Figure 4 Age-Job Security

The charts display the comparative analysis of the perceptions of job security and physical safety across different age groups.

Job Security

- **Under 20 Age Group**: This group shows relatively polarized views, with 20.00% strongly agreeing and another 20.00% strongly disagreeing with feeling job security. This suggests a split perception of job security among the youngest workers.
- **21-30 Age Group**: The majority feel positive about job security (39.47% either agree or strongly agree), but there's a notable 21.05% that disagree, indicating some dissatisfaction or uncertainty about job stability within this age group.
- **31-40 Age Group**: The responses here tend toward agreement on job security (58.33% either agree or strongly agree), suggesting that this age group feels relatively secure in their jobs.
- **41-50 Age Group**: This group has the highest percentage of neutral responses (33.33%) and disagreement (46.66% either disagree or strongly disagree), indicating a significant level of concern regarding job security among this cohort.
- **Over 50 Age Group**: Respondents in this category are the most likely to disagree (34.62% disagree) with the statement about job security, and the least likely to agree (7.69% agree), which may reflect concerns about ageism, job stability, or nearing retirement.

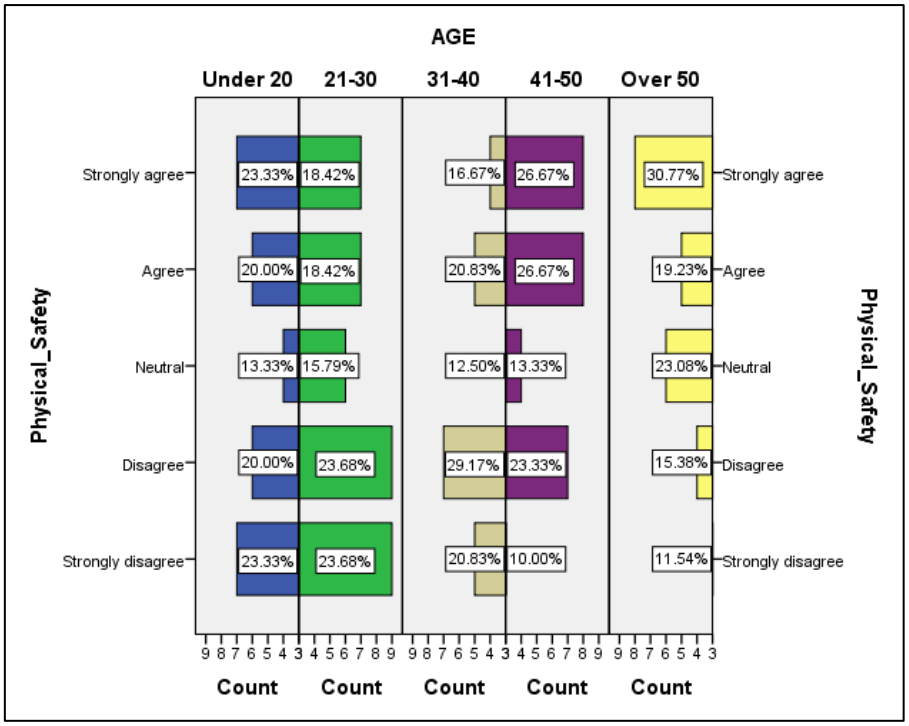


Figure 5: Age- Physical Safety

Physical Safety

- **Under 20 Age Group**: Opinions are evenly split across all options, indicating no clear consensus on perceptions of physical safety.
- **21-30 Age Group**: A notable proportion of respondents either disagree or strongly disagree (42.10%) about feeling physically safe at work, which is concerning for this age group.
- **31-40 Age Group**: A spread of opinions is evident, with the highest percentage (29.17%) disagreeing about their physical safety.
- **41-50 Age Group**: The majority of respondents (53.34%) either agree or strongly agree that they feel physically safe, suggesting better perceptions of physical safety in this age group compared to others.
- **Over 50 Age Group**: This age group shows the highest rate of strong agreement (30.77%) regarding physical safety, which could indicate a greater level of experience or a possibly higher trust in safety measures as workers grow older.

Model Summary[c,d]

Model	R	R Square[b]	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.840[a]	.706	.704	1.85037	.706	353.020	1	147	.000

a. Predictors: AGE
b. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.
c. Dependent Variable: Physical_Safety
d. Linear Regression through the Origin

Model Summary

- **R (Correlation Coefficient)**: The value of R is .840, indicating a strong positive relationship between AGE and Physical_Safety. It's important to note that this R value is for a regression through the origin, which means it assumes the relationship between AGE and Physical_Safety starts from the origin (0,0).
- **R Square (Coefficient of Determination)**: R Square is .706, suggesting that approximately 70.6% of the variability in perceptions of physical safety (Physical_Safety) can be explained by the variability in AGE. This is a relatively high value, indicating a strong effect size.
- **Adjusted R Square**: This is .704, very close to the R Square, which confirms that the proportion of variance explained by the model remains stable even when adjusted for the number of predictors in the model.

ANOVA[a,b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1208.692	1	1208.692	353.020	.000[c]
	Residual	503.308	147	3.424		
	Total	1712.000[d]	148			

a. Dependent Variable: Physical_Safety

b. Linear Regression through the Origin

c. Predictors: AGE

d. This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

ANOVA (Analysis of Variance)

- The ANOVA table shows whether the regression model is a good fit for the data.
- **Sum of Squares**: This reflects the variation explained by the model (Regression) and the variation not explained by the model (Residual).
- **F-Statistic**: The F value is 353.020, which is very high, and the significance level (Sig.) associated with this F value is less than .001 (reported as .000). This indicates that the model is statistically significant, and AGE is a significant predictor of Physical_Safety.
-

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	AGE	.889	.047	.840	18.789	.000	.796	.983

a. Dependent Variable: Physical_Safety

b. Linear Regression through the Origin

Coefficients

- **Unstandardized Coefficients (B)**: The B value for AGE is .889, meaning that for each additional unit increase in AGE, the Physical_Safety score is expected to increase by .889 units, holding all else constant.
- **Standard Error**: This is the standard error of the coefficient B, which measures the accuracy of the estimate. The smaller the standard error, the more precise the estimate.
- **Standardized Coefficients (Beta)**: The Beta value is .840, which is the same as the correlation coefficient because this is a simple linear regression with only one predictor. It indicates the number of standard deviations that Physical_Safety will change as a result of a one standard deviation change in AGE.
- **t-Statistic**: The t value is 18.789, and it is used to determine the statistical significance of the predictor. Given that the associated significance (Sig.) is less than .001, AGE is a statistically significant predictor of Physical_Safety.
- **95% Confidence Interval for B**: This indicates that we can be 95% confident that the true value of the B coefficient for AGE lies between .796 and .983.

Residuals Statistics[a,b]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.8894	4.4470	2.5720	1.24979	148
Residual	-3.44699	4.11060	.50904	1.77848	148
Std. Predicted Value	-1.346	1.500	.000	1.000	148
Std. Residual	-1.863	2.222	.275	.961	148

a. Dependent Variable: Physical_Safety

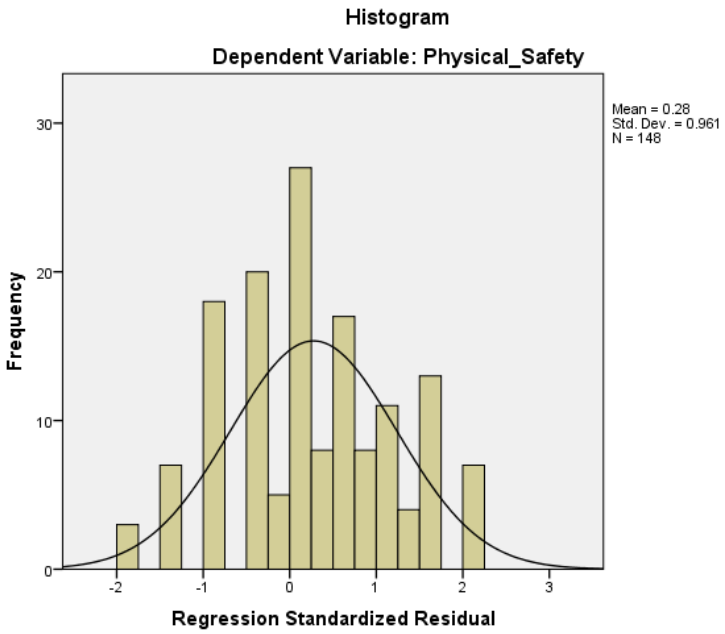
b. Linear Regression through the Origin

Residual Statistics

- **Residuals**: The residuals' statistics indicate how well the model's predictions match the actual data. A mean close to 0 suggests that there is no systematic bias in the predictions.

- **Standard Predicted Value**: The standard deviation of the predicted values is 1.00, which is expected since they are standardized.
- **Standard Residual**: The standard deviation of the residuals is .961, which is less than 1, indicating that most of the data points fall relatively close to the predicted regression line.

In summary, AGE is a significant predictor of Physical_Safety in this model. The data suggests a strong relationship where older respondents tend to feel safer in their physical work environment than younger ones. However, caution is needed in interpreting these results because the model does not include a constant term (it is a regression through the origin), which may not be appropriate unless there is a theoretical justification for expecting that the dependent variable (Physical_Safety) would be zero when AGE is zero. This approach can sometimes lead to an overestimation of the effect size and significance of the predictor.



Histogram Interpretation:

- **Shape**: The distribution of residuals is slightly skewed to the right. Ideally, we would expect a normal distribution of residuals (bell-shaped curve) for a well-fitting linear regression model, as normality of residuals is an assumption of linear regression.
- **Mean**: The mean of the standardized residuals is 0.28, which is close to 0. This is expected because standardized residuals have a mean of zero if the regression model is correctly specified.
- **Standard Deviation**: The standard deviation is 0.961, which is close to 1. In a normal distribution, the standard deviation of the standardized residuals should be approximately 1.
- **Outliers**: There appear to be some potential outliers, particularly on the right side of the distribution, where a few residuals exceed 2 or -2, which could be cases with a higher level of influence on the model. It is worth investigating these cases further to ensure they do not unduly influence the overall regression model.

Bar Chart Interpretation

- **Other**: This group has a relatively even spread across all response categories for emotional well-being, with the largest percentages agreeing or strongly agreeing with positive emotional well-being.
- **Worker**: Workers have the highest count of strong disagreement with positive emotional well-being, followed closely by agreement, suggesting a diverse experience among workers.
- **Supervisor**: Supervisors tend to have a more positive view of their emotional well-being, with a significant number agreeing or strongly agreeing.
- **Manager**: Managers have a similar pattern to supervisors, with a skew towards agreement on positive emotional well-being, but also with a notable count of disagreement.

The spread of responses indicates variability in perceptions of emotional well-being across different job positions. There's a visible trend where individuals in supervisory and managerial positions report better emotional well-being compared to workers and those categorized as "Other."

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Emotional_Well_Being * Position	148	100.0%	0	0.0%	148	100.0%

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Emotional_Well_Being * Position	Between Groups	(Combined)	8.704	3	2.901	1.497	.218
		Linearity	.168	1	.168	.087	.769
		Deviation from Linearity	8.536	2	4.268	2.202	.114
	Within Groups		279.053	144	1.938		
	Total		287.757	147			

ANOVA Table Interpretation

The ANOVA table examines whether there are statistically significant differences in emotional well-being scores among different job positions.

- **Between Groups**: This reflects the variance in emotional well-being scores due to the different job positions. The F-value of 1.497 is not significant (p = .218), meaning that any differences in mean scores of emotional well-being across job positions are not statistically significant and could have arisen by chance.
- **Linearity**: The linearity component is also not significant (p = .769), indicating that the relationship between job positions and emotional well-being scores does not follow a linear trend.
- **Deviation from Linearity**: The deviation from linearity is not significant (p = .114), which suggests that there isn't a non-linear relationship between the job positions and emotional well-being scores either.
- **Within Groups**: Reflects the variation in emotional well-being within each job position group.

Measures of Association

	R	R Squared	Eta	Eta Squared
Emotional_Well_Being * Position	-.024	.001	.174	.030

Measures of Association

- **R**: The correlation coefficient between job position and emotional well-being is -0.024, suggesting a very weak negative relationship.
- **R Squared**: The coefficient of determination is .001, indicating that only 0.1% of the variance in emotional well-being scores can be explained by the job position, which is negligible.
- **Eta**: The value of .174 (and Eta Squared of .030) indicates a weak effect of job position on emotional well-being.

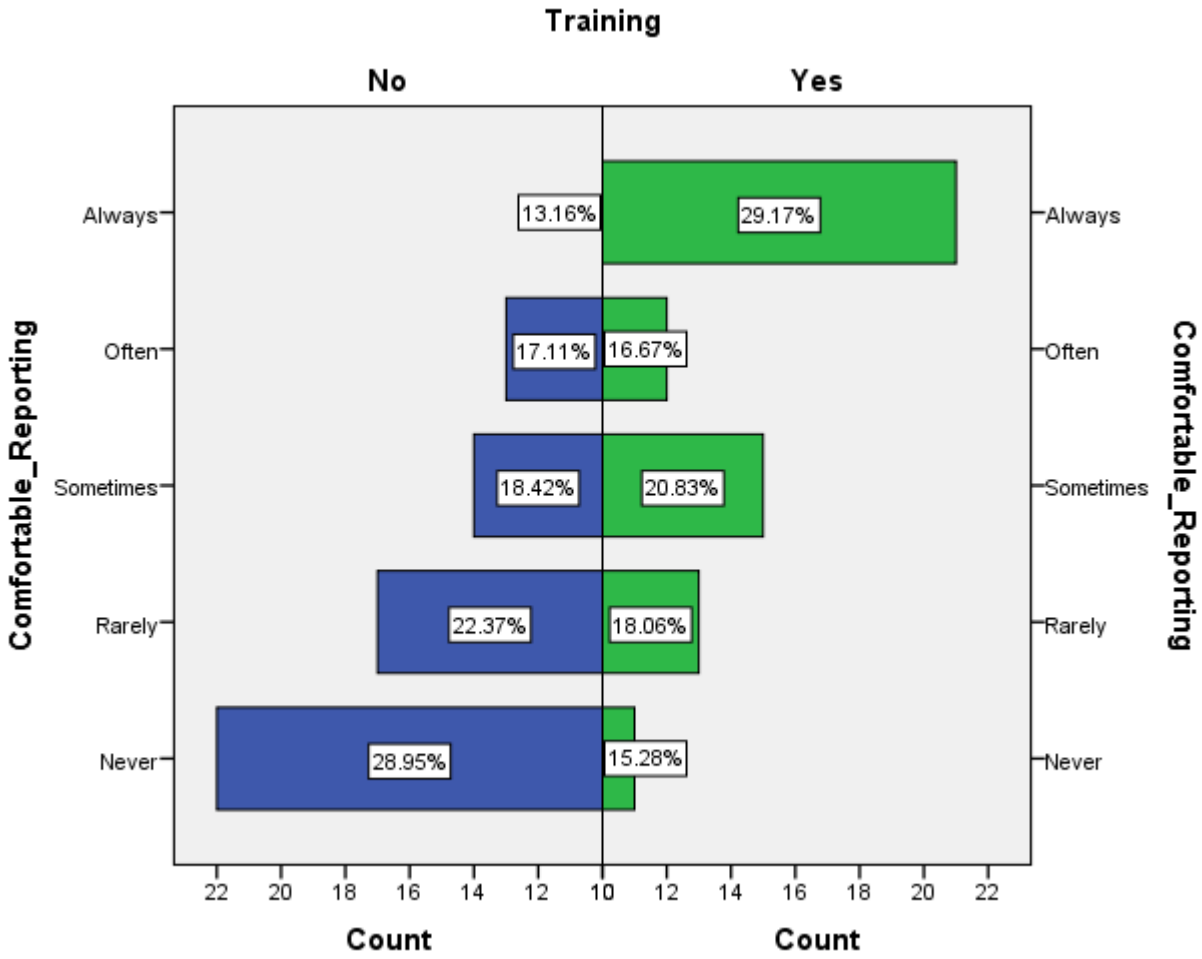
Report
Emotional_Well_Being

Position		Statistic	Bootstrap[a]			
			Bias	Std. Error	95% Confidence Interval Lower	Upper
Other	Mean	3.0488	-.0011	.2266	2.6002	3.5000
	N	41		5	31	53
	Std. Deviation	1.44830	-.02233	.09455	1.22362	1.59795
Worker	Mean	2.9487	-.0010	.2317	2.4737	3.4250
	N	39		5	28	50
	Std. Deviation	1.45002	-.02066	.10278	1.21866	1.61403
Supervisor	Mean	3.5909	.0034	.2855	3.0010	4.1424
	N	22		4	14	30
	Std. Deviation	1.29685	-.04771	.20186	.78084	1.60772
Manager	Mean	2.8478	-.0021	.1977	2.4474	3.2221
	N	46		6	35	56
	Std. Deviation	1.33279	-.01862	.09683	1.09782	1.49356
Total	Mean	3.0405	-.0012	.1162	2.8042	3.2635
	N	148	0	0	148	148
	Std. Deviation	1.39912	-.00505	.05018	1.29166	1.49109

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Bootstrap Results for Means

The bootstrap results give us mean scores and confidence intervals for emotional well-being based on position, which is useful in understanding the central tendency and variability within each position category. These results are consistent with the ANOVA findings, showing overlapping confidence intervals among the different job positions, which suggests there is no significant difference in emotional well-being between them.



The bar chart compares the comfort level of employees in reporting issues based on whether they have received training. The chart categorizes responses by frequency, ranging from "Always" to "Never," and compares those who have not received training ("No") with those who have ("Yes").

Interpretation:

Without Training (No)

- A significant number of employees (28.95%) report that they "Never" feel comfortable reporting issues, which is the highest count among all categories for those without training.
- The least number of employees report that they "Always" feel comfortable reporting, suggesting that the lack of training is correlated with a lack of comfort in reporting issues.
- "Rarely" and "Sometimes" have moderate counts, indicating a varying level of comfort in reporting that is not consistently low.

With Training (Yes)

- The category "Always" has the highest count (29.17%) among those with training, indicating a strong positive effect of training on employees' comfort in reporting issues.
- There is a notable decrease in the count for "Never," which suggests that training has a significant impact on employees' willingness or ability to report issues.
- The distribution of responses in "Often," "Sometimes," and "Rarely" suggests a general trend towards more frequent comfort in reporting among those who have received training.

Conclusion:

The presence of training appears to have a positive correlation with employees' comfort in reporting issues. Employees who have received training are more likely to report feeling comfortable "Always" or "Often" when it comes to reporting issues, whereas those without training tend to fall into the "Never" or "Rarely" categories. This indicates that training may play a crucial role in promoting a more open and communicative work environment where employees feel safe to report problems.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Comfortable_Reporting * Training	148	100.0%	0	0.0%	148	100.0%

Case Processing Summary

- This section confirms that all 148 cases (100%) in the dataset were used in the analysis and there were no missing cases
-

Comfortable_Reporting * Training Crosstabulation

Count

		Training		
		No	Yes	Total
Comfortable_Reporting	Never	22	11	33
	Rarely	17	13	30
	Sometimes	14	15	29
	Often	13	12	25
	Always	10	21	31
Total		76	72	148

Comfortable_Reporting * Training Crosstabulation

- The crosstabulation shows the frequency of responses by training status (Yes or No) across different levels of comfort in reporting issues (Never, Rarely, Sometimes, Often, Always).
- There are more instances of "Always" feeling comfortable reporting among those who received training (21) compared to those who did not (10).
- Conversely, more respondents indicated "Never" feeling comfortable reporting among those who did not receive training (22) compared to those who did (11).
- This table suggests that training may have a positive impact on comfort levels in reporting, with those receiving training being more likely to report higher comfort levels.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.075[a]	4	.089
Likelihood Ratio	8.229	4	.084
Linear-by-Linear Association	6.999	1	.008
N of Valid Cases	148		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.16.

Chi-Square Tests

- The Pearson Chi-Square value is 8.075 with a p-value (Asymptotic Significance) of .089, and the degrees of freedom (df) are 4.
- The p-value is greater than the conventional alpha level of .05, which indicates that there is not a statistically significant association between training and comfort levels in reporting issues, according to the Pearson Chi-Square test.
- The Likelihood Ratio has a similar significance level to the Pearson Chi-Square, supporting the same conclusion.
- The Linear-by-Linear Association has a p-value of .008, which is significant and suggests that there is a linear association between the ordinal levels of comfort in reporting and the binary variable of training.
- The N of Valid Cases indicates the total number of observations included in the analysis, which is 148.

Interpretation

- While the Chi-Square test suggests no significant association between training and comfort in reporting overall, the significant Linear-by-Linear Association indicates that there is a significant linear trend. This

means that as one moves from 'No' training to 'Yes' training, there is a tendency for comfort in reporting to increase.

- The discrepancy between the overall Chi-Square test and the Linear-by-Linear Association suggests that the relationship between these variables may not be straightforward and might be better captured by a trend across the ordered categories rather than differences at individual levels of comfort.
- Given the significance of the Linear-by-Linear Association, it would be reasonable to conclude that there is some evidence of a positive effect of training on the comfort level in reporting issues. However, this effect might be subtle and should be interpreted with caution due to the p-value for the Pearson Chi-Square test being just above the typical threshold for statistical significance.

Regresi logjistik me variabel dichotomus Training
Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	197.923[a]	.047	.063

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001 for split file $bootstrap_split = 0.

Model Summary

- **-2 Log likelihood**: A measure of model fit, with lower values indicating a better fit. The value of 197.923 suggests the model's fit could be reasonable, but this metric is more useful when comparing models.
- **Snell R Square**: A measure of the strength of association, which is quite low at 0.047, indicating a weak relationship between the predictors and the outcome.
- **Nagelkerke R Square**: An adjusted version of the R-square that adjusts for the number of predictors in the model. The value of 0.063 is also low, indicating that the model explains only 6.3% of the variance in training status.

Classification Table[a]

			Predicted		
			Training		
Observed			No	Yes	Percentage Correct
Step 1	Training	No	53	23	69.7
		Yes	39	33	45.8
	Overall Percentage				58.1

a. The cut value is .500

Classification Table

- This table compares observed versus predicted values, based on a cutoff value of .500.
- For cases with no training, the model correctly predicts 69.7% of cases. For those with training, it correctly predicts 45.8%.
- The overall percentage of correct predictions is 58.1%, which is moderately better than chance, considering the binary nature of the outcome.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Comfortable_Reporting	.310	.118	6.856	1	.009	1.363
	Constant	-.966	.387	6.217	1	.013	.381

a. Variable(s) entered on step 1: Comfortable_Reporting.

Variables in the Equation

- **Comfortable_Reporting**: The B coefficient for Comfortable_Reporting is 0.310, and its significance level is .009, which indicates that it is a statistically significant predictor of training status. The positive coefficient suggests that greater comfort in reporting is associated with higher odds of having training.
- **Exp(B)**: The odds ratio for Comfortable_Reporting is 1.363, which can be interpreted as the odds of receiving training are 1.363 times higher for each one-unit increase in comfort level in reporting issues.
- **Constant**: The constant B value (also known as the intercept) is -0.966, which is the log odds of receiving training when Comfortable_Reporting is zero.

Bootstrap for Variables in the Equation

			Bootstrap[a]				
						95% Confidence Interval	
		B	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
Step 1	Comfortable_Reporting	.310	.006	.121	.008	.083	.562
	Constant	-.966	-.017	.398	.011	-1.809	-.189

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Bootstrap for Variables in the Equation

- The bootstrap method was used to calculate more robust B coefficients and their significance, based on 1000 bootstrap samples.
- **Comfortable_Reporting**: The bootstrap results confirm the logistic regression results, with a B coefficient of 0.310 and a significant p-value of .008.
- **Interval**: The 95% confidence interval for the B coefficient of Comfortable_Reporting is between 0.083 and 0.562, which does not cross zero, indicating statistical significance.

Interpretation

The logistic regression analysis suggests that there is a significant positive relationship between the comfort level of reporting issues and the likelihood of having received training. Individuals who are more comfortable with reporting are more likely to have received training, which implies that training may influence an individual's comfort level in reporting workplace issues. However, the overall model explains a small proportion of the variance in whether individuals have received training, which suggests that there may be other factors that also contribute to an individual's training status that are not included in this model. The moderate classification accuracy indicates that while there is some predictive power, the model's practical utility may be limited, and it should be used with caution for prediction purposes.

ANNEX 1: Questionnaire on Textile Industry Safety

Demographic Information

1. Age:

- Under 20
- 21-30
- 31-40
- 41-50
- Over 50

2. Gender:

- Male
- Female
- Prefer not to say

3. Position:

- Worker
- Supervisor
- Manager
- Other _____

4. Years of Experience in the Textile Industry:

- Less than 1 year
- 1-5 years
- 6-10 years
- More than 10 years

Physical and Environmental Safety

5. I feel that my workplace is physically safe.

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

6. I am provided with the necessary personal protective equipment (PPE).

- Always
- Often
- Sometimes
- Rarely
- Never

7. The equipment and machinery I use are well-maintained and safe.
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Health Safety

8. I receive regular health check-ups through my employer.
- Yes
- No

9. I have received training on how to handle hazardous substances.
- Yes
- No

Emotional and Psychological Safety

10. I feel comfortable reporting safety concerns to my superiors.
- Always
- Often
- Sometimes
- Rarely
- Never

11. I feel that my emotional well-being is considered in my workplace.
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Job Security and Satisfaction

12. I feel secure in my job position.
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

13. I am satisfied with the opportunities for professional development.
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

COVID-19 Safety Measures

14. Adequate measures have been taken by my employer to protect workers from COVID-19.
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

References

1. Asfaw, A., Rogers, W., & Phelan, K. (2013). *Occupational Safety and Health in the Textile Industry*. Routledge.
2. Goldin, C., & Katz, L. F. (2016). *The Race Between Education and Technology*. Harvard University Press.
3. Huang, Y. H., Chen, P. Y., & Krauss, A. D. (2017). "Safety climate and self-reported injury: Assessing the mediating role of employee safety control." *Accident Analysis & Prevention*, 104, 123-131.
4. Chandrasekar, K. (2011). "Workplace environment and its impact on organizational performance in public sector organizations." *International Journal of Enterprise Computing and Business Systems*, 1(1), 1-19.
5. Leamon, T. B., & Murphy, P. L. (2017). "Occupational health psychology." *Annual Review of Public Health*, 38.
6. Biddle, E. (2013). "Safety and productivity: Unpacking the relationship." *Journal of Workplace Health and Safety*, 61(4), 18-22.

7. Tucker, E. (2018). "The efficacy of regulation as a function of psychological and situational factors." *Journal of Safety Research*, 65, 1-14.
8. International Labour Organization (2020). *Global Trends and Challenges in Occupational Safety and Health in the Textile Industry*.
9. World Health Organization (2019). *Guidelines on Occupational Safety and Health Management Systems*.
10. Occupational Safety and Health Administration (2020). *OSHA Standards for the Textile Industry*.
11. European Agency for Safety and Health at Work (2019). *Risk Assessment in the Textile Industry*.
12. Asfaw, A., Pana-Cryan, R., & Rosa, R. (2012). "The cost-benefit of safety: Evidence from the literature." *Journal of Safety Research*, 43(2), 127-134.
13. ISO 45001:2018. *Occupational health and safety management systems — Requirements with guidance for use*.
14. National Institute for Occupational Safety and Health (2021). *Best Practices for Textile Mills to Save Money and Reduce Pollution*.
15. Smith, J. A., & Liu, Y. (2017). "Innovations in protective clothing and the prevention of occupational hazards in the textile industry." Proceedings of the International Conference on Occupational Health and Safety Management.