



doi 10.5281/zenodo.13293962

Vol. 07 Issue 07 July - 2024

Manuscript ID: #01523

# Challenges Impacting Effective Work-Stress Management in the Nigerian Petroleum Industry

Esang Lazarus Esitikot<sup>1\*</sup>, Akaninyene Edet Ekong<sup>2</sup>, Mary Ubong Umoh<sup>1</sup>, Clement O. Obadimu<sup>1</sup> and Anthony Akadi<sup>1</sup>.

<sup>1</sup>Institute of Health, Safety, Security and Environment Studies, University of Uyo, Nigeria 
<sup>2</sup>Highstone Global University, Texas, USA

\*Corresponding Author: Email:esitikot@gmail.com

#### **Abstract**

Work-related stress in the Nigerian petroleum industry is a major challenge which impacts severely on worker's health and productivity. Despite measures put in place by the organizations and supervisors to effectively manage work-related stress, challenges still abound, which results is severe impacts on the workers. This study was conducted to uncover the challenges affecting effective work-stress management in the Nigerian petroleum industry. Grounded on the Person-Environment fit theory, the study adopted a multiplecase study design to enhance triangulation of data from several sources. The population for the study was supervisors in petroleum companies in the Nigeria Niger Delta region who have successfully applied strategies to reduce work- related stress. Purposive sampling technique was adopted to samplesix supervisors from three companies to participate in the study. The instrument for data collection as a structured interview guide and company document analysis. Results of the study showed the major challenges encountered which hinders effective work-stress management are urgent requests by clients that adversely impact effective planning, inadequate resources to achieve worker-pay match, and inability to adapt stress management strategy to meet individual worker's need. The study also identified that effective work-related stress management requires a synergy of all stakeholders within the petroleum industry. Such an approach requires collaboration among the workers, supervisors, organizational leaders, and clients or customers. With an all-stakeholders approach, availability of resources to enable worker-pay fit, and adaptation of stress management strategy to meet individual worker's need, work-related stress in the petroleum industry of the Niger Delta can be effectively managed to enhance workers' health, work-life and work-family balance, and increased organizational profitability with positive socio-economic impacts on the oil producing communities and Nigerian government revenue.

## **Keywords:**

challenges, management, petroleum industry, stress, work.



#### Introduction

Workers in the petroleum industry perform roles in a variety of areas and work in some of the most adverse working conditions, which may result in adverse effects, such as occupational stress and burnout, affecting their physical, psychological, and social health. Fatigue, resulting from sleep deprivation, poses a substantial risk to personal and process safety, necessitating the implementation of Fatigue Risk Management Systems (Asgari et al., 2017). Research indicates that increased task and organizational stressors are associated with elevated psychological distress, while improved job control and coping resources can reduce this risk (Tsareva et al., 2019).

Each profession has its risk and buffer factors in relation to stress (Tsareva et al., 2019). The Nigerian petroleum industry presents significant challenges for effective work-stress management. Effective work-related stress management involves understanding the stressors in each organization and environment and developing strategies to manage them (Abozaid et al., 2019; Asgari et al., 2017).

The conceptual framework for the study is the person–environment (P–E) fit theory postulated by Caplan (1975). When factors in the work environment do not match the needs of the worker, there is the potential for inducement of work-related stress (Osibanjo et al., 2016). Based on the P–E fit theory, the amount of stress a worker experiences is directly related to the degree of mismatch between the worker and the workplace factors (Jee-Seon& Kim, 2020; Osibanjo et al., 2016). The key concept from the theory for this study is worker–environment mismatch. The lack of fit between the worker and the work environment can be considered from different perspectives: person–organization fit, person–job fit (Jee-Seon& Kim, 2020; Osibanjo et al., 2016), person–pay fit and person–person fit (Osibanjo et al., 2016). To eliminate work-related stress, there should be an appropriate match between the worker and organizational factors, job design and control, remuneration, and fellow workers (Dar & Rahman, 2020; Jee-Seon& Kim, 2020). When the workplace factors do not align with a worker's needs, there is the potential to induce stress that can affect the worker's health and productivity (Castner, 2020; Osibanjo et al., 2016). To address any misfit, the industry should focus on developing strategies to promote better quality of life and improved working conditions for its professionals.

## **Design and Methodology**

The study adopted a multiple case study design, which was chosen because it is appropriate when a researcher is answering a research question using several cases and when exploring the similarities and differences between two or more cases (Lederer et al., 2017; Saunders et al., 2015; Yin, 2014). Additionally, a multiple case study approach was found to be suitable for gathering data from multiple organizations and contexts, and for analyzing health and working conditions in these organizations. This design was selected to enhance the triangulation of data from several sources.

The population under study consisted of supervisors in petroleum companies in the Nigeria Niger Delta region who had successfully applied strategies to reduce work-related stress. The sample size was determined based on the context and the study population. According to Malterud et al. (2016), in a multiple case study design, a sample size of six to ten participants with diverse experiences may be adequate to achieve data saturation. In this study, a purposive sampling technique was used to select six supervisors from three companies to participate. This was because purposive sampling increases the likelihood of accessing rich information and improves the efficiency of the sampling process by using the most informative candidates, thereby enhancing the value of the collected data (Griffith et al., 2016; Palinkas et al., 2015).

To ensure the correct supervisors were sampled, contact was made with each organization's officer in charge of research to identify the supervisors who had self-reported as experienced in work-related stress and had been recognized or rewarded by their organization for successfully implementing strategies to reduce work-related stress. This focus on information-rich samples was intended to yield more insights and in-depth understanding rather than empirical generalizations from samples (Benoot et al., 2016).

Participants were interviewed until responses no longer generated new information, marking the point of data saturation. In the study, the ethical protection of research participants was upheld. Participants' consent was also sought for audio recording the interview sessions, and they were informed of their right to review the transcripts of the audio recordings. To maintain the confidentiality of the research participants and their organizations, pseudonyms were used to represent both the participants and the organizations.

Semi-structured interviews were used to collect the data for the study. Other documents reviewed included safety bulletins, information posted on general notice boards, the employee handbook, and company procedures related to the management of work-related stress. This approach was intended to enhance objectivity and provide confirmatory evidence (Owen, 2014; Yin, 2014). Methodological triangulation was used to validate the results obtained from the different data sources.

## **Results and Discussion of Findings**

There are challenges that adversely impact effective management of work-related stress (Akbari et al., 2017; Lecca et al., 2020; Lee et al., 2017; Paais, 2019; Wasserman & Trosten-Bloom, 2017). One of such challenges in the petroleum industry is urgent requests by clients that adversely impact time off schedule or shift rotation, task planning, and resources distribution. As explained by P1, "The clients wants the job completed within a certain timeline but you being at site may know that the task is not achievable within the timeline but so as not to look as if you are not serious you keep pressing on to finish and that can expose the workers to stress".

P6 corroborated respondent P1's response: "The client that is calling you does not look at the time; all the client is interested in is for you to deliver on his request and such request puts pressure on you to meet the demand within the client's timeline". Another respondent noted that "urgent requests from clients are sources of emotional strain due to calling personnel out at odd hours and having limited time for personnel to rest." The respondents expressed lack of control over clients and so could not clearly define the strategy for managing client-induced work-related stress. As noted by P1 "so as not to look as if you are not serious, you keep pressing on to finish and that can expose the workers to stress." The management of work-related stress should involve all stakeholders (Collins, 2016; Havermans et al., 2018). While the respondents in this study identified specific strategies for workers, supervisors, and organizational leaders to enhance work-related stress management, clients in the petroleum industry were identified as a key challenge to the successful implementation of stress management strategies. Another challenge for managing work-related stress is inadequate resources to achieve worker-pay match. As noted by P4, "compensation is below the worker's need so there is the need to define minimum compensation standard and bonuses for extra work." P2 identified the "need to focus on welfare of workers, define minimum working condition for workers, and provide incentives to make workers feel a sense of belonging." Because of the inability to achieve worker-pay match, a respondent noted that "there is that tendency that when a worker finishes work and is supposed to rest, the worker goes elsewhere to work during his or her off time and that may induce stress." Another respondent identified "lean manpower and poor condition of service as requiring

attention." The review of documents at partner organization C1 showed that "management shall allocate adequate resource and plan for the continuous improvement and promotion of HSE" was part of the HSE policy. A similar statement was also included in the occupational hygiene policy. The company also noted in the HSE policy that "HSE issues shall be given priority in all operations by performing all operations with regard to the prevention of accidents." It was unclear the extent the organization has complied with the HSE policy in view of the contrary perspectives shared by respondents.

A worker expects fairness and justice in the pay he or she receives and in the distribution of resources, obligations, and rewards (Abun et al., 2020; Virtanen & Elovainio, 2018). The implication is that a worker who perceives being unfairly rewarded compared to others, may experience stress (Abozaid et al., 2019). Though P5 and P6 noted that they give bonus for extra work as a strategy for stress management, they agreed that the perception of fairness may vary among workers and so it may be challenging determining when there is a worker-pay match. Payment for extra workdays or longer workday may also be a disincentive for workers to rest, hence increased potential for work-related stress. Also, contemporary organizations often carry out changes and reorganizations as part of the strategy to achieve efficiency (Virtanen & Elovainio, 2018). In the midst of the changes, it is challenging to identify the factors to consider in determining when the pay a worker receives is aligned with the worker's desires and needs. Document review at the three partner organizations did not show any specific strategy to ensure worker–pay match.

Inability to adapt stress management strategy to meet individual worker's need is another challenge supervisor's experience in managing work-related stress. Since the response to work-related stress is individualized, there is variation on the optimum stress level among workers (Amarnath&Himabindu, 2016; Pellerone et al., 2020). The document review at the partner organizations did not show any specific strategy for meeting each worker's need. Though P1 identified "Supervisors' monitoring of field personnel and taking action to address their need" as being effective, the respondent added that "individual differences is a challenge." P2 made similar observation and noted that "no one strategy fits all workers; effective strategy varies among individuals" as individual differences and the subjective well-being factors may change the personal or contextual experiences that cause misfit.

## Conclusion

When an organization has a reputation for adverse health impacts on workers, project delays, and hazardous work environment due to ineffective management of work-related stress, the organization may experience less patronage, shareholders' apathy, difficulty in hiring competent workers, and reduced customer trust to deliver on commitments. Such scenarios may indirectly result in reduction in organizational profitability and possible loss of business opportunities. The negative impacts of work-related stress does not only adversely affect workers but may impact an organization's ability to support positive citizenship behavior. Organizational citizenship behavior enhances effective interaction among workers and is necessary for improved organizational performance. Such a condition may result in high worker turnover which has been identified as a consequence of work-related stress. Addressing the challenges identified in this study may enhance organizational leaders' ability to demonstrate citizenship behavior which may lead to reduction in worker turnover.

The key challenges experienced by supervisors in managing work-stress is urgent requests by clients that adversely impact effective planning, inadequate resources to achieve worker-pay match,

and inability to adapt stress management strategy to meet individual worker's need. The study identified that effective work-related stress management needs a synergy of stakeholders within the petroleum industry. Such an approach requires collaboration among the workers, supervisors, organizational leaders, and clients or customers. With an all-stakeholders approach, availability of resources to enable worker–pay fit, and adaptation of stress management strategy to meet individual worker's need, work-related stress in the petroleum industry of the Niger Delta can be effectively managed to enhance workers' health, work-life and work-family balance, and increased organizational profitability with positive socio-economic impacts on the oil producing communities and Nigerian government revenue.

## References

- Abozaid, R. F. A., Mansoor, R., Nawaz, Z., Abozaid, R. F. A., Mansoor, A., &Hafedh, M. (2019). Effects of transformational leadership and perceived fairness on job satisfaction: evidence from Middle East. *International Journal of Information, Business and Management, 11*(4), 31–49.
- Abun, D., Magallanes, T., Foronda, G. S. L., &Encarnacion, M. J. (2020). Employees' workplace well-being and work engagement of divine word colleges' employees in Ilocos region, Philippines. *International Journal of Research in Business and Social Science*, 9(2), 70–84. <a href="https://doi.org/10.20525/ijrbs.v9i2.623">https://doi.org/10.20525/ijrbs.v9i2.623</a>
- Akbari, J., Akbari, R., Shakerian, M., &Mahaki, B. (2017). Job demand-control and job stress at work: A cross-sectional study among prison staff. *Journal of Education and Health Promotion*, 6(15), 1–6. <a href="https://doi.org/10.4103/jehp.jehp\_68\_14">https://doi.org/10.4103/jehp.jehp\_68\_14</a>
- Amarnath, B., & Himabindu, N. (2016). A comparison of stress management levels in three Corporate Hospitals at Hyderabad. *Splint International Journal of Professionals*, 3(1), 48–59.
- Asgari, F., Jafari, M., &Ramazani, A. (2017). Investigating the relationship between organizational factors of stress and delay of software projects in a large knowledge based company. *Independent Journal of Management & Production*, 8(1), 15–33. <a href="https://doi.org/10.14807/ijmp.v8i1.487">https://doi.org/10.14807/ijmp.v8i1.487</a>
- Benoot, C., Hannes, K., &Bilsen, J. (2016). The use of purposeful sampling in a qualitative evidence synthesis: A worked example on sexual adjustment to a cancer trajectory. *BMC Medical Research Methodology*, 16, 21. <a href="https://doi.org/10.1186/s12874-016-0114-6">https://doi.org/10.1186/s12874-016-0114-6</a>
- Castner, J. (2020). Professional flourishing: The job Demands–Resources model and emergency nursing. *Journal of Emergency Nursing*, 45(6), 607–610. https://doi.org/10.1016/j.jen.2019.09.008
- Collins, B. J. (2016). Fair? I don't care: Examining the moderating effect of workplace cynicism on the relationship between interactional fairness and perceptions of organizational support from a social exchange perspective. *Journal of Leadership & Organizational Studies*, Advance online publication. <a href="https://doi.org/10.1177/1548051816667896">https://doi.org/10.1177/1548051816667896</a>
- Dar, N., & Rahman, W. (2020). Two angles of overqualification-the deviant behavior and creative performance: The role of career and survival job. *PLoS One*, *15*(1). https://doi.org/10.1371/journal.pone.0226677

- Griffith, D. A., Morris, E. S., &Thakar, V. (2016). Spatial autocorrelation and qualitative sampling: The case of snowball type sampling designs. *Annals of the American Association of Geographers*, 106, 773–787. <a href="https://doi.org/10.1080/24694452.2016.1164580">https://doi.org/10.1080/24694452.2016.1164580</a>
- Havermans, B. M., Brouwers, E. P. M., Hoek, R. J. A., Anema, J., Beek, A. B., & Boot, C. (2018). Work stress prevention needs of employees and supervisors. *BMC Public Health*, 18, 1–14. <a href="https://doi.org/10.1186/s12889-018-5535-1">https://doi.org/10.1186/s12889-018-5535-1</a>
- Jee-Seon, Y., & Kim, H. (2020). Factors related to presenteeism among South Korean workers exposed to workplace psychological adverse social behavior. *International Journal of Environmental Research and Public Health*, 17(10), 1–14. https://doi.org/10.3390/ijerph17103472
- Lecca, L. I., Finstad, G. L., Traversini, V., Lulli, L. G., Gualco, B., &Taddei, G. (2020). The role of job support as a target for the management of work-related stress: The state of art: Acces la success acces la success. *Calitatea*, 21(174), 152–158.
- Lederer, M., Kurz, M., &Lazarov, P. (2017). Usage and suitability of methods for strategic business process initiatives: A multicase study research. *International Journal of Productivity Management and Assessment Technologies*, 5(1), 40–51. <a href="https://doi.org/10.4018/JJPMAT.2017010103">https://doi.org/10.4018/JJPMAT.2017010103</a>
- Lee, S., Shin, Y., &Baek, S. I. (2017). The impact of job demands and resources on job crafting. *Journal of Applied Business Research*, 33, 829–842. https://doi.org/10.19030/jabr.v33i4.10003
- Malterud, K., Siersma, V. D., &Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26, 1753–1760. https://doi.org/10.1177/1049732315617444
- Osibanjo, O. A., Salau, O. P., Falola, H. O., &Oyewunmi, A. E. (2016). Workplace stress: Implications for organizational performance in a Nigerian public university. *Verslas: teorijairpraktika*, 17, 261–269. https://doi.org/10.3846/btp.2016.668
- Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *Qualitative Report*, 19(26), 1–19.
- Paais, M. (2019). Evaluation of employees job satisfaction through training, development, and job stress in bank Maluku, Indonesia. *Calitatea*, 20(172), 89–94.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., &Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42, 533–544. https://doi.org/10.1007/s10488-013-0528-y
- Pellerone, M., Rapisarda, V., Maria Chiara, A. T., Vitale, E., &Ramaci, T. (2020). Burnout and self-perceived instructional competence: An exploratory study of a group of Italian female elementary school teachers. *International Journal of Environmental Research and Public Health*, 17(4), 1356. https://doi.org/10.3390/ijerph17041356

- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7th ed.). Pearson Education Limited.
- Tsareva, N. A., Yakimova, Z. V., & Vlasenko, A. A. (2019). Job crafting role, staff involvement and work stress. *DilemasContemporáneos: Educación, Política y Valore, 1*(18), 1–18.
- Virtanen, M., &Elovainio, M. (2018). Justice at the workplace: A review. *Cambridge Quarterly of Healthcare Ethics*, 27, 306–315. <a href="http://dx.doi.org/10.1017/S0963180117000639">http://dx.doi.org/10.1017/S0963180117000639</a>
- Wasserman, I., &Trosten-Bloom, A. (2017). Enhancing profitability through business process excellence: The green mountain coffee roaster's story. *AI Practitioner*, 19(2), 28–32. <a href="https://doi.org/10.12781/978-1-907549-31-1-4">https://doi.org/10.12781/978-1-907549-31-1-4</a>
- Yin, R. K. (2014). Case study research: Design and methods (5th ed.). Sage.