

Exploring communication challenges due to language and cultural diversity on South African construction sites

Peer reviewed and revised

Abstract

Communication can be traced to, among others, an individual's language and cultural background. These aspects play a fundamental role in ensuring effective communication. Literature surveys show that language and culture have contributed to ineffective communication, giving rise to a wide range of problems in the construction industry. These problems include an increase in rework and poor product quality, and low employee morale. Given the multicultural environment in which construction activities occur in South Africa, communication can potentially dictate the extent of project performance. In order to explore the impact of this phenomenon, a survey was undertaken among general workers and site managers employed by five general contractors (GCs) in the Eastern Cape province of South Africa. Salient findings include that communication problems occur on construction sites due to language- and cultural diversity-related barriers; site managers are generally effective at communicating; the South African workforce is diversely cultured, which potentially leads to misunderstandings on sites, and language barriers between site management and site workers impede performance improvement.

Keywords: Communication, construction, culture, language, site managers, site workers, Eastern Cape, South Africa

Abstrak

Kommunikasie kan teruggevoer word na, onder andere, 'n individu se taal en kulturele agtergrond. Hierdie aspekte speel 'n belangrike rol in effektiewe kommunikasie. Literatuuroorsigte toon dat taal en kultuur bygedra het tot oneffektiewe kommunikasie, wat aanleiding gee tot 'n wye verskeidenheid probleme in die konstruksiebedryf. Hierdie probleme sluit in 'n toename in werkherhaling en swak produkkwaliteit asook lae werknemersmoraal. Gegewe die multikulturele omgewing waarbinne konstruksie aktiwiteite in Suid-Afrika voorkom, kan kommunikasie potensieel die omvang van projekprestasie voorspel. Ten einde die impak van hierdie verskynsel te voorspel, is 'n opname gedoen onder algemene werkers en die bestuurders werksaam by vyf algemene kontrakteurs in die Oos-Kaap provinsie van Suid-Afrika. Belangrike bevindings

Dr Fidelis Emuze, Senior Lecturer, Department of Built Environment, Central University of Technology, Free State (CUT), Private Bag X20539, Bloemfontein, 9300, South Africa. Phone: +27 51 507 3661, Fax: +27 51 507 3254, email: <femuze@cut.ac.za>

Matthew James, BSc (Hon.), Graduate at the Department of Construction Management, Nelson Mandela Metropolitan University, PO Box 77000, Port Elizabeth, 6031, South Africa. Phone: +27 41 504 2790, Fax: +27 41 504 2345, email: <s208008353@live.nmmu.ac.za>

sluit in dat kommunikasieprobleme plaasvind op konstruksieterreine as gevolg van taal- en kulturele verskeidenheid-verwante hindernisse; terreinbestuurders kommunikeer in die algemeen effektief; die Suid-Afrikaanse werkerskorps kom uit verskeie kulturele agtergronde wat potensieel tot misverstande op bouerreine mag lei, en taalgrense tussen terreinbestuurders en -werkers hinder prestasieverbetering.

Slutelwoorde: Kommunikasie, konstruksie, kultuur, taal, terreinbestuurders, terreinwerkers, Oos-Kaap, Suid-Afrika

1. Introduction

Communication affects all aspects of work to some extent, and is crucial in the construction industry. Without effective communication among people, work progress would become an uphill task in construction. In the modern fast-paced world, the workforce has become a diverse, multicultural group of employees worldwide. In this environment, it is fundamental to recognise the ever-growing diverse workforce with regard to language and culture. South Africa may be a good example.

Macleod (2002: 7) explains that there are five major ethnic groups in South Africa, eleven different languages, besides the seven non-official languages, and four main religions. These backgrounds create a vastly diverse workforce. It is, therefore, obvious that contractors need to have a good understanding of the diverse groups employed by firms, in order to learn how to deal with them in the correct manner. In the dynamic and evolving world of project management, communication remains constant as a desirable and critical competency for managing projects. Krahn & Hartment (2006: 51) found that experts rated listening and verbal communication among the top 10 competencies important for project managers to be successful. Indeed, the continuing growth of virtual contexts, with geographically dispersed work teams, necessitates the use of communication by competent project managers (Gibson & Cohen, 2003: 214-230).

According to Varner & Beamer (2005: 40), culture and language are intertwined and shape each other. Every time words are chosen, a sentence is formed and a message sent (either oral or written), cultural choices are made. While language helps in communicating with people from different backgrounds, cultural literacy is necessary to understand the language being used. If language is selected without an awareness of the cultural implications, at best, communication may not be effective and, at worst, the wrong message may be sent.

As teams grow in size, sub-teams often form around individual elements within the system. While team members are often aware of with whom they must directly collaborate on shared components, the fact is that activities can rarely be considered in isolation. Most aspects of complicated technologies have dependencies, some of which may be owned by other teams. These dependencies across teams may not be instantly obvious to team members, and may require extra communication beyond standard patterns (Sosa, Eppinger & Rowles, 2004: 1673). As teams increase in complexity and spread across sites, communication and coordination requirements also increase (Cataldo, Herbsleb & Carley, 2008: 9).

The purpose of this article is to report on the effect that language and culture have on communication in the workplace and to emphasise the importance of clear and effective communication. The research was conducted to identify the effects of poor communication, in order to improve the overall performance of firms that employ a culturally diverse workforce.

2. Communication and culture

According to Stanton (2009: 1), the objectives of communication are to receive, understand and accept information, and to obtain a response. Such response may be a change in behaviour and/or attitude. Stanton (2009: 13-15) also states that basic speaking skills allow for effective communication between parties. These skills are not limited to personal qualities such as clarity, accuracy, empathy, sincerity, relaxation, eye contact, appearance and posture and to vocal qualities such as speech, pitch, volume, diction and accent, vocal tension, speed, the use of the pause and tone. Parties involved in communication need to be aware of the factors that cause problems, in order to overcome them and minimise their effects. Stanton (2009: 4-5) contends that differences in perception, jumping to conclusions, stereotyping, lack of knowledge, lack of interest, difficulties in self-expression and emotions are the factors that cause problems for effective communication.

Verwey & Du Plooy-Cilliers (2003: 7) agree with regard to stereotyping and add that insufficient motivation for effective communication leads to reliance on stereotypes, in order to understand past and anticipate future behaviours. Without direct interaction, people have less psychological empathy for each other's work environment and limitations. Parties should have the opportunity to discuss their perceptions of each other and find ways to correct misconceptions. Verwey & Du Plooy-Cilliers (2003: 7) discussed ways of minimising the

effects of some of the above factors. They explain that introducing intergroup mirroring with the assistance of a trained facilitator can be beneficial. The objective is for the conflicting groups to express their perceptions, discuss their differences, and then work out strategies to mend relationships.

Henderson (2004: 474) regards the satisfaction of project team members as equal to productivity, because it is a critical goal of overall project efforts. Turner & Müller (2005: 58) elaborate further, stating that project managers play a significant role in their relationships with teams in terms of satisfaction and productivity. Brill, Bishop & Walker (2006: 23-24) found that listening effectively, and having strong verbal communication skills were among the most important competencies and characteristics required of a project manager.

2.1 Understanding cultural influences on communication

According to Macleod (2002: 3), culture consists of behaviours related to language, religion, values, standards, and customs that are shared by a group of people and learned from birth. Individual behaviour does not represent either the communal or the individualistic culture; it is often a blending of both. DiTomaso, Post & Parks-Yancy (2007: 474) elaborate on Macleod's explanation of culture by explaining that workforce diversity refers to

the composition of work units in terms of the cultural or demographic characteristics that are salient and symbolically meaningful in the relationships among group members.

According to Macleod (2002: 9), there are two major cultural influences in South Africa, namely communal and individualistic. Communal cultures are found mostly in African culture, and place a high regard on teamwork, conformity and collective unity and on achieving group goals both within the family and in the work environment.

Individualistic cultures, also known as western culture, are typically found in Britain and the United States of America (USA), and have a higher emphasis on individual goals. These include goals such as attaining wealth and status rather than group goals. Both of these cultures exist in South Africa, communal being represented by the African, some rural Coloured, Malay and Indian ethnic groups. Individualistic or western culture is represented by the White culture group.

According to Verwey & Du Plooy-Cilliers (2003: 257), communication across cultures and races is complex and involves interaction with not only other South Africans alone. People may use different sets of symbols, or the same symbols with a different understanding of their meanings. The non-verbal aspects of intercultural communication cause additional issues. Research has shown that those individuals who are comfortable with themselves, because they are secure in their identity and possess high self-esteem, cope best with diversity and intercultural communication. Harrison, Price, Gavin & Florey (2002: 1040) reported that people who collaborate in diverse teams learn about each other's values, which over time become more influential to group outcomes than demographic ones. This allows diverse groups to develop unique interests and values that promote integration and cohesiveness. Increased intergroup contact, however, does not always result in intergroup integration. Harrison & Klein (2007: 1223) and Lau & Murnighan (2005: 652) agree that increased contact with members of other cultures can also lead to adverse outcomes and even create worse problems over time, if people pay more attention to information confirming bias and prejudice. It can also emphasise social group distinctions and continue with ideas and beliefs that encourage social group separation or marginalisation. Such adverse outcomes are likely to occur when increasing diversity results in configurations that emphasise separation and dispersion.

2.2 Diversity in the workplace and its societal dimensions

Diversity is important in the workplace, because it can help to create an environment that offers mutual respect and support, appreciation of different and unique individuals and the non-reliance on biases that can exist due to lack of education, information and knowledge. Viewing biases logically would afford the opportunity to accurately perceive others and gain better exposure to, and knowledge of a diverse group (Thiederman, 2003: 93). The new knowledge and perspectives brought by diversity can become a resource for innovation and adaptability (Ely & Thomas 2001: 269). Experiencing greater creativity and innovation can breed positive intergroup relations and commitment to change, if members of an organisation understand the strategic resource potential of diversity. As diversity becomes a learning resource that influences future change, diversity change can gain momentum or succumb to inertia.

Those who believe that diversity is a source of creativity and learning are more likely to show behavioural support and facilitate

its implementation with greater focus, persistence, and effort. Positive attitudes and emotions can counter dysfunctional reactions and create upward spirals through contagion (Fredrickson, 2003: 330-331).

Change in all elements brings new collective schemas, values, and beliefs about diversity, that is, a new interpretive scheme (Amis, Slack & Hinings, 2004: 26). This would influence the manner in which the organisation deals with future outcomes and unintended side effects. For instance, intergroup conflict can be regarded as substantive and a source of debate and dissent instead of a problem. How to sustain diversity change would be evident if an organisation builds resilience, that is, the ability to bounce back and recover from declining diversity change by learning from past events. The new perspective, knowledge, and ideas brought by diversity can become a resource for knowledge and innovation (Ely & Thomas, 2001: 269).

Programmes that increase diversity in the workplace are generally viewed positively, as they improve the workforce by giving opportunities to individuals who may or may not have received them. Currently, organisations are realising the importance of diversity and are employing what is called 'change management' which according to Verwey & Du Plooy-Cilliers (2003: 185), can be defined as

the management of organisational features and functions such as strategies, structures, systems, processes, people and culture, to continually renew the organisation's directions and capabilities to serve the ever-changing needs of the marketplace, the organisation and the employees.

Again, the South African experience can be used to illustrate diversity. As mentioned earlier, Macleod (2002: 7) explains that there are five major ethnic groups, eleven different languages, besides the seven other non-official languages, and four main religions in South Africa. The reality may cause significant diversity in the South African workplace. In addition to these groups, there are others that are intermingled, causing a greater diversity of cultures influenced by other 'primary' cultures. Although diversity can be regarded as a means to create communication problems, enormous potential synergies can be derived by combining the strengths and richness of cultural diversity to improve the economic performance and well-being of all South Africans. In other words, living and working in a culturally diverse setting should be exciting and challenging. This argument is reinforced by the view that individuals join and leave groups and organisations throughout their careers, bringing their

own individual past experiences with diversity to a new context with each transition (Hopkins & Hopkins, 2002: 549).

Verwey & Du Plooy-Cilliers (2003: 134) explain that the South African business environment is particularly dynamic and challenging, as it consists of both developed and developing components. South Africa's communities are still highly segmented. During the previous dispensation, the focus was on differences, and thus former legislation affected the different population groups in varying ways, which often led to conflict. Current constitutional, legal and societal pressures are used to encourage firms to implement unbiased, democratic and representative policies and structures. With these new pressures, business leaders should focus on how diversity in the workplace can strengthen, rather than weaken, organisations. It is increasingly common for firms to become aware of the value and power of diversity by employing people from different backgrounds. The advantages of becoming aware of the value and power of diversity include a better understanding of cultural similarities and differences. These can lead to improved teamwork through effective communication that can enhance decision-making and team performance on complex tasks. This may eventually give an organisation a competitive advantage in the marketplace.

3. Research methodology

The sample stratum consisted of five construction firms currently operating in the Eastern Cape province of South Africa. These firms were chosen based on two fundamental criteria. The first criterion pertains to logistics and accessibility in terms of the fieldwork. The second criterion was the company size in terms of annual turnover and number of employees. The purposively selected firms have regional operational footprints throughout the province. From the list of these five construction firms, 15 members were randomly selected from each firm, giving a total sample size of 75 possible respondents. The selection was made among middle- and site-management employees with job titles ranging from project managers to site agents. Of the 75 randomly selected members, 63 members replied. This amounts to an 84% response rate. The respondents belong to multiple ethnic backgrounds such as Xhosa, Afrikaans, Zulu, Shona, and Sesotho. Thus, the descriptive survey method was employed to process the data obtained through observation. Leedy & Ormond (2005: 179) suggest that this type of research involves identifying the characteristics of an observed phenomenon. The survey was designed with closed-ended questions and one open-ended

question so that respondents could identify communication impediments, and their effects based on the literature reviewed, and offer general comments.

The construction firms, identified in the sample stratum, were sent a covering letter requesting their assistance in this study and a copy of the questionnaire. Willing participants were required to complete the questionnaire and return it by a pre-determined date. Once the data were captured from the completed questionnaires that were returned, the subsequent results became the primary data. The questionnaire consisted of twenty-two (22) questions and included the use of a five-point rating scale predominantly. While one question requested general comments, four questions addressed the respondents' demographic background. Seventeen (17) structured questions, contained within the questionnaire, were specifically aimed at determining the consensus of respondents' attitudes towards, and opinions of communication with regard to language and culture in the construction industry. The analysis of the data included descriptive statistics and the central tendency of the responses. These responses were then computed and presented in 'text' and 'tables' formats. The findings, presented in the next section, were based on the computed percentage (%) and mean score (MS), based on the analysis that was carried out.

4. Results and discussion

4.1 Importance of language and culture in understanding site instructions

Table 1 shows the perceived importance of language and culture in the ability to understand instructions given to workers.

Table 1: Perceived importance of language and culture concerning understanding instructions given to workers

Factor	Response (%)					Unsure	Mean score	Rank
	Not important		Very important					
	1	2	3	4	5			
Language	0.0	1.6	11.1	31.7	55.6	0.0	4.41	1
Culture	3.2	12.9	30.6	27.4	22.6	3.3	3.55	2

The responses are tabulated in terms of percentage responses ranging from 1 (not important) to 5 (very important), and an MS ranging from 1 to 5. It is notable that language was ranked first, with an MS of 4.41; this indicates that language plays a crucial role with

regard to understanding the instructions given to site workers. With an MS of 3.55, culture also plays an important role in understanding the instructions given to site workers. As language and culture are above the midpoint 3.00, it can be deduced that they are important factors when it comes to understanding instructions given on site. However, it was perceived that language plays a significantly more important role than culture.

Table 2 shows the results on the question that tested the concurrence to site managers' ability to convey clear instructions to workers.

Table 2: Concurrence to site managers' ability to convey clear instructions to workers

Response (%)					Unsure	Mean score
Strongly disagree		Strongly agree				
1	2	3	4	5		
1.6	7.9	30.2	42.9	15.9	1.6	3.65

The analysed data show that 42.9% of the respondents agreed that site managers tend to convey clear instructions to workers. This suggests that significant effort is expended for effective communication to take place between site management and workers in the South African construction.

Table 3 shows the results on the question that reviewed the extent of diversity in the workplace.

Table 3: Concurrence to the extent of diversity in the workplace

Response (%)					Unsure	Mean score
Strongly disagree		Strongly agree				
1	2	3	4	5		
4.8	9.5	22.2	30.2	31.7	1.6	3.76

The majority of the respondents agreed that the workforce in their firms is culturally diverse, as 31.7% and 30.2% of them, respectively, strongly agreed or agreed with the view. Thus, a typical construction site in South Africa would have people of different cultures working side by side to deliver a project.

Table 4 shows the results on the question testing perceived frequency of sharing a common culture between site managers and site workers being important to communication and morale.

Table 4: Perceived frequency of sharing a common culture between site managers and site workers being important to communication and morale

Response (%)						Unsure	Mean score
Never					Always		
1	2	3	4	5			
0.0	17.5	23.8	36.5	22.2	0.0	3.63	

The MS of 3.63 indicates that sharing a common culture between site managers and workers is sometimes important in terms of communication and morale. It is important to note that none of the respondents indicated that sharing a common culture between site managers and workers is never important, thus implying that incidences where it is important to share a common culture may have occurred on their sites.

Table 5 shows the results on the question that reviewed the degree of effectiveness of communication on site with regard to a diversely cultured workforce.

Table 5: The degree of effectiveness of communication on site with regard to a diversely cultured workforce

Response (%)						Unsure	Mean score
Not effective			Very effective				
1	2	3	4	5			
1.6	17.5	42.9	25.4	9.5	3.2	3.25	

The MS of 3.25 shows that the effectiveness of communication on site with regard to a diversely cultured workforce is perceived to be marginally effective, as only 9.5% of the respondents were of the opinion that it is very effective. This MS may explain why the majority of the respondents were undecided as to whether a multicultural workforce has a negative or positive effect on site productivity.

4.2 Occurrence of miscommunication and misinterpretation on sites

Table 6 indicates the extent to which respondents perceive that incidences of miscommunication and misinterpretation occur on site due to language and culture differences.

Table 6: Perceived frequency of miscommunication and misinterpretation due to language and culture differences

Response (%)					Mean score
Never		Always			
1	2	3	4	5	
3.3	15.9	41.3	30.2	7.9	1.6
					3.24

The responses are tabulated in terms of percentage responses within a range of 1 (never) to 5 (always) and an MS ranging between 1 and 5. The MS of 3.24 indicates that incidents of miscommunication and misinterpretation, due to language and culture, sometimes occur on site (Table 6). This shows that miscommunication and misinterpretation do occur on site, but not to a significant degree. It is important to note the high percentage of respondents who indicated that 'miscommunication and misinterpretation' sometimes (41.3%) and/or often (30.2%) occur on site, due to language and culture differences.

4.3 Respect for different cultures in the workplace

Table 7 indicates the perceived negative/positive level of respect shown to other members of the workforce and their culture, assuming the organisation is diversely cultured.

Table 7: Perceived level of respect shown to other members of the workforce and their culture

Response (%)					Mean score
Strongly negative		Strongly positive			
1	2	3	4	5	
1.6	18.0	21.3	42.6	14.8	1.7
					3.52

The responses are tabulated in terms of percentage responses within a range of 1 (strongly negative) to 5 (strongly positive) and an MS ranging between 1 and 5. The MS of 3.52 indicates that the respondents perceive the level of respect given to other members of the workforce and their culture to be positive. The high number of respondents (42.6%) who indicated that the level of respect shown to other members of the workforce and their culture was positive is notable. It is important that the respect shown to members of other cultures is positive, as it promotes understanding and cohesiveness within a firm.

When asked if misunderstandings between site managers and workers lead to rework, poor product quality and time overruns, an

MS of 3.73 was recorded, as shown in Table 8. This indicates that 53.9% (20.6% + 33.3%) of the respondents strongly agreed or agreed with the notion, respectively. In other words, communication-related misunderstandings on construction sites often affect project performance in various forms. This finding was recorded despite the fact that 71% (35.5% + 35.5%) of the respondents contend that workers are either competent/or more than competent to understand the instructions given to them by their managers (Table 9).

Table 8: Concurrence related to the extent that misunderstandings between site managers and workers lead to rework, lost time and quality

Response (%)						Mean score
Strongly disagree			Strongly agree		Unsure	
1	2	3	4	5		
1.6	11.1	33.3	20.6	33.3	0.0	3.73

Table 9: Perceived level of competence of workers in understanding instructions given to them by managers

Response (%)					Unsure	Mean score
Not very			Very			
1	2	3	4	5		
1.6	11.3	35.5	35.5	14.5	1.6	3.51

4.4 Site managers' proficiency in languages spoken on site

Table 10 indicates the approximate number of site managers who are able to speak and are fluent in all languages spoken on site.

Table 10: Perceived ability of site managers to speak and be fluent in all languages spoken on site

Response (%)					Unsure	Mean score
None			All			
1	2	3	4	5		
15.9	49.2	20.6	6.3	1.6	6.4	2.24

The responses are tabulated in terms of percentage responses within a range of 1 (none) to 5 (all) and an MS ranging between 1 and 5. The MS of 2.24 was recorded, as indicated in Table 10. This shows that few of the site managers are able to speak and are fluent in all the languages spoken on site. Note the high percentage (49.2%) of respondents who recorded that few site managers are able to speak and are fluent in all languages spoken on site. This can be

related to the results in Table 9 in that, although few site managers are able to speak and are fluent in all the languages spoken on site, understanding of instructions given to workers is sometimes misinterpreted. Improving site managers' ability to speak and be fluent in the major languages spoken on site is perceived to positively influence the understanding of instructions given to site workers.

4.5 Availability of site rules and regulations in multiple languages

Table 11 indicates whether site rules and regulations are available in all the languages of the workforce.

Table 11: Perceived availability of site rules and regulations in all the languages of the workforce

Response (%)		
No	Yes	Unsure
21.0	52.4	14.3

The responses are tabulated in terms of percentage responses of either no, yes or unsure. While 12.3% of the respondents failed to respond, the findings show that 52.4% of the respondents agree that site rules and regulations are available in all languages spoken on site. This suggests that not all site workers may be able to understand the site rules and regulations, assuming they can only understand written documentation in their own language. This is crucial to ensure that the entire workforce has the same understanding of site rules and regulations, without which there is no cohesion and no common goal for the workforce.

In addition, Table 12 indicates the level of concurrence perceived by the respondents as to whether a diversely cultured workforce leads to misunderstandings on site.

Table 12: Views concerning whether a diversely cultured workforce leads to misunderstandings on site

Response (%)					Unsure	Mean score
Strongly disagree		Strongly agree				
1	2	3	4	5		
6.5	22.6	32.3	22.6	12.9	3.3	3.13

The responses are tabulated in terms of percentage responses within a range of 1 (strongly disagree) to 5 (strongly agree) and an MS ranging between 1 and 5. The MS of 3.13 indicates that respondents were neutral with respect to a diversely cultured workforce leading to misunderstanding on site.

4.6 The ability of site workers to function effectively in a multicultural environment

Table 13 indicates the perceived effectiveness of site workers at handling a diversely cultured workforce.

Table 13: Perceived effectiveness of site workers at handling a diversely cultured workforce

Response (%)						Mean score
Not effective			Very effective		Unsure	
1	2	3	4	5		
1.6	12.7	49.2	23.8	6.3	6.4	3.22

The responses are tabulated in terms of percentage responses within a range of 1 (not effective) to 5 (very effective) and an MS ranging from 1 to 5. The MS of 3.22 is deemed to be effective. Of the respondents, 49.2% indicated that site workers are effective at handling a diversely cultured workforce. The MS is above the midpoint of 3.00, which indicates that, in general, respondents are of the opinion that site workers are effective at handling a diversely cultured workforce. This is important, as it incorporates respect and cohesiveness.

Table 14 indicates the perceived concurrence as to whether the cultural backgrounds of different members of the workforce are understood and appreciated.

Table 14: Level of concurrence regarding the cultural backgrounds of different members of the workforce

Response (%)						Mean score
Strongly disagree			Strongly agree		Unsure	
1	2	3	4	5		
0.0	22.2	44.4	19.0	9.5	4.9	3.17

The responses are tabulated in terms of percentage responses within a range of 1 (strongly disagree) to 5 (strongly agree) and an MS ranging from 1 to 5. The MS was calculated to be 3.17, which indicates that respondents were neutral that the cultural backgrounds of different members of the workforce are understood and appreciated. It is important to note that none of the respondents indicated that they strongly disagreed that the cultural backgrounds of different members of the workforce are understood and appreciated. Although the MS was above the midpoint 3.00, a small percentage (22.2%) of respondents disagreed with the statement, indicating

that the cultural backgrounds of different members of the workforce are not always understood and appreciated.

Table 15 shows the importance of effective communication between site managers and site workers, in a common language.

Table 15: Importance of effective communication between site managers and site workers, in a common language

Response (%)						Mean score
Not important			Very important		Unsure	
1	2	3	4	5		
0.0	3.2	3.2	9.5	84.1	0.0	4.75

It is notable that 84.1% (MS = 4.75) of the respondents recorded that effective communication in a common language is very important in the construction industry with regard to site managers and site workers. Site operations would become less problematic when communication takes place in languages that are commonly spoken by the workers.

Table 16 indicates the perceived effectiveness of common language communication between site managers and workers on construction sites.

Table 16: Perceived effectiveness of common language communication between site managers and workers

Response (%)						Mean score
Not effective			Very effective		Unsure	
1	2	3	4	5		
1.6	14.3	31.7	36.5	14.3	1.6	3.48

With an MS of 3.48, it can be argued that the ability of site managers to communicate with site workers in a common language can be deemed to be only slightly effective. It is notable that 36.5% of the respondents perceive that site managers are effective at communicating with site workers in a common language. This may be perceived as not being a communication constraint on construction sites.

Table 17 shows the results on the question reviewing the frequency of incidences involving the use of translators by both site management and site workers.

Table 17: Frequency of incidences involving the use of translators by both site management and site workers

Response (%)						Mean score
Never				Always		
1	2	3	4	5	Unsure	
7.9	27.0	33.3	12.7	17.5	1.6	3.05

Despite the need to improve the effectiveness of communication between site managers and their workers, the use of translators only occurs marginally, according to 33.3% of the respondents who show a need for the use of more translators on construction sites.

In terms of the open-ended question, the respondents were requested to provide general comments regarding the effectiveness of communication between managers and workers on construction sites based on their experiences. The question generated 26 comments that were recorded in English, Afrikaans and Xhosa. Some of the salient comments include:

- “Understanding each other’s culture and language leads to a more productive environment”;
- “Provided there is respect amongst all, i.e. workforce and management, productivity will be the order of the day”;
- “As a Coloured, I think it’s time for me to learn more languages with all the different cultures in our community. I think we must not look at the culture but just love one another as a nation. We are all human”;
- “It would be very good if different cultures can work together with each other and treat each other with respect”;
- “On site, it is good to have site managers that do understand quite a number of different languages and cultures. Messages are [more] easily conveyed in that way than [by] using a common language”;
- “Differences in negotiation and communication style can cause serious problems and have a significant impact on whether a multinational company, merger or joint venture succeeds across cultures. If culture differences are mismanaged, the consequences are potentially disastrous and previously effective managers and organisations can become ineffective and frustrated with overseas and multinational ventures. On the other hand, the successful management of cultural differences can create a competitive advantage, innovative business practices and organisational learning”;

- "With regards to communication and culture, we find the workforce wanting to understand instructions and have an effectiveness because they want to be part of the building process and ultimately also want to show off the project to friends and family through being part of the specific project";
- "The construction industry consists of 75% uneducated/illiterate people that learned on site and got additional training on site with experience. The cultural differences play a very big role when it comes to housekeeping, safety, and wastage, to be responsible and accountable. Communication is always a challenge, even among educated people. To talk and listen is one thing, to make it happen is another";
- "Communication between site managers and site workers, in a common language, is not always possible, but first prize if a common language is used. External translators are not used, only someone on site is used. South Africa's skills are currently lacking and a willingness to work is fading. Labour and skills from neighbouring countries are most definitely supplementing this loss/inefficiency and having a positive effect on productivity and quality. Site rules and regulations are only partly available in all languages of the workforce, mainly only English and Xhosa";
- "It is probably the biggest cause of rework on any construction site (poor communication) due to language differences. I do not believe that different cultures play a big role in this. It is merely a language issue";
- "It is extremely important to be able to communicate with your workforce at a level where miscommunications can be completely eliminated. It is also important to relay a message in the language of the receiver. This way he is interested more in what you have to say. I think when communicating a message, the cultural differences must be respected. Failing in doing this can cause the receiver to shut-down and blocking the transmission";
- "Culture on its own isn't a communication barrier; however, an understanding of some cultural elements can be a great facilitator of communication";
- "One can never judge another man until you have walked 100 miles in his shoes. The more we know and understand each other's culture and background, the better we'll be able to communicate";
- "When people feel like they are not being understood – it does not only affect the productivity negatively on site, but

it also affects the morale of the team because of building up of emotions from their perception of the employer. And those perceptions become reality if not addressed through effective communication. Therefore, it is critical for managers to understand that South Africa is a diverse country that requires more than a skill to be a leader in a construction environment – adaptability and relationships are highly important for breaking the barriers of communication”;

- “I think that diversity is not a problem in itself, but how it is handled that is important. There are many countries in the world with similar challenges and they are able to be very effective. Education and understanding of the cultures is important and having compassion for your team that is important”;
- “Effective feedback and organizational transparency through democratically elected forums is of great significance. The impact of this is magnified with representation of such bodies at executive and board meetings. This approach to a large degree breaks down distrust on a cultural/language level and also serves as platforms for different cultures to meaningfully engage on mutually beneficial issues. Effective daily communication on site pertaining to daily operational milestones adds huge value in eliminating barriers to mutual understanding of operational requirements and productivity levels. Coupling this with visual communication, i.e. using productivity charts linked to various measurable criteria further builds a common understanding”;
- “I think the level of literacy also plays a big role” [Translated from Afrikaans];
- “In my experience, respecting other cultures and learning them create a huge amount of respect, which in turn creates a better working environment not only socially but also productively. A ‘manager’ who has earned the labour’s respect is far more efficient in HR”;
- “You will always have people from different backgrounds and cultures. However, if you apply the same rules and conditions for everyone without exceptions, then you will not have problems on sites (employee disagreements). As soon as you start accommodating certain people, then others will take exception and the problem will be where you draw the line. You will spend more time trying to satisfy everyone instead of getting the work done. You have to adapt to the situation as best you can without excluding everyone”;

- “Managers do not concern themselves with learning other languages spoken by their employees, and the employees don't want to miss opportunities or work because of this, over and above the fact that employees don't understand English, the managers aren't able to make the instructions clear and understandable to the employees” [Translated from Xhosa];
- “Culture is not supposed to play a role or influence the construction industry. Language differences, understandably, can lead to misunderstandings at times. It is a professional industry and should be treated as such, because these days culture is a form of politics. I would say that all culture groups should be respected.” [Translated from Afrikaans]

5. Conclusion

The purpose of this article was to explore the effect of language and culture in the workplace and to emphasise the importance of clear and effective communication in the construction industry. A survey of opinions of employees from 5 construction firms in the Eastern Cape provided insightful perspectives on the subject area.

The results revealed a culturally diverse workforce on South African construction sites. Although misunderstandings between site managers and workers sometimes occur on site, due to language and culture differences, site workers were generally perceived to be competent at understanding instructions given to them. The observable perceptions further show that communication on site affects every aspect of construction works, and it is, therefore, regarded as crucial. Communication is also directly affected by the language and culture of those communicating. Incidences of miscommunication and misunderstandings that often occur on site may be due to differences in language and culture. Language differences were viewed as a major contributing factor to misunderstanding. These poor communication tendencies result in rework and other construction problems on site when they are not addressed adequately.

The argument is supported by the notion that the workforce in the South African construction industry is culturally diverse, including people from beyond the borders of South Africa. It was indicated that sharing a common culture between site managers and site workers is sometimes important for communication, morale and productivity. Despite the insightfulness of the views expressed by the respondents, it is important that these views be viewed in the context in which they were made. Although the site managers and workers

may have worked on several projects, their views are limited by the extent of their experience. Hence, wholesome generalisation may not be possible with their perception. As a result, further research is needed in order to determine the most effective means of communicating across cultures in an environment that entails many cultures and languages on site. This research should endeavour to explore the use of research paradigms and methods that can give rise to significant contributions to knowledge in the subject area.

6. Recommendations

Communication is a fundamental aspect of the construction industry, as it affects project implementation. As such, it is necessary to understand the importance of its role in the industry. Two key aspects of communication, language and culture, need to be fully understood and realised on site, in order to improve the communication process. Lack of effective communication leads to rework, loss in time, and a range of other construction performance problems. Hence, it is recommended that site managers and workers take cognisance of the importance of communication, especially the impact of language and culture on the process. Site managers and workers also need to strive to become effective at communicating, in order to minimise misunderstandings on site. Managers of sites should, even when necessary, make use of translators to ensure that their instructions are clearly and effectively understood. All site employees need to be aware of the cultural diversity of the workforce and make certain that they employ the best methods and techniques to ensure effective cross-cultural communication; site managers and site workers need to ensure that high levels of sensitivity and respect are shown to other members of the workforce who share a different culture, thus creating cohesiveness of the workforce and congruency in the direction of work.

References list

- Amis, J., Slack, T. & Hinings, C.R. 2004. The pace, sequence, and linearity of radical change. *Academy of Management Journal*, 47(1), pp. 15-39.
- Brill, J.M., Bishop, M.J. & Walker, A.E. 2006. The competencies and characteristics required of an effective project manager: A web-based Delphi study. *Educational Technology, Research and Development*, 54(2), pp. 115-140.

Cataldo, M., Herbsleb, J.D. & Carley, K.M. 2008. Socio-technical congruence: A framework for assessing the impact of technical and work dependencies on software development productivity. In: *Proceedings of the 2nd ACM-IEEE International Symposium on Empirical Software Engineering and Measurement*, 9-10 October. Kaiserslautern, Germany, pp. 2-11.

DiTomaso, N., Post, C. & Parks-Yancy, R. 2007. Workforce diversity and inequality: Power, status, and numbers. *Annual Review of Sociology*, 33(3), pp. 473-501.

Ely, R.J. & Thomas, D.A. 2001. Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), pp. 229-273.

Fredrickson, B.L. 2003. The value of positive emotions. *American Scientist*, 91(4), pp. 330-335.

Gibson, C.B. & Cohen, S.G. 2003. *Virtual teams that work: Creating conditions for virtual team effectiveness*. San Francisco, CA: Jossey-Bass.

Harrison, D.A. & Klein, K.J. 2007. What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32(4), pp. 1199-1228.

Harrison, D.A., Price, K.H., Gavin, J.H. & Florey, A.T. 2002. Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal*, 45(2), pp. 1029-1045.

Henderson, L.S. 2004. Encoding and decoding communication competencies in project management: An exploratory study. *International Journal of Project Management*, 22(6), pp. 469-476.

Hopkins W.E. & Hopkins, S.A. 2002. Effects of cultural recomposition on group interaction processes. *Academy of Management Review*, 28(4), pp. 541-553.

Krahn, J. & Hartment, F. 2006. Effective project leadership: A combination of project manager skills and competencies in context. *Paper presented at the biennial meeting of the Project Management Institute Research Conference*, 16-18 July. Montreal, Canada.

Lau, D.C. & Murnighan, J.K. 2005. Interactions within groups and subgroups: The effects of demographic fault lines. *Academy of Management Journal*, 48(4), pp. 645-659.

Leedy, P.D. & Ormrod, J.E. 2005. *Practical research: Planning and design*. 8th edition. Upper Saddle River, NJ: Pearson Prentice Hall.

Macleod, G. 2002. *Cultural considerations: A guide to understanding culture, courtesy and etiquette in South African business*. Claremont: Spearhead.

Sosa, M.E., Eppinger, S.D. & Rowles, C.M. 2004. The misalignment of product architecture and organizational structure in complex product development. *Management Science*, 50(12), pp. 1674-1689.

Stanton, N. 2009. *Mastering communication*. 5th edition. New York: Palgrave Macmillan.

Thiederman, S. 2003. *Making diversity work: Seven steps for defeating bias in the workplace*. Chicago, IL: Dearborn Trade Publishing.

Turner, J.R. & Müller, R. 2005. The project manager's leadership style as a success factor on projects: A literature review. *Project Management Journal*, 36(2), pp. 49-61.

Varner, I. & Beamer, L. 2005. *Intercultural communication in the global workplace*. 3rd edition. New York: McGraw-Hill/Irwin.

Verwey, S. & Du Plooy-Cilliers, F. 2003. *Strategic organisational communication: Paradigms and paradoxes*. Sandown: Heinemann Publishers.