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Die Förderung interkultureller Kompetenzen im interkulturellen technischen Management

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Abstract (English)

Intercultural competences are key competences in international engineering organisations. This article is based on selected empirical findings from a multi-method research study. It focuses on cultural engineering in a specific engineering organisation in South Africa. Thereby, it investigates how managers in an international and culturally diverse engineering environment define intercultural competence, how they cope with intercultural challenges in their daily work routine and how intercultural competence could be promoted within cultural engineering contexts.

Keywords: Intercultural engineering, managerial competences, emic perspectives

Abstract (Deutsch)

Interkulturelle Kompetenzen sind Schlüsselkompetenzen in internationalen Unternehmen. Der Artikel basiert auf den empirischen Forschungsergebnissen aus einer multimethodischen Forschungsstudie. Er fokussiert Intercultural Engineering in einem speziellen Unternehmen in Südafrika. Es wird den Fragen nachgegangen, wie Manager in diesem kulturell diversen Umfeld interkulturelle Kompetenz definieren, wie sie mit interkulturellen Herausforderungen umgehen und wie interkulturelle Kompetenz in solch einem Umfeld gefördert werden könnte.

Stichworte: Interkulturelles Engineering, Managerkompetenzen, emische Perspektiven, empirische Forschung

1. Introduction

Intercultural competence and its promotion have become well recognized aspects in international human resource management and cultural engineering during the past years (Moore / May / Wold 2012). However, only a few studies have been conducted in globalized and technologized South African engineering contexts.

The concept *engineering* derives from Greek, referring to "ingenious, invention, machine, machinery, invent, constructed by the art of the mechanic, art to construct a machine" (Bazac 2009:265). To engineer is here defined as to intervene, with the human

intelligence, within the human life, or to intelligently transform the human environment as well as the human being him- / herself to realise human ends. Focusing on a definition of engineering, to engineer also refers to the use of tools (ibid.). From this understanding, tools are defined broadly to include words, actions, and interactions, verbal and non-verbal communication. From this perspective, the term engineering refers to the tools of human interaction as defined previously.

Moving the concept of engineering forward to include *cultural engineering*, these tools of human interaction exist in a cultural context. Culture has been defined broadly across disciplines, decades and contexts (Treichel / Mayer 2011). According to Balzac (2009) culture includes the spiritual and material creation of a human being's life in interaction with the socio-cultural context. Culture is being created through human interaction and therefore, engineering is a cultural practice. This cultural practice relates to the use of technology within or across cultural contexts and includes the discussion about technological interventions made by human beings within the cultural environment. In these terms, cultural engineering is compatible with the concept of cultural management which is defined as the "art of directing projects from the original concept to its final realization" (Kagan 2010).

This article is based on selected empirical findings from a multi-method research study. It focuses on cultural engineering in a specific engineering organisation in South Africa.

It investigates how managers in an international and culturally diverse engineering environment define intercultural competence, how they cope with intercultural challenges in their daily work routine and how intercultural competence could be promoted within cultural engineering contexts.

The contribution of this article is double fold: Firstly, it highlights the importance of understanding processes of inside (emic) sense-making for under-standing intercultural competencies in cultural engineering contexts. Secondly, it adds to the literature on intercultural competences and their promotion in cultural engineering in a globalised and technologized international engineering industry.

In the following, the context of the study and the theoretical background will be presented. Then, the methodology will be introduced and the selected empirical findings with regard to the formerly defined research questions will be presented. A conclusion with regard to (promoting) intercultural competence in the cultural engineering context will be provided.

2.   The context of the study

Cross-cultural and intercultural studies have been conducted within the South African management context to compare managerial competences across cultures (Van den Bergh 2008). However, these cross-cultural studies are often based on cultural comparisons, using outside (etic) perspectives and culture-general approaches to research selected aspects of intercultural competences. Studies which focus particularly on intercultural competence from emic managerial perspectives – in cultural engineering contexts which relate particularly to subjective concepts of managers and their understanding of intercultural competences and their promotion – have hardly been published (e. g. Van den Bergh 2008).

The Republic of South Africa has undergone tremendous change on societal, political, economic and individual levels in the post-apartheid era (Hart 2002). Nearly two decades after the end of Apartheid, South Africa is still in a double transition (Webster / Adler 1999). This double transition refers to the changes in both the socio-political intra-national transformation since 1994 and in increasing globalisation trends within the South African engineering context. Global processes have impacted on values and management in the society and in organisations (Mayer 2008).

Owing to the increase in cultural complexity within the engineering industry in South Africa, hybrid cultural identities as well as interculturality in South African engineering organisations have developed. It has been stated that new intercultural management approaches as well as new communication techniques and ways of thinking are required (Luthans / van Wyk / Walumbwa 2004).

Managers feel that they need to prepare for managing complex intercultural situations with employees from different social, cultural and disciplinary backgrounds (Mayer 2008). Through developing and promoting intercultural competences, employees in cultural engineering contexts are empowered (Denton / Vloeberghs 2003), particularly since it has been highlighted that intercultural competence in managers and managerial health are strongly connected (Mayer 2011). Intercultural competences can contribute to the increased understanding of cultural complexities, intercultural communication situations and intercultural interactions in the engineering context.

Several authors (Booysen 2004:177) have emphasised that particularly in South African management contexts, cultural awareness needs further consideration to promote interculturally competent employees and organisations to create healthy organisational cultures (Booyse 2001, Viljoen / Rothman 2002). This is assumed as particularly important in the engineering context in which managers often deal with intercultural human interaction, often mediated by technology in a highly technologized work environment.

3. Intercultural competence in engineering organisations

The term intercultural competence has been defined variously across contexts and cultures and has been applied in different fields. In management sciences, intercultural competence is generally summed up as the ability to work and communicate well across cultures. Most of the definitions of intercultural competence include components of intercultural competence, such as "empathy, flexibility, cross-cultural awareness, and managing stress", while some definitions of intercultural competence specifically note other elements such as technical skills, foreign language proficiency, and situational factors (Deardorff 2004:14). Other authors (e. g. Lustig / Koester 2003) highlight that intercultural competence is not an individual characteristic, but rather an ability to cope with intercultural situations. In management sciences, the effectiveness and efficiency of intercultural work interactions is often stressed with regard to intercultural competences (Bolten 2007). The variety of definitions on intercultural competence is huge, however,

> "Nearly all definitions of intercultural competence include more than knowledge of other cultures, since knowledge alone is not enough to constitute intercultural competence. Intercultural competence also involves the development of one's skills and attitudes in successfully interacting with persons of diverse backgrounds" (Deardorf 2004:13).

Studies on intercultural competence have often emphasised that the measure and the promotion of intercultural competence is strongly connected to the question on how the concept is defined (Klemp 1979).

With regard to the South African managerial context, concepts of intercultural competence, intercultural training, measurement of intercultural competence and the question on how to promote intercultural competence have variously been explored with regard to medical and health contexts (e. g. Levin 2011), as well as in educational contexts (Weber / Domingo 2004). For the South African context, it has been highlighted that engineering graduates are expected to possess various competences which can be distinguished into hard and soft skills and which include intercultural competences (Oladiran et al. 2011).

With regard to management development in engineering in South Africa, intercultural competence training

has recently gained interest (Horwitz 2006). A few studies have explored intercultural communication in engineering contexts, using a cross-cultural comparative approach from etic perspectives (e. g. Naidoo 2011). The development of intercultural competence of engineering students has also been highlighted (Jansen 2004). However, the emic perspectives of engineers towards intercultural competences within engineering have hardly been explored.

4. Methodology

The research study presented is a mixed-method research study based on qualitative and quantitative research methods within a phenomenological research paradigm.

The engineering organization used for this study belongs to one of Europe's leading German engineering groups; Southern Africa is one of its largest sales regions.

Natural sampling procedures were implemented by the Human Resources Department of the South African headquarters. Altogether 27 out of 120 managers agreed to participate in the study, including 15 female and 12 male managers. 19 of the interviewees defined themselves as White, including 13 South African, four German, one Bulgarian and one Dutch manager, three as Indian, one as Coloured and four as Black.

Data were collected through questionnaires, in-depth interviews, observation, field notes, secondary literature and the internal documents of the organisation. The in-depth interviews were recorded and transcribed verbatim. The in-depth interviews were based on predetermined research questions focusing on the issue of research. Observations were conducted and field notes were taken during the research study.

For this article, only selected qualitative findings will be presented.

The data from the in-depth interviews were analysed according to a 5-step process of content analysis: Step 1:

Familiarisation and immersion; Step 2: Inducing themes; Step 3: Coding; Step 4: Elaboration; and Step 5: Interpretation and checking (Terre Blanche / Durrheim / Kelly 2006:322ff.). The interviews have been (re-)constructed by the content analysis process, using categorisation and coding methods which led to the elaboration and interpretation of data.

With regard to qualitative research, criteria conformability, credibility, transferability and trustworthiness were defined.

The research ethics contribute to the quality of data and ethical guidelines: The managers who were interviewed were fully informed about the research and participated voluntarily. Informed consent was given and confidentiality, anonymity and transparency were agreed upon.

This study is limited with regard to its context as a multi-method single case study which refers to a relatively small set of data. The findings presented are subjective data, providing emic perspectives of selected individuals. Therefore, findings are not necessarily generalizable in quantitative terms and follow-up studies are required to prove these findings in similar and different organisational and national contexts.

5. Research findings

Referring to the biographical data, findings show that the group of 27 interviewees included 13 South African, four German, one Bulgarian and one Dutch manager. Referring to ethnicity, seven managers from the Indian, Coloured and Black groups defined themselves as South African. One Black interviewee defined herself as North-Sotho by nationality (Mayer 2011).

Regarding the mother tongue and the cultural group affiliation, four Blacks indicated their mother tongue as Lutoro / Lutaro, Sotho / Zulu, Tsonga and Zulu. The Coloured manager indicated Afrikaans as mother tongue, two of the Indian managers indicated English as mother tongue and one interviewee

What is intercultural competence?	Interview partners	Frequency of statements
Speaking the language	P1, P7, P8 P9 P10 P14 P22 P23 P24 P26 P27 (11)	11
Understanding the other culture	P6, P8, P11 P17 P18 P19 P23 P24 P27 (9)	9
Being calm / patient	P4, P7, P8, P12 P17 P22 P24 P26 P27 (9)	9
Tolerance, acceptance and respect	P10, P11 P14 P22 P24 P26 P27 (7)	7
Treating people equally across cultures	P9, P10 P14 P22 P23 P24 (6)	6
Being sensitive to situation and people	P2, P5, P8 P17 P19 P27 (6)	6
Not discriminating race, religion, culture, age	P2, P11, P13, P14 P24 (5)	5
Giving people equal opportunities	P2, P11, P14 P27 (4)	4
Emotionally intelligent - empathy	P1 P4 P19 P23 (4)	4
Knowing how to communicate across culture / age groups	P1 P8 P14 (3)	3
Seeing the whole human being	P2, P17 P18 (3)	3
Being at peace within yourself	P10, P11 P23 (3)	3
Managing conflict across gender	P4, P9, P10 (3)	3
Being flexible	P11; P12 P24 (3)	3
Apologizing	P4, P8 (2)	2
Networking	P2 (1)	1
Transparency	P11 (1)	1
Being helpful	P22 (1)	1

Exh. 1:   Intercultural competences. Source: Author's own work.

failed to respond to this question. Eight White managers were Afrikaans-speaking, four were English-speaking, four were German-speaking, one was Bulgarian-speaking, one was Dutch / Afrikaans-speaking and one was English / Polish-speaking by mother tongue. All Black, Coloured and Indian managers had studied at Universities and got Bachelor (BA) or Master (MA) degrees.

5.1. Defining intercultural competence

Referring to research question 1 "How do managers define intercultural competence in their work context?", the following Table 1 gives an overview of managers' statements on definitions of intercultural competence in engineering. (See Exh: 1)

In the following, selected aspects of statements on these aspects of intercultural competence will be presented and explained. Only the three mostly mentioned aspects in the interviews will be explained in-depth.

In total, 11 out of 27 managers highlight intercultural competence being mainly influenced by "speaking the language". P22, a female Indian South African manager emphasizes:

"Well I am exposed quite, ahm, to a big [emphasis] extent with, ahm, our German colleagues, ah, because I'm in charge of pricing. So whenever I need a price I speak to [name of a manager] all the time. She's from the logistics department. Ah, she liaises with, ah, Indian people to get the Indian pricing. Ahm, and then I deal with very high-level people like [name of a manager] who's in charge of setting up…for our pricing and special requests, I do deal a lot of Germans. Ahm, I felt that their English was not too good, in the beginning, ahm, but then I noticed that Germany's introduced, ahm, English lessons and that has improved my communication and my emails to [name of a manager] a great bit because at some stages I would think, o my word, you don't understand [emphasis] what I'm talking about, because I would get a one-sentence response, but it's basically because we had this language barrier. Ahm, but I must say, it's improved greatly and besides, ahm, having a work relationship with everybody overseas I've ended up having a personal relationship, as well, over email. Ahm, so they actually send me pictures of their kids and their dogs and whatever and, ahm, you know, talk about the weekend. It's not really professional, professional and to that point. Ah, it's a very friendly, casual relationship, but [emphasis] results-driven, as well. Ahm, which is good, I think. That comes across in whoever I speak to. I must say [name of a manager] response from last six months

and this six months is really great because, ahm, from not understanding my logistics requirements and pricing requirements to really [emphasis] getting down to equip me with what actually happens there. Ah, filling in the process link, filling me with the reports that I need, ahm, reporting every week, telling me, alerting [emphasis] me in advance when anticipate [emphasis] something going wrong. That's worked very well, so I must say, ah, hats off to them for that. The English lessons have helped us get on to the same level."

As shown in this quotation, the notion of "speaking the language" is very much connected to aspects of a professional understanding with regard to logistics and pricing requirements, reporting, information processing, anticipation, but also to social communication and casual relationships of P22 and her colleagues overseas. All of this communication is mediated through technology, such as email, telecommunication or video conferencing. To understand each other across cultures is, in the eyes of this manager, strongly connected to language competencies. Because of professional English skills and a highly professionalised language communication, it is very important that the employees in the organisation all speak the language of conduct to a certain degree, that technical terms are understood and that complex work processes and interlinkages of, for example, logistics and pricing can be explained and understood. The manager highlights that, since the language competency of her colleague in Germany has improved, the team work has really improved.

P7, a South African male white manager also comments on "speaking the language" as a very important part of intercultural competence;

"Yeah, if I can just relate one little incident which happened, ah, last week, ahm. Some, ah [...] people from one of our country's north, I mean Zimbabwe and stuff, had a problem with a related issue with, ah, their vehicle and they, ahm, thought it was supposed to have been treated with a warranty, ahm, which I had to and they were very sort of, ah, adamant about it and, ahm, I had one of my junior personnel actually attending to the thing and they came to me, said to

me, you know, they couldn't relate to these people and they were very aggressive with the whole thing and so on and, ahm, the first thing I did is when I greeted them, I greeted them in their own language and I think that pretty straight away took off, ahm, the aggression from it and I went on to discuss the issue with them and we came to an amicable solution to it and, ahm, I explained to them why the warranty situation wasn't viable and they, ah, accepted the outcome of it."

This male White manager shows by describing a "little incident" that happened to him at work, how language competencies can decrease conflict and conflict potential just by approaching a colleague in his / her mother tongue. In the opinion of this manager, language competency is a key competence in intercultural competence. Knowing the mother tongue of another person is like a door-opener. This door-opener opened a deeper discussion about the warranty contract this manager is narrating about. He implicitly argues that his ability to speak the "local language" leads to an open discussion about the situation as well as to the decrease of aggression within the situation. By speaking the language he connects to those addressed on a very personal level, showing them respect and also interest in their culture and language. By speaking the language he also shows understanding of the cultural background and knowledge about the cultural background of the individuals addressed.

In parallel to the aspect of "speaking the language", two more aspects are particularly emphasised by selected managers: "understanding the culture" and "being calm / patient". These two aspects are often interlinked, because knowing the language also means to know the culture to a certain extend. However, at the same time, it becomes obvious that knowing the language is often not enough to really understand – the understanding can only be created between the managers and the researcher.

In the following, two managers of this engineering organisation point out that "understanding the culture" is highly important. All of the managers that highlight this point, argue on base of

the assumption that "understanding the culture" implies that there are cultures which are highly homogenous so that a person can speak of "the culture".

P27, a German expatriate, who has been living in Johannesburg for six years states the following:

> "Ahm, actually I was positively, ah, which does one say [question], ah, welcomed [emphasis], because I started very early in saying, I have the opportunity to learn a lot about your cultures, so I wanna now, and that was in principle my speech in the beginning [emphasis], I wanna give you [emphasis] the opportunity to also learn something about my culture. And I gave them also promise and said, whenever I'm travelling overseas, I will bring something back. So my first trip was to Verona, to international meeting from the group, and I brought a pic about Verona with, from Italy. So, and, and stuff like that, or a simple thing is, you know, I'm from Bavaria so obviously we, we know how to drink beer. So I bought this Bavarian beet beer and explained to them how we pour it into, ah, a beer glass. That was quite, ah, a good experience and the next thing is that, always in December, when we close off the year, it's always the last day in the year, we have a German event, which means in the first year we had Bavarian sausage with pretzel and mustard and beet beer and the second year I had, ah, Eisbein and the third year now I had a, ah, ahm, what is it ,like a snack, and people appreciate it and with that approach they also open up themselves as far as their culture is concerned and they are eager to tell me about their culture and why they do this and that and Queen Mashaba, the Rain King, or whatever and so on and so forth. So I always was welcomed and we openly shared what our cultures do and why and this and that and for that matter it was always excellent."

This German expat explains that the understanding of "the culture" is very important when it comes to getting to know his colleagues and subordinates. So, this expatriate chooses the approach to celebrating *German festivals* at the end of each year and he brings in culture-specific food and explains how *Bavarians* enjoy pouring beer into glasses. His approach of "cultural understanding" is a very practical approach that generalises national and regional culture. However, by choosing this approach, his colleagues open up and talk about their own cultures and culture-specifics. In the department, he thereby establishes an approach which is based on talking openly about one's own culture. This approach includes the explanation of culture-specific thoughts and behaviour. So colleagues talk openly about their cultures, cultural behaviour and cultural assumptions, thereby creating an *open-minded* organisational culture. The manager is well aware of the fact that this approach is "for that matter excellent". It is a very simple, trust-building approach which promotes openness; however it is also limited: this approach is an introduction to building up trust and openness and also to promoting intercultural understanding to a certain extent. The manager is, on the other hand, well aware that this approach is highly generalising and simplifying and that "the culture" is not a homogeneous, but rather is highly heterogeneous culture.

Likewise, an Afrikaans-speaking managers of 62 (P14) highlights the importance of "understanding the culture" in a similar way. He gives the example of "calling me Oom" which he sees as a highly culture-specific way of addressing an elderly person in a friendly and respectful way.

> "Ahm, another thing is, you know, ah, everybody of all cultures, right, call me Oom. You know, it's, it's, ah, ah the first time it was strange for, ah, you know, I went to visit a dealership in Ermelo, for an Indian guy, you know what Oom is [question]. Oom, you know, Afrikaans, Afrikaans culture's got a thing, if somebody's slightly older than you, you call him Oom, Uncle, Oom is Uncle, right. So if he, if he, if he looks, ah, I went to a dealership in Upington and there was a,a guy there and he, over the phone he called me [name of a manager], right, and when I arrived there he said to me, how old are you, I said 60. He said but oh, then I must call you Oom, you know [laughter] and then to hear from, you know, you walk into a dealership and a Indian guy comes to you and he says to you More Oom [name of a manager] [laughter], you know, then, then you, then I think you,

you know you've crossed that, that, that cultural, cultural bridge."

The male manager shows in this excerpt that intercultural competence is based on the "understanding of culture". He highlights that colleagues across cultures call him "Oom", uncle. He views it as culturally competent when colleagues across cultures know about culture-specific expressions and use them across cultures to show respect and thereby to show that they are interested in the culture and that they are knowledgeable across culture specific aspects.

For him, this is a possibility to communicate respectfully across cultures and bridge cultural gaps.

For managers, being "calm" and "patient" is strongly connected to "taking time to understand" and "get to know a person" and "understand conflictual intercultural situation" (see table 1). In an intercultural conflict situation it is viewed as competent, if a person stays calm, speaks quietly and calmingly. Showing strong emotions, such as anger, is seen as incompetent.

Besides the frequently emphasized aspects of "speaking the language", "understanding the other culture", "being calm / patient", managers also highlight values such as "tolerance, acceptance and respect" which are important in their intercultural professional work. With regard to the past of South Africa, these values are highly important in the Post-Apartheid society and therefore also reflected in the organisational intercultural reality. Furthermore, managers highlight that intercultural competence means "treating people equally across cultures", which includes talking to them in a calm and relaxed way and seeing every person as equal. This is also a highly important value in Post-Apartheid society that is reflected within the organisational culture.

Altogether six managers highlight that "being sensitive" is extremely important and five managers point out that intercultural competence is the opposite of discrimination with regard to any diversity aspect. A person is understood as interculturally competent if he / she does not discriminate against others with regard to race, culture, religion and age. These statements are connected to "giving people equal opportunities" (four statements), as well as to "being empathetic" (four statements). All these aspects of intercultural competence might be interpreted as being rooted in a long and deep experience of Apartheid during which discrimination and "being different" and "being unequal" were key concepts.

Finally, three managers highlighted "communication skills", "humanness", "peacefulness", "gender competences" and "flexibility" as important intercultural competences within the engineering field.

Competences with regard to "being able to apologize" (mentioned by two managers, "networking", "transparency" and "being helpful" (mentioned by one manager each), were stated with regard to intercultural competences.

5.2. Coping with intercultural challenges in engineering

The second research question being responded to in this article is "How do managers cope with intercultural challenges in the engineering organisation? (See Exh: 2)

A total of 17 managers out of 27 feel that communication is the most important tool to cope with intercultural challenges in the workplace. Thereby, managers mention diverse communication strategies to resolve conflicting situations, such as "talking openly about those issues" which need to be addressed, "discussing", "inquiring and asking questions". For a few managers, "round table talks" are important means for resolving intercultural conflicts. Furthermore, from an emic perspective, explanations for why things are done in this or in that way are important.

P14, a White South African male manager, for example highlights, that

"There should be a forum of different cultures, right, and, and then that forum

Coping with intercultural challenges	Interview partners	Frequency of state-ments
Communication Talking openly (P6, P8, P9; P12, P14, P18) Discussing (P1, P3, 14, P26, P27) Inquiring, asking questions (P4, P19, P22) Round table talks (P3, P22) Explaining (P5)	P1, P3, P4, P5, P6, P12, P15, P18, P22, P26, P27	17
Learning the culture	P3, P5. P8, P11, P12, P16, P17, P18, P20, P21, P23, P24, P25	13
Respecting others	P1, P4, P11, P12, P13, P14, P19, P21, P24, P26	10
Being professional	P1 P17 P19 P21 P22 P23 P24 P25	8
Openness, open-mindedness	P12, P14, P15 P20 P21 P22 P26 P27	8
Accepting different cultures	P2, P7, P8, P12, P14 P25	6
Adaptation	P12, P13, P17, P22, P24	5
Religious belief	P1, P7, P11, P12, P20	5
Being objective & strategic, not emotional	P2, P17, P19, P22	4
Building up trust	P6, P10, P12	3
Raising awareness of different cultures	P2, P8, P27	3
Introducing Key Performance Indicators	P3, P22, P27	3
Accommodating different world views	P2, P18	2
Action room methods	P1, P22	2
Using humour	P1, P16	2
Reflecting and observing	P1, P2	2
Understanding body language	P1	1
Working with the issues	P11	1
Ignoring cultural faux pas	P8	1
Compromising	P11	1

Exh. 2:   Coping with intercultural challenges. Source: Author's own work.

should meet, what, every three months and discuss any problems that they saw within the organization that, or have, you know, heard anything, you know, experienced anything in the organization that needs to be addressed. I think it, it, it, it needs to come, not maybe, from the, from the top down, it needs to come from the bottom up and, ah, having a forum like that, ah, say, you know, three different cultures from CPD, three different from workshop, let them sit and discuss, you know, that was an issue, like health and safety."

P14 is of the opinion that formal as well as informal open discussions are very important to act in an interculturally competent manner. This includes, for example, explanations of thoughts, strategies or ideas, as well as the exchange of ideas and discussions on specific issues, such as "communication" or "health and safety". Thereby, communication should follow a "bottom-up approach of employees and managers". To him, it seems to be very important that managers have the opportunity to work together across cultures on different managerial levels to really become interculturally competent.

With regard to the definition of intercultural competence, managers highlight managing "intercultural challenges", "learning how to connect to the cultural aspects of the other person" and "learning and addressing the culture" (13 managers). Additionally, ten managers feel that the strategy of "being respectful" helps them to cope with intercultural situations. Eight managers state that "being professional" and "open-minded" equals intercultural competence and view these attributes as being effective in copying with intercultural interactions in their daily life routine.

Other interviewees highlight that accepting and adapting are very successful strategies in intercultural situations. P13, a female South African white manager, for example, points out:

"It's not really a res, resources that it's needed there [...] ah, you need to learn to adapt, that's the first thing. If you can adapt it means that's a big resource. So it means when you go to India [....] if you

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can adapt you live like them, if you go to Russia you be like Russians. As long as you can adapt that's it, that's the main purpose."

So in the opinion of P13, adaptation is the most important tool for pursuing an interculturally competent strategy. However, P2, for example, highlights that before you can adapt you need to know "the culture" ("if you go to Russia you be like Russians") and that the best tool for getting to know the culture is observation.

> *"I think it is my ability to actually stand back and observe [....] I'm usually somebody if something gets heated or some conversation or some situation, I would really stand back and look at it objectively [...] and I think that is really one of my strengths in terms of managing difficult situations. Ahm, I'm not [emphasis] emotional [...] and like they always say typical females are, but I'm not emotional when it comes to business and difficult situations. I really leave my emotions outside the door and look at it objectively."*

The ability to "stand back" and observe is strongly connected to looking at the intercultural situation as it occurs in an objective, non-emotional and professional way (P2). P2 is a female manager who believes that emotions can create difficulties in communication. For her, an "objective" view is very important. From her perspective, this objectivity, which she places high value upon, is gained by observation.

5.3. Recommendations for developing intercultural competences

Finally, the findings with regard to the third research question on "Which recommendations can be provided to promote intercultural competence in managers in the international engineering organisation?" will be presented.

A majority of managers highlight that they are very content with the organisational culture in terms of intercultural competence and understanding of managers across cultures within the organisation. However, managers point out that the following aspects can still

Recommendation for promoting intercultural competences	Interview partners
Putting new policies in place	P1, P4, P24
Sharing information and knowledge	P1, P10
Closeness of cultures working for one goal	P10, P11
Updating technological systems	P1
Proper introduction training	P1
Providing feedback	P7
Improving email communication	P10

Exh. 3:   Recommendations for intercultural competences. Source: Author's own work.

be improved with regard to intercultural competence. (See Exh: 3)

Managers across all cultural groups feel highly content about intercultural relationships which they have. Hence, only a few statements on recommendations for how to promote intercultural competences were given.

Three managers point out that new policies could bring improvements for promoting intercultural competences within the organisation These policies include, for example, the taking in of members of formerly disadvantaged groups (Black, Coloured, Indian) into top management positions.

Two managers highlight that "sharing of information and knowledge" can always be improved. Another two managers feel that managers of different cultural belonging could still work more closely together and that working together across cultures is very much influenced by the definition of goals. These two managers see it that way that managers across cultures should agree on common goals and mediate their inter-relationships through the goals of the organisation or the department. Common goals can support the bridging of cultural gaps and differences, as long as the goals are defined as overall goals and as highly important.

P1 states that technological systems need to be updated to communicate on "an equal technological level" across cultures. She also emphasises that intercultural training can help to professionalise working together across cultures in a professional way. For P7, it is important to give and gain feedback with regard to his work and interpersonal communication behaviour to improve his own intercultural competences and learn about his colleagues. Another manager is convinced that email communication needs to be improved with regard to the question how a person should communicate in an interculturally competent manner across cultures in emails.

One of the white English-speaking male managers (P4) highlights the following when it comes to recommendations for the organisation to promote intercultural competences:

> "Its, its, there's such a huge mix of cultures, that, in order to understand the person standing next to you's culture you, you've really got to make a concerted effort and maybe if we do [emphasis] then make that effort we'll understand each other a lot better. But yeah, ahm, I think South Africa is a very complicated country. We also need new policies to bring people together and bring people of former disadvantaged groups into top management positions."

This statement shows that the manager is aware of the fact that each and every individual within the organisation needs to make a concerted effort to be interculturally competent. Together with improved policy strategies, intercultural competences within the organisation can be improved (P4). This includes the restructuring process of organisational policies and the overcoming of Apartheid-related structures (White management, Black workers) in the organisation which still exist.

Finally, to learn about other cultures, respect others, being professional, open-minded, accepting and adapting, as well as copying through religious belief are all important copying strategies which help managers to cope with challenging situations. Further on, managers view the following aspects as important competencies and strategies to cope with

intercultural situations: objectivity and non-emotionality, trust building, raising awareness, key performance indicator, the accommodation of different world views, action room methods, humour reflection and observation, understanding body language, working with the issues, ignorance of cultural faux pas and compromising.

6. Conclusion

This article refers to the questions of how managers in an international and cultural diverse engineering environment define intercultural competence, how they cope with intercultural challenges in their daily work routine and how intercultural competence could be promoted within cultural engineering contexts.

It can be concluded that intercultural competence is highly important for managers with regard to language competencies (to speak a language as well as to know introductory words and small talk in a certain language), cultural understanding (understanding cultural aspects, thought styles and behaviour as well as using cultural concepts to bridge differences) and calmness / patience (be calm, patient and take time to understand and manage). Managers use a very practical approach with regard to their definition of intercultural competence. Particularly with regard to language and cultural understanding emic perspectives are relatively simplistic and generalizing in terms of their homogeneous picture of cultures. This picture comprises national, regional and language-group ascriptions and is epitomized in the expression "understanding 'the' culture". From an emic managerial perspective in this specific context, the concept of intercultural competence can be interpreted as being strongly rooted in the Post-Apartheid concept of "being equal" and "anti-discrimination". It has to be viewed and understood with regard to the Apartheid history. This suggests the importance of taking the specific organizational setting and also macro-societal configurations into account when trying to approximate emic understandings of culture. In general,

managers view intercultural competence as a very important concept which supports managers to overcome the cultural gaps within the organisation.

With regard to the research question on how managers cope with intercultural challenges in engineering, the most important coping strategies are related to communicative competencies which include open talk, discussion, inquiry, round table talks and explanations. However, from emic perspectives the most important coping strategies are: learning about other cultures, respecting others, being professional, open-minded, accepting and adapting, as well as copying through religious belief. Further on, managers view objectivity and non-emotionality, trust building, raising awareness, key performance indicator, the accommodation of different world views, action room methods, humour reflection and observation, understanding body language, working with the issues, ignorance of cultural faux pas and compromising as important competencies and strategies to cope with intercultural situations.

There are only a few recommendations that managers state with regard to improving intercultural competences in the organisation. This might be due to the fact that managers are not aware of intercultural competences and the possibilities of their promotion. It might, however, also be related to their cultural concept and their assessment of culture-related behaviour. Finally, it could be also related to a gap in trust to talk openly about their criticisms on organisational matters. It can be concluded that intercultural competences can improve effectively when individuals within the organisation make an effort to become interculturally competent whilst the organisation undergoes restructuring processes in terms of the implementation of new policies to promote interculturality and thereby intercultural competences within the organisation. Improvement referring to intercultural competences does not only refer to inter-relationship, social and structural competences, but also to technological advancement and improvement which might be specific with regard to an emic perspective in the engineering organisation.

This study makes a small and exploratory contribution to studying emic perspectives on intercultural competences and their promotion in an engineering organisation in South Africa. It is limited to primary and secondary source analyses and triangulation of theories, methods and data in terms of qualitative data analysis within one organisation. Referring to the sample and the qualitative single case study approach, the results of the study are not generalizable in quantitative terms; however, the results provide exploratory insights and a deeper understanding of the exemplified issues in the described and presented setting.

7.   References

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