

CONSTRUCTION ENGINEERING MASTERS DISSERTATION ABSTRACT

Organisational Citizenship Behaviours directed towards the environment (OCBE): A model for main contractors in the construction industry

The construction industry is operating in an increasingly regulated environment with tighter carbon emission and waste reduction targets. The industry is committed to a 50% reduction in both carbon emissions and waste production by 2025, against 1990 levels. However, a recent study has found that the built environment emitted carbon has increased since recovery from the Global Financial Crisis and the trend of actual emissions since the 1990 baseline, although reducing, is forecasting a significant reduction deficit by 2025.

To date the industry's environmental performance initiatives have focussed on formal and organisational level practices such as environmental management systems and green technologies, including modular construction and building information modelling. This approach is largely neglecting or even ignoring the role of individual employees' behaviours and the benefits these can have.

Research has shown that improvements to environmental infrastructure and systems can only reduce an organisation's environmental impacts to a limited extent and that employees' behavioural responses to such changes are a crucial factor. Environmental sustainability issues are extremely diverse and complex by nature, and difficult to integrate within formal management systems, often relying on individuals' informal, voluntary and discretionary behaviours for their success. Furthermore, while businesses monitor their environmental outputs i.e. levels of waste, pollution and emissions, they rarely evaluate their employees based on their environmental performance. Therefore, the role of individual workers engaging in voluntary and unrewarded pro-environmental actions can crucially contribute to improving a company's sustainability performance.

This research contributes to the growing interest in organisational citizenship behaviours directed toward the environment (OCBE) and how their prevalence are promoted to improve a main contractor's sustainability performance within the UK construction industry.

Organisational citizenship behaviours directed toward the environment has been extensively researched. However, literature review has revealed two knowledge gaps: studies of the antecedents of OCBE undertaken specifically within the construction context, and studies undertaken within a single organisation environment enabling review of the relative influence of an organisation's procedures, systems and management structure to be considered.

A research method was developed to: (1) identify antecedents to OCBE within a UK contractor's organisation and (2) examine the efficacy of the identified antecedents in predicting OCBE within a contractor's organisation. A quantitative, cross-sectional study was conducted, with a sample of 149 employees from a main contractor within the construction industry. Using Principal Component Analysis and Hierarchical Multiple Linear Regression statistical modelling, the following antecedents were identified with



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strong correlation with the prevalence of OCBE: Individual Environmental Concern (IEC), Organisational Environmental Concern (OEC) and Perceived Organisational Support from Management (POS-M). Knowledge of these antecedents can be utilised by contractor's organisations within the UK construction industry to foster the prevalence of OCBE to improve their environmental performance.

Adrian Stearn

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