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Analysis of the foundations and consequences of occupational health and safety (HSE) using the grounded theory method (case study: employees of Bandarjask Naval Army Hospital workshop)

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EXTENDED ABSTRACT

INTRODUCTION:

Today, the discussion of "safety and health in the workplace" has become an important issue because the injuries of employees caused by work have adverse effects on the productivity and performance of companies. Based on this, the current research, which is based on the qualitative method of the basic theory or grand theory, and from the sociological approach, examines the role and importance of safety and health in the workplace from the perspective of the employees of a construction camp, which was carried out in the army naval hospital workshop in the city of Bandar Jask. Is. In fact, the research looks at the issue of safety and health in the workplace from the point of view of the sociology of work and occupation.

METHODOLOGY:

The study population of the workshop employees and the study sample were 23 people who were selected in a purposeful way and the sampling continued until theoretical saturation and analytical induction, that is, until no new data was obtained, and all parts of the paradigm model were obtained. was also completed and the investigated process was expressed in the form of a model. The data collection method was in-depth interview and the interviews were analyzed by coding. In order to achieve credibility, the research results were returned to the participants and after their approval, the credibility and acceptability of the research was achieved. The research process was also reviewed by experts. Also, the reliability of the research was calculated using the within-subject agreement method, and the result of 70% indicates the desired reliability of the current research.



FINDINGS:

The findings of the research indicated that the existence of harmful environmental and organizational factors as causal conditions, if not identified, evaluated and controlled with a preventive view, will lead to the central phenomenon of "double loss of employees/employer" that some of these the losses include: spending a lot of money for the treatment of the injured workforce, increasing absences due to occupational diseases and injuries, and expenses related to paying compensations, loss of training workforce. Seen and experienced and spending additional costs for training alternative workforce and wasting time for the above. In order to prevent this mutual loss, the activists have taken advantage of the "Safety and Health of the Work Environment" (HSE) strategy. This strategy is influenced by two groups of conditions, which are called the governing background and intervention conditions. The governing context is: 1) the background variables of the employees, 2) the type of job and the location of the employees, 3) the location of the workshop and its infrastructure, 4) the climatic conditions of the region and 5) the available possibilities for HSE. Intervening conditions include: 1) natural disasters and unexpected events, 2) economic conditions, 3) social-cultural conditions and 4) timepolitical conditions.

CONCLUSION:

In the end, the adoption of the workplace health and safety strategy leads to the mutual benefit of employees/employers, such as employee health and increased productivity, and has mutually beneficial consequences, such as environmental protection and sustainable economic development.

References:

Aksorn, T.; Hadikusumo, B.H.W. (2008). Critical success factors influencing safety program performance in THAI construction projects. Safety Science. 46(4): 709–727.

Alwani, S.M. (2007). Public Management. Tehran: Ney. (Persian).

Amiri, M.; Mohajeri, M. (2016). "Ranking of jobs in high-rise construction workshops in terms of safety culture using the FTOPSIS-FAHP model". Occupational health and safety. 7(2): 131-143. (Persian).

Arghami, S.; Poyakian, M.; Godarzi, R. (2015). "Identifying the factors affecting the safety culture in Iran's thermal power plants". Occupational health engineering. 3(2). (Persian).



Armant, A.; et al. (2021). "Psychosocial and Organizational Processes and Determinants of Health Care Workers' (HCW) Health at Work in French Public EHPAD (Assisted Living Residences): A Qualitative Approach Using Grounded Theory". Envieronmental Research and Public Health. 18(14): 72-86.

Asgharizadeh, E.; Ghasemi, A.; Behrouz, M. (2013). "Evaluation of incidents, based on safety performance monitoring indicators using Avamix". Crisis Management. No. 5: 57-64. (Persian).

Babbie, E. (2005). Research methods in social sciences. Translation: Reza Fazel. Tehran: Samt. (Persian).

Botha, P.A.; Brand, H. (2009). Development of a holistic wellness model for managers in tertiary institutions. Origin Res. 7(1).

Butters, J.E.; et al. (2006). Illicit drug use, alcohol use and problem drinking among infrequent and frequent road ragers. Drug Alcohol Depend. 80: 169-175.

Charmaz, K. (2002). Qualitative Interviewing and Grounded Theory Analysis, in Handbook of Interview Research, Context & Method. London: Sage.

Chen, H.; et al. (2020). "Comparative study on the strands of research on the governance model of international occupational safety and health issues". Safety Science. 122.

Chen, Y.; McCabe, B.; Hyatt, D. (2017). Impact of individual resilience and safety climate on safety performance and psychological stress of construction workers: A case study of the ONTARIO construction industry. Journal of Safety Research. 61: 167–176.

Dehghani, F. et al. (2018). "Evaluating the emotional state of workers exposed to mixed organic solvents (case study: a paint industry)". Occupational health and safety. 9(1): 40-48. (Persian).

Enchill, E.; Mireku, K.K. (2014). The evaluation of factors influencing safety performance: a case in an industrial gas manufacturing company (GHANA). International Journal of Data Mining & Knowledge Management Process. 4(5): 61-69.

Eshghi-Malairi, B. (?). Work environment health and safety course booklet. Bu Ali Sina University. Hamedan. (Persian).

Fernandez-Muniz, B.; Manuel Montes-Peon, J.; Jose Vazquez-Ordas, C. (2007). Safety management system: development and validation of a multidimensional scale. Journal of Loss Prevention in the Process Industries. 20(1): 52–68.



Golbabai, F.; Tirgir, A. (2002). "Occupational exposure to wood dust from the perspective of environmental ergonomics", National Conference on Ergonomics in Industry and Production, Tehran, Ergonomics and Human Factors Engineering Association. (Persian).

Herzberg, F. (1959). The Motivation to Work. New York: John Wiley and Sons.

Hudson, P. (2007). Implementing a safety culture in a major multinational. Safety Science 45(6): 697-722.

Iman, M.T. (2009). Paradigmatic basis of quantitative and qualitative research methods in humanities. Qom: University Press. (Persian).

Janackovic, G.; Savic, S.; Stankovic, M. (2011). Multi-criteria decision analysis in occupational safety management systems. Safety Engineering. 1(1): 17-22.

Karimi, Y. (2005). Personality psychology. Tehran: Payam Noor University. (Persian).

Kerr, R.; Marie M.H.; McCrory, M. (2009). HSE Management Standards and stress-related work outcomes. Occupational Medicine. 59(8): 574-579.

Khaki, G. (1999). Research method with an approach to thesis writing. Tehran: Derayat. (Persian).

Khalilzadeh, N. (1997). Investigating the effective factors in job satisfaction and dissatisfaction of student teachers. Master's thesis in psychology. Payam Noor University of Urmieh. (Persian)

Leblebici, D. (2012). Impact of workplace quality on employee's productivity: case study of a bank in Turkey. Journal of Business Economics and Finance. 1(1): 38-49.

Mardani, A. (2011). "Machine safety and personal safety is a step towards improving HSE engineering". the first national health, safety and environment (HSE) conference. Mahshahr, Islamic Azad University, Mahshahr branch. (Persian).

McCaughey, D.; DelliFraine, J.L.; McGhan, G.; Bruning, N.S. (2013). The negative effects of workplace injury and illness on workplace safety climate perceptions and health care worker outcomes. Safety Science. 51: 138–147.

Ministry of Labor, Cooperation and Social Welfare. (2021). "The situation of accidents caused by work in the Islamic Republic of Iran". Online.

Available at:

https://bazresikar.mcls.gov.ir/fa/filepool/download/566f6a2b996d47b394ce7207447dd0f4. (Persian).



Modiri, M.; Dashti Shiramin, M.; Karimi Shirazi, H. (2018). "Identifying and prioritizing factors influencing safety performance with the combined approach of Dimetal and Fuzzy Network Analysis Process (DANP) (case study: a combined cycle power plant)". Occupational health and safety. 9(1): 49-60. (Persian).

Mohammadfam, I. et al. (2016). "Providing a framework for evaluating the performance of occupational health and safety management systems using multi-criteria decision-making methods". Iran's work health. 14(1): 23-36. (Persian).

Mohammadzadeh, A.; Mehrojan, A. (1996). Organizational behavior, contingency attitude. Tehran: Allameh Tabatabai University. (Persian)

Morrow, S.L.; Koves, G.K.; Barnes, V.E. (2014). Exploring the relationship between safety culture and safety performance in U.S. nuclear power operations. Safety Science. 69: 37–47.

Nazari, J.; Dashti, M. (2018). "Investigating the impact of occupational accidents on the quality of working life of employees of a steel company (a case study)". Occupational health and safety. 9(1): 73-83. (Persian).

Neal, A.; Griffin, M.A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. Journal of Applied Psychology. 91: 946–953.

Occupational health group of social security organization. (2014). General occupational health and safety. Tehran: Social Security Organization. (Persian).

Parsons, K. (2000). Environmental ergonomics: a review of principles, methods and models. Applied ergonomics. 31(6): 581-94.

Quick, J.C.; et al. (2003). Occupational health psychology. John Wiley & Sons, Inc

Rah Chamani, M.; Zakarian, A.; Kamal, A. (2017). "A comparative study of the effect of the color temperature of fluorescent and LED lamps on the psychological indicators of employees in a government office". Iran's work health. 15(5): 30-37. (Persian).

Rowlinson, SM. (2003). HONG KONG construction safety management and the Law. 2nd ed. Hong Kong: Sweet and Maxwell.

Saldana, J. (2015). A Coding Guide for Qualitative Researchers. Translation: Abdullah Givian. Tehran: Scientific and Cultural. (Persian).

Samimi, A. (2011). "The necessity of examining the occupational safety and security culture in Iran's oil industry". the first national health, safety and environment (HSE) conference. Mahshahr, Islamic Azad University, Mahshahr branch. (Persian).



- Sawacha, E.; Naoum, S.H.; Fong, D. (1999). Factors affecting safety performance on construction sites. International Journal of Project Management. 17(5): 309-315.
- Schultz, D. (2005). Personality theories. Translation: Yusuf Karimi and others. Tehran: Arsbaran. (Persian).
- Scott, D.; Morrison, M. (2006). Key Ideas in Educational Research. London: Continuum.
- Sedghi, S.; Shahnavazi, H.; Khalesi, N. (2017). "Investigating personal and occupational influencing factors on the health of forensic medical workers in Tehran based on the holistic welfare model". Iran's work health. 15(5): 75-83. (Persian).
- Sorensen, G.; et al. (2021). "The future of research on work, safety, health and wellbeing: A guiding conceptual framework". Social Science & Medicine. 269.
- Steers, R. M.; Porter, L.W. (1991). Motivation and Work Behavior .NewYork: McGraw-Hill.
- Strauss, A.; Corbin, J. (2011). Basics of qualitative research (techniques and stages of production of grounded theory). Translation: Ebrahim Afshar, Tehran: Ney. (Persian).
- Taghdisi, M.H. (2006). "Health, safety and environment management; A creative approach to sustainable development". Iran's work health. 3(3,4). (Persian).
- Tan. H.; Wang, H.; Chen, L.; Ren, H. (2012). Empirical analysis on contribution share of safety investment to economic growth: A case study of Chinese mining industry. Safety Science. 50: 1472–1479.
- Tavasoli, G. (2013). Sociology of work and occupation. Tehran: Samt. (Persian).
- Thomas, F.; Caitlyn, G.; Stephanie, S. (2015). Investigating Holistic Wellness Dimensions during Older Adulthood: A Factor Analytic Study. Adult Dev. 22: 239–247.
- Van Vliet, G.; Magrin, G. (2012). The environmental challenges facing a Chinese oil company in Chad.
- Wang, Y.U.; et al, (2012). Study on the HSE Management at Construction Site of Oil and Gas Processing Area. Procedia Engineering. 45: 231-234.
- Yeh, L.T. (2017). IncorporatingWorkplace Injury to Measure the Safety Performance of Industrial Sectors in Taiw. Sustainability. 9: 1-14.





Zakerian, A. et al. (2015). "Investigating the effect of work environment design on the productivity of bank employees". Occupational health and safety. 6(2): 35-42. (Persian).

Zaravshani, V. (2019). "Occupational safety and health and response to Covid-19 using the technologies of the fourth industrial revolution", Occupational health and safety. 10(4): 329-348. (Persian).

Zhang, J.; Li, Y.; Wu, C. (2013). The Influence of Individual and Team Cognitive Ability on Operators' Task and Safety Performance: A Multilevel Field Study in Nuclear Power Plants. PLoS ONE. 8(12): 1-9.