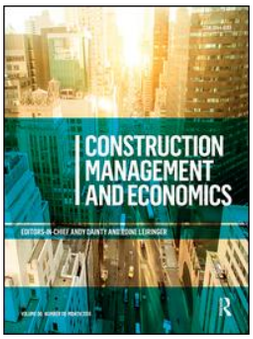

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Linking corporate social responsibility and organizational performance in the construction industry

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ABSTRACT

In the construction industry, the subject of corporate social responsibility (CSR) is becoming increasingly important as communities, employees and socially conscious clients expect firms to demonstrate they are good corporate citizens. However, while CSR research in construction has accelerated in recent years, it remains fragmented and unconceptualized and there is little understanding of the relationship between CSR and organizational performance, the types of CSR strategies employed and the strategic motivations behind them. To address this deficiency in current CSR knowledge and drawing upon contemporary CSR theory, a survey of 104 professionals from across the construction supply chain in Australia and New Zealand was undertaken. The results show that CSR initiatives in the construction sector are integrative, isolated, narrowly focussed (mainly on environmental activities), immature, compliance-based and operational rather than strategic. The link between CSR and economic performance increasingly espoused (and assumed) in much of the CSR literature does not appear to be accepted in practice with the main benefits being seen as relational in building corporate loyalty, brand and engagement with both internal and external stakeholders. By empirically showing that CSR in construction takes place within an integrative conceptual framework, our findings highlight the potential value of theoretical concepts such as stakeholder salience in moving this field of research forward. These approaches recognize the power that stakeholders (both internal and external) have over a business and the need to manage those relationships carefully in order to secure a licence to operate.

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Corporate social responsibility; perceptions; business performance; strategy; stakeholders

Introduction

The World Business Council for Sustainable Development defines CSR as "the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large". (Watts and Holme 2003, p. 3). Watts *et al*. (2015) point out that a firm's CSR record is becoming increasingly important in the construction industry. Not only are socially conscious clients expecting a demonstrable CSR record but the wider community is expecting it.

CSR has been of interest to researchers in the construction industry for over a decade with 56% of all articles on CSR in the ARCOM database of leading Construction Management journals, Conference Proceedings and submitted PhD theses (ARCOM 2016), appearing in the last 5 years. The first paper to use CSR as a keyword in its own right was Kang *et al*. (2004), who linked CSR with corporate ethics. Later, Jones *et al.* (2006) argued that although construction companies recognized the importance of CSR they were generally poor at measuring CSR performance. Murray and Dainty's (2008) book on CSR sought to map-out the early landscape of CSR research in construction covering topics such as corruption, community engagement, sustainable development, occupational health and safety and the role of construction in disaster and poverty mitigation. Green *et al.* (2008) saw CSR as an important counter-discourse to a pervasive enterprise culture which they argued was creating an industry of hollowed-out firms. In Australia, Petrovic-Lazarevic (2008) argued that in order to be recognized as a socially responsible business, firms operating in the construction supply chain should develop a corporate governance structure that takes into account: working environment concerns; sustainability, occupational health and safety measures, relationships with suppliers and commitment to local community protection and engagement. Later, Thorpe-Jones *et al.* (2010) argued that CSR could be used as a vehicle to better promote seemingly intransigent issues like the lack of diversity in the construction industry. Ness (2010) built on Green's (2008) ideas and argued that while on the surface there may appear to be concern for social issues in many firms, in reality the majority of the construction industry is driven by the bottom line. This was supported

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by Loosemore and Phua's (2011) critical review of CSR in construction which exposed widespread rhetoric around "doing the right thing", when in reality business strategies were driven by the "bottom-line". Through several case studies of leading international firms from across the construction supply chain, Loosemore and Phua (2011) exposed a number of barriers to effective CSR in the construction industry including: established cultures and ways of working; confusion of what CSR means; lack of leadership and management skills; lack of CSR data; scepticism about return on investment; supply chain resistance; and sceptical clients. According to Loosemore and Phua (2011), the growing literature on CSR in construction had several problems. First, it was naively pitching CSR as a wholesale solution for all firms without truly understanding the specific business environment in which it was applied. Second, a highly formalized CSR strategy did not necessarily suit every firm. Third, the growing numbers of papers uncritically philosophizing the need for construction firms to adopt some form of CSR initiative were not supported by sufficient evidence of how firms should strategically pursue and operationalize CSR to achieve sustained competitive advantage and improved performance. Loosemore and Phua (2011) argued that the connection between CSR and business performance was still uncertain and problematic and there was still a great degree of scepticism in the construction industry about this purported relationship.

It is the aim of this research to explore this gap in knowledge by exploring whether corporate social responsibility (CSR) is seen to be good for business by those who operate in the construction industry. More specifically, it is to better conceptualize the links between CSR and business performance in construction using contemporary CSR theories, to explore what these benefits and costs are considered to be and what CSR initiatives, if any, are seen to produce business benefits. The only construction research to have so far empirically explored the critical relationship between CSR and organizational performance has been Huang and Lien (2012) who showed that corporate image may serve as a mediator between CSR and organizational performance. While this is a useful start to understanding this important relationship, we have little idea of how firms benefit from CSR in terms of improved business performance. This research is important since contemporary CSR research no longer conceives CSR as simply a moral responsibility to contribute to the greater social good at a potential cost to a corporation's profitability, but as a strategic resource to improve profitability and achieve "shared value" with the communities in which organizations do business (Porter and Kramer 2011, Battaglia *et al*. 2014). Furthermore, as Wang (2015, p. 27) concluded from his content analysis of CSR articles in eight leading internationally refereed management journals and three leading business journals, the association between corporate social performance and corporate financial performance "needs to be further validated and the causal link between the two fundamental elements should continue as an important discussion topic".

Strategic CSR theory – the relationship between CSR and business performance

While CSR represents an increasing strategic concern for corporations, conceptually it "remains largely vague" (Amaeshi *et al.* 2013, p. 4). Carroll and Shabana (2010) noted 37 definitions of CSR in common use, produced by a wide variety of academics and practitioner and quasi practitioner organizations. They also noted that the boundaries and meaning of CSR differ between national and industry contexts and changes over time. Tilt (2016) argues that many CSR studies fail to consider these contextual factors, relying on theories derived in the developed world, particularly the US, UK and Australasia. While many developing nations are moving towards a more market-based orientation, they have entirely different social, political, cultural, environmental and legal regimes and influences, which produce very different understandings of CSR. Similarly, Carroll's (2016) recent revisiting of his formative pyramidal depiction of CSR (Carroll 1991) acknowledges that it was developed within the context of large organizations in American-type capitalistic free-market societies and that the pyramid might need rearranging to meet the conditions of other countries or smaller businesses such as those that dominate the construction industry. It is not surprising therefore that this conceptual vagueness is also reflected in the construction industry where Lou *et al*. (2011) found that definitions of CSR vary considerably, covering many social and environmental issues. This plurality in coverage is inevitable and positive, however ambiguity continues as documented by Watts *et al*. (2015) who also found that confusion exists over a precise definition of CSR in construction. Lou *et al.* (2011) suggest that this definitional confusion might be related to a lack of clear guidance to help organizations implement CSR, particularly for the many small-to-medium-sized enterprises that populate the construction sector. On the other hand, Secchi (2007) argues that this is largely down to the heterogeneity of theories and approaches and the multidisciplinary diversity of the CSR debate. Whatever the reasons, despite over 50 years of research, it appears that CSR still doesn't have a universally accepted definition and is often confused with related concepts such as corporate citizenship, sustainability, corporate accountability, corporate ethics, responsible entrepreneurship, corporate stewardship and sustainable development (Øyvind *et al.* 2014). For this reason, Frynas

and Stephens (2014) argued that it is best to use CSR as an umbrella term for a variety of related concepts which are all concerned with challenging the shareholder primacy model of the firm and the way in which firms self-govern and integrate social, environmental and economic concerns into their values, culture, strategy and operations in a transparent and accountable way. As Padfield (2015, p. 17) states, at its core "CSR supports affirmatively elevating social responsibility over shareholder wealth maximisation … the CSR position is that shareholder wealth may be sacrificed if the net social gain is positive, so that the board may defend its actions by pointing to some accounted-for social benefit even when it demurs on the issue of shareholder wealth maximisation".

In understanding the relationship between CSR and business performance, Carroll and Shabana (2010) trace the history of CSR back to early work of Theodore Levitt (1958) and Nobel Prize economist Milton Friedman (Friedman 1962) who both opposed CSR on the basis that it positively damaged the interest of business. To them, the only social responsibility of firms was to maximize profits and shareholder wealth. Social benefits would then "trickle-down" into communities through thriving businesses providing employment opportunities and other associated benefits such as pensions and healthcare. Despite these warnings, the field of CSR flourished in response to the growing social consciousness of the 1960s, embodied in the growth of social movements around civil rights, women's rights, consumer rights, environmentalism and the perceived social transgressions of business. Friedman's moral minimalism was widely criticized and the idea that businesses had a moral responsibility to consider social goals was increasingly accepted. The CSR of the 1970s was influenced heavily by social, moral and ethical considerations and by Rawls (1971) and Donaldson's (1982) theories of organizational justice. The idea that CSR could be good for business also started to emerge, moving the field closer to the idea of the "business case". Carroll's (1979) work was particularly formative in first introducing the concept of "corporate social performance" which was later developed into the highly influential "pyramid of corporate social responsibility" which conceptualized CSR as having economic, legal, ethical and discretionary dimensions (Carroll 1991). Carroll (1991) argued that economic and legal responsibilities were "required", ethical responsibilities were "expected" and discretionary responsibilities were "desired" by society. During the 1970s research into social auditing, reporting and accountability also began to emerge as corporations started to publish the first CSR reports (Bauer and Fenn 1973). The 1980s saw an expansion of empirical research around CSR with concepts such as stakeholder theory, public policy and business ethics and corporate culture being used to conceptualize firms as serving a broader constituency and having a responsibility towards a wider group of stakeholders, which included anyone who had a legitimate interest in the activities of a firm (Evan and Freeman 1983, Freeman 1994). Donaldson's (1982) work was particularly formative in using theories of social contract and moral agency to argue that corporations had a social contract with society as well as an economic contract. Importantly, this work also drew the first links between CSR and corporate financial performance. CSR during the 1990s and 2000s was largely driven by the quest for the business case for CSR and by interest in globalization, the activities of unethical multinational corporations (many of which had become more powerful than nation states), and ideas around sustainable development and by corporate scandals like Enron. It was during this period that the first theories of corporate governance (Freeman and Evan 1990) and corporate citizenship started to emerge (Waddock and Smith 2000, Matten *et al.* 2003, Garriga and Mele 2004, Valour 2005). These argued that if a firm wanted to become a good citizen then it needed to develop positive relationships with society, the community and its stakeholders (Waddock and Smith 2000). More recently, ideas of corporate citizenship have been extended into corporate global citizenship in response to globalization and the changing roles of governments and corporations in delivering welfare in some countries, meaning that corporations often have to "step-in" to replace the role of governments failures to protect their citizens (Matten and Crane 2005). Other new branches of CSR research have started to explore comparative perspectives on how institutional settings (politics, law, unions, etc.) in different countries affect the emergence and diffusion of CSR in business by empowering stakeholders to exert relational pressures on corporations to adopt CSR (Brammer *et al.* 2012). The growth of CSR reporting and concerns around corporate governance, environmental performance and labour relations (particularly in supply chains of large multinationals) has also led to the emergence and involvement of many governments, non-government organizations (NGOs) and regulatory authorities such as the United Nations (UN), International Labour Organization (ILO), Organization for Economic Co-operation and Development (OECD), European Union (EU), International Standards Organization (ISO), Accountability, Social Accountability International (SAI), International Standards Organization (ISO) and the FTSE Group, taking a lead role in producing regulations and standards aimed to increase the visibility of corporate social behaviour. In the UK construction sector, influential government reports such as the UK's "Rethinking Construction" (Egan 1998) and subsequent initiatives such as The Movement for Innovation, The Respect for People Steering Group, The Construction Best Practice Programme and Local Government Task Force,

Constructing Excellence and the Considerate Constructors Scheme have also played a major role in promoting CSR in construction, committing the industry to improvements in safety, people and environmental management standards. In other countries like Australia, quangos like the Federal Government's Built Environment Industry Innovation Council (BEIIC) have also been a catalyst for action and leadership in challenges like climate change, sustainability and industry competitiveness.

The main driver for CSR in both recent research and non-academic contexts has been the relationship between CSR, strategy, competitiveness and business performance (Carroll and Shabana 2010, Porter and Kramer 2006, 2011, Aguinis and Glavas 2012, Amaeshi *et al*. 2013, Battaglia, 2014). According to Porter and Kramer (2006, p. 80), prevailing approaches to CSR are highly fragmented and disconnected from business and strategy and obscure the ways that companies can benefit society and vice versa. Porter and Kramer (2011) propose the concept of "shared value" to encapsulate their idea that what is good for business is also good for society and verse versa, a new way of thinking about CSR which they argue is a major advance on "first generation" CSR theory which saw economic goals always taking first priority and "second generation" CSR theory where trade-offs had to be made between economic, social, and environmental impacts - the triple bottom line. As Carroll and Shabana (2010, p. 93) point out, in contrast to the "old style" of CSR which was motived by social and ethical considerations, "the new world of CSR emphasises the link between CSR and corporate financial success". In this emerging "strategic CSR" literature, the claimed benefits for firms in developing a CSR strategy are said to be numerous and include: improved risk management; improved reputation; better staff recruitment, development, engagement and retention; improved innovation and competitiveness; access to broader markets; better supply chain relationships and community and governmental relations; better ability to address change and; better access to capital and finance (Battaglia 2014). Much of this contemporary CSR research builds on Jensen's (2002) work on "enlightened value maximisation theory" which argued there is a mutual dependency between profit maximization and the quality of stakeholder relations. This recent work is important because as Siegel and Vitaliano (2007) showed, commercial firms which perceive that they are more likely to benefit from CSR are more likely to invest in it.

The conceptual development of CSR described above has recently been encapsulated by Barraket *et al*. (2016) who propose a simple model which summarizes four main approaches to CSR in the literature: *Instrumental*; *Political*; *Integrative*; and *Ethical*. *Instrumental* conceptions of CSR argue that business exists for profit and CSR is a valid way of enhancing profits and competitive advantage by building its reputation among employees and potential clients and shareholders and by avoiding any negative outcomes for the firm. *Political* conceptions of CSR assumes that businesses have a social obligation and contract to act in the best interests of society and that there is a mutual dependency which ensures that firms cannot thrive without being a good corporate citizen and being seen to be one in the public's eyes. *Integrative* approaches to CSR view businesses as being dependent on the community stakeholders who have power over corporations. Managers of organizations seek to navigate and negotiate the expectations of different salient stakeholder groups, based on their relative power in order to be granted a social licence to operate. Finally, *ethical* conceptions of CSR assume a moral obligation of corporations to behave in an ethical manner. However, some reject the notion of CSR all-together, dismissing it as manipulative attempt to put a human face on capitalism and outsource welfare to the private sector to save government resources (Øyvind *et al*. 2014). Other critics point to the huge gulf between what is said and done by businesses under the CSR banner while some argue that CSR privileges, consolidates and legitimizes the power of large corporations which can't be trusted with welfare decisions. To some extent, in the field of construction, this position is reflected in the work of Green *et al*. (2008), Ness (2010) and Sherratt (2014, 2015) who question the true motives of recent government and business CSR initiatives and the impact they potentially have on the personal freedoms, individual rights and autonomy of employees. More recently, Øyvind *et al*. (2014) argue that CSR is a niche business strategy and only makes sense under certain circumstances and for certain firms and that the logic of the market is incapable of transforming firms into sustainable businesses which means that CSR is business as usual for many firms.

Method

In order to better understand the relationship between CSR and business performance in the construction industry and to explore what these benefits might be, an online survey of CSR professionals was undertaken with firms across the construction supply chain in Australia and New Zealand. An online survey was used for three main reasons relating to the nature of our respondents and the subject of our research. First, face-to-face interviews would have been be prohibitively time consuming given the geographic spread and size of our population (across Australia and New Zealand). Second, this approach to data collection suited the busy lives of our target respondents who were senior professionals in leadership positions in the organization's we targeted. Third, given that we were

enquiring about firm CSR performance, an online survey afforded a certain degree of anonymity to our respondents in completing their responses, minimizing social desirability bias in our results (a potential problem in all CSR research where companies want to be seen "to being doing the right thing" Loosemore and Phua 2011).

Like all methods, electronic surveys have their limitations. For example, although one may have access to greater numbers of participants, it is difficult to determine whether the resultant sample is representative (Couper 2000). However, Couper (2000) shows that self-selection is no more problematic in online surveys than in mail and telephone surveys and Gosling *et al*. (2004) showed that research using this approach compares favourably to other published findings with respect to gender, socio-economic status, geographic location, age, and race.

The survey comprised several sections. The first section required respondents to provide general information about the nature, size, location and international reach of the firm's activities and turnover. Subsequent sections asked about the nature and extent of the firm's CSR strategy and activities using categorizations of CSR initiatives produced by Ashridge (2005) and Battaglia *et al*. (2014). The value of these frameworks is that they recognize that CSR activities vary considerably among countries and that they provide a broad overview of most common forms of CSR activities across a wide range of countries, clustering them into "coherent, meaningful and representative classes of CSR activities" (Ashridge, 2005, p. 2). Furthermore, after a detailed literature review, as documented above, these frameworks were regarded as the most comprehensive categorizations of corporate CSR strategies available which were arranged under four main headings: Workforce Activities (relating to the fair treatment of employees); Supply Chain Activities (relating to the fair treatment of business partners); Community Engagement Activities (relating to the fair treatment of communities in which companies build – social impacts); and Environmental Activities (relating to the impacts of the business activities on the ecological). The final section of the survey related to perceived links between CSR and business performance based on the literature we have reviewed above. The variables in each of these categories are described in Table 1 and responses were given on a seven-point Likert Scale, ranging from 1 (strongly disagree/never) to 7 (strongly agree/always). The questionnaire was pretested and validated using a pilot study allowing refinements before an industry-wide survey was conducted.

For the survey, probability sampling was employed whereby respondents were randomly selected from a sampling frame generated from Building Construction Information Australia (BCI)'s database of architects, contractors, consultants, subcontractors and suppliers. Many companies in the construction industry do not have formal CSR positions and thus the "key informant approach" was adopted in this study where each firm in our sample was asked to self-nominate a person who they saw as having responsibility for CSR. Initial email invitations with the survey link were sent to the owner or management of respective targeted companies via BCI's central emailing system, explaining the aim of the study and assuring anonymity and confidentiality. This was essential, given the potential sensitivity of the questions we were asking. Table 2 summarizes the final sample structure used for analysis.

A total of 104 responses were collected and the data were examined for normality using histograms, skewness, kurtosis and Kolmogorov–Smirnov (K–S) tests. The test results reveal that the data did not fulfil the normal distribution assumption, with the skewness and kurtosis values ranging from –4.564 to 1.088, and –1.079 to 28.011, respectively. Furthermore, the K–S test results show that the data were statistically significant at $p = 0.000$. It follows that several non-parametric tests were adopted in this study. The One-sample Wilcoxon-signed rank test was performed to determine if the median values of the sample were significantly different to the test median value of 4 (i.e. the midpoint of the seven-point Likert scale). This shows whether there was significant consensus among the respondents about the perceived benefits of CSR, its focus and relevant strategies. Lastly, the Spearman's rho test was undertaken to examine the relationship between the perceived benefits of CSR, their focus and various workplace, supply chain, community engagement and environmental strategies in Table 1. For ease of interpretation, we had adopted Hinkle *et al.*'s (2003) guideline to determine the magnitude of association: 0.00–0.30 as negligible correlation; 0.30–0.50 as low level of correlation; 0.50–0.70 as moderate; 0.70–0.90 as high; and 0.90–1.00 as very high.

Results and discussions

Perceived benefits of CSR

The results in Table 3 add some granularity to our current understanding of how the benefits of CSR are perceived in the construction sector. For example, Watts *et al*. (2015) argue that CSR is increasingly being seen as having a positive relationship with competitive advantage. However, our findings qualify this instrumental perspective and show that CSR was not widely seen as beneficial to competitive advantage and economic performance by our respondents (as most items have a mean of less than 4). More specifically, the One-sample Wilcoxon-Signed Rank test results show that most of our respondents did not think that being a socially responsible firm helped to improve financial performance (item B10, mean = 3.01

Table 1. Items used in this study

Item code	
	CSR focus
F1	Occupational health, welfare and safety
F2	Environmental management/impacts
F3	Social responsibility/impacts
F4	Community interactions
F5	Gender equity and diversity
F6	Racism/cultural diversity and equity
F7	Disabled
F8	Aged
F9	Harassment and bullying
F10	Discrimination and unfair treatment
F11	Corruption
F12	Ethical business practices/code of conduct
F13	Political contribution
	Workplace strategies
W1	Consulting employees about key business activities
W2	Respecting rights to free assembly and collective bargaining including recognition of trade union activities and representation
W3	Ensuring people are treated fairly at work regardless of race, gender and disability
W4	Respecting people's privacy
W5	Providing ample opportunities for people to develop their knowledge and skills
W6	Is aware of and attuned to the needs of differential societal groups in its workforce
W7	Helping employees to balance their work life responsibilities
W8	Looking after the mental health and well-being of our workforce
	Supply chain strategies
S1	Listening and working collaboratively with our product and service providers to resolve issues
S2	Treating our product and service providers fairly and with respect
S3	Working with our product and service providers to implement standards of acceptable social and environmental performance
S4	Integrating CSR criteria into our selection process for product and service providers
S5	Requiring product and service providers to set and meet acceptable social and environmental performance targets
S6	Placing greater emphasis on the social and environmental performance of our product and service providers than their price during the selection process
S7	Favouring product and service providers run by minority groups
S8	Preferring purchasing products and services from local businesses than from overseas businesses
S9	Turning away product and service providers with poor CSR records
S10	Making specific reference to our CSR record during marketing
S11	Screening our customers for their CSR record
S12	Working collaboratively with our customers to make our products and services more responsible
S13	Turning away business from customers with a bad CSR record
	Community engagement strategies
C1	Donating cash in support of community or charity organizations
C2	Donating assets to community causes (e.g. by giving old office furniture or equipment such as old PCs)
C3	Match-funding employee donations to chosen causes
C4	Sponsoring events, arts or sports clubs
C5	Providing loans below commercial interest rates for community initiatives (e.g. for start-up businesses in socially deprived communities, etc.)
C6	Partnering with charity or community organizations
C7	Loaning facilities and assets to communities (e.g. allowing a community group to use our premises or in-house facilities)
C8	Helping to promote social cohesion in the community (e.g. by offering immigrants and refugees points of contact to their new culture by visits to the premises of the enterprise, etc.)
	Environmental strategies
E1	Assessing and managing the environmental impacts of our business activities
E2	Seeking to improve energy efficiency in our products and services
E3	Purchasing 'green' materials (e.g. using timber from sustainable sources)
E4	Using renewable energy to supplement an enterprise's primary source of energy (e.g. by fitting photovoltaic cells to buildings, etc.)
E5	Considering land use and bio-diversity in its business decisions
E6	Encouraging and educating employees about sustainability and efficiency energy use
E7	Using 'green' technologies that use fewer resources
E8	Acting to minimize air, water and other forms of pollution in our business activities
E9	Acting to minimize the treatment and disposal of hazardous waste
E10	Acting to minimize noise, odour, vibration and undesirable visual impacts of our business activities on the local community
E11	Encouraging the reuse and recycling of materials and minimization of waste
E12	Using certified products with the use of independent third parties to verify how products are produced
E14	Considering and managing the environmental impacts from transport of our people, goods and services
	Perceived benefits of CSR
B1	Public image
B2	Employee morale
B3	Employee loyalty
B4	Customer confidence
B5	Brand recognition
B6	Employee retention
B7	Competitive advantage
B8	Workforce productivity
B9	Staff awareness of CSR
B10	Financial performance

Table 2. Sample characteristics

Description	Frequency	Percentage (%)
Company size		
Small (1–19 employees)	37	35.58
Medium (20–199 employees)	56	53.85
Large (200+ employees)	11	10.58
Sector		
Private	91	87.5
Public	13	12.5
Turnover		
$0–1 million	14	13.46
$1–10 million	37	35.58
$10–$50 million	39	37.5
>$50 million	14	13.46
Company location		
Australia	91	87.5
NZ	13	12.5

and median = 3 significant at $p = 0.000$); gain competitive advantage (item B7, mean = 3.37 and median = 3 significant at $p = 0.001$); increase productivity (item B8, mean = 3.42 and median = 3.5 significant at $p = 0.001$); improve public image (item B1, mean = 3.44 and median = 3.5 significant at $p = 0.003$); and even increase staff awareness of CSR (item B9, mean = 3.49 and median = 4 significant at $p = 0.003$). These results tend to support Loosemore and Phua's (2011) assertion that the perceived link between CSR and economic business performance (i.e. productivity, competitiveness and financial performance) is not yet established in the construction sector. They also add some important qualifications to the arguments of authors such as Lin *et al*. (2009), Huang and Lien (2012) and Saeidi *et al*. (2015) who have pointed out that the main benefits of CSR are long-term in nature (reputation, workforce productivity, competitive advantage and corporate image). The picture that emerges from this research is that CSR in construction is perceived to have little, if any benefit (even in the long-term) and to be a compliance-based necessity. Given the fiduciary responsibility of company directors to serve the interests of their shareholders first and foremost, CSR is therefore likely to be seen as a low strategic priority. Accepting the research of Siegel and Vitaliano (2007) and Thompson and Ke (2012) who provided empirical evidence to show that firms which are more likely to benefit from CSR are more likely to invest in it, then it follows that investments in CSR in construction will likely remain marginal – at least until the construction sector reaches a state of institutional isomorphism (Dimaggio and Powell 1983) where CSR is seen as basic minimum to compete or managers behave in accordance with Jensen's (2002) enlightened value maximization theory which is based on accumulating evidence of a link between profit maximization and the quality of stakeholder relations.

Although no other significant findings were detected in the One-sample Wilcoxon-signed rank test, our comparative analysis of the item frequency response revealed that our respondents were more appreciative of how CSR could help improve the quality of stakeholder relations than their economic performance. As shown in Table 3, the main benefits of CSR were perceived to be: employee retention (B6), morale (B2) and loyalty (B3), and building customer confidence (B4) and brand recognition (B5). These findings indicate that the drivers of CSR in construction are mainly from two sources: clients of construction services and products; and employees both new and existing. This supports much of the research on the corporate benefits of CSR (for example, Battaglia 2014) with the important exception of direct links to competitive advantage which do not seem to widely exist in a construction context. If there are any links to competitive advantage, then they appear to be mediated through employee engagement and client satisfaction which suggests that if the priorities of these stakeholders changed, then so would the commitment of the industry to CSR. Theoretically, this suggests Jensen's (2002) ideas around "enlightened value maximisation" may be a useful lens for future construction researchers in studying CSR. The potential value of this approach is that it debunks the polarizing debate over whether construction

Table 3. Perceived Benefits of CSR

	Frequency of responses								One-sample Wilcoxon-signed rank test median value = 4		
Item code	Never (1) (%)	Rarely (2) (%)	Quite rarely (3) (%)	Sometimes (4) (%)	Quite often (5) (%)	Usually (6) (%)	Always (7) (%)	Mean	Median	Test statistics	Sig
B1	20	14	15	23	11	11	6	3.44	3.5	−3.008	0.003
B2	16	9	9	32	13	15	6	3.87	4.0	−1.011	0.312
B3	18	10	9	29	12	14	9	3.84	4.0	−1.098	0.272
B4	16	8	10	25	14	20	7	4.01	4.0	−0.202	0.840
B5	16	12	14	23	10	15	10	3.83	4.0	−0.914	0.361
B6	18	10	12	28	12	13	9	3.77	4.0	−1.358	0.175
B7	22	13	17	23	10	11	5	3.37	3.0	−3.390	0.001
B8	19	13	18	23	13	11	3	3.42	3.5	−3.284	0.001
B9	16	15	16	24	13	12	3	3.49	4.0	−2.984	0.003
B10	23	20	24	13	6	12	2	3.01	3.0	−4.981	0.000

companies should maximize value or whether they should act in the interests of their stakeholders which is often framed as a shareholder vs. stakeholder primacy approach (Green 2008, Ness 2010, Loosemore and Phua 2011). It is clear from our results that construction organizations seek to do both and that this theory could resolve this unnecessary dilemma by questioning the inherent conflict between pure stakeholder theory and pure value maximization theory and by accepting the mutual dependency between profit maximization and the quality of stakeholder relations. Furthermore, our results support Watts *et al.* (2015) and Singh *et al.*'s (2015) assertion that CSR plays an important role in the sense-making of an organization and a critical cultural and symbolic resource for an organization to develop and use to develop and communicate their corporate identity. Sense-making therefore may be another theoretical perspective to better understand CSR in a construction context. Building on the work of Weick *et al.* (2005) under this perspective, CSR is seen as a collaborative process of creating shared awareness and understanding out of different stakeholder perspectives and varied interests (shareholders and stakeholders). Indeed, Singh *et al*. (2015) has recently adopted a sensemaking perspective to show how construction organization label and categorize CSR in their annual reports, revealing how these are individual to every organization, how they evolve over time and that sensemaking in relation to CSR is an evolutionary process.

CSR focus

Table 4 summarizes the CSR focus of our respondent companies. The one-sample Wilcoxon-signed rank test results show the companies had placed considerable emphasis on 12 of the 13 CSR focus areas (with median values ranging from 5 to 7 significant at $p < 0.01$). Of these, occupational health and safety (item F1; mean = 6.72 and median = 7) was the top priority of most companies, following by ethical business practices (item F12; mean = 6.08 and median = 7); harassment and bully (item F9; mean = 5.85 and median = 7); discrimination and unfair treatment(item F10; mean = 5.69 and median = 7); corruption (item F11; mean = 6.64 and median = 7); and environmental management (item F2; mean = 5.93 and median = 6.5). It is notable that at least 50% of the respondent companies had scored 7 for this group of priorities and that these top 6 focuses are a reflection of the regulatory imperatives which drive the sector, which are very much focussed on safety, environmental impact, equity, diversity and discrimination.

The second group of priorities given by the respondents were around social impact (item F3; mean = 5.53 and median = 6), gender equity and diversity (item F5; mean = 5.35 and median = 6) and racism/cultural diversity and equity (item F6; mean 5.60 and median = 6). The third group of priorities were related to community interaction (item F4; mean = 5.13 and median = 5.5), disable and aged (items F7 and F8 with corresponding mean values of 4.76 and 4.66 and median = 5.5).

The above results highlight the integrative (Barraket *et al*. 2016) and compliance-based nature of CSR in the Australian and New Zealand construction sector, suggesting it is still operating at the bottom of Carrol's (1991) pyramid in a state of low CSR maturity. In other words, our respondent companies tended to see CSR as a way to plicate communities which have power over their operations and that the task of management is to negotiate community expectations, based on the relative power of different community groups, in the corporation's favour. Furthermore, by operation at the base of Carroll's CSR pyramid, the construction sector is doing what is required by society (economic and legal) rather than what is desired or expected (ethical and discretionary). Based on this insight, it is clear that taking on greater ethical responsibilities will require construction organizations to embrace a greater

Table 4. CSR Focus

	Frequency of responses								One-sample Wilcoxon signed rank test median value = 4		
Item code	Never (1) (%)	Rarely (2) (%)	Quite rarely (3) (%)	Sometimes (4) (%)	Quite Often (5) (%)	Usually (6) (%)	Always (7) (%)	Mean	Median	Test statistics	Sig
F1	1	0	0	0	6	11	83	6.72	7.0	9.358	0.000
F2	2	1	2	13	9	22	50	5.93	6.5	7.774	0.000
F3	3	2	5	12	21	24	34	5.53	6.0	6.983	0.000
F4	2	6	8	20	16	23	25	5.13	5.0	5.788	0.000
F5	6	4	6	13	12	25	35	5.35	6.0	5.899	0.000
F6	4	5	3	14	11	17	46	5.60	6.0	6.714	0.000
F7	7	5	11	27	9	19	23	4.76	5.0	3.971	0.000
F8	9	9	9	20	12	20	22	4.66	5.0	3.263	0.001
F9	4	5	1	9	11	17	54	5.85	7.0	7.265	0.000
F10	6	3	4	10	11	16	51	5.69	7.0	6.759	0.000
F11	7	3	5	10	10	13	53	5.64	7.0	6.564	0.000
F12	2	2	3	5	12	22	55	6.08	7.0	8.105	0.000
F13	48	13	11	13	4	3	9	2.56	2.0	−5.830	0.000

Table 5. Workplace Strategies

	Frequency of ranks								One-sample Wilcoxon-signed rank test median value = 4		
Item code	Never (1) (%)	Rarely (2) (%)	Quite rarely (3) (%)	Sometimes (4) (%)	Quite often (5) (%)	Usually (6) (%)	Always (7) (%)	Mean	Median	Test statistic	Sig
W1	2	6	3	5	24	44	16	5.41	6.0	6.866	0.000
W2	3	10	9	20	13	36	10	4.77	5.0	4.352	0.000
W3	0	2	0	4	6	39	49	6.28	6.0	8.720	0.000
W4	0	1	0	3	12	47	38	6.16	6.0	8.796	0.000
W5	0	2	1	4	13	42	38	6.08	6.0	8.573	0.000
W6	1	4	1	14	18	41	20	5.50	6.0	7.265	0.000
W7	0	7	2	12	21	37	22	5.45	6.0	7.083	0.000
W8	0	5	4	12	20	36	24	5.50	6.0	7.344	0.000

range of activities and practices that are not codified in law. In other words, working to the spirit of the law, not just the letter of the law. This means conducting business in a fairer manner as noted by Loosemore and Lim (2015) who argued that much can be done to improve levels of procedural and distributive justice in the construction sector, particularly in relation to the distribution of risks (and opportunities) between project participants and the ways that these are negotiated. Loosemore and Lim (2015) also argued that particular attention should be given to improving the position of subcontractors and suppliers on smaller and commercial projects. Beyond business relationships, Carroll (2016) states that this will also require construction firms to "reflect and honour what consumers, employees, owners and the community regard as consistent with respect to the protection of stakeholders' moral rights". Furthermore, as Carroll (2016) suggests, this will inevitably involve what might appear (falsely) to be unfamiliar trade-offs between commercial and non-commercial goals and between short-term and long-term profitability. Carroll (2016) argues, the CSR pyramid "should not be interpreted to mean that business is expected to fulfil its social responsibilities in some sequential, hierarchical, fashion, starting at the base". Rather, CSR should be seen as an integrated concept which addresses all levels of corporate responsibility simultaneously. In other words, construction companies should "strive to make a profit, obey the law, engage in ethical practices and be a good corporate citizen".

Workplace strategies

The workplace strategies of our respondent companies are summarized in Table 5. Most of the items were found to have a median value of 6 significant at $p < 0.000$, with their mean values ranging from 5.41 to 6.28. Also, the majority of respondents scored at least 5 for all items in Table 5. It is notable that most companies' top priorities are to ensure that: their employees are treated with fairness and equity in work (item W3); their privacy is respected (item W4); they are given ample opportunities for self and career development (item W5); their societal needs (item W6) and mental health (item W8) are taken care of; they have a good work–life balance (item W7) and consulted about key business activities (item W1). Encouragingly, although these results give no indication of how effective these CSR strategies are in practice, they are encouraging and appear to highlight that firms are seeking to address long-standing concerns about work–life balance, unfair treatment and work conditions in the construction sector as highlighted in previous research such as Sang *et al*. (2007), Caven and Raiden (2010) and Lingard *et al*. (2012). It was interesting that union representation and building awareness of different cultural groups in the workforce did not feature strongly in the results. This may be a function of the confrontational and negative industrial relations environment in Australia which has seen a number of Royal Commissions into the construction industry's (PC 2014). The lack of attention to cultural diversity might be related to the tendency for the industry to take its diversity for granted, to ignore cultural problems and tensions on site, rather than leverage it to competitive advantage. For example, both Dunn *et al*. (2010) and Phua *et al*. (2011) exposed significant levels of racism and discrimination on Australian construction sites and practices which were far from best practice, as recognized by leading firms in other industries. Thorpe-Jones *et al*. (2010) also found that despite a growing body of legislation enforcing equal opportunities, construction remains a predominately white, male-oriented and hegemonic industry, arguing that CSR might provide a vehicle for enacting the diversity agenda.

Supply chain strategies

Table 6 results indicate that most companies' top supply chain priorities were to treat their product and service providers fairly and with respect (item W2; mean = 6.01 and median = 6 significant at $p < 0.000$); listen and work collaboratively with them to resolve issues (item W1; mean = 5.82 and median = 6 significant at $p < 0.000$); and

Table 6. Supply chain strategies

	Frequency of ranks								One-Sample Wilcoxon-signed rank test median value = 4		
Item code	Never (1) (%)	Rarely (2) (%)	Quite rarely (3) (%)	Sometimes (4) (%)	Quite Often (5) (%)	Usually (6) (%)	Always (7) (%)	Mean	Median	Test statistic	Sig
S1	0	2	0	5	25	44	24	5.82	6.0	8.441	0.000
S2	0	2	0	5	16	44	33	6.01	6.0	8.729	0.000
S3	1	4	6	20	20	34	15	5.17	5.0	6.455	0.000
S4	6	11	6	25	23	21	9	4.47	5.0	2.557	0.011
S5	13	23	7	34	5	15	4	3.57	4.0	−2.525	0.012
S6	16	25	12	22	12	12	2	3.30	3.0	−4.047	0.000
S7	18	24	7	37	11	3	1	3.10	4.0	−5.495	0.000
S8	5	7	6	15	17	30	20	5.04	5.5	5.077	0.000
S9	14	9	6	46	12	7	7	3.79	4.0	−1.490	0.136
S10	12	22	4	35	13	11	5	3.65	4.0	−2.346	0.019
S11	17	30	4	38	10	2	0	2.98	3.0	−6.238	0.000
S12	10	8	9	21	17	23	13	4.48	5.0	2.427	0.015
S13	15	25	4	32	13	9	3	3.38	4.0	−3.854	0.000

purchase products and services from local businesses rather than overseas businesses (item W8; mean = 5.04 and median = 5.5 significant at $p < 0.000$). They also work with their business partners and service providers to implement standards of acceptable social and environmental performance (item W3; mean = 5.17 and median = 5 significant at $p < 0.000$) and make their products and service more responsible (item W12; mean = 4.48 and median = 5 significant at $p < 0.015$) by integrating CSR criteria in the selection process of their product and service providers (item W4; mean = 4.47 and median = 5 significant at $p < 0.011$).

In contradiction to the above, the results also show that most respondent companies are reluctant: to screen their customers for CSR record (item W11; mean = 2.98 and median = 3 significant at $p < 0.000$) and prioritize CSR performance over price given by product and service providers (item W6; mean = 3.30 and median = 3 significant at $p < 0.000$). Furthermore, our respondents did not: favour suppliers or subcontractors run by minority groups (item W7, mean = 3.10 and median = 4 significant at $p < 0.000$); turning away customers with bad CSR records (item W13, mean = 3.38 and median = 4 significant at $p < 0.000$); setting and measuring CSR standards against their product and service providers (item W5, mean = 3.57 and median = 4 significant at $p < 0.012$); and make specific references to their CSR record during marketing (item W10, mean = 3.65 and median = 4 significant at $p < 0.019$). These findings support Glass and Simmonds (2007), Glass (2012) and Glass (2014) who all argue that the construction industry has yet to engage in supply chain management and responsible sourcing strategies. They also support recent research by Loosemore and Lim (2015) which shows that while local businesses are often favoured by construction companies in their project supply chains, social benefit organizations (such as Indigenous enterprises) and social enterprises that are run by minority and disadvantaged groups are relatively under-represented and unsupported compared to other industries. This is despite increasing social procurement guidelines and regulations in Australia, such as the Indigenous Procurement Policy (2015), which require firms to integrate these organizations into their supply chains when tendering for public sector projects.

Community engagement strategies

Table 7 shows that five out of the eight community engagement strategies were disregarded by our respondent companies (the item median ranging from 1 to 3 significant at $p < 0.000$). Most companies in our sample do not provide loans below commercial interest rate for community initiatives (item C5; mean = 1.50), do not promote social cohesion in the community (item C8; mean = 2.07) or loan facilities and assets to communities to support social causes (item C7; mean = 2.22). Furthermore, few companies in our sample partner with charity or community organizations (item C6; mean = 2.88) and match fund employee donations to chosen causes (item C3; mean = 3.13). These results indicate that our respondent companies had a narrow understanding of what community engagement involves and that they might perceive donating cash in support of community or charity organizations (C1) as the best way to showcase their community engagement efforts. The picture emerges from this research is that CSR in construction is what Porter and Kramer (2011) would describe as "old school" CSR which largely involves giveaways and donations to local causes. Porter and Kramer (2011) argue that contemporary CSR should be more strategically focussed around "shared value" opportunities with the local communities in which the firm does business. However, traditionally, debates around community consultation have been the domain of urban planners who have developed detailed principles

Table 7. Community engagement strategies

	Frequency of ranks								One-Sample Wilcoxon-signed rank test median value = 4		
Item code	Never (1) (%)	Rarely (2) (%)	Quite rarely (3) (%)	Sometimes (4) (%)	Quite often (5) (%)	Usually (6) (%)	Always (7) (%)	Mean	Median	Test statistic	Sig
C1	9	11	4	33	14	18	12	4.35	4.0	1.682	0.093
C2	12	16	10	32	11	14	6	3.80	4.0	−1.279	0.201
C3	25	17	17	20	6	9	6	3.13	3.0	−4.242	0.000
C4	18	11	10	36	9	8	10	3.67	4.0	−1.821	0.069
C5	74	13	6	5	1	1	0	1.50	1.0	−8.938	0.000
C6	36	14	9	23	8	7	4	2.88	2.5	−5.428	0.000
C7	50	20	8	13	1	7	2	2.22	1.5	−7.321	0.000
C8	54	19	11	8	2	5	2	2.07	1.0	−7.720	0.000

Table 8. Environmental strategies

	Frequency of ranks								One-sample Wilcoxon-signed rank test median value = 4		
Item code	Never (1) (%)	Rarely (2) (%)	Quite rarely (3) (%)	Sometimes (4) (%)	Quite Often (5) (%)	Usually (6) (%)	Always (7) (%)	Mean	Median	Test statistic	Sig
E1	4	2	3	10	20	36	26	5.51	6.0	6.859	0.000
E2	2	1	3	11	19	40	24	5.62	6.0	7.581	0.000
E3	3	5	4	24	20	25	19	5.06	5.0	5.549	0.000
E4	4	17	8	35	15	9	13	4.16	4.0	0.924	0.355
E5	8	10	8	37	12	15	12	4.27	4.0	1.520	0.129
E6	4	8	10	22	29	13	15	4.63	5.0	3.655	0.000
E7	3	12	7	24	19	20	15	4.67	5.0	3.694	0.000
E8	1	3	6	12	15	39	24	5.52	6.0	7.364	0.000
E9	1	3	2	17	13	32	33	5.63	6.0	7.389	0.000
E10	2	3	5	13	16	34	28	5.51	6.0	7.073	0.000
E11	2	2	2	14	14	37	29	5.63	6.0	7.342	0.000
E12	4	12	7	26	15	18	18	4.65	5.0	3.532	0.000
E13	5	6	7	26	19	21	16	4.78	5.0	4.233	0.000

and techniques to interact with communities during the early, pre-construction phases of a construction project (Carson and Gelber 2001). Typically, once the project proceeds to the construction stage, the community has less input into the project. As Moodley (1999), Preece and Moodley (1998) and Chinyio and Olomolaiye (2010) have shown, while on rare occasions, the best companies will have project-specific community consultation plans, most companies will be devoid of any plans or process and ill-equipped to deal community concerns. For this reason, for most construction companies, the community is seen as a risk rather than an asset and the process of community consultation is simply contracted out to a specialist consultant, as if it were similar to letting any other trade (Raidén *et al.* 2006, Teo 2008). While Cleland (1995) argues that this allows someone with specialist skills to focus on community relationships, Winch *et al.* (2007) argue this can be a costly exercise and often portrays to the public a lack of care by the company who is outsourcing their responsibility to the community. For this reason, Glass and Simmonds (2007) and Close and Loosemore (2014) argue that there is a need to develop better project management skills in this area.

Environmental strategies

Table 8 shows the results relating to respondent companies' environmental strategies. The One-sample Wilcoxon-signed rank test results reveal that the companies had significantly engaged with 11 out the 13 environmental strategies as characterized by their significant median values at $p < 0.000$. It appears that most companies' top environmental priority is around operation management through implementing effective waste management (items E9 and E11; mean = 5.63 and median = 6) and energy conservation practices (item E2; mean = 5.62 and median = 6); assessing and managing the environmental impact of their overall business activities (item E1; mean = 5.51 and median = 6); and looking for opportunities to minimize air, water, noise, odour, vibration and undesirable visual impacts on the environment and local community (items E8 and E10; with corresponding means of 5.52 and 5.51, and median = 6). In reinforcing their operations, they also attempted to: purchase green materials (item E3; mean = 5.06 and median = 5); manage the transport of their people, goods and services (item E13; mean = 4.78 and median = 5); use green technologies (item E7; mean = 4.67 and median = 5); use green certified

Table 9. Correlation between perceived benefits, CSR focuses, workplace, supply chain, community engagement and environmental strategies

		B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
CSR focus	F1	0.267**	0.337**	0.321**	0.214*	0.281**	0.274**	0.211*	0.285**	0.259**	
	F2	0.458**	0.423**	0.452**	0.383**	0.404**	0.361**	0.329**	0.386**	0.460**	0.312**
	F3	0.451**	0.505**	0.537**	0.469**	0.446**	0.448**	0.402**	0.480**	0.552**	0.365**
	F4	0.372**	0.383**	0.396**	0.339**	0.388**	0.370**	0.374**	0.423**	0.372**	0.392**
	F5	0.214*	0.310**	0.303**		0.223*	0.242*		0.276**	0.318**	
	F6	0.235*	0.293**	0.308**		0.205*	0.247*		0.301**	0.294**	
	F7	0.336**	0.311**	0.319**	0.257**	0.287**	0.261**	0.246*	0.292**	0.335**	0.222*
	F8	0.223*	0.275**	0.320**	0.203*	0.217*	0.248*		0.269**	0.313**	
	F9	0.267**	0.355**	0.350**	0.218*	0.237*	0.286**	0.214*	0.304**	0.345**	0.202*
	F10	0.221*	0.320**	0.323**			0.229*		0.278**	0.236*	
	F11		0.211*	0.294**			0.197*		0.240*	0.251*	
	F12		0.211*	0.264**	0.218*		0.234*		0.324**	0.268**	
	F13	0.198*	0.241*	0.249*			0.198*	0.217*	0.207*	0.208*	0.210*
Workplace strategies	W1	0.287**	0.356**	0.346**	0.267**	0.221*	0.289**	0.265**	0.259**	0.271**	0.237*
	W3	0.249*	0.284**	0.275**			0.200*		0.223*		
	W4	0.250*	0.241*	0.252**	0.247*	0.194*	0.195*		0.228*		
	W5	0.244*	0.367**	0.344**	0.279**	0.219*	0.274**	0.225*	0.318**	0.301**	0.225*
	W6	0.366**	0.502**	0.471**	0.449**	0.403**	0.413**	0.333**	0.422**	0.501**	0.325**
	W7	0.331**	0.426**	0.398**	0.351**	0.249*	0.346**	0.224*	0.390**	0.407**	0.244*
	W8	0.459**	0.453**	0.439**	0.356**	0.371**	0.362**	0.289**	0.380**	0.398**	0.290**
Supply chain strategies	S1	0.342**	0.465**	0.467**	0.413**	0.395**	0.385**	0.299**	0.402**	0.481**	0.319**
	S2	0.217*	0.404**	0.395**	0.323**	0.254**	0.316**	0.204*	0.335**	0.407**	0.195*
	S3	0.421**	0.539**	0.558**	0.559**	0.489**	0.528**	0.398**	0.489**	0.497**	0.402**
	S4	0.500**	0.570**	0.590**	0.525**	0.439**	0.536**	0.419**	0.496**	0.589**	0.478**
	S5	0.460**	0.506**	0.531**	0.451**	0.456**	0.507**	0.428**	0.483**	0.553**	0.385**
	S6	0.406**	0.467**	0.477**	0.458**	0.463**	0.518**	0.420**	0.471**	0.497**	0.423**
	S7	0.319**	0.265**	0.264**	0.283**	0.297**	0.286**	0.265**	0.297**	0.344**	0.213*
	S10	0.479**	0.487**	0.486**	0.421**	0.443**	0.372**	0.454**	0.369**	0.473**	0.340**
	S11	0.375**	0.382**	0.401**	0.332**	0.359**	0.391**	0.366**	0.442**	0.463**	0.353**
	S12	0.421**	0.600**	0.608**	0.581**	0.446**	0.530**	0.442**	0.561**	0.551**	0.420**
	S13	0.358**	0.351**	0.371**	0.339**	0.281**	0.356**	0.282**	0.358**	0.371**	0.295**
Community engagement strategies	C1		0.249*	0.244*					0.207*		
	C2	0.200*	0.290**	0.309**	0.269**	0.301**	0.281**	0.270**	0.333**	0.281**	0.264**
	C3	0.221*	0.347**	0.296**	0.201*	0.223*	0.213*		0.236*	0.324**	0.223*
	C4	0.247*	0.305**	0.313**	0.230*	0.344**	0.283**	0.300**	0.313**	0.194*	0.248*
	C5				0.193*			0.209*	0.212*		0.200*
	C6	0.424**	0.395**	0.396**	0.314**	0.392**	0.323**	0.295**	0.297**	0.316**	0.278**
	C7	0.262**	0.275**	0.287**	0.227*	0.307**	0.260**	0.260**	0.270**	0.340**	
	C8	0.222*	0.283**	0.287**	0.268**	0.294**	0.273**	0.325**	0.209*	0.281**	0.256**
	C9	0.352**	0.392**	0.389**	0.341**	0.283**	0.312**	0.266**	0.304**	0.312**	0.260**
	C10	0.376**	0.399**	0.409**	0.337**	0.292**	0.324**	0.242*	0.289**	0.293**	
	C11	0.389**	0.454**	0.433**	0.368**	0.364**	0.338**	0.370**	0.321**	0.333**	0.301**
Environmental strategies	E1	0.494**	0.505**	0.498**	0.462**	0.457**	0.367**	0.421**	0.408**	0.397**	0.387**
	E2	0.371**	0.480**	0.478**	0.408**	0.384**	0.371**	0.348**	0.387**	0.374**	0.381**
	E3	0.457**	0.455**	0.480**	0.409**	0.385**	0.376**	0.303**	0.395**	0.435**	0.280**
	E4	0.308**	0.346**	0.338**	0.319**	0.297**	0.324**	0.282**	0.281**	0.389**	0.261**
	E5	0.464**	0.504**	0.516**	0.420**	0.371**	0.430**	0.356**	0.432**	0.475**	0.368**
	E6	0.485**	0.526**	0.488**	0.425**	0.478**	0.439**	0.423**	0.365**	0.506**	0.336**
	E7	0.492**	0.502**	0.467**	0.428**	0.425**	0.416**	0.383**	0.434**	0.500**	0.382**
	E8	0.477**	0.516**	0.502**	0.452**	0.435**	0.379**	0.399**	0.398**	0.505**	0.350**
	E9	0.498**	0.381**	0.391**	0.351**	0.434**	0.347**	0.343**	0.356**	0.378**	0.341**
	E10	0.334**	0.455**	0.454**	0.411**	0.376**	0.378**	0.311**	0.351**	0.390**	0.240*
	E11	0.406**	.490**	0.466**	0.405**	0.425**	0.373**	0.327**	0.332**	0.408**	0.207*
	E12	0.392**	0.355**	0.359**	0.380**	0.364**	0.397**	0.352**	0.368**	0.348**	0.350**
	E13	0.416**	0.359**	0.317**	0.386**	0.394**	0.283**	0.309**	0.276**	0.354**	0.298**

NB: ** and * Correlation is significant at the 0.01 level and 0.05 level (2-tailed), respectively. Those insignificant relationships had been removed from the table. Moderately strong relationship (0.5–0.7) and negligible relationships (<0.3) are highlighted in dark and light grey colours, respectively.

products with the use of independent third parties (item E12; mean = 4.65 and median = 5); and educating their people about sustainability and efficiency energy use (item E6; mean = 4.63 and median = 5). Overall, it appears that a strong focus of CSR strategy is on environmental initiatives which is likely to be a response to the large amount of regulation in this area compared to social sustainability. As Awale and Rowlinson (2014, p. 1285) state, "social dimensions are given relatively lower priority, analysed separately and treated outside the scope of business strategy". However, the results also show that environmental strategies are mainly internally focussed and that

strategies targeted at minimizing supply chain impacts, imbedded energies and behavioural factors which could lead to reduced environmental impacts are less used. This supports Upstill-Goddard *et al.*'s (2012) conclusion that the knowledge and awareness of how the supply chain impacts critically on environmental and social sustainability is low in the construction sector.

Perceived link between CSR strategies and its benefits

Table 9 shows the Spearman rho's correlations between perceived benefits and CSR focuses and strategies. It can be seen that, among all strategies, the companies' supply chain and environmental strategies are more positively associated with their perceived benefits of CSR. So this in-turn is where investment in CSR is likely to flow. In particular, we found that firms are more likely to appreciate the public image advantage of CSR (item B1) if they had integrated social and environmental performance into their selection criteria (item S4; $r_s = 0.500$), and marketed their CSR records (item S10; $r_s = 0.479$) about their environmental and waste management policies (items E1 and E9; with corresponding r_s of 0.494 and 0.498) as well as their experience in using green technologies (item E7; $r_s = 0.492$). Our results also show that to further improve customer recognition or confidence (item B4), firms should also constantly work with business partners to implement standard of acceptable social and environment performance (item S3; $r_s = 0.559$) and make their products and services more responsible (item S12; $r_s = 0.581$).

These results add further weight to our view that CSR in construction is "integrative" in nature (Barraket *et al*. 2016). This approach assumes that businesses are "dependent" on their communities – that they work in communities and therefore need to engage with an array of stakeholders when enacting their work. Indeed, it was recognized by Barraket *et al.* (2016, p. 74) that "Organizations that rely on good relationships with specific communities, such as mine, developers and chemical factories commonly use this approach". So our results add weight to this conclusion. Our results also support Watts *et al.* (2015) research which showed the importance of effective reporting and communication of CSR outcomes in changing stakeholder perceptions of value in this area of corporate strategy. It also adds weight to Meister's (2010) findings that firms are mostly likely to boost their brand recognition (item B5) if they undertake a proactive approach towards collaborating with their business partners to implement standards of acceptable social and environmental performance (item S3; $r_s = 0.489$) and encouraging and educating employees sustainability and efficient energy use (item E6; $r_s = 0.478$). Furthermore, it appears that, to further enhance employees' morale (item B2), loyalty (item B3) and retention (item B6) and their CSR awareness (item B9) more attention should be placed in the firms' workplace, supply chain and environmental strategies. In particular, our results indicate that a firms' employee morale, loyalty, retention and awareness of CSR have relatively strong associations with: working with partners to implement standards of social and environmental performance (item S3; r_s ranging from 0.528 to 0.558) and to make companies' product and services more responsible (item S12; r_s ranging from 0.530 to 0.608), integrating social and environmental performance into selection criteria (item S4; r_s ranging from 0.536 to 0.590), placing emphasis on social and environmental performance over price (item S6; r_s ranging from 0.467 to 0.518) and requiring product and service providers to meet those targets (item S5; ranging from 0.506 to 0.531). This further supports Meister's (2010) assertion that employees are attaching ever greater importance to the CSR records of the firms they work for and that this affects their engagement with those firms. Lastly, our Spearman rho's correlation results provide empirical evidence supporting Loosemore and Phua's (2011) assertion about the weak perceived link between CSR and economic business performance (i.e. productivity, competitiveness and financial performance).

Conclusion

The aim of this paper was to address a conceptual gap in knowledge around the connection between CSR and business performance. It has argued that we need to get away from the polarizing debate over whether construction companies should maximize economic value or whether they should act in the interests of their stakeholders. Rather, there is a need to align with contemporary CSR theory which increasingly recognizes a mutuality of interests between firms and the communities in which they operate. Using strategic CSR theory as a conceptual base and a survey on 104 construction professionals from across the supply chain, our results show that construction is out of step with this thinking. Our results indicate that CSR in the construction sector is integrative in nature, narrowly focussed (mainly on environmental activities), immature, non-strategic and compliance-based. While there are some encouraging signs that certain elements of CSR strategies are being adopted in the sector (in narrow areas like work–life balance), they are far from comprehensive and the link between CSR and economic performance increasingly espoused (and assumed) in much of the CSR literature does not appear to be accepted in practice. Supply chain practices appear to be primitive and the industry appears to be operating in a low state of CSR maturity at the base of the CSR pyramid. The main benefits of CSR

in construction are perceived to be relational in terms of placating communities who may oppose projects and building engagement and loyalty from both employees and customers both internal and external stakeholders. While these "softer" benefits are clearly significant, the link between CSR and economic performance, both short and long term do not appear to be well understood or established. This in turn suggests that CSR will continue to be seen as a marginal and low strategic investment priority in most firms, and given the reluctance to enforce CSR through their supply chains, isolated rather than spread through the construction community.

This research is important since to date, approaches to CSR in construction have not been positioned within a clear conceptual framework. By empirically showing that CSR in construction takes place within an integrative conceptual framework, our findings highlight the potential value of theoretical concepts such as stakeholder salience in moving this field of research forward. These approaches recognize the power that stakeholders (both internal and external) have over a business and the need to manage those relationships carefully in order to secure a licence to operate.

The limitation of this exploratory research is its focus on Australia and New Zealand companies and its quantitative nature. Furthermore, the sample size of 104 was relatively small. The research findings thus need to be interpreted closely within its context and provide only an indicative, rather than a conclusive, trend of CSR in construction. Further research would be valuable to verify and test our results. We also acknowledge that CSR is a socially constructed concept, having a variety of meanings across different occupational and national contexts. Approaches to CSR like any issue, take place within a specific institutional, relational and regulatory context which means that in other countries, an integrative framework might not accurately reflect approaches to CSR. So not only is further research needed to explore the link between CSR and business performance, but further research is also needed in other contexts to understand whether approaches to CSR differ in different contexts. For example, it may be the case that some countries or markets where clients have a strong CSR focus have progressed more towards "industry isomorphism", where it is simply unacceptable not to be engaging in CSR because it is accepted as an industry norm. It is also important to separate out those firms who do (and do not) acknowledge a link between CSR and economic performance in order to understand what impact this has on corporate strategy in this important and emerging area. Finally, given the socially constructed nature of CSR, it would be interesting to undertake interviews with respondents to explore the reasons behind the relationships discovered in this research. There is also a need to explore why the construction industry continues to be so reluctant to embrace CSR.

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