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Operatives' experiences of cultural diversity on Australian construction sites

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Construction sites are among Australia's most culturally diverse workplaces. A survey of 1155 construction operatives on Australian construction sites investigated, for the first time, the extent of this diversity and how it is experienced by workers. Results show that while cultural diversity presents organizational challenges by segregating the workforce, operatives' cultural groups also perform positive functions such as maintaining positive bonds among group members and providing group support and safe havens. While there broadly appears to be equality of opportunity for all cultural groups, there is significant evidence of differential treatment for some groups, particularly in relation to accessing higher paying jobs, offensive graffiti and racist joke telling. Language barriers are one of the major challenges affecting work and social relations between different cultural groups and there is evidence that this has a detrimental impact upon safety.

Keywords: Diversity, culture, immigrants, safety, racism, discrimination.

Introduction

The construction industry is one of Australia's largest and most culturally diverse industries, directly employing about 9% of the working population (ABS, 2009). Since the construction industry also involves a relatively large proportion of unskilled and manual tasks, it has absorbed a relatively high proportion of immigrants into its workforce (Loosemore and Chau, 2002). Around 20% of all workers in the construction industry are overseas born and half of these are from non-English speaking counties (DIAC, 2009). While the current economic crisis will likely reduce immigration in the short term, in the long term migration will continue to be seen as a source of skilled labour supply for the construction sector in most countries. For example, in Australia, it is anticipated that labour demand will continue to increase at around the current rate (1%) for the next 20 years (DIAC, 2009) and that home-grown labour supply will be in decline as baby-boomers retire, participation rates plateau and growth in young workers falls. There have also been many years of under-investment in training and apprenticeships which will mean that future demand for skilled labour is unlikely to be met by domestic supply (Ball

and John, 2005; CPSISC, 2005). The potential contribution of immigrant workers to addressing this future labour shortfall in construction was recognized and made a priority by the Council of Australian Governments (COAG) in December 2005, by establishing a new three-year programme to address skills shortages which targeted immigrant workers from countries like India, Korea and Sri-Lanka (COAG, 2006).

On top of the short-term labour supply problems migration addresses, it is increasingly recognized that a culturally diverse workforce can be an asset in today's highly competitive and globalized business environment. A number of studies in Australia and overseas have demonstrated that effective use of diversity can have a positive effect on work productivity, problem-solving, creativity and innovation and ultimately competitive advantage (Cox and Blake, 1991; Hoecklin, 1994). Conversely, if not managed properly, ethnic diversity can have a negative impact on the efficiency and productivity of businesses from workplace conflict, low morale, high labour turnover, lower quality work, absenteeism, stress-related illnesses and a poor corporate image (Hay, 1996; Steele and Sodhi, 2006).

In recognition of the above trends and issues, some research has been undertaken into the management of

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cultural diversity in the construction sector in various countries such as UK, Middle East, Singapore and Australia (Ofori, 1994; Loosemore and Al Muslmani, 1999; Debrah and Ofori, 2001; Loosemore and Chau, 2002; Loosemore and Lee, 2002; Gale and Davidson, 2006; Dainty *et al.*, 2007). While this is useful, there has been no extensive and systematic attempt in Australia to map out the exact pattern of cultural diversity that exists in the construction sector and to understand the dynamics of intercultural interaction that exist. Such research is important since it represents the fundamental starting point in building a comprehensive and coherent strategy to effectively manage this growing challenge into the future. This research addressed that empirical deficiency and reflects on the positive and negative functions of cultural diversity on Australian construction sites and attitudes towards it.

Managing cultural diversity

The general thrust of most recent western scholarship on community relations, and workplace relations, has been to emphasize the benefits of diversity, and of cross-group interactions. Diversity can be a catalyst for dynamic workplace cultures and it provides linguistic resources. However, some recent international literature also suggests that there are certain aspects of cultural diversity that have negative social implications for societies and organizations. For example, some recent influential literature on community relations within diverse societies has concluded that circumstances of cultural diversity are associated with lesser levels of trust and civic participation, and it is argued that this is attributable to strong 'within group' associations and weaker across group links (Putnam, 2007; Cummins, 2008; Markus and Dharmalingham, 2008). Put another way, bonding social capital within ethnic groups operates at the cost (to some extent) of bridging capital between them. The argument is that members of new migrant groups, or ethnic minorities experiencing some level of distress, constrict (turtle) themselves. This 'turtling' allows them to secure the benefits of co-ethnic support and networking, and yet limits their exposure to the effort and risks of cross-cultural contact. While Putnam's work helps understand why this occurs, there is a general assumption that this 'turtling' does not advance the public good, and nor does it allow society to leverage the optimum benefits from diversity. Within organizational management literature there is a similar concern that in-group identification (whether that be ethnic-based, culturally based or even some other informal group units) detracts from corporate affiliation and the super-ordinate goals of the organization (Brickson, 2000; Gomez *et al.*, 2000; Hogg

and Terry, 2000). In conceptual terms the contrast between strong within-group affiliation versus cross-group affiliation can be traced to arguments revolving around the politics of identity versus the politics of difference (more appropriately referred to as diversity) (West, 1990; Young, 1990). These more abstract discussions of policy settings reflect changing paradigms of thought on the best means of empowerment, social inclusion and civic participation for minority groups. Our suspicion is that for minority ethnic groups working on Australian construction sites there is merit in both a politics of identity (in-group association) and diversity (enhanced levels of cross cultural interaction), and that there are both sectoral (construction industry) and societal (public good) benefits from both as well.

Dunn and other cross-cultural researchers have found that capturing the potential benefits of cultural diversity in the workforce is not automatic (Dunn and McDonald, 2001; Pedersen *et al.*, 2005). In Australia, diversity management is not a high priority for companies; more importantly the understanding and application of the concept is still framed in the narrow terms of equal employment opportunities (De Cieri and Kramar, 2003, pp. 248–9). Partly because of this lack of systematic approach to managing cultural diversity the construction industry has struggled to integrate different cultural groups into a harmonious and productive workplace, despite having a long history of employing immigrant workers (Shen *et al.*, 2009). For example, Loosemore and Chau (2002) found that 40% of Asian-Australian operatives had experienced workplace discrimination on construction sites. More recent research by Loosemore indicates that construction workers of non-English speaking background (NESB) are exposed to significantly greater safety risks than other workers and can expose other workers to higher safety risks because of their poor training and, inability to understand basic instructions and warning signs, etc. (Loosemore and Lee, 2002; Trajkovski and Loosemore, 2005; Loosemore and Andonakis, 2006). In addition, the Australian Bureau of Statistics (ABS) reveals that in 2005–2006 injuries to foreign-born workers accounted for 21% of all documented occupational injuries, the vast majority occurring in labour-related occupations where immigrant employment is strongest (ABS, 2006). If not managed effectively NESB immigrant workers therefore represent a significant risk to employers who have to comply with increasingly stringent safety regulations (Loosemore *et al.*, 2003). Given that the construction industry has an occupational injury and disease rate which is 240% times the all-industry average and a fatality rate which represents about 15% of all-industry workplace fatalities, this is a significant national problem (Lingard and Rowlinson,

2005; WorkCover, 2005). The total economic cost of work-related injuries and diseases of the construction industry is \$6.3 billion, representing 11% of total cost of work-related injuries and diseases in all industries for financial year 2005–2006 (Australian Safety and Compensation Council, 2009). It is estimated that workplace injuries and diseases associated with foreign workers have an incurred cost to the construction industry of \$41.6 million, resulting in about 8943 person-days lost work time and \$79 million in workplace compensation payments (WorkCover, 2005).

Another related problem with having different cultural groups on construction sites is that operatives tend to socially identify with those of similar cultural backgrounds, resulting in a workplace of clearly distinguishable cultural and linguistic territories, typically demarcated by occupational boundaries (Loosemore and Lee, 2002). For example, on major Australian construction sites Italian-Australians dominate concreting trades, Croatian-Australians specialize in carpentry trades, Korean-Australians are concentrated in tiling trades, and those of Southern Islander origin in scaffolding and the Irish in labouring, etc. At the same time, the too often under-examined Anglo presence tends to be concentrated within management, design and engineering professions. Loosemore and Lee (2002) found that these cultural and linguistic 'ghettos' present a significant and largely neglected organizational challenge, particularly in terms of managing communications and improving safety and productivity.

Method

Before progressing to describe the method, it is important to clarify some definitional issues. Cultural group, and cultural diversity, are the terms most often used by scholars in Australia because culture is a broader term that can encompass groups based around language, or religion, or national background. This paper follows that academic tradition. However, in everyday language in Australia the term 'ethnic' is used (often inaccurately) to describe all of the above groupings. Hence we used that term in the questionnaire surveys with operatives. One way to operationalize culture is by self-identification, but in Australia this tends to generate inconsistent categories, as some people self-identify by nation of birth (Australia, Fiji, Hong Kong, New Zealand, England), some by 'race' or ancestry (British, Indian, Chinese, Maori) and some by religion or language (Muslim, Hindi, Macedonian). Similar definitional issues have been uncovered in other countries, such as the United Kingdom (Commission for Racial Equality, 2007). We used language spoken, birthplace

and religious affiliation as our concrete indicators of cultural background.

This research used a questionnaire survey of site operatives to identify the extent and nature of cultural diversity on Australian construction sites, the boundaries of cultural groupings, and attitudes towards cultural groups and diversity. The specific aims of the research are as follows:

- Aim 1. To identify the extent of cultural diversity on Australian construction sites: What are the cultural compositions of Australian construction sites as measured using established indicators of ethnicity (birthplace, language, religion, indigeneity)?
- Aim 2. To identify the cultural groupings on Australian construction sites and their positive and negative functions: What are the perceived importance and functions of these cultural groupings? What positive and negative roles do they play? What are the spaces and mechanisms and processes of group formation?
- Aim 3. To analyse attitudes about cultural diversity, and towards other cultural groups, on Australian construction sites: What are workers' attitudes towards cultural difference within the workplace? What are the attitudes held by workers towards diversity in Australian society? To what extent are general attitudes regarding cultural diversity reflected in dispositions towards diversity on construction sites?
- Aim 4. To chart and assess the relations between cultural groups on Australian construction sites. Do groups have stronger relations with some groups, and less so with others? In what ways is 'cultural group density' related to cross-cultural contacts? What are examples of negative relations between cultural groups (those that generally worsen inter-communal relations)? What are the examples of positive relations between cultural groups (those that generally improve inter-communal relations)?

The survey was administered between May and December 2008. The questionnaires were distributed on 29 construction sites in the Sydney metropolitan area as well as in the offices of the Construction, Forestry, Mining and Energy Union (CFMEU). These sites were chosen because of the size and high cultural diversity of the workforce. They were also chosen because of high union representation which was important in securing trusted access to respondents (the Construction, Forestry, Energy and Mining Union were partners in this research). While it could be argued that restricting our sample to unionized sites could influence the results because workers are more protected, non-unionized

sites in Australia tend to be far less culturally diverse since they are typically regional and small in scale. Such sites would have been far less appropriate to our research aims as described above.

The survey was administered by hand during workers' breaks and/or other allocated times by site management under the supervision of the research team. The management advised that Korean and Chinese-Australians were the major groups which are not competent in reading English. Therefore the survey was translated into two languages (Korean and Mandarin).

The questionnaire took about 20 minutes to complete and participation in the survey was entirely voluntary. The questionnaire was administered by hand with the help of interpreters where needed. The survey consisted of seven sections including questions about the extent of interaction between workers of different cultural backgrounds, respondents' feelings about cultural diversity and other groups, experiences of intolerance and equality of treatment on construction sites. The questionnaire also gathered data on demographic indicators, as well as cultural indicators such as birthplace, language and religion. Most of the questions were close-ended with clearly identified categories. There were also a few open-ended questions about attitudes towards other cultural groups. During the survey sessions, respondents were also permitted to openly discuss the questions resulting in rich anecdotal data which provided further insights into the issues being investigated.

A total of 1233 questionnaires were collected (see Table 1 for sample structure). However 78 questionnaires were not included in the sample as they were returned incomplete resulting in a total valid sample of 1155. The data were analysed using SPSS 15.0 Software.

Discussion of results

Interaction between workers from different cultural backgrounds

The respondents were asked about the extent of their social and work-related interaction with co-workers from different ethnic groups. Eighty-five per cent of the respondents agreed that they talk with other ethnic groups during social situations and work-based activities, 15% said that they did not. Of those that do interact, 85% indicated that they talk with other ethnic groups at lunch time and 87% at site barbeques. However, field data suggest that this high level of social interaction may have some limitations. For example, lunch sheds allocated to each subcontractor (or sometimes allocated tables or lunch timeslots) drastically reduce the possibilities of social interaction on site. This is because each subcontractor (trade) splits

Table 1 Respondent demographics, Sydney construction sites, 2008

		Percent
Gender	M	100
	F	0
Age	under 18	1
	18–34	42
	35–54	47
	55–64	10
	65 & over	1
Education	No schooling	2
	Primary	7
	Secondary	83
	Bachelors degree	8
Birthplace	Postgraduate	1
	Australia	47
	Non-English speaking countries	40
	English speaking countries	13
Language other than English	Yes	57
	No	43
Religion	Christian	71
	Islam	6
	All other beliefs	3
	No religion	15
	Inadequately described	5
	Don't know	0

along explicit ethnic boundaries. Stage two of this research will investigate the management strategy behind this segregation but it would seem that while separate lunch sheds or times may avoid possible conflicts between workers of different cultural backgrounds, it is reasonable to assume that it makes interaction difficult and undermines the bridging capital to be gained from inter-cultural and inter-subcontractor communication. Speculatively, such separation also fails to engage with the root causes of any tensions and conflicts among different ethnic groups.

When we asked about the ethnicity of their friends, 50% of respondents said that most of their friends at work belong to their own ethnic group. Research internationally has found that social interaction among workers of the same cultural group draws heavily on common attributes among members (Phua, 2004a, 2004b; Phua and Rowlinson, 2004). So unsurprisingly, the majority of the respondents (76%) believe 'their own ethnic group understand them better'. For example, in response to the question about ethnic groups that they like working with the most, one Greek worker wrote: 'Greeks, because we understand each other and share the same culture' (Questionnaire #690).

Our field data suggest that cultural groupings can have both negative and positive functions. On the one hand these cultural groupings play a role in perpetuating the boundaries and stereotyping between different groups; potentially reducing inter-subcontractor communication on construction sites. For example, during discussions with the research team many workers raised their concerns about lack of social interaction among different ethnic groups and limits of cultural diversity. In the words of some workers:

Cultural diversity is good, but people still tend to only mix with their own kind. (Questionnaire #976)

Cultural diversity is good, but every group isolates itself. Chinese are with Chinese, Australians are with Australians. (Verbal comment, Field diary, November 2008, Large-scale residential project, Sydney)

The operatives characterize construction sites as lacking in sufficient development of bridging capital.

Cultural groupings have some positive functions, such as maintaining positive bonds among group members, group support and providing safe havens in conflict situations (Brewer, 1979; O'Reilly and Chatman, 1986). Operatives recognized the bonding capital that was accommodated through in-group preferences on construction sites. For example, 45% of respondents reported that members of their own ethnic group need to stick together to 'survive' on construction sites. This is supported by the following statement made by a Greek worker:

Greeks stick together definitely ... For example, we [referring to one of the Greek workers] don't talk too much, we're not close friends. But if something happens on the site, or something that concerns all of us, then we stick together, definitely. We support each other. (Verbal comment, Field diary, October 2008, Large-scale education project, Sydney)

In terms of cross-cultural interaction, almost 31% of respondents reported that they did not make an effort to mix outside their own cultural group. Making the effort to interact with others was more common among workers of non-English speaking background (NESB). While 38% of Australian-born respondents did not make an effort, only 20% of NESB respondents avoided cross-cultural interaction. Some of the respondents who were recent immigrants mentioned that they make an effort to interact with Australians to 'get more settled' and/or 'to improve their English skills'. There was also a widespread belief that lack of interaction among different cultural groups is normal in such a work environment where language barriers are strong.

While the majority of respondents reported a high level of social interaction across cultural groups this was mostly because they are compelled to have such social

interaction by the nature of construction work which requires different trades to interact. Our comparison of social and work-related interaction suggests that workers' cross-cultural contact is most frequent while on the job rather than at lunch or at site barbeques. The field data also support this finding. Many workers mentioned that diversity is a fact of life on construction sites and that interaction is more of a necessity than a choice. The vast majority of interaction occurs in the context of work-related activities rather than socially. Despite this negative picture, 64% of the respondents indicated that they would like to see more opportunities to mix with people from other ethnic groups while at work. The emerging picture is high levels of cross-cultural interaction, and a general desire for more opportunities for meaningful cross-cultural contacts. This confirms the importance of management strategies that can not only provide more opportunities for greater interaction among workers, but also motivate those who are reluctant to interact with workers of other cultural groups.

When asked about their perceptions of other groups, the majority of respondents were comfortable working with people of different ethnic groups (88%). However respondents' feelings about working with other ethnic groups are not totally constructive. A considerable percentage of respondents (32%) think that different ethnic groups should stay away from each other. Confrontations between some cultural groups on site and in the wider international and national community might be one reason for this perception. Also a 'macho culture', that is the dominance of masculine values, also seems to contribute to confrontations in the form of bullying and intimidation as suggested by an Anglo-Australian worker: 'Sites are like school yards. You should bully people if you don't want to be bullied' (verbal comment, Field diary, November 2008, Large-scale residential project, Sydney). Finally, it could be argued that a widespread perception about the negative impact of multicultural work groups on productivity hinders interaction among workers of different cultural backgrounds. Having said this, in general, levels of work-related cross-cultural interactions are high on construction sites. The vast majority of workers are comfortable with those circumstances of cultural diversity and think that it works well. However, they simultaneously perceive homogeneity to work well—if not better.

Linguistic diversity and communication difficulties

More than half of the respondents are able to speak a language other than English. Mandarin and Cantonese, Croatian, Portuguese, Spanish, Serbian, Arabic and Bosnian were the most commonly spoken languages other than English (Table 2). There is a great deal of

linguistic diversity on construction sites and multilingual respondents reported that they used these languages at work (Figure 1).

Our research findings show that the vast majority of the respondents (88%) do not experience any difficulties in reading and understanding English. Those workers who experience language difficulties were mostly of a non-English speaking background (NESB). Most of the non-English speaking background migrant workers (73%) indicated that they were competent in reading English despite the fact that some of them experienced serious difficulties in understanding and reading the questionnaire without assistance. This may suggest that in some instances respondents did not feel comfortable in revealing their language skills. Therefore the language difficulties experienced by the non-English speaking background workers may be deeper than it was actually reported and requires further investigation.

Table 2 Selected commonly spoken languages other than English, Sydney construction sites, 2008 (Cultural Diversity on Australian Construction Sites Survey, May–Dec. 2008)

	Percent
Mandarin and Cantonese	9%
Croatian	9%
Portuguese	8%
Spanish	7%
Serbian	6%
Arabic (incl. Lebanese)	6%
Bosnian	6%
Greek	4%

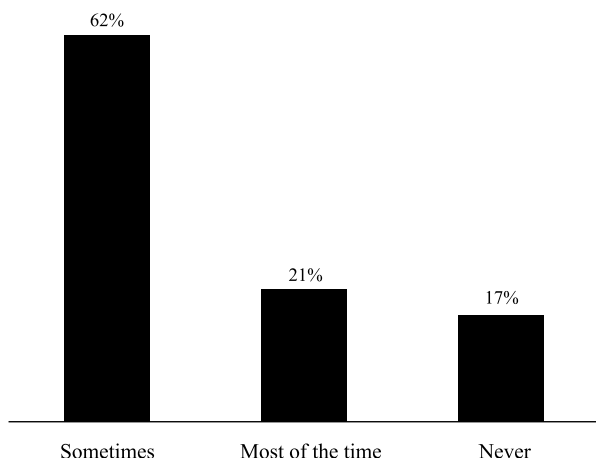


Figure 1 Frequency of speaking a language other than English at work, Sydney construction sites, 2008 (Cultural Diversity on Australian Construction Sites Survey, May–Dec. 2008)

Note: Question wording: How often do you speak that language?

Communication problems caused by language barriers are one of the major challenges affecting work and social relations between different cultural groups on construction sites. Since some cultural groups tend to specialize in a particular trade, and because workers of each trade commonly use their first language at the workplace, there can be serious language barriers between the workers of different subcontractors. One worker mentioned that different ethnic groups do not work well on site ‘due to language barriers and people not wanting to mix e.g. all companies, subbies are made up of one ethnic group’ (Questionnaire #976). Some workers also indicated that they do not want to be employed by certain subcontractors because they believe they would be isolated within the group and not able to communicate with their team members. This issue was particularly raised in reference to Chinese and Korean groups which mostly specialize in gyprocking and tiling.

Field data reveal that language barriers and low English proficiency of certain groups appear to have direct impacts on safety. The impact of language barriers on safety issues was raised by many workers:

Cultural diversity is a good thing for construction sites, yes but need to speak and understand English for safety aspects. (Questionnaire #334)

People should be able to read English when working on sites to read safety notices. (Questionnaire #373)

Cultural diversity is not a good thing no, not when safety is compromised cause they are unable to understand, comprehend or speak English. (Questionnaire #590)

These comments add further weight to previous research which showed that language differences affect migrant workers’ understanding of safety risks on construction sites (Loosemore and Lee, 2002; Trajkovski and Loosemore, 2005).

Our research indicates that the greatest communication challenge is experienced with and by Asian-Australian workers and that this is especially a challenge during inductions, training sessions and whitecard workshops; although the implications of English proficiency on safety issues are well known, it is still rare to find multilingual posters and signs on most sites. Indicating the importance of multilingual signs and posters, an Anglo-Australian worker pointed out:

Many years ago, there were multilingual posters and signs. Because of the costs, now they removed all of them. But most of the workers here can’t speak English. I don’t understand how the bosses expect those people to understand signs written in English. Is it that difficult to write everything in Chinese, in other languages as well? This is safety and important. (Verbal comment, Field diary, December 2008, Large-scale commercial development, Sydney)

Furthermore, the lack of employment-related information about the English language skills of workers deepens the problem. In particular, managers appear to have very little information about the number of non-English speakers working on their site. Site inductions are sometimes interpreted by bilingual members of cultural minority groups, but they are not qualified interpreters, and so the quality of the information provided cannot be assured.

This suggests that managers could provide multilingual posters depicting construction equipment and common phrases, multilingual and multimedia induction DVDs or CDs and multilingual information about occupational health and safety issues. Managers can also assist and/or encourage non-English speaking background workers to improve their language skills by e.g. facilitating workplace mentoring programmes between English speakers and workers from non-English speaking backgrounds. So construction sites in Sydney are places of strong linguistic diversity, and the use of languages other than English is an important source of bonding capital among operatives of a non-English speaking background. While there are anxieties about that diversity among operatives, the core of that concern involves the weakness of English language skills among some workers. The absence of English is seen as presenting safety issues, as well as, and related to, the barrier it imposes on bridging capital.

Attitudes towards cultural diversity and difference

The questionnaire also gauged workers' attitudes towards cultural diversity. Respondents were asked about their support of cultural diversity in the broader Australian society and on construction sites. Almost 88% of respondents were of the view that cultural diversity is good for society and the construction industry. However around 13% of respondents were opposed to this view. The majority of respondents (88%) reported that they like working with people of

different ethnic groups (88%) while 82% feel secure when they work with different ethnic groups confirming the generally positive attitudes towards cultural diversity on construction sites.

Support for cultural diversity is not consistent and is context dependent. For example, 23% of respondents reported that different groups do not work well together and 50% of respondents indicated that there are groups they do not like to work with. These findings run counter to the generally high level of support for cultural diversity. When asked to name the ethnic groups that they do not like working with, commonly mentioned groups were Lebanese-Australians, Asians-Australians, Serbian and Croatian-Australians, and Middle Eastern-Australians (Figure 2).

A more detailed analysis shows that there is an association between demographic characteristics (such as age, birthplace and language) and attitudes towards minority groups (Table 3). Intolerance towards Lebanese-Australians, Asian-Australians and those from a Yugoslavian background were more likely to be expressed by those who do not speak a language other than English. Multilingual speakers were more

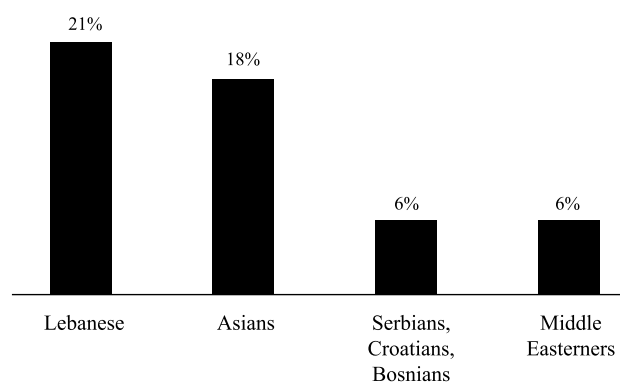


Figure 2 Ethnic groups that operatives least like to work with, Sydney construction sites, 2008 (Cultural Diversity on Australian Construction Sites Survey, May–Dec. 2008)

Note: Question wording: Which ethnic groups do you like working with the LEAST?

Table 3 Selected ethnic groups that workers like to work with the least by language, birthplace and generation (%), Sydney construction sites, 2008 (Cultural Diversity on Australian Construction Sites Survey, May–Dec. 2008)

Demographic characteristics & chi-square test		Lebanese	Asians	Yugoslavians
Language other than English $p < 0.000$	Yes	16	13	3
	No	26	22	5
Birthplace $p < 0.000$	Australia	25	24	5
	English speaking countries	17	11	2
	Non-English speaking countries	16	10	2
Generation $p < 0.000$	1st	17	10	2
	2nd	21	23	5
	3rd	27	25	5

Note: Question wording: Which ethnic groups do you like working with the LEAST?

likely to be tolerant towards other groups. Intolerance progressively increases into second and third generation Australians and those who were born in Australia and English speaking countries (Table 3). The data suggest that anxieties about cultural difference are more keenly felt by Anglo-Australians, and by those who have lived more of their lives in Australia.

Respondents were also asked to name the ethnic groups that they like working with. Commonly mentioned groups were Australians, South Europeans and Polynesians (Figure 3). Most respondents who used the term 'Australian' as a response to this question were generally referring to 'Anglo Australians'. Dominant perceptions of both out-groups (Lebanese-Australians, Asian-Australians) and in-groups (Anglo-Australians) in the wider society are reflected on Sydney construction sites (Dunn *et al.*, 2004, 2007).

Field information gathered from site workers provides some insights into the issues of miscommunication and intolerance among site operatives. It appears that cultural differences and stereotypes play a major role in shaping workers' perceptions of other groups. For example, there is a widespread belief among workers that Lebanese-Australians show an aggressive behaviour on sites. While this needs to be further explored, it might be argued that the intergroup relations between Anglo-Australians and Lebanese-Australians and Australian-Muslims are associated with and influenced by tensions and negative perceptions between the two groups within the broader Australian society (Dunn *et al.*, 2007). The following comments reflect how Islamophobic discourses within the broader society circulate within construction sites:

Usually people don't like them because Lebs hate Australians and some ethnic groups don't want to adopt Australia. They don't like Australians so other people don't like them. (Verbal comment, Field diary, November 2008, Large-scale commercial development, Sydney)

Lebanese. They have different values. For example, a couple of years ago they wanted one girl to wear a headscarf when she goes to school. They forced people to wear headscarves. I don't appreciate this kind of values. (Verbal comment, Field diary, December 2008, Large-scale refurbishment project, Sydney)

Muslims of any ethnic background are the most difficult groups to live with as they are not accepting of others' beliefs. (Questionnaire #364)

The issues pertaining to Asian-Australians are different. Here intolerance is based on their perceived impact on employment and safety standards. There is a too common belief among workers that Asian-Australians dramatically reduce safety standards, wages and professional quality and they are seen as threats to the social and economic fabric of the construction industry. The following comments exemplify these notions:

Racism on sites is so deep, and invisible. There is no physical conflict, but some groups hate each other ... most of the Australians think that they [Chinese and Koreans] steal their jobs. (Verbal comment, Field diary, September 2008, Large-scale residential project, Sydney)

Look at those Chinese. They can't speak even one word in English, but they find the most high-paying jobs. They find better jobs than us. (Verbal comment, Field diary, December 2008, Large-scale refurbishment project, Sydney)

The perception that Asian-Australians misuse the toilets and lunch sheds was another prominent issue. In the words of an Anglo-Australian worker:

The other thing is cultural differences. Most of them can't speak English. No way to communicate. Also food issues. They cook in the kitchen. It stinks. Smells terrible. We can't use the kitchen. We have to go out. And toilets of course. They use toilets in a different way. That's why we can't use them after Chinese go to toilets. (Verbal comment, Field diary, December 2008, Large-scale education project, Sydney)

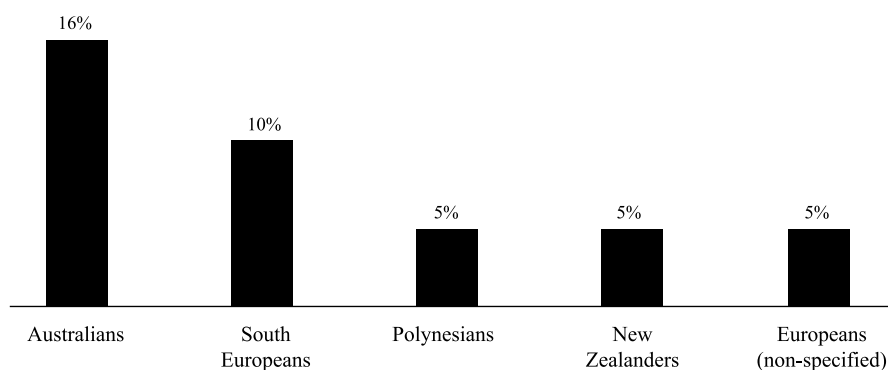


Figure 3 Selected ethnic groups that workers like to work with the most, Sydney construction sites, 2008 (Cultural Diversity on Australian Construction Sites Survey, May–Dec. 2008)

Note: Question wording: Which ethnic groups do you like working with the MOST?

There is also a widespread belief among English speaking workers (and perhaps managers) that 'Asians cannot speak English'. Asians are mostly generalized as non-English speakers which might further reinforce stereotypes towards Asian-Australian workers. Such generalizations could also limit the social interaction between Asian-Australians and other workers.

Despite the negative perceptions between some groups, the results indicate that there are generally positive views about cultural diversity on construction sites. This contradictory disposition could be conceptualized as the simultaneous valuing of culture and groups, alongside a wariness of barriers to bridging capital and of trends towards segregation. And our preliminary results indicate that anti-cultural diversity views and stereotypical attitudes against particular ethnic groups could be reduced through educational programmes aimed at reducing prejudice among workers. These programmes can emphasize similarities between different cultural groups, rather than differences, increasing knowledge, awareness and understanding of different cultures and providing a positive environment where site operatives can exchange cultural information. Making people conscious of the way they behave and the implications for themselves and others is widely accepted as the most effective intervention strategy to break down prejudice in organizations (Loosemore and Chau, 2002). Site induction processes could be used to communicate and reinforce equal opportunity policies, to increase tolerance on site, and to establish expectations of behaviour.

Equality of treatment

Respondents were asked a set of questions about their views on equality of treatment at work. The aim of these questions was to identify whether they experienced inequality of treatment in different aspects of their working lives and whether they believed certain ethnic groups were in a more or less privileged position. The majority of respondents believe that there is equality of opportunity in the construction industry (71%). However, Table 4 shows that perceptions of inequality exist in specific areas, particularly access to higher paying jobs, working conditions and career opportunities. Respondents also named ethnic groups that were more likely to experience inequality of treatment, 41% identifying Asian-Australians as the main disadvantaged group.

When asked about the different types of cultural intolerance that are most prevalent on construction sites, the vast majority of the respondents (90%) reported that they did not experience any physical threat at work. Only one-fifth (19%) of respondents indicated a lack of respect on the basis of their ethnic

Table 4 Perceptions of equality of treatment, Sydney construction sites, 2008 (Cultural Diversity on Australian Construction Sites Survey, May–Dec. 2008)

	Yes (%)	No (%)	Number of respondents
Equal access to high paying jobs ^a	66	34	1065
Equally good working conditions ^b	69	32	1062
Equal say in the union ^c	80	20	818
Having same chances of becoming a manager ^d	69	31	1050
Equal say on site ^e	73	27	1048

Notes: Question wordings:

^a Do all ethnic groups have equal access to high-paying jobs?

^b Do all ethnic groups have equally good working conditions?

^c Do all ethnic groups have an equal say in the union?

^d Do all ethnic groups have the same chances of becoming managers?

^e Do all ethnic groups have the same amount of say on site?

background, and 22% respondents raised their concerns on not being trusted. Almost one-third (32%) of respondents indicated that they have been called names or insulted because of their ethnic background. Derogative name calling was also evident from the questionnaires. A high number of respondents used expressions like 'Lebs', 'Lebos' and 'Wogs'. Our findings reveal that offensive graffiti and joke telling were the most common forms of racial harassment. Offensive graffiti is widespread with 57% of respondents reporting that there was racist graffiti on sites where they had worked. Fifty-two per cent also indicated that they have made derogative jokes about peoples' ethnic background, although perpetrators are more common among younger workers. While humour is an important part of the construction industry's culture, it appears that racially motivated jokes have become an accepted method of communication between workers of different cultural backgrounds:

They make jokes. In the past and now they call me with names. But it is a not a racist thing. They make jokes, they call me names because they trust me, because I am their friends. They love me, we're friends. (Verbal comment, Field diary, November 2008, Large-scale commercial development, Sydney)

We are sometimes racist without even noticing it. The jokes sometimes take a different turn. There are no clear lines between racist and non-racist behaviours. Racism is not black and white. Sometimes the jokes I make are racist. But I don't know that, the others are warning me and telling me that those are racist jokes. (Verbal comment, Field diary, December 2008, Large-scale commercial development, Sydney)

I have been working in this industry for [many] years. Everyone gets along with each other. No racism. There are only jokes, you know, innocent jokes. And this is

normal. (Verbal comment, Field diary, August 2008, Large-scale residential project, Sydney)

Racist jokes may exacerbate current stereotypes attached to certain cultural groups and might also be detrimental to workplace relations. But humour can also be a form of social glue, it can help accumulate bridging capital, and serve anti-racist purposes. Our data reveal some of the pitfalls and potentials of ethnically descriptive humour on construction sites, but much less is known about what forms and settings generate productive or deleterious impacts.

Further research

This study had several limitations that deserve mentioning. Apart from using an English-based questionnaire, the survey was only translated into Korean and Mandarin, following the advice of our key informants. While this was deemed adequate at the time of the questionnaire administration, subsequent observations by the research team on sites show that many of the NESB operatives are not entirely fluent in English, even though they had indicated that they are. Further research using questionnaires or interviews should be translated into other languages in order to obtain a richer dataset. Another study limitation was that the administration of the survey was carried out mostly to coincide with operatives' lunch/tea breaks. Given these time pressures, sometimes there were limited opportunities to engage with operatives on key issues relating to cultural diversity. Finally, one may argue that because we did not ask directly for the ethnicity of the respondents but instead used indicators like birthplace, language and parents' birthplace to determine ethnicity, the final results may be an inaccurate breakdown of the respondents' ethnicity profile.

Conclusions

The aim of this research was to examine the nature of cultural diversity on Australian construction sites and how it is experienced by workers. Our key findings are that the majority of the respondents interact with other cultural groups during social situations and work-based activities, suggesting that there is a good deal of cross-cultural interaction on construction sites. However, for most operatives, friends at work belong to their own ethnic group and many do not make an effort to talk with workers of different ethnic backgrounds. The majority of the respondents believe 'their own ethnic group understands them better' and there is a strong belief that members of their own ethnic group need to stick together to survive on construction sites. This suggests

that cultural groupings have some positive functions such as maintaining positive bonds among group members, group support and providing safe havens.

The vast majority of workers are comfortable with cultural diversity in society and at work and think that it works well and is good. However, they simultaneously perceive homogeneity to work well and a significant proportion believe that different ethnic groups should stay away from each other. Nevertheless, most respondents indicated that they would like to see more opportunities to mix with people from other ethnic groups while at work.

Communication problems caused by language barriers are one of the major challenges affecting work and social relations between different cultural groups and there is a widespread opinion that language barriers have a detrimental impact upon safety on construction sites for NESB workers and those around them. Finally, most respondents believe that there is equality of opportunity in the construction industry. However, a significant proportion report differential treatment of certain cultural groups (particularly Asians). Derogative name calling, offensive graffiti and joke telling are the common forms of harassment on construction sites.

These findings are important in themselves. However, by contributing to the limited and poorly conceptualized understanding of the positive and negative roles of cultural diversity on construction sites, we have also provided the basis of a framework (to be developed in stage two of this research) which will be used to explore how it can be managed more effectively to create a potentially more harmonious, safe and productive workplace. For example, the results suggest a need for management intervention strategies such as the provision of information and training on cultural diversity issues to site teams and educational campaigns that can raise awareness among workers about the benefits of cultural diversity for them and their company. Another critical form of information provision ought to confront stereotypes and false beliefs about relevant out-groups.

Another strategy that management researchers have found to be effective, and which this study aims to explore further, is the enactment of a supra-organizational identity as a tool that surpasses other ethnic-based identities with which employees would otherwise identify. The conceptual explanation for this is that companies that manage to create a supra-organizational identity are able to promote salient organizational-level norms and values which prevail over other culturally derived norms and values among employees. When employees identify themselves with their organization and what it stands for, inter-group differentiation is reduced as they define their cognitive self-concept and affective attachment through the organization's

unifying lens (Alderfer and Smith, 1982). Numerous studies have shown that employees who have strong organizational identity demonstrate greater pro-social behaviour at work (Abrams and Hogg, 1990; Dutton *et al.*, 1994; Gomez *et al.*, 2000). Particularly in the construction industry, with the coexistence of multiple identities arising from its culturally diverse workforce, the development of an overarching or supra-identity which acts as an enduring anchor for employees' self-conceptualization is potentially beneficial as 'a sense of identity is understood to connect different experiences and to reduce fragmentation in feelings and thinking. It counteracts or closes the possibility of responding to contingency with limitless plasticity' (Alvesson and Willmott, 2002, p. 625). This supra-organizational identity could fundamentally assist with the development of bridging capital on sites, assuaging anxieties about difference, and facilitating stronger appreciation of the benefits of diversity.

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