

Downloaded from: http://bucks.collections.crest.ac.uk/

This document is protected by copyright. It is published with permission and all rights are reserved.

Usage of any items from Buckinghamshire New University's institutional repository must follow the usage guidelines.

Any item and its associated metadata held in the institutional repository is subject to

Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0)

Please note that you must also do the following;

• the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form

• a hyperlink/URL to the original Insight record of that item is included in any citations of the work

- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

If you need further guidance contact the Research Enterprise and Development Unit ResearchUnit@bucks.ac.uk

AN ANALYSIS OF DIVERSITY MANAGEMENT IN THE CONSTRUCTION INDUSTRY: A CASE STUDY OF A MAIN CONTRACTOR

In recent times there is an increasing argument for diversity and inclusivity in work places. Although the construction industry is moving forward to improve diversity, there is still a long way to create a more inclusive workforce. Not only are there legal requirements that organisations must adhere to following the release of the Equality Act 2010, there is also a moral and business case for managing diversity. It has been speculated that improving diversity and reaching out to wider talent pools could help improve the skills shortage that is currently affecting the industry. However, there is limited evidence to substantiate this claim in the construction industry context. The aim of this study is to establish a theoretical perspective on how diversity management would improve the construction industry and evaluate whether main contractors are managing diversity effectively. A theoretical framework was developed through the review of the literature to monitor the effectiveness of the DM strategies. A case study of one of the top ten major contractors in the United Kingdom has been carried out to see the extent to which the company is applying the diversity management requirements. The data were collected using semi-structured interviews with senior management mainly Director, Project Manager and Diversity Manager to understand their current approach to manage diversity, document analysis and observations. Following these interviews, a questionnaire was issued to all employees of the company to identify if the approach taken from senior management is working. The case study findings highlight that there are policies and tools in place to comply equality legislation and to improve and enhance diversity. There is a positive attitude to implement and maintain steps to improve diversity with some incentives. However, the results of the questionnaire survey reveal that the main contractor lacks diverse workforce as the employment of women or ethnic minorities; majority of women in the organisation are on lower level positions. There is limited evidence to quantify the productivity improvements, nevertheless majority of the respondents believed that diverse workforce enhances productivity.

Keywords: construction, diversity management, equality, women, ethnic minorities.

INTRODUCTION

Diversity management (DM) is used by organisations to improve diversity by promoting and retaining a workforce from different backgrounds. This provides an inclusive environment for all employees to work together to meet organisational targets. It is a strategy used by organisations through a collection of ideas and procedures to recognise and value individuals from different backgrounds of its employees with benefits to be gained such as productivity and effectiveness (Kumra and Manfredi, 2012). Not only are there legal requirements that organisations must adhere to following the release of the Equality Act 2010, there is also a moral and business case for managing diversity. There are different aspects of diversity that have

been studied by different researchers such as team diversity (Wu et al 2019; Horwitz and Horwitz 2007), this study focuses on the approaches taken by companies to manage diversity in the workplace in terms of composition of workforce mainly in terms of age, disability, gender and ethnicity.

It is argued that productivity is one area that diversity management could help improve. A more diverse workforce with less discrimination and employees feeling valued and respected team members in positive working environments results in stronger teams which leads to higher productivity (Equality and Human Rights Commission, 2011). There would be less absenteeism from discriminative behaviour and knowledge is retained with improved staff retention therefore performance will increase improving productivity.

The construction industry is one of the largest sectors in the UK and contributes approximately £90 billion to the economy. There are over 280,000 businesses which provide around 10% of the UK's total employment (Department of Business and Skills, 2013) however, the Office for National Statistics (2018) highlights that "the construction industry is the least productive industry in the UK at more than 20 percentage points below the average output per hour for the whole economy in 2017". Considering construction is a key sector for the UK economy there is a significant issue with productivity that needs to be addressed. The role of diversity management is vital in improving productivity in the construction industry.

Demographics in the labour market is also a key factor to improve diversity and the composition has become increasingly diverse therefore organisations need to attract new talent from the competition (Kirton and Greene, 2016). It has been speculated that improving diversity and reaching out to wider talent pools could help improve the skills shortage that is currently affecting the industry. According to CITB (2018), 158,000 jobs are required over the next 5 years to meet construction output.

Although the construction industry is moving forward to improve diversity, there is still a long way to go to create a more inclusive workforce. Current statistics show that women only make up 14% of the construction industry (McGuinness, 2018), ethnic minorities as only 11.3% and less than 5% declared disability (Construction Industry Council, 2016) highlighting that improvements need to be made. Construction Industry Council (2016) also provide evidence suggesting women aged 25 and under make up 22% of the industry in that age bracket compared to women aged 46-55 making up only 4%. This highlights that more women are starting their careers in the construction industry however measures need to be put in place to retain older female construction employees.

There can also be cost implications for organisations if diversity is not effectively managed. An employee may decide to take an organisation to employment tribunal if they experience discrimination which could result in a high compensation payment. A key challenge with managing diversity is proving the effectiveness of the relationship between diversity and the benefits. There is a vast range of information confirming the positive benefits of diversity management however it is not easily supported with evidence. Capturing quantifiable benefits of equality and diversity for the business creates substantial methodological challenges (Government Equalities Office, 2013). There are also difficulties showing returns on investment when evaluating diversity (Kirton and Greene, 2016).

Although there are numerous benefits to a more diverse workforce for both the employees and the organisations, there is currently a gap on the current approach taken by construction companies towards improving diversity. Following the release of the Equality Act 2010, construction companies have a legal requirement to ensure they comply with the regulations however there is no consistent framework used to implement and enhance diversity management. Different construction companies use their own methods for improving diversity therefore no consistent evidence is available regarding the effectiveness of their methods or what extent they are using it. Furthermore, it is not clear whether companies are using diversity management for legal reasons or there is a belief that the diverse workforce improves productivity and morale and hence there is a business case for its management.

This study establishes a theoretical perspective on how diversity management should be implemented, and its progress should be evaluated by the construction companies. Using a case study of one of the top 10 contractors in the UK, the study evaluates the extent to which the company has implemented diversity management and establishes whether the objectives of diversity management are achieved effectively. Finally, it argues that there is a need for further evidences to ascertain that DM increases productivity of the construction workforce.

DIVERSITY MANAGEMENT AND EVALUATION FRAMEWORK

Diversity Management needs to be an ongoing process, not a one-off initiative (CIPD, 2018) and would involve the creation of an equality policy. This is not a legal requirement however it would demonstrate that the organisation is a diverse employer fulfilling its moral and legal duties (CIPD, 2018). The first step for implementing diversity management into an organisation is to include diversity within the corporate strategy with support from leaders and senior management. Leadership need to enforce diversity to ensure it is implemented and passed down to all levels of the organisation. Cultural change is vital therefore leaders need to understand conceptually and practically culture change as it is key to the success or failure of Diversity Management (Arredondo, 1996).

There are not many frameworks available specifically for construction companies to use as guidance for improving diversity. One notable framework is Be FaIR framework created by the CITB that is tailored specifically for construction companies and is made up of 5 modules with supporting documents and templates (CITB, 2019). The modules covered include: commitment, policies and procedures, employment, site environment and supply chain. The framework modules include free training and resources programme which covers leadership, recruitment, management, monitoring, training and procurement to help employers meet their legal obligations regarding equality (CITB, 2019). Companies can also get accreditation for enrolling in the Be FaIR framework which is valid for three years and provides ongoing support. As this framework is focussed on providing accreditation, this can be seen more about complying with the legal requirements instead of having a general framework that can support companies to monitor and evaluate their DM initiatives.

It is crucial to review and audit the diversity strategies to establish what is working and what needs improvement. This also allows the actions set within the strategy to be monitored and establish if the expected results have been met or if improvements need to be made (CIPD,2018). There are two main considerations for implementing diversity management; firstly, identification of policy requirements and secondly a method of measuring the effectiveness of the policy implementation. Through the literature review, the policy requirements are comprehensively covered by the ACAS (ACAS, 2014) and the framework for measuring and monitoring the effectiveness of the policies are provided by the Royal Academy of Engineering (RAE) through six Ps cultural analysis framework (RAE, 2015). Figure 2 shows the framework considered for the study of the diversity management by a case study company and evaluation of its effectiveness.

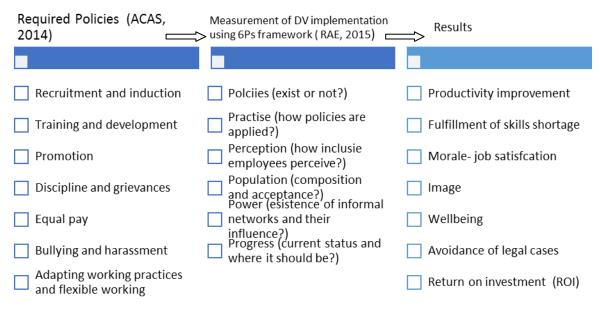


Figure 2: Diversity management requirements and measurement of its implementation and expected results

Description of the Six Ps Framework

This framework is called the six Ps cultural analysis framework (RAE, 2015) and covers six key areas that need review:

Policies - all policies require review in relation to employee life cycle such as flexible working, recruitment and selection, performance appraisal etc to ensure all policies are kept up to date with current legislation and follow best practise. These policies also need to be made available to the employees.

Practise - The day to day management practise must then be reviewed to establish how inclusive or flexible managers are or how policies and processes are applied. This will identify and address any areas of unconscious bias and also develops a corporate culture putting diversity as a business requirement as opposed to an HR requirement.

Perception - The employee's perception should then be considered of how inclusive they view the organisations culture to identify areas that need improvement and can also relate to the policies and processes.

Population – The demographic composition of the organisation and its relation to key processes should be reviewed to identify if any opposing effect is occurring. This can be carried out through statistical information which can be used to set targets and measure progress.

Power – Consideration is needed regarding informal networks that may exist within the organisation and how much these networks impact career development, make people feel included/excluded or affect performance perceptions

Progress – Identify and understand where the company wants to be and where it currently stands with diversity. This also includes any progress that has already been made and is a useful to look at benchmarks at this stage

Once information is gathered from the six Ps framework, it should be used to highlight the strengths and areas requiring development. The results will demonstrate how they are currently performing so can be compared to what they are trying to achieve. An action plan can then be put in place that identifies the key objectives, which should be implemented within the organisation's strategy (RAE, 2015). Senior leaders should commit to the process and drive the initiatives within the organisation.

The benefits of DM in the literature highlighted productivity improvement, fulfilment of skill shortage, increased morale leading to job satisfaction, improved image of the company, wellbeing of the employee, avoidance of legal cases, and return on investment. These themes were used to evaluate whether the case study company achieved these benefits objectively or subjectively. Furthermore the six Ps framework was used to evaluate the DM practice in the case study company.

RESEARCH METHOD

Data was collected using a case study of one of the top ten major contractors in the United Kingdom to see the extent to which the company is applying the diversity management requirements. A case study selects one case, such as a construction company, and are investigated and analysed in a qualitative manner to achieve the research objective (Dul & Hak, 2007). The data was collected using semi-structured interviews with senior management mainly one Director, a Group Talent and Organisation Director and a Project Manager to understand their current approach to managing diversity. A semi-structured interview was chosen, and a list of questions were covered in the interviews, however the interviewees responses can open up further lines of discussions which the interviewer can probe for further answers (Holland and Edwards, 2013). This method is appropriate for this study as the interviewee may also provide a considerably different response from the theoretical framework which allows the interviewer to pursue further questions to critically engage with the interviewee therefore providing further layers to the findings of the interview (Galletta, 2013). To collect the information about company policies and diversity data, document analysis and observations were used. To elicit the views of the employees, a questionnaire survey of the employees of the case study company was conducted and 92 responses were received and analysed.

The framework identified through the literature review (Figure 2) was used to evaluate the effectiveness of the diversity management by the case study company. The existence of policies and demographics data, initiatives used by the company etc. were elicited using the document analysis and views of management were collected using the semi-structured interviews, which covered practise, power and progress. Perception of employees was collected using the questionnaire survey.

CASE STUDY

Company A, which is one of top 10 major construction contractors in the UK was used as a case study to study the status of the DM in construction in the UK. The company employs about 16000 people, out of which 77% are male and 23% female, as of 2018. Company A was selected because it one of the UK major contractor and it also claimed to have a diverse workforce.

The focus of the study is mainly on three offices, which represent Southern Region business of the Company A with £300 million turnover and more than 350 employees. They cover works in different sectors such as education, commercial offices, defence, health and civic buildings. The diversity management practices of the Southern region offices of the Company A were evaluated with the framework presented in Figure 2 following the 6Ps proposed by the RAE.

Result and Discussion

Evaluation of Policies Element

Document analysis of the case study organisation reveal that an Equality, Diversity and Inclusivity (ED&I) strategy has been created and implemented into the organisation which highlights the actions that will be taken towards leadership, the workforce and the workplace over 2019. Each office has 'Diversity Champions' to promote and raise awareness in each office of company A's commitment to improving diversity. This is achieved through regular communication about company initiatives and events relating to diversity, playing a Diversity board game with all employees to help improve diversity knowledge and having a diversity week. The evaluation of policies required as per ACAS guidelines for the DM were present in the company as shown in Table 2.

Policies	Present	Comments	
Recruitment and induction	Yes	Part of Performance Development Review (PDR) discussions	
Training and development	Yes	Training on unconscious bias	
Promotion	Yes	-	
Discipline and grievances	Yes	-	
Equal Pay	Yes	Pay gap report published in 2017 and 2018	
Bullying and harassment	Yes	-	
Adapting working practices and flexible working	Yes	Agile working recently implemented	

Table 2: Presence of Diversity Policies

The above result shows that company A has some policies in place which aligns with the RAE framework [RAE, 2014 and the ACAS, 2014. However, the drive for having this within the organisation is not very obvious.

Evaluation of the Practise Element

The interview result indicates that company A provides compulsory training to all employees about 'unconscious bias'. One of the respondent stated that 'the company use 12 to 18 months cycle in reviewing the policies however, if new legislation is

released that impacts on the policy then the policy would instantly be reviewed and updated'[Interviewee one, The Talent and Organisation Director]. The survey results show that 32.61% of employees involved in the recruitment and selection process have received training to ensure fairness and to avoid bias whereas 8.7% confirmed they have not received training. 23.91% of managers who carry out PDR's have received training on how to ensure fairness with progression and promotion whereas 11.96% confirm they have not received training. Although these percentages show that more employees or managers have received training than not, there is still a need to ensure that training is provided to all relevant employees. It could be argued that creating diversity awareness through training may not necessary lead to effective result. According to Sanchez et al, 2004 creating diversity awareness in an organisation without supportive work environment would not produce good outcome.

Employees were asked whether they were aware of their company's equality and diversity policy to see if the policy had been communicated effectively to the employees. A majority of 80.43% confirmed that they are aware and 13.04% confirmed as being 'very aware' of the policy. Only 6.52% were unaware/very unaware of the policy which highlights that the company has effectively communicated their policy to its employees. Although, majority of the respondents claim to be aware of the policy, Table three still shows that about twenty two percent did not agree that company A is truly diverse. This shows DM practice should go beyond awareness to holistic implementation.

Evaluation of the Perception Element

Table 3 shows the survey responses of the employee of the case study company, which shows that there is a general agreement in the benefits of the DM.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Response Total
A diverse workforce is important for the future performance of the construction industry	2.2% (2)	1.1% (1)	20.7% (19)	47.8% (44)	28.3% (26)	92
A diverse workforce will help improve productivity	2.2% (2)	4.3% (4)	40.2% (37)	34.8% (32)	18.5% (17)	92
A diverse workforce will help improve the current skills shortage	1.1% (1)	5.4% (5)	31.5% (29)	35.9% (33)	26.1% (24)	92
It is important to improve equality and diversity in construction	0.0% (0)	3.3% (3)	13.0% (12)	50.0% (46)	33.7% (31)	92
A company showing commitment to diversity makes them a preferable employer	1.1% (1)	2.2% (2)	18.5% (17)	51.1% (47)	27.2% (25)	92

Table 3: Cast study company employees view on DM

Employees were asked whether they feel the current actions taken by the company to improve diversity and the responses highlighted 'mostly average' (44.57%) and with 'good action' taken (40.22%), which shows that employees feel the company is trying to improve diversity however improvements need to be made to show employees that

they are doing more. Ten respondents felt that minimal or no action has been taken which does not seem to correlate with the high awareness of the company's equality and diversity policy and its numerous initiatives.

One of the respondents of the survey highlighted 'the company needs to educate all employees, managers etc. on how to stop stereotyping a person, and also what the implications of doing so can have on themselves, the company and the person they are stereotyping. According to Munns, 1996 stereotyping leads to poor communication and conflict on construction project. The survey results show that the employees view the diverse workforce will improve productivity and help solve skills shortage.

The Project Manager (Interviewee 3) highlighted that there is focus on the DM as a strategic objective however, the interviewee felt that the activities have been mostly tick box exercise and suggested that there needs to be a cultural change saying " bring people through, motivating, mixing teams up from different backgrounds, different age, different sexes, I think they could do more". They also felt that leadership were not effectively driving diversity within the business although believing they do want to drive it but need to change the barrier of their middle age mindset.

Evaluation of the Population Element

The 2019 diversity report for the three offices for southern region of Company A shows that only 2.54% of employees consider themselves as BAME with no BAME employees in the most southerly office. There is 1 LGBT person in each office and only 2 employees who consider themselves disabled. Unfortunately, data was not obtainable for previous years so the percentage of women at 21.47% cannot be compared to show if this has increased or decreased. The age range shows that most women are aged 25-34 with only 7 women at a younger age of 16-24 compared to 24 males. There has been no increase in BAME employees over the last three years and female graduates are reducing. In 2016, the company had a set up objectives of 70:30 gender split for recruitment by 2020, however, this has not been achieved yet. There is evidence that the statistical information was used to set targets and measure progress.

Evaluation of the Power Element

The company has used several networks such as LGBT+ network and BAME (black, Asian and minority ethnic) action group. There is no evidence to suggest that the company actively seeks to establish whether any informal networks that may exist within the organisation and their impact in career development, inclusivity or performance perceptions. Interviewee B who is the Operations Director for one of the businesses did not feel there was anyone overtly bigoted within the business and felt that everyone was reasonably open.

Evaluation of the Progress Element

Following the release of Section 78 of the Equality Act 2010 in 2016, the company released a gender pay gap report in April 2017 to comply with the regulations. This highlighted the median pay gap at 20.2% and the mean pay gap at 22.7% which is higher than the national average of 17.9% in 2018 for all employees (McGuinness and Pyper, 2018). Company A's 2018 gender pay gap showed a slight improvement of a median pay gap of 17.7% and a mean pay gap of 21.2%. The mean pay gap is the percentage of pay to women that is lower than men and the median pay gap is calculated in the same way as the mean however instead of taking the average, the mid-point of pay is taken (Platt, 2011). The biggest factor for the pay gap was due to

the fact that women were under-represented in senior management roles. With more than 3500 women employed, only 13.5% are in senior management roles so company is focused on increasing the number of women entering the business and progressing onto senior roles to tackle the gap.

Interviewee 2 highlighted that 'the company provides the online training that's structured and we mandate to make sure everyone in the business at least looks at them and goes through the training because it's about that awareness part of the business. However, there is a lack of evidence of where the company wants to be. Although company A are monitoring the metrics of the amount of women, BAME etc. within the business, there seems to be no process in place made by the company to monitor the effectiveness of the initiatives and link to the benefits that company may realise (improved productivity, fulfilment of skills shortage etc as shown in Figure 2). This lack of understanding to the benefits of DM is reflected in the questionnaire results which showed 40% of employees rated neutral when asked if a diverse workforce would improve productivity and 31% rated neutral when asked if a diverse workforce would help the current skills shortage affecting the industry. Company A need to communicate the benefits of improving diversity within the organisation to educate and change the perceptions of its employees towards diversity. However, DM has only been applied quite recently within Company A with interviewee 1 being quite honest that over the last three years they have started from a relatively low basis and have made progress on improving diversity but still have lots more to do to improve diversity.

CONCLUSIONS

The aim of the current study is to establish a theoretical framework that could be used to evaluate DM and to finally evaluate how DM practice in construction project organisation align with identified framework. The study found that there is no unified framework for managing diversity. However, the framework for measuring and monitoring diversity provided by the Royal Academy of Engineering (RAE) seems to be very developed.

The study found that some of the current practice within the case study organisation align with the some of the practice stipulated in the RAE framework for managing diversity and there is an improving trend to manage diversity.

However, the corporate action plan is not being driven successfully by the senior leaders within the individual businesses and there is a lack of awareness and understanding of the benefits of DM and the effectiveness of the initiatives. The case study suggested that there is a lack of clear vision and framework to monitor the progress on the implementation of diversity management initiatives. This means it could be argued that the current approach to DM may be to fulfil legal requirement and as tick box exercise. However, the respondent believe that DM could contribute to productivity. It is worth mentioning that while it is not possible to generalise the findings which of course is not the purpose of the study, the current study provide a new insight into how diversity could be managed in a construction project organisation and the existing framework to do it.

REFERENCES

ACAS (2014). *Delivering Equality and Diversity Booklet*. [online] Available at: http://www.acas.org.uk/media/pdf/t/l/Delivering-equality-and-diversity-advisory-booklet.pdf [Accessed 18 Nov. 2018].

Arredondo, P. (1996). Successful Diversity Management Initiatives: A Blueprint for Planning and Implementation. London: Sage.

cic.org.uk. (2009). Gathering and Reviewing Data on Diversity within the Construction Professions. [online] Available at: http://www.cic.org.uk/download.php?f=cicdiversityfinalreport15.05.09.pdf [Accessed 20 Nov. 2018].

CIPD. (2018). *Diversity and Inclusion at work - Facing up to the business case*. [online] Available at: https://www.cipd.co.uk/Images/diversity-and-inclusion-at-work_2018-facing-up-to-the-business-case-technical-report_tcm18-47062.pdf [Accessed 20 Nov. 2018].

CITB (2019). *What is the Be Fair Framework*? Available at: https://www.citb.co.uk/standards-and-delivering-training/be-fair-framework/what-is-the-be-fair-framework/ [Accessed 21 Mar. 2019].

Construction Industry Council (2016). *A Blueprint for Change - Measuring success and sharing good practice*. Diversity and Inclusion Panel. Available at: http://cic.org.uk/networks-and-committees/diversity-panel.php [Accessed 24 Oct. 2018].

Dul, J, & Hak, T 2007, *Case Study Methodology in Business Research*, Routledge, Kidlington. Available from: ProQuest Ebook Central. [27 January 2019].

Equality Act (2010). Available at: <u>https://www.gov.uk/guidance/equality-act-2010-guidance</u> [Accessed 18 Nov 2018].

Department of Business and Skills (2013). UK Construction: An economic analysis of the sector. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachme nt_data/file/210060/bis-13-958-uk-construction-an-economic-analysis-of-sector.pdf [Accessed 18 Nov. 2018].

Equality and Human Rights Commission (2011). *Equality and diversity: good practice for the construction sector*. Available at:

https://www.equalityhumanrights.com/sites/default/files/ed_report_construction_secto r.pdf [Accessed 24 Oct. 2018].

Government Equalities office (2013). *The Business Case for Equality and Diversity. A survey of the academic literature.* Department for Business Innovation and Skills, UK.

Gillham, B. (2007). *Developing a questionnaire*. 2nd ed. London: Continuum International Publishing Group.

GOV.UK (2013). *Equality Act 2010: guidance*. [online] Available at: https://www.gov.uk/guidance/equality-act-2010-guidance [Accessed 17 Nov. 2018].

Holland, J. and Edwards, R. (2013). *What is Qualitative Interviewing*?. London: Bloomsbury Publishing.

Horwitz, S. and Horwitz, I. (2007). *The Effects of Team Diversity on Team Outcomes:* A Meta-Analytic Review of Team Demography. Journal of Management 33(6), p.993.

Kumra, S. and Manfredi, S. (2012). *Managing equality and diversity*. Oxford: Oxford University Press.

McGuinness, F. (2018). *Women and the Economy*. House of Commons Library Briefing Paper.

Munns A.K. (1996) Measuring mutual conŽ dence in UK con- struction projects, ASCE Journal of Management in

Engineering, 12(1), 26–33.

Office for National Statistics (2018). *Construction statistics*. Available at: https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/articles/constructionstatistics/number192018edition [Accessed 24 Oct. 2018].

Royal Academy of Engineering (RAE) (2015). *Increasing diversity and inclusion in engineering – a case study toolkit*. [online] Available at: https://www.raeng.org.uk/publications/reports/increasing-diversity-and-inclusion-in-engineering [Accessed 10 Jan. 2019].

Sanchez, J.I. and Medkik, N., 2004. The effects of diversity awareness training on differential treatment. Group & Organization Management, 29(4), pp.517-536.

Wu,G, Zhao, X., Zuo, J. and Zillante, G (2019). Effects of team diversity on project

performance in construction projects, *Engineering, Construction and Architectural Management*, https://doi.org/10.1108/ECAM-05-2018-0220