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Breaking down the site hoardings: attitudes and approaches to community consultation during construction

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As the general public become more empowered, informed and educated about the impact of business activities on their lives, they are demanding more involvement in construction projects which they perceive to affect their interests. The process of community consultation is traditionally seen as the responsibility of urban planners but residual community concerns often spill over into construction requiring construction professionals to also consult with communities. To investigate current attitudes and approaches towards community consultation during construction, 150 construction professionals were surveyed and 10 interviewed. The results indicate that the majority of the professionals involved during construction consider community consultation a burdensome, costly and time-consuming exercise. The community is seen as a liability rather than an asset and few construction professionals have the skills to consult effectively. There appears to be a widespread assumption that community consultation is the responsibility of town planners before work starts on site and that further interaction with the community is a nuisance, once construction starts.

Keywords: Community, consultation, corporate social responsibility, project management, risk.

Introduction

Beck's (1992) prediction of an increasingly paranoid society obsessed by risk was prophetic. As Barnes (2002) pointed out in his postmodernist critique of society's changing attitudes towards risk and the organizations and institutions that seek to manage it, members of the public have never been more educated, informed and empowered and more willing to protest against the impact of governmental and industrial activities that they perceive to have a detrimental impact on their lives. The construction industry is significantly affected by this profound change in societal attitudes towards authority because its activities cause significant and sometimes irreversible impacts on the ecological, social, cultural, economic and political environment in which they are carried out. As Teo (2009) noted in her pioneering ethnographic investigation into community protest against construction projects, direct impacts include the use of land, raw materials and energy which leads to potential destruction of the environment, greenhouse gas emissions and the production of other wastes which can affect society's health and well-being. Indirect impacts include the urban form's effect on human health and well-being, congestion from denser populations and the knock-on effects of transport infrastructure needed to connect new communities with precincts, towns and cities. Given this broad range of potential impacts and the increasing empowerment of communities, professionals involved with construction projects not only need to effectively manage the many risks associated with development activity, but they also need to be seen to be doing so in the public's eye. As Awakul and Ogunlana (2002) showed in their case study of the Pak Mun Dam project in Thailand, when communities perceive that construction project managers do not care about their concerns then potentially damaging conflicts will likely arise.

The impacts of construction activity can be both positive and negative. As Hansford (2013) pointed out, at its best construction can have a transformative impact on local communities, regional economies and even national prosperity. The London Olympics'

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transformation of London's East End and the Guggenheim Museum's role in revitalizing Bilbao in Spain are just two of many examples of how building projects can create a new sense of regeneration, identity and pride in disadvantaged communities. But there are also negative impacts which need to be managed. For example, Spillane *et al.* (2013) highlighted many impacts on 'local' communities such as noise, dust, traffic disruption and effects on local businesses. Teo's (2009) research highlighted much wider 'ripple effects' on regional, national and even international communities including impacts on eco-environments, social cohesion, cultural heritage, indigenous land rights and people's spiritual connections with the land. Teo's (2009) and Spillane *et al.*'s (2013) research efforts are starting to provide empirical evidence that the cost, time and reputational implications of ignoring and mismanaging community concerns can be significant not only for the firms and individuals involved but also for affected communities, which can become bitterly divided in both opposition and support for construction activity.

Numerous researchers have recognized the importance of stakeholder management in the efficient delivery of construction projects. Typical of this work is Ward and Chapman's (2008) framework for managing stakeholder expectations and fostering trust between stakeholders and Yang *et al.*'s (2011) typology of practical approaches towards stakeholder management for practitioners in construction. However, few researchers have explicitly singled out the community as a stakeholder to be better understood, typically bundling all stakeholders into a single cohesive group. In reality however, communities are much more complex than this. While some researchers like Tam and Tong (2011) have used stakeholder management as a framework to understand the process of public engagement in urban planning and infrastructure project impact assessments no one has explored the attitudes of professionals involved in the construction phase of projects towards the complex and dynamic communities in which they build and the current methods and frameworks used to manage community concerns. This question is an important but missing starting point for any discussion about effective community consultation and the importance of this work has been recognized not only by Teo and Loosemore (2011) but also by Glass and Simmonds (2007) who found that further research is required to gain a better understanding of the skills required of a project team to conduct a successful community consultation process. Glass and Simmonds' (2007) research suggests that these skills are lacking and their findings align with those of Winch *et al.* (2007) who argue that public involvement needs to be seen as a vehicle to increase project success and not a hurdle to be overcome to reach project completion. Community consultation is an issue which is becoming increasingly important. For example, in countries such as the UK initiatives such as the Considerate Constructors Scheme have highlighted the benefits and need for more effective community consultation (Glass and Simmonds, 2007; Murray *et al.*, 2011) and recent laws like the Public Services (Social Value) Act 2012 have placed, for the first time, a duty on the clients of publically funded projects to consult communities in considering how projects might improve the economic, social and environmental well-being of the community.

The meaning of community

A 'community' refers to a social unit that shares common values and interests and whose members normally live in close proximity (Barzilai, 2003; Parsons, 2008). From a sociological perspective, communities are fluid entities comprising groups of people united by at least one common characteristic such as geography, shared interests, values, experiences, or traditions (Thompson *et al.*, 1990). Conceptually, communities may be viewed as systems and sub-systems of individuals who represent specialized functions, activities, or interests within the overall community system. Healthy communities have well-integrated, interdependent sub-systems that share responsibility to resolve problems and enhance the well-being of the community as a whole. From the perspective of a construction project, 'community' refers to the people who perceive their interests to be affected by that project, although the concept of a construction project community has not yet been conceptualized and explored rigorously (Moodley, 1999; Loosemore *et al.*, 2005). While Atkinson and Cope's (1997) analysis of community participation and activism in urban regeneration projects showed that communities cannot be treated as a single homogeneous, easily identifiable group, Teo's (2009) research showed that in reality, communities affected by construction projects are far more transitionary, multi-layered, dynamic and complex than first thought. Teo (2009) showed that they often organize themselves in ways which make them very difficult to identify and argued that it is far better to see the term 'community' as an umbrella term representing a multitude of overlapping, competing and often conflicting interest groups which shift over the life of a project, through planning, design, construction and operation.

Community consultation encompasses the processes used by authorities and business organizations to hear community concerns and aspirations, seek feedback from members of the community about proposed plans, educate them to understand the issues at hand and inform them about decisions that are made (Holst, 2002). Given the breadth of issues raised by a construction project and the complexity of potential communities affected, the task of consultation can be overwhelming within the resource constraints facing a particular project. If every stakeholder were consulted individually then many projects would simply be unviable and never go ahead. For this reason, McManus (2002) and Bourne and Walker (2003) argue that firms must balance the costs and benefits of consulting and undertake a stakeholder analysis to separate out 'key stakeholders' most impacted by a project. Normally, the most intensive stakeholder consultation processes are reserved for this most important group. However, the problem with the 'rational' approach is that traditionally disempowered communities, such as indigenous and minority groups are often excluded. Therefore, to increase their bargaining power, these groups often pool their resources, knowledge and skills to engage in 'collective action' a process which normally forms the basis of community-based protest (Rubin and Rubin, 2008).

Community consultation in construction

Traditionally, debates around community consultation have been the domain of urban planners who have developed detailed principles and techniques to interact with communities during the early, preconstruction phases of a construction project (Carson and Gelber, 2001). In practice, this process starts when a developer lodges a development application which then requires a local planning authority to notify and seek feedback from a community about the proposal and liaise with the developer about any changes that may need to be made. Typically this is done in two stages: pre-consultation and full consultation. Pre-consultation is used to inform and pre-warn the community about the full consultation process. This may include a letterbox drop using a leaflet that summarizes issues and invites feedback, newsletters carrying articles about a project or advertisements in local newspapers and media releases and interviews with local journalists. After pre-consultation, full consultation traditionally involves attendance at community events, dedicated community forums and public meetings, surveys, focus groups and workshops, steering and advisory committees, community exhibitions, newspaper articles and advertisements and exhibitions of models and displays (virtual and physical). Contemporary techniques involve interactive websites, social media, information kiosks, charettes, community cultural development initiatives, e-consultation, citizen panels, search conferences, scenarios and hypotheticals, multimedia displays, deliberative polling and tele-voting (Troast, 2011). These methods are not generally used as stand-alone options, but form part of a broader consultation strategy which should take account of the size of the project, the skills, capabilities and needs of the proponents and communities and the time and resources available.

Normally, once all issues raised by the community have been satisfactorily resolved by urban planners, the project will proceed to the construction stage. Typically, once the project proceeds to this stage the community has less input into the project. However, as Moodley (1999), Preece *et al.* (1998) and Chinyio and Olomolaiye (2010) point out, residual community concerns often 'spill over' into construction and new concerns might arise as the physical impact of a development becomes evident. These researchers have shown that while on rare occasions (mostly on landmark projects), 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 with such situations. While recent increased engagement with corporate social responsibility (CSR) within the construction industry might have been expected to foster closer links with communities, Loosemore and Phua (2011) found a considerable gap between the rhetoric and reality of CSR, particularly in the area of social responsibility, where community engagement would lie. While the International Organization for Standardization has produced a CSR standard to help address this problem (ISO 26000), the guidelines are vague and provide minimal information on community consultation processes (International Organization for Standardization, 2010). Other CSR frameworks such as the Global Reporting Initiative (GRI) and AA1000 (AccountAbility, 2008) are also light on community consultation although one of AA1000's main objectives is to ensure people have a say in the decisions that affect them. However, these are voluntary initiatives as are initiatives like the UK's Considerate Constructors Scheme. Therefore, the process of community consultation is often restricted to small pockets of the industry and can be disregarded and left to the discretion of individual companies. As Jones *et al.*'s (2006) study of the UK's most prominent construction companies found, there is a huge variation in CSR standards and most see CSR as a compliance or charitable activity rather than in any strategic capacity. Many of the companies in Jones *et al.*'s (2006) sample were members of the UK's voluntary Considerate Constructors Scheme which promotes greater community engagement.

At an operational level, the process of community consultation falls within the project manager's responsibilities. However, in the Project Management Body of Knowledge (PMBOK, 2013) the community is virtually ignored and as Raidén *et al.* (2006) point out, for most large companies, the process is contracted out to a specialist consultant, as if it were similar to letting any other trade. Cleland and Ireland (2007) argue that this allows someone with specialist skills to focus on community relationships but as Winch *et al.* (2007) argue, this can be a costly exercise and often portrays to the public a lack of care by the company that is outsourcing its responsibility to the community. However, the many small companies that dominate construction cannot afford the luxury of a community relations manager. Therefore, on most projects, by default the community consultation falls back on to the shoulders of a project manager. For this reason, Glass and Simmonds (2007) recognized that there is a need to develop better project management skills in this area.

Theories of community consultation

The foundational theories of community consultation go back more than 50 years and have diverse origins enabling researchers, policy makers and business managers to understand the ways in which communities are best engaged to address public concerns, particularly around issues such as health. *Social ecological theories* seek to describe the concept of community as a dynamic interplay between individuals, groups, and their social and physical environments. Community interactions informed by this perspective are directed largely at social factors, such as community norms and suggest that community engagement efforts need to be focused at multiple levels (Goodman *et al.*, 1996). The literature on *cultural influences* suggests that cultural sensitivity is essential to ensure that programmes are developed in ways that are consistent with a people's and community's cultural framework (Airhihenbuwa, 1995). Broader theories around *community participation* suggest that mobilizing the entire community, rather than engaging people or organizations on an individual basis, leads to more effective results (Braithwaite *et al.*, 1994), whereas the *community empowerment* literature suggests that a critical element of community engagement relates to empowerment, providing communities with the tools and authority to enable them to make effective decisions on critical issues (Fawcett *et al.*, 1995). In a similar vein, the literature on *community capacity building* also asserts that before communities can become effective partners in community decision making and action, they may need additional and specialist resources, knowledge, and skills (Fawcett *et al.*, 1995). However, communities are not always willing to participate in community consultation efforts and *social exchange theories* have helped to explain why this may be so. This literature describes organizations as being involved in an 'exchange system' where a social exchange between a community and authority will only take place when the benefits of doing so exceed the costs (Wandersman *et al.*, 1987). Finally, the community organization literature seeks to bring all of this together by offering a path to engagement through a process by which community groups are helped to identify common problems or goals, become empowered and competent to interact with authorities, to mobilize resources, and to develop and implement strategies for reaching their common goals (Minkler, 1990). More recently, contemporary theories of community engagement are grounded in principles of community organization, fairness, justice, empowerment, participation and self-determination (Wallerstein and Duran, 2006).

Numerous models have emerged out of the above theories to conceptualize the community consultation process. For example, Arnstein (1969) developed 'a ladder of citizen participation' (Figure 1) to show how different consultation approaches affect and are affected by balances of power between society and authorities.

On the bottom rungs of Arnstein's eight-step ladder are manipulation and therapy (non-participation) which are aimed more at educating or 'curing' stakeholder concerns rather than involving stakeholders in a decision. Barnes (2002) argues that this approach is

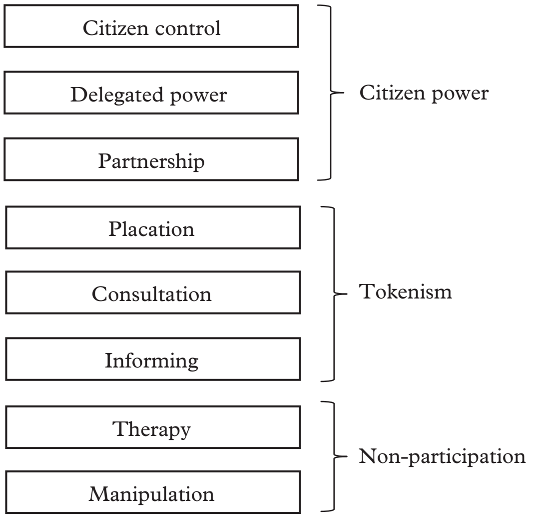

Figure 1 Arnstein's ladder of citizen participation (Arnstein, 1969)

underpinned by a belief that communities are irrational, uneducated and misinformed and cognitively unable to make reliable decisions about the impacts of government policy and business on their lives. The next three rungs on Arnstein's ladder are informing, consultation and placation (tokenism) where the community is given a 'voice' in decision making but lacks the authority to ensure its views will be acted upon by those in authority. Barnes (2002) argues that the underlying assumption here is that experts know best and that the subjective perceptions of risk and opportunity held by communities are inferior to scientific facts and figures. In contrast, in the uppermost steps of Arnstein's ladder, partnerships, delegated power and citizen control provide communities with a real opportunity to provide input into decision-making processes. Barnes (2002) argues that here community perceptions of risk are seen as critically important, regardless of whether they align or not with expert assessments. As Teo and Loosemore (2011) point out, these approaches align with contemporary approaches to community 'engagement' which have moved on from traditional notions of 'consultation'. Ontologically, there is a recognition that perceptions of risk and opportunity associated with development are socially constructed and that community perceptions of risk and opportunity are as legitimate as expert facts and figures. Epistemologically, as Brewer (2013) shows, at this level community participation involves a process of collective social learning between multiple stakeholders who are given appropriate knowledge, power and institutional support to contribute meaningfully within a conducive policy and regulatory environment.

Like all categorizations, Arnstein's model has been criticized. In particular, Tritter and McCallum's (2006) forceful critique asserts that the model is too inflexible and that in reality, community participation is not as hierarchical and linear as Arnstein's ladder suggests. Also, the ultimate goal of participation as being citizen empowerment does not always align with the motives of communities for engaging. Indeed, while the ideal of citizen empowerment is implied, there is little discussion of how that power is best exercised or recognition that different types of problems and stakeholders and situations need different levels of empowerment and types of participation and that this can change during the participatory process itself. Furthermore, one cannot assume that power is a zero-sum game (where communities seize power and authorities cede it) when in reality, power can be gained by one party without the disempowerment of another.

While other 'ladder' models have been produced to address these concerns such as Burns *et al.*'s (1994) 'ladder of citizen power' and Wilcox's (1999) 'ladder of participation', Tritter and McCallum (2006) acknowledge that Arnstein's ladder of citizen participation remains the touchstone for those involved in community consultation, particularly those involved in large infrastructure projects. Furthermore, as Graham (2010) points out, the issue of power remains central to the debate around community consultation where many see community consultation as the engagement of an enemy which too often erupts into a war between expert project proponents and emotionally charged communities. In these situations, the intended social inclusion becomes an adversarial engagement leading to community protest, anti-action and sometimes the mobilization of extremist groups. Certainly, Teo's (2009) study of Australia's longest running community protest against a construction project supports this contention.

Method

Recognizing above that attitudes towards communities are likely to be socially constructed in the minds of those construction professionals who have to interact with communities, this research employed an interpretivist ontology. Ontologically, interpretivism holds that social reality is the result of interactions between different actors in real social contexts (in our case construction professionals and communities who are stakeholders in a construction project). According to Burrell and Morgan (1979) interpretivists assume that the social world is a subjective construction of individual human beings who, through their everyday interactions create and sustain an intersubjectively shared meaning of that world. It then follows that the experiences of actors in any social context are socially constructed rather than a physical perception of the 'real' material world. Epistemologically, interpretivism is anti-positivist in nature and necessitates an approach which recognizes that this research cannot be conducted in a laboratory environment but has to be carried out in interaction with respondents in an organizational context. To avoid accusations of relativism (if what is regarded as true is only relative to a particular social formation, then research results can only regarded as being true in this social context), we employed both qualitative and quantitative methods (Creswell, 2004). Quantitative data were collected via an electronic survey of 222 leading construction and architecture firms in the UK, Australia and New Zealand. The population for the survey comprised site managers, project managers, architects, engineers and any construction professional involved during the construction stage of projects whose role involved interacting with the community. Using a non-stratified random sampling approach we wrote to 222 of the largest construction companies and architecture practices (by turnover) in the UK, Australia and New Zealand asking them to forward the survey to relevant people in their business. Of the 222 firms contacted to participate in the study 150 questionnaires were fully completed, a good response rate of 68%. The sample structure of respondents is shown in Table 1 providing us with a statistically representative cross-section of respondents from across leading firms within the industry.

A survey was chosen due to its ability to capture a large spread of respondents across a geographically dispersed area. We were not interested in the skills and attitudes of one particular profession (although this could be a topic for future research) but wanted to examine more broadly the general attitude towards communities of a cross-section of professions who have to interface with them. The use of an electronic survey made the process of distribution significantly more efficient and cost effective than a survey conducted through post or personally distributed. The questions and variables for the survey were derived from the relevant literature as reviewed above and explored: the community consultation experience of the respondents (whether it was positive or negative and whether they saw it as their responsibility or someone else's; see Raidén *et al.*, 2006); their attitudes towards community consultation (whether it sees it as an asset or a liability; see Barnes, 2002); what skills are required to communicate effectively with communities (PMBOK, 2013); and their current approaches in doing so (as defined by Arnstein's (1969) ladder of community participation). The structure of the survey predominantly targeted gathering quantitative data with a smaller portion of the questions aimed at gaining qualitative data through written responses. The quantitative data were collected using a mixture of ordinal and nominal scales. Ordinal data were collected via a five-point Likert scale with each point relating to a different circumstance such as 5 being 'strongly agree' and 1 being 'strongly disagree'. The five-point scale was seen as the most beneficial scale as it allowed the recipient to provide an answer that was seen as non-judgemental. It is possible to argue that a five-point scale cannot be relied upon to produce mean values of results, as they don't show any significance in relation to the rest of the data. However, as the Likert scale related to qualitative data such as 'strongly agree' it was deemed more appropriate to use a five-point scale. It is also believed that any Likert scales with a high level point scale above 7 can confuse and often reduce the number of participants in the sample as it is considered more time consuming than a smaller Likert scale. Quantitative data were analysed for relationships between the variables using cross-tabulations and Spearman's and Pearson's correlation tests. The Pearson test was used to analyse our interval scale questions, and was used on true values and to depict linear relationships. The Spearman test was more appropriate for measurements taken from our ordinal scales, was computed on ranks and was used to depict monotonic relationships within our data.

Table 1 Sample structure

Respondent	Respondent number	%
Project manager	54	37
Site manager	34	25
Architect	23	23
Other (directors, operations managers, sustainability managers, engineers)	39	15
Total	150	100

In line with our interpretivist ontology, we sought to explain the insights from our survey in a second round of data collection which involved structured interviews with 10 site managers who volunteered during the survey to be interviewed. We chose site managers because they emerged in our research as the group with the greatest exposure to community concerns. The interview questions were based on the results of the first stage quantitative analysis and sought to derive qualitative explanations from our respondents. Respondents were presented with the findings and asked to explain them. This is an example of how the questions were asked: 'Based on findings discovered between two survey questions analysed it was found that when the community is given more say and "influence" on a project the relationship between the community and construction professionals is improved. Why do you think this is the case?'

Other key questions to emerge from the stage one survey analysis included:

- Why site managers encountered community protest the most?
- Why construction professionals believe the community is more of a hindrance than a benefit during construction?
- Why town planners and project managers were considered the best construction professionals to deal with community consultation?
- Why only 7% had undertaken formal training in community consultation? and
- What are the benefits and risks to having the community involved in your projects?

We acknowledge that like any sampling method, this process of sampling by self-selection has some limitations, most notably a possible tendency for certain 'types' of respondents to volunteer. However, in this case there were more volunteers than were needed and to overcome this potential problem a second round of random sampling was undertaken by the research team to minimize bias in the identification of suitable respondents. Site managers were selected for interview because they emerged from the analysis of the stage one survey data (see stage one results below) as the most exposed professional group in our sample to community concerns and because the site, as the domain of responsibility, represented the front line in interacting with the community. Furthermore, despite being the closest to the community, they emerged as the most sceptical of our respondents in these interactions (see stage one results below). We acknowledge the limitations in selecting one group for interview and suggest that in future research, other professional groups are also interviewed.

Discussion of results

The survey

The majority of respondents had at some point dealt with a community protest (67% yes, 33% no). A cross-tabulation between those that responded 'Yes' and respondent category showed that most respondents had experienced community protest but that site managers were most likely to do so (site managers 79%, architects 65%, project managers 59%, other 65%).

The mean level of influence that respondents believed the community had over their decisions during the construction period was 2.97 on a scale of 1 to 5 (1 being no influence and 5 being high influence). With a standard deviation of 1.01, showing that 95% of the responses for this question fell relatively close to the produced mean overall our sample thought that the community had 'some influence' on the decisions of construction stage professionals. A cross-tabulation was also carried out for this question in relation to the roles of construction professionals and what each believed the influence was (see Figure 2). The results show that it is the site managers who bring the mean score down and uniquely believe that communities have relatively little impact on their decisions. Interestingly, site managers are also the group that has the largest experience of community interaction.

When our respondents were asked how positive their community consultation experiences had been on a scale of 1 to 5 (1 being extremely negative: lowest, and 5 being highest), the mean result was 3.14. A standard deviation of 0.97 also shows that responses were quite similar and thus all tended to have a relationship with the community close to that of the mean.

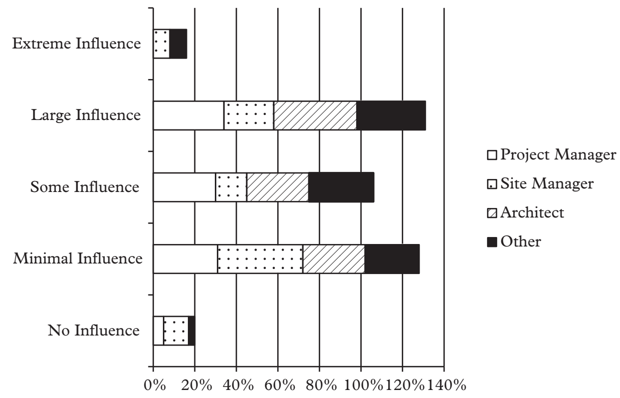

Figure 2 Relationship between role undertaken and the influence communities have on a project during construction

Cross-tabulation in Figure 3 shows quite distinct differences in the experiences of the sample, with project managers and site managers having markedly worse experiences.

Table 2 shows the Pearson parametric test results for correlation between the influence a community has on a project and the positivity of the relationship with the community. If there is a perfectly positive linear relationship then the value is +1 while if the relationship is a perfectly negative linear relationship the value is –1.

Significantly, Table 2 shows a positive linear relationship between the community influence and the positivity of this relationship (Pearson's correlation: 0.244, Sig. P = 0.003). This indicates that when the community is given a stronger voice on a project the relationship between the community and construction professionals improves.

Figure 4 shows the relationship between those who 'had' and 'had not' experienced protest and perception of community involvement. Interestingly, this shows

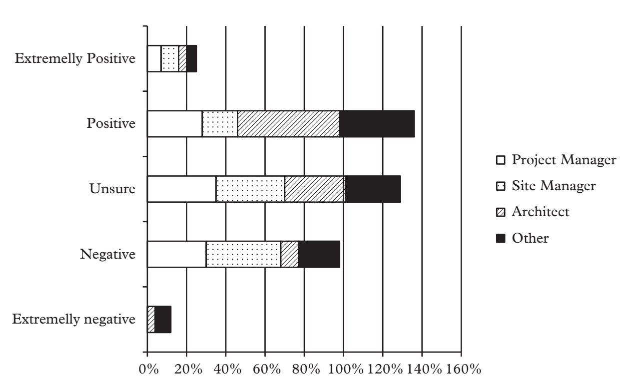

Figure 3 Experiences of community consultation by role

Table 2 Extent of influence v experience of consultation

		Extent of influence	Experience of consultation
Extent of influence	Pearson correlation	1	–
	Sig. (2-tailed)	–	0.003
	N	150	150
Experience of influence	Pearson correlation	0.244**	1
	Sig. (2-tailed)	–	–
	N	150	150

Note: **Correlation is significant at the 0.01 level (2-tailed).

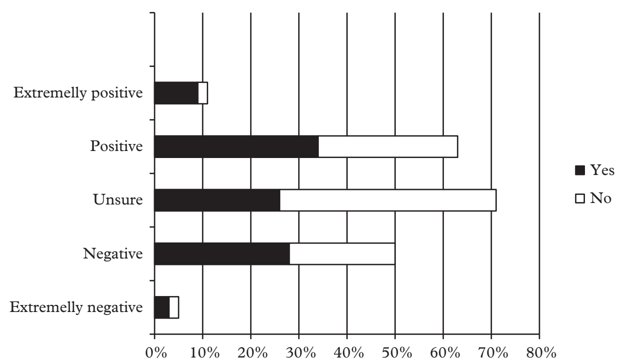

Figure 4 Relationship between those who had encountered community protest and their attitudes towards the community

that those respondents who had experienced protest had a more positive view of communities than those who had not experienced protest. It suggests that negative community perceptions by construction professionals are in part born out of ignorance and preconceived ideas of how communities behave.

The most common method of communication with the community during construction was as follows:

- Notice boards: 61%
- Newsletter/Bulletin: 46%
- Community meetings: 50%
- Websites: 25%
- Social media: 8%
- Other: 19%

Those who selected 'other' stated that it was common to operate in door-knocking schemes as a means of communication as well as letterbox drops. It was also interesting to find that larger projects often used a community hotline to keep the community up to date with information and to enable them to speak directly to individuals working on site. In one instance, a respondent said that community radio was also used as a method of communication.

Using the Arnstein (1969) model of community participation respondents were asked about their main motives behind community consultation. The results are shown below and indicate that the majority of the respondents fell into the 'tokenism' level of community participation.

- To comply with regulations: 61%
- To develop a partnership with the community: 29%
- To accommodate community demands: 40%
- To provide a platform for dialogue with the community: 30%
- To pacify the community: 31%
- To instruct the community: 15%
- To empower the community: 14%
- To control the community: 8%
- To manipulate the community: 3%
- To delegate power to the community: 3%
- Other: 11%

When our respondents were asked whether they thought the community should be consulted about decisions they made during construction, 51% said 'yes', 19% said 'no' and 30% said 'sometimes'. Of the respondents who said 'sometimes' the majority stated that communities should only be consulted if the construction decision is likely to impact on them directly or change the current way of living of the surrounding community. It was evident that this was best left to their judgement rather than the community's. Other qualifications to community consultation included 'only when it is a publicly funded project' and 'only where law requires it'.

Figure 5 breaks up these responses by role and shows that architects tend to be more open to community influence than those who are traditionally involved with construction activities on site.

Respondents were asked to agree or disagree with the statement 'The community should only have a say in the town planning phase and should not need to be consulted during the construction stage of projects.' The majority of the respondents believed that the

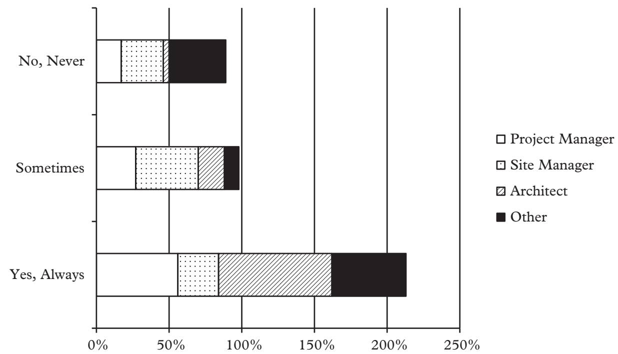

Figure 5 Attitudes towards community consultation by role

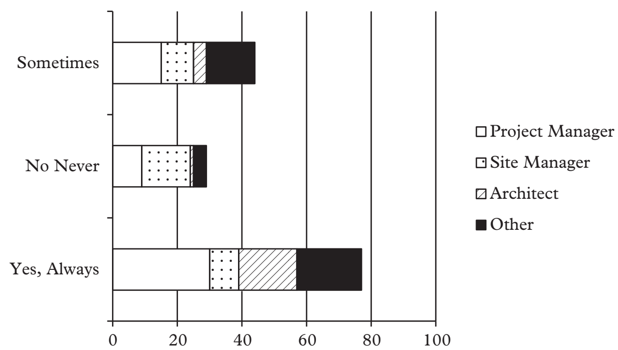

Figure 6 Role v attitude towards community involvement during construction

community's voice should cease when construction starts on site (M = 3.07). However, the standard deviation for this set of data was 1.329 showing a substantial spread in responses for this particular question. Figure 6 shows that it was the architects who deviated from the other respondents in their view. Excluding architects from the sample results in a far stronger opinion that community consultation should stop at the planning stage.

Finally, when our respondents were asked if they had received any formal training in how to consult with communities, 7% said 'yes', 33% said 'some' and 60% said 'none'. Project and site managers were most strongly represented in the 'no' category.

Interviews

The interview questions as described above were based on the key findings of the survey and were used to explore key issues (described below) in more detail. In presenting our results we have decided to present the narrative of the discussions rather than reduce the data to quantitative counts of variables via content analysis. There are two reasons for this. First, we did not seek to test the relationship between any independent and dependent variables. We simply wanted the respondents to tell us about their experiences of interacting with communities. Second, we wanted the results to retain the full richness of insight contained in the narratives we collected from our respondents. As Meisel and Karlawish (2011, p. 2023) note, the power of narrative is in translating respondent accounts into data that people can comprehend. Clearly, it is not possible in this paper to recount everything that was said. So presented below are the main points which were issues of agreement across all the interviews in relation to each question asked.

Why site managers encountered community protest the most?

For most of the interviewees it came as 'no surprise' that site managers encountered community protests the most. Site managers were seen to be on 'the front line' between the community and a project and more open to approach: 'I think it's more the fact they work from site they are always open to people coming in.' Another reason put forward was that community interaction was typically seen as a sign of problems on site and that site managers would be reluctant to pass issues up the chain of command for fear of being blamed for those problems: 'If the site manager was at fault then they're not going to tell the office based staff that they were doing their job poorly.'

Why greater community involvement in a project improved the relationship between the community and construction professionals?

The majority of the respondents believed that community relationships depend crucially on the supply of information to, and the amount of contact with, the community: 'Keeping them in the loop keeps them a lot happier.' 'Like any relationship it should improve the more contact there is.' However, some respondents (a minority) believed that if the community is provided extended input into the project it may be detrimental to the project's success. 'There is no point giving them a say if it's going to be ill informed or if it's a flippant comment rather than constructive feedback. … I mean you give them an inch they take a mile sort of thing.'

Why construction professionals believe the community is more of a hindrance than a benefit during construction?

Many of the respondents pointed to time and cost pressures as a barrier to community consultation. 'Due to time restraints … if the community was to be removed from the project altogether, I mean construction professionals would find the task a lot easier as it's one less stakeholder to deal with.' 'We work big hours and the last thing we want to do is further our days by having to consult with the communities about our projects.'

Why town planners and project managers were considered the best construction professionals to deal with community consultation?

Most of the respondents saw a separation of responsibility for project delivery and community consultation: 'I think that the actual process should be left to the town planners only because it is their role during planning and there is no point passing these issues on to the project team if it's just going to be more of a burden on the project team.' 'I don't see the point in having to change the professional required to undertake consultation between planning and construction when it is the planner's job anyway.' 'I think every construction professional working on the project should have a degree of responsibility. If it relates directly to the effects of construction then the construction and production teams should deal with it. Whilst if it relates to issues that having nothing to do with construction then others should deal with it like architects or private certifiers.'

Why only 7% had undertaken formal training in community consultation?

Many respondents saw formal training as unnecessary: 'I believe it's because it's relatively unnecessary to have formal training in community consultation. … I reckon that general communication skills are all that is required to deal with the community.' 'I can't even imagine what they'd teach in formal community consultation training.'

Others pointed to the general lack of tertiary education in the construction industry. 'A lot of people come into construction from a non-tertiary background and I think that's where you're ever going to undertake community consultation training.' 'A lot of project managers come off the tools and I suppose come from different paths and just aren't offered training.'

Others argued that community consultation can only be learnt through experience on the job: 'I think that number will increase as I personally believe that it comes with experience like most skills acquired by a project manager.' 'I've gained 95% of my knowledge through on the job experiences and I think that's the same with consultation.'

What are the benefits and risks to having the community involved in your projects?

Most respondents found it difficult to identify any benefits of community consultation: 'They do take up a lot of time and it can be a very costly exercise.' 'The risk in having the community involved is in fact greater costs to manage them and possibility of delays'. 'There aren't many benefits.' 'I can't really see many benefits in dealing with the community during construction. I think they are more a burden as a stakeholder than a benefit.' 'Like I said during the hindrance and benefit question, I think they're more of a hindrance so I can't say there are too many benefits.'

Although the perceived risks greatly outweighed the benefits, some benefits included: 'They know the local area and they know what's best for them and especially if it's a publicly funded project.' 'When you've got the community involved in your project at least it feels as if you're giving back to the community in a way and it feels like they're involved in the process especially when it comes to completing later projects with the community. If they know that your company is quite good with consultation then they're going to be more willing on future projects.'

Conclusion

The aim of this paper was to explore the attitudes of professionals involved in the construction phase of projects towards the communities in which they build and current methods and frameworks used to manage community concerns. The results of our survey and interviews show that experience of community angst against projects was very common, especially for 'front-line' managers who work on site and interface with the community every day. While communities are not 'cut off' from sites once the site hoardings are erected, it would seem that there is very little openness to consultation. There is an assumption that community concerns have been resolved before work starts on site and that consultation is no longer required unless there are serious concerns brought forward by the community. Community consultation tends to be more reactive than proactive. There is also a belief that community consultation during construction is a burdensome and arduous process that is time consuming and costly. There is a perceived and distinct delineation of responsibility for delivery and consultation and when work starts on site, the focus should be on delivery with minimal 'interference' from the community. For most of our respondents the risks of community consultation greatly outweighed the benefits, although the greater the contact between the community and project, the more positive this relationship became, a potentially important finding in bringing about changes in attitudes within this professional cohort. However, changing attitudes is likely to be difficult since the vast majority of construction professionals are ill-equipped to manage community concerns, lack training in the process of community consultation and do not see the point of being trained in this area. Furthermore, where community consultation does occur, the results are rarely acted on and the process is considered more of a token obligation than an opportunity to develop a partnership and work side by side with the community.

Our findings tend to support Teo's (2009) assertion that the underlying ontological foundation of construction professionals is rationalist rather than constructivist. In other words, there is a belief that experts know best. Our work also supports Barnes' (2002) postmodernist critique of business decision makers and policy which argued that the idea of legitimately differing realities beyond objective facts and figures would be difficult for most of our respondents to accept. Epistemologically therefore, the tendency would be for our construction professionals to impose their own perceptions of risk and opportunity on the communities in which they build and to discount community perceptions as something to be placated rather than taken seriously and meaningfully considered. Most of our respondents would disagree with O'Hearn's (2002, p. 3) contention that the process of community consultation is a 'non-negotiable' process and would also struggle with Winch *et al.*'s (2007) and Holst's (2002) contention that public involvement is a vehicle to increase project success and an opportunity to produce a better project outcome. Bourne and Walker's (2003, p. 655) research, which found that project managers need to be more 'analytical and intuitive' in identifying community expectations and needs, would also be a problem for most of our respondents. The vast majority would strongly disagree with their finding that project managers need to be better equipped to engage 'with the hidden reservoirs of power that are exercised by project stakeholders in the interaction between individuals in their social environment'. Interestingly, if forced to accept that community consultation should not stop at the site gate, most respondents would also disagree with Raidén *et al.*'s (2006) and Cleland and Ireland's (2007) contention that the process is too in-depth to be managed by an individual project manager and that it should be contracted out to a specialist. While this might be the case on larger projects, our research indicates that this assumption is born more out of ignorance of what is involved by our respondents rather than any informed understanding of the community consultation process which will have underpinned Raidén *et al.*'s (2006) and Cleland and Ireland's (2007) work. Almost all respondents thought that community consultation only required basic communication skills that every project manager should already possess. Finally, our research would support Glass and Simmonds' (2007) assertion that construction professionals appear to be significantly under-trained in the process of community consultation. However, a qualification to this is that receptivity to that training is low because of educational background and a perception that it is someone else's responsibility and should be resolved before work commences on site.

In conclusion, despite the above, most of our respondents considered that they had reasonably positive relationships with the communities in which they built. However, our findings contrast starkly with the sophistication of principles and approaches described by Carson and Gelber (2001) which exist in the planning community. Whether there is justification for similar development of community consultation expertise during construction phases is uncertain and needs to be explored by future research in this under-developed area of construction management research. However, given the changes in society discussed at the very start of this paper, which are likely to lead to more community action against projects in the future, there would seem to be considerable scope for improvement in construction professionals' attitudes and approaches to community consultation. These findings need to be acted upon by the educational community in designing and updating new courses for construction professionals but also by those in the industry who have to interact with the community. There is clearly a lot of skills development which needs to occur in this area.

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