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Critical Review of Construction Accident Causation Theories and Models: The Need for Improved Models

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Abstract

Construction industry is recognized and best described as an accident-prone industry, being characterized with a plethora of occupational risks. Review of literature on construction accidents revealed that a copious number of theories have been propounded over the years by different theorists, though some of these theories were criticized. In addition to this were the multifarious models developed by different proponents at different times. However, accidents are an unplanned event that are common on the building construction sites, involving materials, objects and people with attendant damages, losses and injuries. Moreover, existing models were developed to investigate the causations of accident with the aim of preventing its occurrence. Effort to analyze the existing models, with criticism in view, was the aim of this research, which was accomplished by pointing out the limitations of applicability of the models and ascertaining the need for an improved model. A major gap was discovered, in that most of these models concentrated on accident causations and investigations with little or no emphasis on preventive measures via the duties of the construction stakeholders (client, consultant, contractor, health and safety agency) at the preconstruction and during construction stages. Having considered the strengths and weaknesses of the existing models, it was discovered that another, but improved, model was needed and such model will consequently enable construction stakeholders in putting

up and implementing accident preventive measures on the building construction sites, as all stakeholders have significant roles to play in preventing accident.

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Keywords: *Accident theory, Construction Accident, Accident Causation Model, Accident Prevention.*

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