

EMPLOYEE HEALTH AND SAFETY IN WORK PLACE WITH REFERENCE TO VERSUNI INDIA HOME SOLUTIONS LIMITED

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ABSTRACT- This project, conducted at Versuni India Home Solutions Ltd. (formerly Philips Domestic Appliances), aims to enhance workplace health and safety standards within the company's operational environment. The core objective is to assess existing health and safety practices, identify gaps, and implement strategies that align with statutory requirements and best industry practices. By focusing on hazard identification, risk assessment, and the development of control measures, the project seeks to reduce workplace incidents and foster a culture of proactive safety management. Through employee training programs, safety audits, and the implementation of personal protective equipment (PPE) protocols, this initiative emphasizes the importance of employee well-being as a critical component of organizational success. Ultimately, this project contributes to sustaining a safe, healthy, and productive workforce in alignment with Versuni's commitment to operational excellence and corporate responsibility.

INTRODUCTION

Employee health and safety in an organization refers to the measures and practices put in place to protect workers from accidents, injuries, and illnesses while on the job. It involves identifying potential risks in the workplace, implementing preventive strategies, and ensuring that employees have the proper training and equipment to perform their tasks safely. Organizations are responsible for creating a work environment where employees feel physically and mentally secure, which includes complying with health and safety regulations, providing protective gear, and promoting wellness initiatives.

Employee health and safety are fundamental aspects of any organization's operations, ensuring that workers are protected from potential hazards while performing their duties. These hazards can range from physical risks, like slips, falls, and equipment malfunctions, to more complex issues such as exposure to harmful chemicals or repetitive strain injuries. Employers are legally and ethically obligated to assess the workplace environment regularly, identify potential dangers,

and implement effective control measures to prevent accidents.

LITERATURE REVIEW

Recent research underscores the growing emphasis on occupational health and safety (OHS) as a multidimensional field shaped by cultural, organizational, and technological factors. Culturally sensitive interventions, such as the OSHAapproved Seguridad en las Lecherías curriculum (Vázquez et al., 2025), demonstrate the effectiveness of bilingual training in enhancing safety awareness among Hispanic dairy workers in the U.S., while Tetzlaff et al. (2025) highlight discrepancies in Canadian heat stress resources, calling for more standardized approaches amid climate extremes.

International perspectives further reveal evolving national frameworks. Isik (2025) traces Turkey's transition from reactive to proactive OHS policies in line with EU and ILO standards, whereas Algahtani et al. (2024) advocate for OHS integration into Saudi educational curricula to foster a safetyfirst workforce. Studies from Australia (Oakman et al., 2024) and Bahrain (Ateeq et al., 2024) show that sectoral risk levels and HRM practices significantly influence OHS reporting and sustainability outcomes.

Advanced analytical tools are being adopted to enhance risk assessment. Trishch et al. (2024) and Schinke et al. (2024) propose quantifiable models using verbal scales and fuzzy Bayesian networks for improved OHS management. Liu et al. (2023) and Maduranga & Harshani (2024) support this trend through comprehensive reviews of OHSRA methodologies, offering guidance for practical applications

INDUSTRY PROFILE

The home appliances manufacturing industry produces consumer household appliances designed to improve convenience, efficiency, and comfort. These appliances can be classified into two main categories:





- Major Appliances (White Goods): Refrigerators, washing machines, dishwashers, ovens, air conditioners, etc.
- Small Appliances: Coffee makers, blenders, vacuum cleaners, irons, food processors, etc.

The industry is driven by factors such as urbanization, smart technology adoption, rising disposable income, energy efficiency regulations, and evolving consumer preferences.

COMPANY PROFILE

Versuni (formerly Philips Consumer Lifestyle) is a privatelyowned Dutch company, headquartered in Amsterdam, which produces consumer electronics and small appliances. Formerly a subsidiary of Dutch electronics conglomerate Philips, it was sold to Chinese private equity firm Hillhouse Investment in 2021.

This is a story about Versuni – a house of domestic appliance brands headquartered in the Netherlands, with offices and manufacturing centers all over the world. Our story started in the late 1800s and has generated a wealth of successful household products, meeting the changing needs of the consumer over the years. With more than a million loyal customers, our talented teams discover, design and deliver solutions that improve consumers' lives at home.

OBJECTIVES OF THE STUDY

- To understand the factors affecting safety workplace environment for all employees.
- To analyze the training and awareness program conducted for the employees.
- To identify workplace risks to prevent accidents and injuries.
- To evaluate implementation of occupational health policies and compliance policy relevant to health and safety regulation.

NEED OF THE STUDY

- Employee health and safety ensures a secure work environment, reducing accidents and injuries.
- It helps companies comply with legal regulations and avoid costly fines or lawsuits.
- A safe workplace boosts productivity by minimizing sick days and workplace disruptions.

SCOPE OF THE STUDY

The health and safety aim to examine the key factors influencing the well-being of employees in the workplace. It will focus on various aspects of workplace health and safety, including the identification of physical, chemical, ergonomic, and psychosocial hazards, and how these impact employee health and productivity. The study will explore existing health and safety regulations, safety protocols, preventive measures, and incident reporting procedures. Additionally, it will analyze the role of both employees and employers in maintaining a safe working environment, with a particular focus on training programs, safety culture, and the effectiveness of safety measures. The research will employ a combination of surveys, interviews, case studies, and observational methods to gather data from employees, managers, and safety experts, aiming to identify gaps and areas for improvement in current practices.

RESEARCH METHODOLOGY

The methodical approach to addressing research issues is known as research methodology. It provides an overview of the different actions taken by the researcher in a methodical way with the aim of identifying different approaches.

The methodology used for this study is descriptive research. Descriptive study is the phenomena that provides a precise and methodical description of the population or circumstance. Descriptive research analyses one or more variables using a variety of research techniques.

The samples collected in this project are 250 samples from the various departments like Production/Manufacture, research and development, sales and Finance, customer service the samples are collected in the Versuni India home solutions Ltd.

ANALYSIS 1: REGRESSION SHOWING THE DIFFERENCE BETWEEN EXPERIENCE OF THE RESPONDENTS AND SATISFACTION LEVEL OF EMPLOYEES PARTICIPATION

NULL HYPOTHESIS(H0):

There may be no effect of experience of the respondents and Satisfaction level of employee's participation.

ALTERNATIVE HYPOTHESIS(H1):

There may be effect of experience of the respondents and Satisfaction level of employee's participation.

STATISTICAL TEST

Regression was used for above hypothesis.



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| Variables Entered/Removed ^a | | | | | |
|--|--|-----------|--------|--|--|
| | Variables | Variables | | | |
| Model | Entered | Removed | Method | | |
| 1 | Experience ^b | | Enter | | |
| 1 | Experience | • | Litter | | |
| a. D | a. Dependent Variable: Satisfaction level of | | | | |
| employee's participation | | | | | |
| b. All requested variables entered. | | | | | |

| | Model Summary ^b | | | | | |
|---|----------------------------|-------------|----------------------|----------------------------------|--|--|
| Mod el | R | R Square | Adjusted R Square | Std. Error of the Estimate | | |
| 1 | .031ª | .001 | 003 | 1.172 | | |
| a. Predictors: (Constant), Experience | | | | | | |
| b. Dependent Variable: Satisfaction level of employee's participation | | | | | | |

| | ANOVA ^a | | | | | | |
|---|--------------------|-------------------|-----|----------------|------|-------------------|--|
| N | Iodel | Sum of Squares | Df | Mean Square | F | Sig. | |
| | Regres sion | .320 | 1 | .320 | .233 | .630 ^b | |
| 1 | Residu al | 340.580 | 248 | 1.373 | | | |
| | Total | 340.900 | 249 | | | | |

a. Dependent Variable: Satisfaction level of

employee's participation

b. Predictors: (Constant), Experience

| | Coefficients ^a | | | | | | |
|---|---------------------------|--------------------------------|---------------|--------------------------------------|------------|------|--|
| Model | | Unstandardized Coefficients | | Standardi zed Coefficie nts | t | Sig. | |
| | | В | Std. Error | Beta | | | |
| 1 | (Consta nt) | 3.512 | .284 | | 12.38 1 | .000 | |
| | Experie nce | 044 | .092 | 031 | 482 | .630 | |
| a. Dependent Variable: Satisfaction level of employee's participation | | | | | | | |

| Residuals Statistics ^a | | | | | |
|---|-------------|-------------|------|-----------------------|-----|
| | Mini mum | Maxi mum | Mean | Std. Deviatio n | Ν |
| Predicted Value | 3.29 | 3.47 | 3.38 | .036 | 250 |
| Residual | -2.380 | 1.709 | .000 | 1.170 | 250 |
| Std. Predicted Value | -2.474 | 2.455 | .000 | 1.000 | 250 |
| Std. Residual | -2.031 | 1.458 | .000 | .998 | 250 |
| a. Dependent Variable: Satisfaction level of employee's participation | | | | | |



CHARTS





INTERPRETATION:

As the above table shows that P = 0.630 > 0.01. Hence the null hypothesis is accepted and alternative hypothesis is rejected.

RESULT:

Hence it is concluded that there may be no effect of experience of the respondents and satisfaction level of employee participation.

ANALYSIS 2: CHI SQUARE SHOWING THE DIFFERENCE BETWEEN GENDER OF THE RESPONDENTS AND SATISFACTION LEVEL OF MATERIAL USAGE.

NULL HYPOTHESIS(H0):

There is no association between gender of the respondents and satisfaction level of material usage.

ALTERNATIVE HYPOTHESIS(H1):

There is a association between gender of the respondents and satisfaction level of material usage.

STATISTICAL TEST:

Chi-square was used for above hypothesis.

NPar Tests

| | | | Descrij | ptive S | Statisti | cs | | |
|---|---------|----------|---------------|---------|----------|----------|----------------|------|
| | | М | Std. | Mini | Max | - | Percentile | s |
| | N | ea n | Devi ation | mu m | imu m | 25t | 50th (Media | 75th |
| | | | | | | 11 | n) | |
| Gender | 25 0 | 1. 20 | .398 | 1 | 2 | 1.0 0 | 1.00 | 1.00 |
| Satisfact ion level of material usage | 25 0 | 3. 34 | 1.178 | 1 | 5 | 3.0 0 | 3.00 | 5.00 |

Chi-Square Test Frequencies

| Gender | | | | | |
|--------|------------|------------|----------|--|--|
| | Observed N | Expected N | Residual | | |
| Female | 201 | 125.0 | 76.0 | | |
| Male | 49 | 125.0 | -76.0 | | |
| Total | 250 | | | | |

| Satisfaction level of material usage | | | | | |
|--------------------------------------|----------|----------|----------|--|--|
| | Observed | Expected | D | | |
| | Ν | Ν | Residual | | |
| | | | | | |
| Dissatisfied | 12 | 50.0 | -38.0 | | |
| Neutral | 38 | 50.0 | -12.0 | | |



ENSURE

REGULATORY

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| Satisfied | 125 | 50.0 | 75.0 |
|----------------------|-----|------|-------|
| Very Dissatisfied | 4 | 50.0 | -46.0 |
| Very satisfied | 71 | 50.0 | 21.0 |
| Total | 250 | | |

| Test Statistics | | | | | |
|--|---|--------------------------------------|--|--|--|
| | Gen der | Satisfaction level of material usage | | | |
| Chi- Squar e | 92.4 16ª | 195.400 ^b | | | |
| Df | 1 | 4 | | | |
| Asym p. Sig. | .000 | .000 | | | |
| a. 0 cells (0.0%) have expected frequencies less than5. The minimum expected cell frequency is 125.0. | | | | | |
| b. 0 cei 5. Th | b. 0 cells (0.0%) have expected frequencies less than5. The minimum expected cell frequency is 50.0. | | | | |

INTERPRETATION:

As the above shows that $P=0.00 \le 0.01$. Hence the null hypothesis is rejected and alternative hypothesis is accepted.

RESULT:

Hence it is concluded that there is an association between gender of the respondents and satisfaction level of material usage.

ANALYSIS 3: CORRELATION SHOWING THE DIFFERENCE BETWEEN ACCESSIBILITY ON MEDICAL ASSISTANCE IN WORK PLACE NEED AND INTERNAL AND EXTERNAL COMPLIANCE AUDITS ARE CONDUCTED FREQUENTLY TO

adherence to safety and regulatory standards. ALTERNATIVE HYPOTHESIS (H1):

NULL HYPOTHESIS(HO):

There is an inter-relationship between accessibility on medical assistance in work place needed and internal and external compliance audits are conducted frequently to ensure adherence to safety and regulatory standards.

STATISTICAL TEST:

Correlation used for above hypothesis.

ADHERENCE

SHOWING THE DIFFERENCE BETWEEN

то

STANDARDS

There is no inter-relationship between accessibility on medical assistance in work place needed and internal and external compliance audits are conducted frequently to ensure

SAFETY

CORRELATION

AND

| Descriptive Statistics | | | | | | |
|---|------|-------------------|-----|--|--|--|
| | Mean | Std. Deviation | Ν | | | |
| Accessibility on medical assistance in work place needed. | 3.18 | 1.428 | 250 | | | |
| Internal and external compliance audits are conducted frequently to ensure adherence to safety and regulatory standards. | 2.61 | 1.405 | 250 | | | |



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| Correlations | | | | | |
|---|--------------------------------------|-----------------------------|---|--|--|
| | | Accessibility on medical | Internal and external compliance audits are | | |
| | | assistance in | conducted frequently to | | |
| | | work place needed. | ensure adherence to safety and regulatory standards. | | |
| | Pearson Correlation | 1 | .178** | | |
| A appreciativity on modical | Sig. (2-tailed) | | .005 | | |
| Accessibility on medical assistance in work place | Sum of Squares and Cross-products | 507.536 | 88.848 | | |
| needed. | Covariance | 2.038 | .357 | | |
| ľ | N | 250 | 250 | | |
| Internal and external | Pearson Correlation | .178** | 1 | | |
| compliance audits are | Sig. (2-tailed) | .005 | | | |
| conducted frequently to ensure adherence to | Sum of Squares and Cross-products | 88.848 | 491.364 | | |
| safety and regulatory | Covariance | .357 | 1.973 | | |
| standards. | N | 250 | 250 | | |

INTERPRETATION:

As the above table shows that, there is a perfect positive correlation between accessibility on medical assistance in work place needed and internal and external compliance audits are conducted frequently to ensure adherence to safety and regulatory standards. Hence the null hypothesis rejected and alternative hypothesis accepted

RESULT:

Hence it is concluded that there is an inter-relationship between accessibility on medical assistance in work place needed and internal and external compliance audits are conducted frequently to ensure adherence to safety and regulatory standards.

FINDINGS

The study reveals several key findings regarding employee health and safety in work place with reference to versuni india home solutions limited

Demographic

- It found that 80.40% of the majority respondents belong to female.
- Majority of the employees (67.60%) are belonging to the Age groups of 20–25 years.
- Majority of the employees (41.20%) are SSLC Qualification.
- It found that majority of the employees (65.60%) having Year of Experience between 02 -05years.

It found that majority of the employees (28.80%) are in Plastic Department.

MAJOR FINDINGS

- It found that Majority of the employees (53.60%) are strongly agree safety equipment easily accessible in workplace.
- Majority of the employees (47.60%) are satisfied that air quality and ventilation system in workplace.
- Most of the employees (46.00%) are Agreed machinery and tools in work place are regularly maintained and kept in good working condition.
- It found that majority of the employees (40.8%) answered Poor for their adequacy of lighting and noise control in the workplace.
- Most of the employees (50.00%) are satisfied with the materials used.
- Most of the employees (47.20%) are Agreed that training sessions are conducted frequently and up to date with necessary skills and knowledge.
- Most of the employees (50.00%) are satisfied with the level of participation.
- It found that most of the employees (44.00%) are Strongly agree with the post-training assessments and feedback processes are effective in evaluating and improving learning experience.
- Majority of the employees (42.00%) are Accessible with the refresher courses to their employees.
- It found that majority of the employees (50.40%) are Strongly agreed that health policies are inclusive and cater to the diverse needs of all employees.
- Most of the employees (42.00%) are Easily access the medical assistance when needed at the work place.
- Majority of the employees (44.80%) are very satisfied with the availability of regular health checkups and screenings.
- Majority of the employees (40.00%) are Strongly Agreed that health and safety policies are effectively communicated to all employees.
- Most of the employees (43.60%) are Agreed with the frequently to ensure a safe working environment.



- Most of the employees (42.80%) are Good with effectiveness of the protective hazard identification system.
- Most of the employees (47.60%) are Strongly agree that reporting mechanisms in place for identifying and addressing risks or safety concerns.
- Majority of the employees (40.80%) are Strongly Agreed that the actions implemented quickly and effectively to address identified safety issues or risks
- Most of the employees (40.40%) are Very Easy to use personal protective equipment provided in the workplace.
- Majority of the employee (42.80%) are agreed that workplace policies are regularly updated to align with current regulations and industry standards.
- Majority of the employees (42.80%) are Strongly Agreed that audits are conducted frequently to ensure adherence to safety and regulatory standards.
- Majority of the employees (40.00%) are Strongly Agreed that that staff receive regular training on regulatory ensure compliance with updated standards.

CONCLUSION

The study highlights that while Versuni has established a solid foundation in employee health and safety, areas such as lighting, noise control, and system responsiveness still require attention. A majority of employees feel well-equipped and trained, but ongoing assessment, inclusive practices, and prompt implementation of safety improvements are essential for sustaining a high safety standard. Prioritizing these areas will not only reduce risk and enhance compliance but also foster a culture where employees feel genuinely protected and valued.

REFERENCE

- Vázquez, R. I., Charlier, D., Peterson, C., Balius, P. N., Kirsch, J. D., Liebman, A., & Bender, J. B. (2025). Health and Safety Training for Immigrant Dairy Workers in the Upper Midwest. *Journal of Dairy Science*.
- Viala, B. T., & Nugroho, B. Y. S. (2025). FACTORS RELATED TO MINOR INJURIES IN CONSTRUCTION WORK FROM THE

PERSPECTIVE OF OCCUPATIONAL HEALTH AND SAFETY. *HEARTY*, *13*(2), 522-529.

- Trishch, R., Cherniak, O., Zdenek, D., & Petraskevicius, V. (2024). Assessment of the occupational health and safety management system by qualimetric methods. *Engineering Management in Production & Services*, 16(2).
- Tetzlaff, E. J., Richards, B. J., Wagar, K. E., Harris-Mostert, R. C., Journeay, W. S., O'Connor, F. K., & Kenny, G. P. (2025). A Content Analysis of Web-Based Heat Stress Materials Published bv Occupational Health and Safety Ministries, Associations, and Agencies in Canada. NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy, 34(4), 306-326.
- Tao, Y., Hu, H., Xu, F., & Zhang, Z. (2023). Ergonomic risk assessment of construction workers and projects based on fuzzy Bayesian network and DS evidence theory. *Journal of Construction Engineering and Management*, *149*(6), 04023034.
- Schinke, R. J., Giffin, C., Cosh, S., Douglas, K., Rhind, D., Harwood, C., ... & Papaiounnou, A. (2024). International Society of Sport Psychology Position Stand: Mental Health through Occupational Health and Safety in High-Performance Sport. In *Mental Health in Sport and Physical Activity* (pp. 21-49). Routledge.
- Siabi, E. K., Donkor, P., Mensah, S. K., Dzane, R. K., Kurantin, N., Frimpong, K., ... & van Etten, E. (2022). Assessing the knowledge and practices of occupational safety and health in the artisanal and small-scale gold mining sector of Ghana: A case of obuasi. *Heliyon*, 8(11).
- Rathor, K., Lenka, S., Pandya, K. A., Gokulakrishna, B. S., Ananthan, S. S., & Khan, Z. T. (2022, October). A Detailed View on industrial Safety and Health Analytics using Machine Learning Hybrid Ensemble Techniques. In 2022 International Conference on Edge Computing and Applications (ICECAA) (pp. 1166-1169).