



Briefing

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Briefing: The adverse health and safety influence of subcontracting

1 Patrick Manu BSc(Hons)

Research Student and Visiting Lecturer, University of Wolverhampton, UK

2 Nii Ankrah MSc, PhD, ICIQB, FHEA

Senior Lecturer, University of Wolverhampton, UK

3 David Proverbs BSc(Hons), PhD, PGCEd., FCIQB, FHEA

Professor of Construction Management and Head of Construction and Infrastructure Department, University of Wolverhampton, UK

4 Subashini Suresh MEng, PhD, PGCLTHE, FHEA

Senior Lecturer, University of Wolverhampton, UK



Subcontracting has been noted to have an adverse influence on health and safety. Through a critique of the health and safety literature the causative factors of this adverse influence are identified, and a subsequent examination of the Construction (Design and Management) Regulations 2007 (CDM 2007) also reveals remedies available to mitigate these causative factors. Pointing to the persistence of the adverse influence of subcontracting despite the available remedies, efforts for further enhancing the mitigation provided by the CDM 2007 against the adverse influence of subcontracting are presented. It is anticipated that through these efforts health and safety improvement within and beyond the context of the adverse influence of subcontracting will be achieved.

1. Introduction

Over the past few decades, the practice of subcontracting in construction has grown in the UK (cf. ILO, 2001). Although the current down-turn in construction activity is expected to reduce the extent of subcontracting, subcontracting will continue to be practised for its economic benefits such as fine-tuning labour flexibility, achieving quicker completion of tasks and bargaining down labour cost (Chiang, 2009; Mayhew and Quinlan, 1997). In spite of these economic benefits, subcontracting has persistently been associated with adverse health and safety (H&S) outcomes in the UK construction industry (Donaghy, 2009; HSL, 1999; Loughborough University and UMIST, 2003; Mayhew and Quinlan, 1997). This state of affairs needs to be redressed, because such adverse H&S outcomes are associated with human tragedies (e.g. fatal injuries) and dire economic and social costs which dent the reputation of the construction industry (Hughes and Ferrett, 2008). Consequently, this study through a critique of H&S literature provides insight into the mitigation provided by the Construction (Design and Management) Regulations 2007 (CDM 2007) against the adverse H&S influence of subcontracting and how such mitigation can be further entrenched through education and further research.

2. The causative factors of the adverse H&S impact of subcontracting

Any effort towards mitigating the adverse H&S impact of subcontracting must begin with an understanding of the causative factors behind this adverse phenomenon, as listed here.

- (a) The lack of resources by small subcontractors to enable them invest in H&S (Mayhew and Quinlan, 1997).
- (b) Fierce competition for contracts among subcontractors resulting in unreasonable cost minimisation in order to win contracts at the expense of adequate pricing for H&S (Loughborough University and UMIST, 2003).
- (c) Subcontractors often having a poor safety culture (Loughborough University and UMIST, 2003).
- (d) Ambiguity about responsibilities and unclear work relationships arising from complex subcontracting relationships on site (Loughborough University and UMIST, 2003).
- (e) Inadequate communication and teamwork among contractors arising from the fragmentation of the workforce caused by subcontracting (Loughborough University and UMIST, 2003).

- (f) Inadequate regulatory control. For instance, inadequate H&S inspectors (Mathiason, 2008).
- (g) The lack of familiarity of subcontract personnel with the inherent safety issues of all site activities which is exacerbated by the transient nature of construction projects, and even more so by the brief periods spent by subcontractors on site within those transient project durations (Hill and Ainsworth, 2001).

3. Health and safety improvement measures

The identification of the above factors, offers some scope for identifying measures for tackling the adverse impact of subcontracting. Given that the regulatory framework is the most significant environmental level influence on H&S in the UK construction industry (Bomel Ltd, 2007), it is important to examine the mitigation it provides against the adverse impact of subcontracting. The CDM 2007 with its generic aim of improving H&S on construction projects from the design concept onwards (HSC, 2007) has certain qualities which mitigate the above causative factors. The CDM 2007 touches on the H&S issues of subcontracting as part of a broad H&S framework which focuses on H&S management. The subsequent discussion goes to point out the qualities of the CDM 2007 that mitigate the causative factors with the view to examining how the mitigating qualities can be further entrenched both within and beyond the context of the adverse influence of subcontracting.

3.1 Competence assessment

The CDM 2007 Regulations 4(1)(a) and 4(2) requires the competence of contractors (and other duty holders) to be assessed by the duty holders responsible for their appointment. As part of effective competence assessment of the subcontracting chain, a form of a H&S minimum acceptable threshold requirement, relative to the needs of projects and proportionate to the risks, size and complexity of the construction works will be set. This will thus create a level playing field during tendering by subcontractors, where no subcontractor will have an undue competitive advantage in terms of under pricing for H&S. Through adequate pricing for H&S, subcontractors could be better placed to invest in H&S. Investing into and implementing H&S management will eventually yield improvement in their H&S cultures as H&S culture embodies H&S management (HSL, 2002). Competence assessment therefore provides mitigation against the causative factors which concern pricing for H&S, investing in H&S, and H&S culture.

3.2 Training and induction

CDM 2007 Regulations 13(4)(a) and 13(5) places the legal requirement on contractors to conduct the necessary training and induction for their workers. Through training and induction, subcontract personnel who are unfamiliar with the inherent H&S issues of site activities would thus become aware of such issues.

3.3 Co-ordination and co-operation

Regulations 5 and 6 of the CDM 2007 impose on all duty holders including contractors the requirement for co-ordination and co-operation, and these can mitigate the problem of inadequate communication and teamwork arising from subcontracting.

3.4 Clear duties of contractors

The clear delineation of duties for contractors and other duty holders in the CDM 2007 serves as mitigation against the causative factor of unclear H&S responsibilities arising from complex on-site subcontracting relationships.

3.5 Enforcement of CDM 2007

The improvements (e.g. competence assessment) reflected in the CDM 2007 (over the CDM 1994) buttressed by its effective enforcement on all project sites by the HSE (through its inspectors) and the other enforcing authorities (i.e. local authorities and the Office of Rail Regulation, where applicable) should contribute to improvement in regulatory controls against the adverse impact of subcontracting.

Although the CDM 2007 was not specifically introduced to redress the adverse impact of subcontracting, the above clearly demonstrates that the CDM 2007 has qualities that could potentially mitigate the causative factors of the adverse influence of subcontracting. The CDM 2007 applies to all construction projects and therefore should imply the mitigation (if not the complete eradication) of subcontracting as an accident causal factor. However, the present state of affairs indicates otherwise and this has implications for efforts towards achieving H&S improvements in the UK construction industry.

4. Implications for H&S improvement

In spite of the potential mitigation provided by the CDM 2007 against the causative factors of the adverse impact of subcontracting, it is startling to note that the adverse impact continues to persist. For instance the 2008/2009 provisional rate and number of fatal injuries for the construction industry self-employed (a category involving subcontractors) exceeded that of 2007/2008 (HSE, 2009). Furthermore, the Donaghy Report (Donaghy, 2009) on the underlying causes of construction fatal accidents, mentions subcontracting among other causal factors. Given that the CDM 2007 has qualities that mitigate the above causative factors, the persistence of the adverse influence of subcontracting implies the need for efforts that would further enhance and entrench the mitigation provided by the CDM 2007 against the causative factors. In this regard stepping up education on the CDM 2007 would be useful as there is inadequate H&S education and awareness of the CDM 2007 (Donaghy, 2009). Through educating the subcontracting chain (i.e. subcontractors and those responsible for their appointment) concerning the above causative factors and their corresponding CDM 2007 mitigating qualities, further enhancement and entrenchment of

the mitigation offered by the CDM 2007 against the causative factors can be achieved. Another useful consideration is an evaluation of the effectiveness of the implementation/enforcement of the mitigating qualities of the CDM on projects, especially projects where complex subcontracting relationships exist and projects where the supply chain is constituted in the main by micro to small- and medium-sized contractors. This is because it is by the effective implementation/enforcement of the mitigating qualities that their intended mitigation against the above causative factors be achieved. Such an evaluation could be done through research which could even be extended to cover the entire CDM 2007 regulations as suggested by Gilbertson (2008). Such study would be useful in highlighting possible weaknesses in the implementation/enforcement of the CDM 2007 on projects, based on which improvement measures can subsequently be introduced.

5. Conclusion

Beyond reporting the causative factors of the adverse impact of subcontracting in the UK Construction industry, the above examination of H&S literature has pointed out the qualities of the CDM 2007 that potentially mitigate the causative factors. The persistence of the adverse H&S influence of subcontracting in spite of this implies the need for efforts that would further enhance and entrench the mitigation provided by the CDM 2007 against the causative factors. It is anticipated that through sustained education of the subcontracting chain concerning the causative factors and the mitigation provided by the CDM 2007, and also through research to assess the effectiveness of the implementation/enforcement of the CDM 2007, the mitigation provided by the CDM 2007 against the adverse influence of subcontracting would be enhanced and entrenched in the industry. It is also anticipated that through these efforts H&S improvements which transcend the accident causal influence of subcontracting would be achieved.

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