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## Accident analysis of human causal factors in the oil and gas industry from 2013 to 2017 using the HFACS-OGI framework

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In the last two decades, human factors have been identified as major causes of accidents in the oil and gas industry; thus, there is an urgent need to establish the root causes of these accidents. Therefore, this study will seek to address this knowledge gap by analysing the human causal factors of oil and gas accidents within a 5-year period in order to ascertain how they can be integrated successfully with the risk assessment process. The study was approved as a low-risk project by Coventry University Ethics Committee, as it involved secondary data collection of accident statistics contained in the International Association of Oil and Gas Producers (IOGP) database. These data were predominantly collated and analysed using various software such as Microsoft Excel and SPSS software. Statistical analysis conducted in this study include trend analysis, descriptive statistics, Pearson's correlation, Cronbach's alpha reliability analysis and Relative Importance Index (RII). A key advantage of this

research is that it will aid in resolving the dilemma about causes of accidents in the oil and gas industry being influenced by different factors. This study could also aid in reducing the amount of accidents in the oil and gas industry once its recommendations are implemented.

### Biography

Chizaram D Nwankwo is a PhD researcher in Civil Engineering, Architecture and Building at Coventry University. His master's degree was in Petroleum and Environmental Technology at Coventry University, while his bachelor's degree was in Biochemistry at University of Port Harcourt, Nigeria. His current PhD research is focused on designing a process safety management framework and taxonomy for the oil and gas industry. He is a Technical Member of Institution of Occupational Safety and Health and an IOSH Trainer at Coventry University. He has over two years' experience in the oil and gas industry.

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