**Do we belong here? Inclusive branding for minority group attraction**

**Associate Professor. Christina Scott-Young**

**School of Property, Construction and Project Management, RMIT University**

Swanston St, Melbourne, Australia 3000, [christina.scott-young@rmit.edu.au](mailto:christina.scott-young@rmit.edu.au),

+61 (0)3 9925 3918

Associate Professor. Christina Scott-Young researches in the wide range of topics related to diversity and Inclusion, Work Readiness, Resilience, and Wellbeing. Associate Professor. Scott-Young is a member of the Sloan Research Network on Aging and Work and Global Resilience Research Network.

**Dr Ashokkumar Manoharan**

Senior Lecturer

## **College of Business, Government and Law, Flinders University**

## Sturt Road, Bedford Park, South Australia, 5042, [ashokkumar.manoharan@flinders.edu.au](mailto:ashokkumar.manoharan@flinders.edu.au), +61 (0)8 82012838

Dr Manoharan has an interdisciplinary background. His research interest includes workforce diversity, migrant workers, diversity management practices, and organisational culture.

**Ms Jessica Borg**

PhD scholar

**School of Property, Construction and Project Management, RMIT University**

Swanston St, Melbourne, Australia 3000, [christina.scott-young@rmit.edu.au](mailto:christina.scott-young@rmit.edu.au),

+61 (0)3 9925 3918

Ms Jessica Borg is currently undertaking PhD studies in the Built Environment, at RMIT University. Jessica is the award winner of the prestigious Women in Project Management Scholarship, awarded by the Project Management Institute in recognition of Jessica’s achievements in industry and research. Her research interest revolves around diversity and Inclusion, and project management.

**Do we belong here? Inclusive branding for minority group attraction**

**Abstract**

# Global skills shortages threaten the sustainability of industries and economies, prompting employers to seek more diverse labour pools. The predominantly white male construction industry is one of the sectors struggling to maintain its workforce viability and has expressed the need to reposition its industry brand image to attract non-traditional minorities. This study explores how effectively the online brands of two of the construction industry’s leading professional societies’ signal workforce diversity and inclusion. Image content analysis with respect to age, gender, and racial/ethnic diversity was conducted on their corporate websites. Adopting the lenses of signalling, identity fit, and social belonging theories, the analysis showed that the two societies are conveying different images. One body is visually signalling that construction offers a progressive young workplace that embraces gender equity, but which is still dominated by white workers. The other society sends visual signals that maintain the traditional ‘dinosaur’ image of construction as ‘pale, stale, and male’. More work is needed if construction is to attract greater diversity in its workforce to address the global skills shortage.

**Keywords** Diversity and inclusion, Industry image, Attraction, Age, Gender, Race/ethnicity, Minorities

**Introduction**

Korn Ferry’s (2018, p.4) recent study of three major industries (finance/business services; technology/media/ telecommunications; and manufacturing) across twenty countries warns that “a major crisis is looming over organizations and economies throughout the world”. Their research estimated that by 2030, there would be “a global human talent shortage of more than 85.2 million people [equivalent to the population of Germany] … Left unchecked, the financial impact of this talent shortage could reach $8.452 trillion in unrealized annual revenue by 2030, equivalent to the combined Gross Domestic Product (GDP) of Germany and Japan” (Korn Ferry, 2018, p.4). In 2019, worker shortages around the globe reached a record high, almost doubling over the past decade (Manpower, 2019). Fifty-four percent of companies of all sizes (small, medium, and large) surveyed in Manpower’s (2019) global annual survey reported difficulty in finding the skills they require. Companies are experiencing the greatest issues in accessing suitably qualified employees in Finland, the US, Poland, Hungary, Hong Kong, Croatia, Greece, Taiwan, Romania, and Japan (Manpower, 2019).

While most industries are affected by these global skills shortages, the construction industry is of particular concern due to its strong economic contribution to national GDPs. Turner and Townsend’s (2019) survey of construction activity in 64 global markets found a sharp annual increase to 65.6% of markets experiencing skills shortages as compared to 58.7% in 2018. In the U.K. alone, 20,000 more new construction recruits are required by 2020 to deliver the country’s planned building projects ([Royal Institution of Chartered Surveyors](https://www.rics.org/uk/) (RICS), 2019). In response to this talent crunch (Korn Ferry, 2018), many companies are attempting to recruit from a more diverse labour pool (Bell, 2011). As well as addressing skills shortfalls, greater human capital diversity provides additional commercial benefits by producing more diverse thinking and problem-solving, greater customer satisfaction, significant performance benefits and increased competitive advantage (Richard, 2000; Hunt, Layton and Prince, 2015), as well as advancing the United Nation’s (2020) higher ethical aim of creating equity for all.

To become attractive to more diverse non-traditional labour pools (Avery and McKay, 2006), the construction industry requires a radical shift away from its traditional image of being dirty, dangerous, macho, and white-dominated (Poon, Rowlinson, Koh and Deng, 2014). In the UK, only 12% or 1 in 8 of the construction workforce are females (Keir, 2019), and even fewer belong to ethnic minorities (2.4% or 1 in 40 workers) (Abouen, Ahmed, Worrall, Baldry and Pathmeswaran, 2008). This latter statistic is of particular concern because black and minority ethnic 18- to 24-year-olds make up 19.1 percent of the working-age population in the UK (Office for National Statistics, 2011). The construction industry is calling for a rebranding effort (Sargent, 2020) to create a new inclusive image to attract a more diverse workforce (Tosti, 2019). The Royal Institution of Chartered Surveyors (RICS) and the Chartered Institute of Building (CIOB) are two major construction professional bodies that are participating in this endeavour.

One effective way that industries can rapidly convey and differentiate their brand image is through developing attractive and inclusive corporate websites that provide online access to a broad audience of students making career decisions, potential employees, and the general public (Bal and Sharik, 2019). Industry-related professional societies serve as visible representatives of their field to the general public and also to students and young professionals searching for career opportunities (Bal and Sharik, 2019). Such organisations can adopt best practices from the branding and marketing communications literature to develop and communicate a positive employment value proposition (Sánchez-Hernández, González-López, Buenadicha-Mateos and Tato-Jiménez, 2019) to attract minority school leavers to construction and appeal to professionals seeking a career change. It is argued that if underrepresented groups or young professionals see others of the same identity portrayed on construction industry websites, they are likely to experience a sense of ‘perceived fit’ imagining themselves socially belonging and being successful in that industry (Chapman, Uggerslev, Carroll, Piasentin and Jones, 2005; Hartley and Morphew, 2008). However, to date, scant research attention has been paid to how the construction industry is conveying its brand image to a global internet audience. Despite the importance of professional talent acquisition to the construction industry, no research has been conducted to understand branding as a method of attracting more diverse talent. Drawing on the marketing literature and adopting the lenses of signalling, identity fit, and social belonging theories, this study aims to identify whether the industry brand images portrayed on the websites of the two leading construction professional bodies (CIOB and RICS) are likely to attract non-traditional members of minority labour markets (i.e., women and racial/ethnic minorities).

**Literature Review and Theoretical Model**

***Industry brand image***

**The terms ‘industry brand’ and ‘industry image’ are often used interchangeably. Studies related to the keyword ‘industry brand’ are limited in the extant literature, with only two papers found. One study on the rail industry’s employer brand found that the industry lacked a** clear brand position(**Wallace, Lings and Cameron, 2012)**.The other study explored the magazine industry’s brand **(Sacks, 2014) finding that the advent of digitisation and multiple new communication platforms has meant that the magazine industry no longer has a clear brand identity. More research has been conducted on ‘industry image’. Industry image is defined as “a set of associations that is firmly anchored, condensed, and evaluated in the minds of people concerning a group of companies, which, from the point of view of an individual, supplies the same customer groups with the same technologies for the fulfillment of the same customer needs” (Burmann, Schaefer and Maloney, 2008 p.159).**

**Industry image includes two important** attributes (Keller, 1993). Firstly, functional attributes such as good prospects on the job market, rapid growth and guaranteed future, international, a high degree of job security, social responsibility, high wage increases, high starting salary, and a good balance between professional and private life. Secondly, symbolic attributes such as employees who are cheerful, reliable, authentic, have high standing among friends and acquaintances, enterprising, and employees are ‘like me’ **(Burmann et al., 2008**). **The attractiveness of an employer to job seekers is influenced by their previous work experience in a particular industry sector (Wilden, Gudergan and Lings, 2010), so it is important that the industry brand is positive and well-developed. Research on industry branding remains in its infancy (Edwards, 2010), and there has not yet been any consideration of the role of industry brand image in the construction literature.**

***Signalling theory***

Proposed by Michael Spence (1973), signalling theory is based on the job-market signalling model from economics, which view signals as possessing information content. The theory is fundamentally concerned with reducing information asymmetry between two parties (individuals or organisations) (Spence, 2002). The theory is useful for describing behaviour when two parties have access to different information. Typically, one party, the sender, must choose whether and how to communicate (or signal) that information, and the other party, the receiver, must choose how to interpret the signal. Signalling theory involves four key aspects: the signaller, the signal, the receiver, and the feedback. Signalling theory has been used to understand employer branding (Wallace, Lings and Cameron, 2012; Wilden, Gudergan and Lings, 2010). For the purpose of this study, signalling theory will be used to explore the role of industry brand image in signalling diversity and inclusion to appeal to minority groups. It is proposed that t**he industry’s brand image will need to signal an attractive employment proposition of inclusivity if diverse individuals are to be attracted to careers in the construction industry (Ehrhart and Ziegert, 2005).**

***Identity, fit and social belonging theories***

Identity-related constructs are known to positively influence job choice decisions and can be used to attract members of diverse labour market groups (Chrobot-Mason and Thomas, 2002). The symbolic attributes of a brand image can be designed to convey that employees in this particular industry are ‘like me’ **(Burmann et al., 2008**) and therefore signal a perceived match or ‘good fit’ (Kristoff-Brown and Bilsberry, 2013). The symbolic attributes conveyed in images of different categories of employees that are portrayed on corporate websites can be used to send an overt visual (or sometimes subliminal) signal to the viewer about their level of ‘fit’ with the organisation and/or industry (Bal and Sharik, 2019). In the case of gender, age and race/ ethnicity, a young female and/or non-Caucasian viewer will perceive there is a ‘good fit’ if they see web images of construction professionals who have diverse identities like their own. Such signals are likely to convey the promise of ‘social belonging’, the perception of social connectedness in and fitting in socially (Walton and Cohen 2007; Tellhed, Bäckström and Björklund, 2017), which is recognised as a basic human need (Baumeister and Leary, 1995).

**Method**

*Sample*

The sample selection criterion for this study was corporate websites of leading professional societies in the construction industry. After consultation with two industry experts (one in the UK, one in Australia), the Chartered Institute of Building (CIOB) and the Royal Institution of Chartered Surveyors (RICS) were chosen since the experts considered them to be the preeminent professional bodies in terms of size, reputation, and impact. Both organisations originated in the UK and are headquartered there, but they both have a strong global presence in the UK, Europe, Asia, and Asia-Pacific. The CIOB, with a membership of 50,000 members in over 100 countries (CIOB, 2020) is the oldest organization and was established over 2 centuries ago in 1834. RICS was established slightly later in 1868, but has a larger membership of 134,000 (RICS, 2020).

*Data Collection and Analysis*

Secondary data was collected from the websites of the two societies in the form of images on the website content. Consistent with the understanding that the identity of an organisation can be defined through its documents (Owen, 2014; Prior, 2003), it is held that the identity of these organisations will be conveyed by the images on their webpages. To analyze the content, the characteristics of individuals portrayed in the images on the website were recorded, noting their gender (male or female), racial/ethnic appearance (Caucasian or non-Caucasian), and career stage (early-career, mid-career, late-career). A note was also taken of the number of males and females represented in each image. To minimize subjectivity in interpretations and to ensure consistency in the analysis of results, the characteristics of individuals (portrayed gender, ethnicity and career stage) were discussed between two of the authors. For each website, the images on the home page of the site were analysed (first-level links). Then, each clickable link or tab on that page was followed (for example; a link to ‘About Us’ or ‘News & Insight’ or ‘Events’) and all images on that second-level link were also analysed. All links on the website were followed to ensure that all the images on the websites were analysed. Sometimes this meant that images at up to seven-level links were analysed. When a link on the website directed the user to a third-party link unconnected to the organization (example: to a website of an external industry training provider or a blog managed by other organizations), data collection stopped at this point and images on the third-party webpage were not recorded.

**Results**

*Gender* *diversity*

Content analysis of the images on the two professional societies’ websites revealed that there was a disparity between them in terms of visual gender representation (see Table 1). Professional Society A signaled greater gender inclusion, with 52% of all the individuals depicted on its website being males and 48% were females. The almost equal gender proportions were very different from the results obtained for Professional Society B, where approximately only 1 in 4 images on their website portrayed females.

**Table 1. Image Portrayal of Males and Females**

|  |  |  |
| --- | --- | --- |
|  | **Males** | **Females** |
| **Professional Society A** | 126 (52%) | 117 (48%) |
| **Professional Society B** | 96 (72%) | 36 (28%) |

*Age Diversity*

Content analysis of the estimated age of the individuals in the images displayed revealed further disparities in how different age groups were represented. Most (45%) of the individuals (both male and female) represented in the images on Professional Society A’s website were estimated to be in the early stages of their career (aged 18-34) followed closely in number by individuals (40%) in their mid-career stage (aged 35-49); with a relatively low proportion of individuals (15%) in their late-career (aged 50+). This pattern of age and career stage portrayal was consistent for both genders on Professional Society A’s website (see Table 2).

Professional Society A’s results contrasted with the age/career stage of the individuals portrayed on Professional Society B’s website, where the largest proportion of individuals were either in their late (36%) or mid-career stages (36%). Only 27% of individuals portrayed on this website were in the early stage of their careers. Also, there were evident gender differences in age portrayal (see Table 2). For males, the majority of individuals depicted on Professional Society B’s website were in their late-career stage, in contrast to the female images, where mid-career female images dominated.

**Table 2. Image Portrayal of Males and Females at Different Career Stages**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Males** | | | **Females** | | |
|  | ***Early Career*** | ***Mid-Career*** | ***Late Career*** | ***Early Career*** | ***Mid-Career*** | ***Late Career*** |
| **Professional Society A** | 50 | 48 | 28 | 60 | 49 | 8 |
| **Professional Society B** | 27 | 27 | 42 | 9 | 21 | 6 |

*Racial/Ethnic Diversity*

When examining the racial/ethnic diversity of the individuals represented in both professional societies’ websites, the results showed that individuals of non-Caucasian appearance constituted the minority (see Table 3). Of all the individuals portrayed on the website of Professional Society A, 90% were of Caucasian appearance. Professional Society B’s website showed similar results, where 89% of all individuals portrayed were of Caucasian appearance. Only a very small proportion of individuals portrayed were of non-Caucasian appearance (10% for Professional Society A; 11% for Professional Society B).

**Table 3. Image Portrayal of Caucasians and Non-Caucasians**

|  |  |  |
| --- | --- | --- |
|  | **Caucasian** | **Non-Caucasian** |
| **Professional Society A** | 219 (90%) | 24 (10%) |
| **Professional Society B** | 118 (89%) | 14 (11%) |

**Discussion**

The findings show that both professional societies are presenting an aspirational portrayal of gender participation in the construction workforce since current female participation rates in the UK stand at 1 in 8 employees (Keir, 2019). Professional Society A appears to be much more ambitious in its aspirations, portraying a near equal proportion of females and males in their webpage images, whereas Professional Society B presents a more modest, but an elevated depiction of approximately one female for every four males. It appears that Society A is signalling that it aspires to achieve gender equity in the industry by conveying that females equally belong in their organization, and by inference, that they equally belong in the wider construction industry.

In terms of age diversity, Professional Society A portrays an image of construction as a vibrant, youthful industry. Their website signals that construction young, early-career individuals (both males and females) belong in the industry. This portrayal suggests that their marketing strategy is aimed at attracting the future generation of workers, students searching the internet for information on careers in construction, or young professionals seeking an early career change. In contrast, Professional Society B shows a bias to presenting late-career males and mid-career females, which possibly may reflect its membership profile. However, it is also possible that the proportion of older male images has been skewed by the inclusion of a historical timeline displayed prominently on Society B’s website with portraits of important members spanning across three centuries. For example, due to social mores of the time, all images from the 19th Century were male and mostly of older age. While no doubt the timeline was intended to signal the solid historical standing of this austere professional body; it could be perceived as reinforcing the entrenched image of the construction industry as a rather staid, unprogressive, old, white male domain. The signals sent by the images on this website are unlikely to appeal to high school students or young people searching the internet for exciting career options. They are less likely to perceive a good fit or to believe that they will socially belong.

*Race/ethnicity* *diversity*

Although many construction companies have expressed an interest in increasing the racial diversity of their workforce (Turner and Townsend, 2020), the findings show that this has yet to be enacted by the industry’s leading professional societies. Despite the ethnic diversity in many of their member countries, it appears that individuals of diverse heritage are not being adequately represented on the websites of the construction industry’s two leading professional societies. Although the proportion of non-Caucasians web images is slightly higher than their actual current representation in the construction industry in the UK (Chaudhry, 2014), this low representation fails to present an aspirational, inclusive image to enable people of diverse racial and ethnic backgrounds to perceive that they fit and socially belong. The sparse depiction suggests that the societies’ website marketing strategies are not yet focused on increasing cultural diversity. Past research has found that companies with the highest ethnic and cultural diversity in executive teams are one third more likely to produce industry-leading performance (McKinsey, 2018). However, this study’s findings suggest that the construction industry is failing to reap the potential profitability benefits of ethnic diversity. Since both these construction professional societies are prominent in non-Caucasian countries in South Asia and Asia-Pacific, the relative lack of non-white images signals a distinct UK/Euro-centric focus that may unwittingly convey the message that professionals of colour do not fit or belong.

*Limitations and future research directions*

Although this research has produced a new understanding of the construction industry’s current brand image as presented on its professional bodies’ websites, the study has several limitations. First, the study only examined the websites of two construction professional societies. However, these bodies were selected after consultation with subject-matter experts who advised that they were the major professional bodies recognized in the UK, Europe, South Asia, and the Asia Pacific. Future research could include professional societies from North America and other geographical regions to compare the industry’s brand image across a broader range of countries. Second, this study only looked at the diversity and inclusiveness of the construction industry’s brand image in terms of gender, age, and race/ethnicity. Future studies could explore other diversity categories such as religion and sexuality. Finally, as this study has focused on diversity and inclusion in only one particular type of industry, the findings may not be generalisable to other industries. However, researchers may find it useful to employ this novel method of website image content analysis to explore diversity issues in other industry sectors.

**Conclusion**

The web image content analysis findings suggest that the two leading construction professional bodies are portraying differing images of the construction industry. Professional society (A) appears to be actively appealing to the young, upcoming generation in terms of depicting an image of construction as a young workforce where both males and females equally belong. This organisation is showing awareness that gender equity is valued by the youngest-born generation (Generation Z), however, it seems unaware that this generation also values equitable representation of all minorities, including racial and ethnic groups (Scholz and Rennig, 2019). The older, more history-focused professional society (B) also seems to be unaware of the importance of racial/ethnic diversity and inclusion in the workplace. In respect to gender, age and race/ethnicity, this more austere organisation is less aspirational in its marketing, representing the traditional status quo by upholding the image of the construction industry as an old white male club (Chaudhry, 2014). Although one of these two leading professional societies has made substantial progress in terms of its attractiveness to females, there is still more work for both these societies to do in terms of positively rebranding the construction industry as more diverse and inclusive. They can both revamp their web presence to include more racially diverse images to improve the perceived fit and social belonging of these under-represented minorities.

**References**

Abouen, S., Ahmed, V. , Worrall, L., Baldry, D. and Pathmeswaran, R. (2008), “Construction and black and minority ethnics in the north west of England: Barriers to entry, progression and retention”, *Journal of Construction in Developing Countries*, Vol.13, No. 2, pp.83-99

Avery, D. R. and McKay, P. F. (2006), “Target practice: An organizational impression management approach to attracting minority and female job applicants”, *Personnel Psychology*, Vol. 59, No. 1, pp. 157–187.

# [Bal](javascript:;), T. L. and  [Sharik](javascript:;), T. L. (2019), “Image content analysis of US natural resources-related professional society websites with respect to gender and racial/ethnic diversity”, Journal of Forestry, Vol. 117, No. 4, pp. 360–364.

Baumeister, R. F. and Leary, M. R. (1995), “The need to belong: Desire for interpersonal attachments as a fundamental human motivation”, *Psychological Bulletin*, Vol. 117, No. 3, pp. 497–529.

Bell, M. (2011). *Diversity in Organizations*. Cengage Learning, Mason, OH.

Burmann, C., Schaefer, K. and Maloney, P. (2008), “Industry image: Its impact on the brand image of potential employees”, *Journal of Brand Management*, Vo. 15, No. 3, pp. 157-176.

Chapman, D. S., Uggerslev, K. L.,   Carroll, S. A.,   Piasentin, K. A. and Jones, D. A. (2005), “Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes”, *Journal of Applied Psychology*, Vol. 90, pp. 928–944.

Chartered Institute of Building (CIOB). (2020), “About CIOB”, Available at <https://www.ciob.org/individual-membership>.

Chaudhry, S. (2014), “Diversity: Brilliant for the construction industry”, *College of Estate Management Occasional Paper Series*, Available at <https://www.ucem.ac.uk/wp-content/uploads/2014/03/diversity_op_030314_low-res.pdf>.

Chrobot-Mason, D. and Thomas, K. M. (2002), “Minority employees in majority organizations: The intersection of individual and organizational racial identity in the workplace”, *Human Resource Development Review*, Vol. 1, No. 3, pp. 323-344.

Ehrhart, K. H. and  Ziegert, J. C. (2005), “[Why are individuals attracted to organizations?](https://primo-direct-apac.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_sage_s10_1177_0149206305279759&context=PC&vid=RMITU&lang=en_US&search_scope=Books_articles_and_more&adaptor=primo_central_multiple_fe&tab=default_tab&query=any,contains,ehrhart%20and%20ziegert&offset=0)” *Journal of Management*, Vol. 31, No. 6, pp. 901-919.

Elving, W. J., Westhoff, J. J., Meeusen, K. and Schoonderbeek, J. W. (2013), “The war for talent? The relevance of employer branding in job advertisements for becoming an employer of choice”, *Journal of Brand Management*, Vol. 20, No. 5, pp. 355-373.

### Hartley, M. and Morphew, C. C. (2008), “[What's being sold and to what end? A content analysis of college viewbooks](https://primo-direct-apac.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_museS1538464008600025&context=PC&vid=RMITU&lang=en_US&search_scope=Books_articles_and_more&adaptor=primo_central_multiple_fe&tab=default_tab&query=any,contains,Hartley%20and%20Morphew,%20(2008),&offset=0)”, *The Journal of Higher Education*,  Vol. 79, No. 6, pp. 671-691.

Hunt, V., Layton, D. and Prince, S. (2015), “Why diversity matters”, Available at <https://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters>.

**Keir, (2019), “**Attracting, retaining and developing a diverse workforce”, Available at www.keir.co.uk.eport **2019**

**Keller, K. L. (1993), “Conceptualizing, measuring, and managing customer-based brand equity”,  *The Journal of Marketing*, pp. 1-22.**

Korn Ferry, (2018), *Future of Work: The Global Talent Crunch,* Available at <https://futureofwork.kornferry.com>.

Kristof-Brown, A. L. and Billsberry, J. (2013), *Organizational Fit: Key Issues and New Directions*, John Wiley & Sons, Chichester, UK.

Manpower. (2019), Available at <https://go.manpowergroup.com/talent-shortage>.

McKinsey. (2018), “Closing the gender gap: A missed opportunity for new CEOs”,*McKinsey Quarterly*, Available at <https://www.mckinsey.com/featured-insights/gender-equality/closing-the-gender-gap-a-missed-opportunity-for-new-ceos>.

Office for National Statistics. (2011), *2011 Census,* Available at https://www.ons.gov.uk/[census/2011census](https://www.ons.gov.uk/census/2011census).

Owen, G. (2014), “Qualitative methods in higher education policy analysis: Using interviews and document analysis”, *The Qualitative Report*, Vol. 19, No. 52, pp.1-19.

Prior, L. (2003), *Using Documents in Social Research,* Sage Publications, London, UK.

Poon, S.W., Rowlinson, S., Koh, T. Y. and Deng, Y. (2014), Job burnout and safety performance in the Hong Kong construction industry. *International Journal of Construction Management,* Vol.13, No. 1, pp. 69-78.

Richard, O. C. (2000), “Racial diversity, business strategy, and firm performance: A resource-based view”, *Academy of Management Journal*, Vol. 43, No. 2, pp. 164–177.

Royal Institution of Chartered Surveyors (RICS). (2020), “About us”, Available at <https://www.rics.org/mena/news-insight>.

[Sacks, R. M](https://search-proquest-com.ezproxy.lib.rmit.edu.au/indexinglinkhandler/sng/au/Sacks,+Robert+M/$N?accountid=13552). (2014), “What's the magazine industry's brand?” [*Publishing Executive*](https://search-proquest-com.ezproxy.lib.rmit.edu.au/pubidlinkhandler/sng/pubtitle/Publishing+Executive/$N/27834/DocView/1619359831/fulltext/274DF2CEBEBC4DB9PQ/20?accountid=13552),[Vol. 29, No. 5](https://search-proquest-com.ezproxy.lib.rmit.edu.au/indexingvolumeissuelinkhandler/27834/Publishing+Executive/02014Y10Y01$23Oct+2014$3b++Vol.+29+$285$29/29/5?accountid=13552), pp. 33-34.

Sánchez-Hernández, M. I., González-López, O. R., Buenadicha-Mateos, M. and Tato-Jiménez, J. L. (2019), “Work-life balance in great companies and pending issues for engaging new generations at work”, *International Journal of Environmental Research and Public Health*, Vol. 16, pp. 5122-5140.

# Sargent, J. (2020), “Tackling the UK construction skills shortage”, Available at <https://www.khl.com/international-construction/constructions-skills-shortage/138380>.

Scholz, C. and Rennig, A. (2019), *Generations in Europe: Inputs, Insights and Implications.* Emerald Publishing, Bering, UK.

**Spence, M. (1978), “Job market signaling”, *Uncertainty in Economics,* pp. 281-306.**

**Spence, M. (2002), “Signaling in retrospect and the informational structure of markets”, *American Economic Review*, Vol. 92, No. 3, pp. 434-459.**

Tellhed, U., Bäckström, M. and Björklund, F. (2017), “[Will I fit in and do well? The importance of social belongingness and self-efficacy for explaining gender differences in interest in STEM and HEED majors](https://primo-direct-apac.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_proquest1907233698&context=PC&vid=RMITU&lang=en_US&tab=default_tab&query=any,contains,gender%20fit%20with%20career&offset=0)”, *Sex Roles*, Vol. 77, No. 1-2, pp. 86-96.

Tosti, L. (2019), “Today’s construction industry workforce demolishing stereotypes”, Available at <https://www.bizjournals.com/philadelphia/news/2019/01/01/today-s-construction-industry-workforce.html>.

Turner and Townsend. (2019), *International Construction Market Survey 2019.* Available at

[www.infrastructure-intelligence.com›default›files›article\_uploads.](http://www.infrastructure-intelligence.com › default › files › article_uploads.)

### United Nations (UN). (2020). “At the crossroads of gender and racial discrimination”, Available at WCAR/e-kit/gender.htm.

### **Wallace, M., Lings, I. and Cameron, R. (2012),** “[Industry branding: attracting talent to weaker profile industries](https://primo-direct-apac.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_wj10.1111/j.1744-7941.2012.00040.x&context=PC&vid=RMITU&lang=en_US&search_scope=Books_articles_and_more&adaptor=primo_central_multiple_fe&tab=default_tab&query=any,contains,Wallace,%20Lings%20and%20Cameron,%20(2012),&offset=0)”, *Asia Pacific Journal of Human Resources*, Vol. 50, No. 4, pp. 483-502.

Walton, G. M., Logel, C., Peach, J. M., Spencer, S. J. and Zanna, M. P. (2015), “Two brief interventions to mitigate a ‘chilly climate’ transform women’s experience, relationships, and achievement in engineering”, *Journal of Educational Psychology*, Vol. 107, No. 2, pp. 468–495.

**Wilden, R., Gudergan, S. and Lings, I. (2010), “Employer branding: Strategic implications for staff recruitment”, *Journal of Marketing Management*, Vol. 26, No. 1-2, pp. 56-73.**