

# Occupational safety in a globalised construction industry: A study on Polish workers in Norway

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## ABSTRACT

Polish workers are the largest group of migrant workers in Norway and are particularly well represented in the construction industry. According to several studies, migrant workers are more prone to occupational accidents than native workers are. This difference is often attributed to poor communication and lack of linguistic skills. We explored factors affecting occupational safety related to migrant workers with an emphasis on communication, culture and language through interviews with Polish and Norwegian workers. The study shows that the construction industry in Norway mainly focuses on language as an issue. Culture is seen as a contributing factor, but is somewhat neglected. Fewer measures to cope with challenges related to migrant workers were found for cultural issues as compared to linguistic. However, the study shows that cultural aspects are at least as important. This gives implications for safety management in the construction industry. This paper suggests considering cultural aspects more in safety management related to migrant workers to achieve the desired safety focus at construction sites.

**Keywords:** culture; language; communication; migrant workers.

## 1. INTRODUCTION

The construction industry is known to be one of the sectors with the highest risk of occupational accidents both in Norway as, as well as abroad. The sector is additionally experiencing rapid changes in form of internationalisation, which is changing the typical working structure and implicating new challenges and opportunities.

After the expansion of the European Union (EU) in 2004, the number of migrant workers from the new member countries across Western-Europe rose. In this study, we analyse the effects of this development for the risk of being involved in occupational accidents related to culture and language. Previous studies<sup>1, 2</sup> have shown that foreign workers have an

increased risk of being injured or killed at work. While we already know a great deal about the differences in risk for the aforementioned groups, we know lesser about the underlying factors causing these increasing risk trends.

In Norway, Poles represent the largest group of migrant workers. The number of Polish workers in Norway is continuously increasing even after 10 years with open borders in Europe. A study carried out by Friberg & Eldring<sup>3</sup> shows that 84 percent of the Polish men coming after 2004 in Oslo are employed in the construction industry. More than one-third of the reported injuries among migrant workers in Norway in 2011-2012 involved Polish citizens<sup>1</sup> even though they only constituted 15 percent of the employed migrant workforce in Norway in 2011\*.

It is important to understand challenges concerning a more international workforce. The aim of the paper is to explore the relation culture and language has to occupational safety. Previous research in the field shows that language affects safety at a work place<sup>4</sup>. When it comes to cultural influences, some studies show that culture does not play a decisive role for occupational safety<sup>5</sup>, others claim that different labour cultures and traditions, and different work habits of foreign workers are among factors that can affect occupational safety<sup>6</sup>. Culture and language are not the only factors affecting occupational safety with regard to migrant workers; nevertheless, they deserve specific attention.

## **2. BACKGROUND**

### **2.1. The Construction Industry**

Construction projects are complex socio-technical systems that can take many different organisational forms. The industry is project-based and operates in an ever-changing environment<sup>7</sup>. One dimension of the complexity relates to the multitude of actors involved in a construction project that all have impact on safety, e.g. authorities, clients, contractors, subcontractors. Another dimension of the complexity relates to the unstable characteristics of the portfolio of projects in the industry. Each project is unique related to type of project (a house, a railway or a bridge), ways of doing work, partners and techniques. Many actors and stakeholders are involved with different rationalities, purposes and knowledge. For example, a client's focus is on design and functionality of the end-product rather than safety during construction. Increased globalisation of the workforce is one of the key development traits characterising the construction industry, making a construction site an increasingly multicultural workplace. The globalisation of the workforce is related to market mechanisms as well as periods of work peak where temporary appointments are applied.

### **2.2. Migrant workers**

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\* Numbers from Statistics Norway, Employment among immigrants, register-based. Available from: [www.ssb.no/en/statistikkbanken](http://www.ssb.no/en/statistikkbanken)

The labour market worldwide is influenced by guest workers emigrating for work abroad. After the expansion of the European Union (EU) in 2004, the number of migrant workers in Norway and the rest of Western-Europe grew rapidly. In Norway as of 2013, 13% of the employed labour force were immigrants<sup>8</sup>, which was twice the number for 2002. The majority came from EU-countries in Eastern Europe and Asia including Turkey. The largest group of migrant workers in Norway are from Poland. A large number of the male Poles work within the construction industry. A study by Friberg & Eldring<sup>3</sup> shows that most of these workers were in 2010 men over 35 years with families, and had lived in Norway for 4 years on average. Most of them had limited language skills in Norwegian and English.

There are many reasons for both migration as well as employment of migrant workers. For the hosting countries such as Norway, some of the reasons for employing migrant workers are the lack of qualified workers in the local market and a desire for a flexible and cheaper workforce. The migrant workers on the other hand usually look for a job opportunity and a better salary. A migrant worker is also not a "migrant worker", i.e. motivations are varying, as are personal circumstances, skills and other factors affecting migrant workers choices and perceptions. An example is the variation between skilled construction workers, unskilled workers and highly educated migrants undertaking low-skilled jobs. As described by Trevena<sup>9</sup> educated migrant workers that take low paid jobs can be categorised as drifters, career seekers or target earners based on their aim of migration and intention of duration of stay.

### **2.3. Risk and safety**

International studies show that migrant workers have a higher risk for work-related accidents than native workers (e.g.<sup>10</sup>). Salminen<sup>2</sup> found that the risk of occupational injury is 2.13 times higher for foreign workers than for native workers. Numbers from The Norwegian Labour Inspection Authority<sup>1</sup> show the same trend; that foreign workers have a 1.46 times higher chance of severe accidents than native workers. Lindhout *et al.*<sup>4</sup> emphasised linguistic challenges in particular, with potential misunderstandings and low risk awareness as main challenges. Other studies have found that there is a relationship between safety and national culture (e.g. Helmreich and Merrit, 1998 in Mearns and Yule<sup>11</sup>), and that different cultures have different risk perceptions and attitudes towards risk<sup>12</sup>. Håvold<sup>13</sup> pointed out that that national culture influences safety orientation. A study comparing Filipino and Norwegian seafaring professionals found that national culture seems to impact on the probability of occupational accidents<sup>14</sup>. A study on Pakistani construction workers based on Hofstede's theory showed that there is a strong correlation between cultural dimensions, safe work behaviour and risk perception which could be explained by attitudes<sup>15</sup>.

### **2.4. Frame conditions**

In addition to factors that can affect occupational safety coming directly from the individuals, factors framing the working situation can affect occupational safety as well. The term *frame conditions* here refers to the "the conditions that influence the opportunities an organisation, organisational unit, group, or individual has to control accident risk" <sup>16†</sup>. Frame conditions are external or contextual factors that influence the way work is performed, decisions are made and safety is upheld. Contractual relationships, economic incentives, the formal division of labour and distribution of power between groups are examples of frame conditions. In the construction industry, the frame conditions vary from project to project. There are differences in contractual relationships, the number of subcontractors involved, the scale and timeframe of projects and so on.

Research on migrant workers' occupational risk shows the importance of several such frame conditions. Guldenmund *et al.*<sup>5</sup> claim that migrant workers are more involved in occupational accidents than local workers because they carry out more dangerous work. Other research shows that migrant workers are exposed to higher risks due to longer work hours and a higher work tempo<sup>17</sup>; they are not offered safety training and have worse working conditions<sup>18</sup>, e.g. in terms of payment. Many migrant workers are hired on a short-term basis, i.e. hired by contractors, subcontractors or recruitment agencies. They often change work places and employer, and will therefore find limited opportunities of establishing social relationships at the work site and acquire the desired safety culture. Furthermore, temporary contracts can create ambiguity regarding responsibilities<sup>19</sup> as there might be a weaker relationship to the employer. According to Mayhew & Quinlan<sup>20</sup> temporary work arrangements may give a higher risk of occupational injury. Numbers from The Norwegian Labour Inspection Authority<sup>1</sup> show that most of the injured migrant workers were not employed on regular contracts, but were either hired or temporary employed.

Economic reward pressure, disorganisation, inadequate regulation and the lack of social and cultural integration are factors that are likely to influence occupational risk. As much as all these factors also shape migrant workers and their occupational safety, the focus of this paper will be on the specific factors; culture, communication and language.

### **3. CULTURE AND SAFETY**

#### **3.1. Background**

The merging of the concepts of (organisational) culture and safety is usually credited to the investigations performed in the aftermath of Chernobyl e.g. <sup>21</sup>. The interest in safety culture had an obvious predecessor in the research on safety climate; e.g. Zohar <sup>22</sup> and the seminal works of Barry Turner <sup>23,24</sup>. The broader field of organisational science saw a wave

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<sup>†</sup> Rosness and colleagues use the term "environmental conditions" instead of "frame conditions". Both terms translate into the Norwegian word "rammebetingelser" and are therefore treated as synonyms.

of research into organisational culture from the early 1980s and later, while the early work on organisational climate can be traced back to the 1960s e.g. <sup>25</sup>. A common denominator in all these strands of research is that they treat culture or climate as intra-organisational properties in the sense that they are oriented at understanding the inner workings of organisations by describing their uniqueness as social systems. Apart from the research on professional culture, the ways organisations are connected with their broader cultural context is an under-researched field. In an increasingly globalised labour market, the possible influence of national cultures on organisational cultures will be an important topic for organisation science in general, and safety science in particular.

### **3.2. National culture and organisational safety**

In particular, the inclusion of multiple nationalities in single organisations and work groups is likely to create new dynamics related to communication and interaction. As such, it can introduce new challenges and opportunities for an organisations' ability to maintain safety. This involves a slight change in focus for safety culture research, from describing the predominant frames of reference and social conventions within a presumed homogenous group, to describing the differences between the members of a given group or between different groups. In a workforce consisting of multiple nationalities, inter-cultural or cross-cultural communication becomes an important challenge. Hofstede<sup>26</sup> is among the researchers describing how cultural differences between different nationalities make their presence felt in the world of work and organisation. Hofstede<sup>27</sup> identified six different dimensions along which different cultures can be classified.

- 1) Power Distance (the degree to which the members of a culture accept and expect inequalities in the distribution of prestige, wealth and power)
- 2) Uncertainty Avoidance (the degree to which uncertainty in terms of rule orientation, employment stability and stress is tolerated)
- 3) Individualism vs. Collectivism (whether the members of a culture expect to take care of themselves and no one else, as opposed to a preference for more collective values where society or groups have a responsibility for taking care of the individual)
- 4) Masculinity vs. Femininity (the role distribution between the sexes and the degree to which traditional masculine ideals related to competition, achievement and assertiveness are valued)
- 5) Long Term vs. Short Term Normative Orientation (whether the members of a culture like to hold on to norms and traditions or are open for new knowledge to prepare for the future)
- 6) Indulgence vs. Restraint (the extent to which the society have strict norms or more freely allows to enjoy life according to desires and impulses)

Hofstede's dimensions can be easily criticised for involving stereotypes, painting generalised caricatures and overlooking obvious differences inside the groups that appear to be similar in Hofstede's classification<sup>5,28</sup>. His taxonomy nevertheless

points to the fact that cultures do vary and that multinational organisations and work places will have to deal with this variation in communication and interaction. In this paper, we explore the relevance of such categories of cultural variations and the way they are perceived to influence safety.

Cultural differences based on nationality should however not be exaggerated. As has been shown by Wenger<sup>29</sup>, being involved with the same activity and having the same craft can be a source of common identity and meaning. In other words, a multinational group of carpenters for example, will most likely be characterised by both differentiation and integration, where integration comes from sharing a profession and an activity.

### **3.3 Communication - culture and language**

Culture and language are inextricably tied together. Culture is defined as something that is shared<sup>‡30</sup> between the members of a group; it presupposes the possibility of communication between the group members. The link between language and culture does however run deeper than this. Language provides us with categories for thought, and there is a close link between the semantic structures of a language, and the way we are able to perceive the world. This relationship between language and social reality is the basis of the well-known Sapir-Whorf hypothesis<sup>31, 32</sup>. While the linguistic determinism of the hypothesis should not be exaggerated, it provides a more or less generally accepted example of the link between language and culture. Furthermore, communication is influenced by cultural factors such as norms, beliefs, perceptions and customs to a large extent. Language can therefore be seen in close relation to culture. Ultimately, language is about conveying meaning between actors. Language consists of a system of signs to which a certain meaning is ascribed. Thus, a sign always *signifies* something. As famously stated by Saussure<sup>33</sup>, the relationship between the sign and the signified is "arbitrary" in the sense that it is established by social convention. Geertz's<sup>34</sup> example of the meaning of the wink of an eye is a good illustration of this: When a person winks an eye during interaction with another person, several interpretations of this gesture are possible. It could be a random muscular contraction like a tic, it could be a way of flirting with another person, it may be a way of underlining a joke, etc. Geertz's point with this example is that the meaning of signs (e.g. words or non-verbal communication) derive their meaning from the cultural context in which they are used. The *meaning* of the sign is difficult to grasp without knowledge of the cultural background of the person using the sign. Studies by Trajkovski & Loosemore<sup>35</sup> from the construction industry point out that messages or hints can be hidden in the speech and thus be hard to decode for workers from different cultures. Culture defined as something that is shared between the members of a group, presupposes the possibility of communication between the group members. The implication of this is that communication requires insight into the structures of meaning of the persons interacting.

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<sup>‡</sup> Defining culture from an integrative perspective does not preclude the existence of conflict, inconsistency or ambiguity. On the contrary, studying what is shared within and between groups should also include what is *not* shared.

## **4. RESEARCH METHODOLOGY**

A qualitative study was conducted to obtain more knowledge on risk of occupational injuries among migrant workers in the construction industry. Data was collected through semi-structured interviews. The results of the data collection tilted the focus of the study towards culture. The study involved migrant workers represented by Polish workers in Norway, and focused on Polish workers coming to Norway after 2004.

### **4.1. Research design**

Scientific research papers about safety and migrant workers formed the background for the study. An interview study was undertaken to find out more about challenges at workplaces that use migrant workforce. This study was partly founded on grounded theory as data about the topic was collected and analysed without starting with concrete hypotheses<sup>36</sup>. However, certain research themes were chosen to focus on during the interviews: background information, safety, cultural aspects, communication, training and follow-up, hiring of labour and inclusion, responsibilities, measures and further work. An interview guide was prepared with these nine key categories and consisted of around 30 questions, depending on the interviewees' positions (separate guides were made for the different positions). The interviews were semi-structured with open questions, as this gave the possibility of basing the questions on themes, asking additional questions around relevant topics, as well as the possibility to explore any new information that came up during the interviews<sup>37</sup>.

The interviews were conducted in March 2014 at the construction site/work place, the interviewees' house or at a neutral location. The length of the interviews ranged from 15 minutes up to an hour, where the majority lasted around 30 minutes. Thirteen of the interviews were recorded to ensure good data quality. Five interviews were not recorded due to practical challenges around the locations of the interviews. Detailed and comprehensive notes were however taken during these sessions. All interviews were written out in form of structured, detailed memos in Polish or Norwegian, according to the interview language. The data was treated confidentiality and published anonymously.

### **4.2. Sample**

Both migrant as well as native workers, represented by Polish and Norwegian workers respectively, working in different positions were interviewed. The sample consisted of 10 Norwegian and 8 Polish interviewees. The interviewees were employed by contractors, sub-contractors and temporary working agencies in the construction industry. Six of the interviewees worked on the same project (four Norwegians and two Polish), four on another common project (two Polish and two Norwegians) and the remaining eight on different project and locations. The interviewees represented six companies and were employed in four different positions as presented in Table 1. The interviewees were recruited through

a contact persons in a construction companies, via local contacts, and through "snowball sampling", from tips from other interviewees. These sampling methods together provided a varied sample of interviewees.

Table 1: Interviewee sample

<b>Position</b>	<b>Norwegian</b>	<b>Polish</b>
Manager	4	1
Supervisor	3	-
Skilled worker	1	6
Union representative <sup>^</sup>	2	1

<sup>^</sup>Union representatives were also skilled workers

The sample size of Polish and Norwegian interviewees was unevenly distributed between positions. However, comparing it with the positions in which the nationalities work in makes the ratio acceptable (the representation of Polish workers in higher positions is relatively low). This could nevertheless be a drawback of the study. The number of interviews can be argued to be large enough as concepts regarding the topic repeated themselves at the end of the data collection.

The interviews were carried out in the interviewees' native languages, i.e. Polish and Norwegian. This gave an advantage in both understanding the words said as well as the meanings behind the words. Reflecting on and describing aspects of culture requires an attempt to explicate frames of reference, norms and conventions. This is a methodological challenge in many different respects (see <sup>38, 39</sup>), but has particular implications when it comes to language. It is hard enough to explicate cultural assumptions within your mother tongue, and likely more challenging in a foreign language.

#### **4.2.1. Polish interviewees**

The Polish interviewees were between 35 and 55 years old and had all started to work in Norway after 2004 through hiring agencies. Most had been working in Norway between 7 and 8 years. The shortest work experience in Norway among the interviewees was 2 years, the longest 10 years. All the interviewees had experience from the construction industry from Poland, and a few from Germany. The skilled workers had technical school as education from Poland.

The terms of employment varied between the Polish interviewees. Some were permanently employed for a contractor or a subcontractor, some had time-limited contracts and some worked in temporary employment agencies and were hired out. Most of the interviewees lived in Norway. Some were settled in Norway with family, others had their family in Poland. A few were commuting between Norway and Poland every second week.

#### **4.2.2. Norwegian interviewees**



The age of the Norwegian interviewees also varied between 35 and 55 years. Their education varied between technical school and higher education. The skilled workers had at least 15 years of experience in the industry. All the Norwegian interviewees were permanently employed by contractors.

### 4.3. Translation

The raw data from the interviews conducted with Polish interviewees was transcribed in Polish. This ensured that it was possible to go back and find the exact wordings from the interviews if necessary. Interviews transcribed in Polish were translated into Norwegian by the interviewer during coding of the data into categories. This was done to have a basis for comparison without language confusions. Translation of data can influence the interpretation and meaning of the data. Therefore, the focus for the translations was on correct interpretation, rather than literal translation. The interviewers' cultural knowledge about Norway and Poland, and the interviewers' linguistic skills in both languages assured a good translation, without meanings being reduced or altered as the cultural contexts and language differences between Norwegian and Polish are well known to the interviewer.

### 4.4. Analysis

The structured memos of the interviews were coded according to categories with subcategories based on "open coding"<sup>40</sup>, which resulted in main findings organised within the following four main categories: linguistic skills, communication, culture and safety, as shown in Table 2. The categories were chosen based on information in the collected data. This approach allows for a structured comparison of the similarities and differences in the collected data. The data was systemised in a matrix with columns for interviewees and rows of categories, and then systematically examined. Findings were separated according to Polish and Norwegian interviewees. The most interesting findings were connected to communication, culture and language and these were separated out for further examination and discussion.

Table 2: Codes for results

Category	Linguistic skills	Communication	Culture	Safety
Subcategories	About Norwegians About Poles Courses	Language Common practice	Understanding Behaviour/Attitudes	Rules and procedures Compliance Reporting Hazards Training

## 5. RESULTS

The main results of the interview study are presented in this section. The focus is on how communication influences safety when migrant workforce is used at construction sites. Two main factors are emphasised upon; language and culture.

### 5.1. Linguistic skills

Norwegian and English skills varied among the Polish interviewees. The stereotype "migrant worker" contained great variations within the group, both related to linguistic skills and integration in Norwegian society. English skills depended highly on the age of the interviewee, where the younger generation in general had better English skills. The Norwegian skills seemed however to depend on several other factors than just the age. The Norwegian skills of the Polish workers highly depended on their expectations for the stay and their working arrangements. The interviewees with no Norwegian skills lived permanently in Poland and commuted to work in Norway every second week. There were no need for them to learn Norwegian as they mostly worked 12-hour shifts while they were in Norway, and did not need to communicate in Norwegian outside work. At work, they had someone that could translate for them, or they knew the few basic words and phrases they needed to do their job. The interviewees that were originally planning to work in Norway for only a few years to improve their economic situation had some skills in Norwegian. The interviewees that had moved to Norway with their families and settled down spoke Norwegian at a higher level, even after only living a couple of years in Norway.

One of the measures taken by companies to cope with language was language courses organised for migrant workers. Some of the interviewees had been to such courses, but found it demanding and time-consuming to learn the language.

*'The course was quite hard. It was after work in the evening, from 8 pm to 10 pm. You are tired after a whole day at work, and you need to wake up early the next day again to go to work'.* [Polish skilled worker]

Another measure that was taken by the companies to deal with linguistic challenges was the nature of workforce organisation at the construction site. It was found that it is common practice to organise Polish workers together in teams with one supervisor that knows both Polish, and Norwegian or English. This person is used as a translator. The level of integration in the work place and in society, as well as frame conditions were seen as having a strong influence on whether the Polish workers were able to communicate in Norwegian. Further measures often implemented by companies were non-verbal communication in form of drawings or pointing was also common. Written information was often available in Polish and English, in addition to Norwegian.

The impression Polish workers themselves had, was that communication at work was okay, either they spoke Norwegian themselves or they had messages translated to them. Several interviewees mentioned that being a good craftsman was more important for getting a job than to know the language well.

*'The ones that know the job get to stay. The language is not most important. A real professional worker will manage without language. Then it is enough with some words and gesticulation'.* [Polish skilled worker]

The interviews indicated that Norwegian workers at the sharp end perceive language barriers as a larger risk factor than Polish workers did. Many of the Polish workers had the opinion that they had a satisfactory level of Norwegian to perform their work. Nevertheless, the opinion was that it would have been useful to have further skills in Norwegian. The interviewees however clearly stated that communication became easier and language was less of a barrier when colleagues know each other and had worked together before.

## **5.2. Different kinds of "yes"**

It was seen that cultural differences can influence the way things are said and how things are understood. One example stated by an interviewee shows that not only the spoken words are important to understand a message correct, but also the context of the message and tone in which it is said.

*'One understood Norwegian very well and spoke Norwegian. He understood the terminology and the tone Norwegians use when they speak. Most of the others however, neither understood what I said, nor why I said it!'* [Norwegian supervisor]

Both Norwegian and Polish interviewees had experienced that their Polish colleagues had answered "yes, yes", without really understanding the question. One of the migrant workers admitted to having answered this way when he did not yet speak and understand Norwegian well. Others said that they usually asked if something was unclear. It was pointed out that the Polish workers tend to answer "yes", but it also was pointed out that there were different types of "yes". The "yes" could be said with different tones, depending on if the message was understood or not. Several interviewees said it is important to reassure that the message is understood correctly by asking "what or how" questions (what is your task?) rather than "yes or no" questions (do you know what to do?).

## **5.3. Hierarchic communication structure – "Boss"**

For the Polish workers, the manager had a lot of authority. Among the Norwegians, the power structure was regarded flatter, where the workers should discuss things with the leader, rather than just agreeing with him. Both groups of interviewees agreed that the Norwegians and the Polish had different views when it comes to relations to the superiors. Norwegian interviewees observed that Polish workers liked to call their superiors for "boss", whereas the Norwegian superiors were not comfortable with this term. For the Polish interviewee calling the superior "boss" was a way to show respect for older and more experienced workers. Some of the Norwegians interpreted the term "boss" with having more responsibilities, which they were against. However, after learning the way Poles talk and their reasons behind calling superiors for "boss", some of the Norwegians got an understanding of it and were fine with being called "boss".

*'I think I have never been called boss before. "Yes, boss". Like a cotton plantation. "I am your supervisor, not your boss. You are your own boss for the next week. You have to plan your own week, not me. I can just help you arrange it and explain. The rest you have to do on your own"'. [Norwegian supervisor]*

Similarly, as the management structure was observed to be more hierarchic among Poles, the communication patterns among Poles were also observed to be influenced by this top-down structure where information came from the top. Further, the Norwegian interviewees had an impression that communication with Polish workers needed to be harsh, which was quite unfamiliar with them.

*'He (a Polish supervisor) communicated with his guys in a very harsh manner as for me. We don't do that. We can speak loudly, but to me it seems wrong to yell and howl: "You should be finished HERE!" We are used to include and involve in planning in Norway; "What do you think?". But with the guys from Poland we need to communicate in a totally different way. More like a loudmouthed control centre. That is totally wrong to me'. [Norwegian supervisor]*

The Norwegian interviewees had observed that Polish workers needed to get specific orders to perform their job, whereas Norwegian workers were by themselves described to be more used to doing things on their own without a superior telling what to do. However, the perception from the Polish workers' perspective was not in accordance with the Norwegian workers' perception. According to some of the Polish workers themselves, they were more observant and solution-orientated, and thus able to perform work and find good solutions without superiors' orders.

#### **5.4. Rules and compliance - "What the boss says, the boss gets"**

Polish interviewees mentioned that HSE and work with safety is seen with importance and performed seriously in Norway. Several underlined that safety comes first in Norway. All the workers had been to HSE-training arranged by developers and contractors and some also from their own company. Regulations and procedures from developers, contractors and sub-contractors were perceived as strict and clear. Most of the Polish interviewees perceived regulations and procedures as somewhat looser in Poland, though many commented that they had not been working in Poland for several years, and did not know how it actually is today.

According to the Polish interviewees, they were respecting and complying with rules and regulations. However, some examples given by the Polish themselves showed that certain behaviour was regarded as acceptable, even though it was breaking the rules. The Norwegian interviewees had different opinions regarding Polish workers' compliance; some said it varied between Polish workers, as it does among Norwegians. Some said Polish workers complied well, others said it was terrible. Several said that rules needed to be repeated for the Polish workers, but after some time the Polish workers got better on rule compliance. It was also pointed out that if they were confronted, they usually listened at once.

*'When you confront them with it; "You need to wear PPE", they do it at once. So that is not a problem. I believe they are quite afraid for their jobs and that if they don't act as they are told, they might lose it'. [Norwegian union representative]*

Reasons given by the Polish workers for complying with rules and regulations varied between taking care of own safety to fear of consequences. Several of the interviewees mentioned keeping their job as the paramount reason for complying with rules and regulations, ahead of taking care of own safety as the most important reason. Examples of non-compliance of safety regulations included not using PPE when it hindered work accomplishment. Another example was the use of shortcuts, such as using a ladder instead of scaffolding if time was too short.

*'Sometimes all the PPE is an obstacle. For example if you need to weld something, and you cannot reach the place with a helmet on because there is not enough space, then you need to take the helmet off to be able to stick your head up. But that are sporadic incidents'. [Polish skilled worker]*

Another example that might affect safety linked to culture is that Polish workers usually do not say "no" to the manager. Both Norwegian and Polish interviewees agreed that most Polish workers have a focus on getting the job done, especially if the boss required it. For this reason, safety considerations may have to give way to work execution.

*'Polish mentality is a bit different. What the boss says, the boss gets. Poles are more loyal. If there is a job that must be done, we do it without excuses'. [Polish skilled worker]*

Expectations from superiors towards migrant workers also played a role for safety. A Polish interviewee had experienced that expectations were higher towards him to perform risk related work because he was a migrant worker.

*'They are used to Polish workers doing everything, and mostly not saying no. Sometimes the employer also expects it. The employees are scared to lose their jobs, so they do what they are told'. [Polish skilled worker]*

### **5.5. Snitching and incident reporting**

Both Polish and Norwegian interviewees pointed out that Polish workers were not very good at, and did not wish to write discrepancy reports, as it was perceived as snitching. Some clearly stated the differences in how Poles and Norwegians perceive reporting:

*'Polish mentality is like; we don't like to snitch or report others. They (the Norwegians) simply look at it differently. For them it is not snitching but about safety, while we perceive it differently'. [Polish skilled worker]*

However, one of the interviewees had adapted to the safety culture at work after working some time in Norway, and had started to report. Another interviewee also reported that attitudes and behaviours change after being in Norway.

*'I usually write notes, because after a while I realised that it is not accusation or reporting, it is about safety. And there is a prize draw'.* [Polish skilled worker]

*'The attitudes differ between different groups of workers. A person who came to Norway to work for the first time ever, doesn't understand that HSE is very important in Norway'.* [Norwegian manager]

### **5.6. Safety measures focusing on language**

The differences between different nationalities were recognised as a challenge to safety management. However, most of the measures aiming to deal with challenges related to migrant workers had to do with linguistics. The interviewees reported that the most common measures at the work site were translations (of documentation, safety courses etc.) and language courses. In most cases, workers were also set together in working groups based on mutual language and had one person translating work instructions and other information to the rest. The authorities also used translation as a measure, e.g. The Norwegian Inspection Authority had information available in four languages on their webpages. They additionally had a phone service available in Polish, in addition to English and Norwegian. They had also given out a brochure with information about the most important workplace regulations and information about rights and obligations as an employee in Norway. It was primarily made for the construction sector and is distributed in eight languages. For Norwegian employees, The Norwegian Labour Inspection Authority has given out a language guide on communication with migrant workers in Norwegian <sup>41</sup>.

## **6. DISCUSSION**

The interviews clearly distinguish an interesting and important aspect about multicultural communication - there is more than just spoken words. This is of course not a new fact. However, the focus on culture as an important part of communication related to safety and use of migrant workers at construction sites was not found to be very large. The main focus was found to be on linguistics. This was seen through the type of measures that were implemented in the construction industry. Most measures found concerned spoken language.

Language is an important part of communication. It can create misunderstandings and usually affects ones access to information, knowledge about work processes, rules and rights. The linguistic skills of the Polish workers in the study varied and the urge to learn the language outside work was low. One reason was that the workers did not have time nor

energy to attend classes after work hours. Another reason was that many preferred to learn through conversation and not through books. A measure to tackle linguistic challenges at worksites was organising workers in groups based on nationalities. This acted as a barrier for the possibility to learn language at work. Additionally, this kind of segregation leaves out the opportunity to acquire the desired safety culture.

The Polish workers did not perceive language as a large risk to safety. On the contrary, several of the Norwegian interviewees found language to be a risk to safety as misunderstandings could occur. One of the examples given was that Polish workers often say "yes" without understanding. An interviewee with some experience regarding work with Polish said that they observed different kinds of "yes". Relating this to Saussure's sign and meaning<sup>33</sup>, understanding the "yes", without any cultural knowledge can be hard. This lack of meaning in the "yes" can be one of the reasons why Norwegians get frustrated when experiencing that Polish workers say "yes" when they mean "no". The sign (here the word "yes") is the same, but the *meaning* of the sign can be difficult to understand without cultural knowledge. This may seem like splitting hairs, but can actually make a big difference in the way safety challenges are framed. The challenges involved with having multiple nationalities working together at construction sites are as mentioned, often seen as linguistic issues. They are seen as problems related to *signs*, in the sense that the simple solution is language training or having all nationalities communicating in English. This however solves only half of the problem. The problem should also be recognised as a problem of *meaning*, that is, as a cultural challenge.

One aspect related to the saying of "yes" can be related to Hofstede's cultural dimensions<sup>27</sup>, Power Distance, where the reason for saying yes, is the respect of superiors, and thus the worker will do whatever the superior requires and not say no. Another explanation can be linked to aspect of Masculinity, where failing and humiliation is not an option. With this reasoning saying yes can be related to the desire of achieving whatever is required. This can also be seen in the example of "what the boss says, the boss gets". Saying "yes" is related to safety as saying yes without understanding what was said might lead to situations of importance to safety, e.g. giving wrong information such as that scaffolding is ready for use when it is yet not ready, because the worker does not want to tell that he is not finished.

Cultural differences are further visible in the management hierarchy and understanding of each other's positions. One example is how some Polish workers call their superiors "boss". The Polish see it as a form of respect, while the Norwegian foremen do not appreciate the term at first glance, as it is associated with negative characteristics for them. Positions and statuses are perceived in different ways in the two cultures. This is also indicative of an asymmetrical power relationship, in the sense that the perception of being subordinated the authority of others can be perceived as barriers

towards communicating worries related to safety, or even as pressure towards taking undue risks<sup>42</sup>. Being unable to say no to the superiors might make the workers undertake dangerous work tasks and expose themselves to unnecessary risks. A Norwegian supervisor described that communication between a Polish supervisor and a Polish worker was very harsh and direct. These are also signs that are culturally determined; as you need to know the culture to understand the way of communication and to be able interpret the meaning in the right way. From Hofstede's theory about Cultural Dimensions, it can be seen that there is a large difference when it comes to the Power Distance between Norway and Poland<sup>27</sup>. Norway scores low, which testifies to a culture with decentralised power where decisions are taken together with employees to a large degree, rather than by the boss alone. Poland scores higher on the scale, indicating that the society is hierarchical, where subordinates are expected to get clear instructions and follow them. A harsh and direct communication from a superior is a way to show power and control. This can further be related to the more hierarchic management as seen in a Polish working group, where there are expectations of clear leadership with a designated "boss". These examples clearly show that managers' knowledge about culture and communication affect safety of migrant workers. Norwegian managers expect workers to speak out if work tasks collide with safety, whereas Polish workers rather put the instructions first.

A common perception among Norwegians in the construction industry was that migrant workers did not comply with HSE-regulations. Differences in incident reporting are amongst the areas where one should be wary of drawing conclusions about differences in national culture. Concepts of "reporting culture"<sup>43</sup> or "just culture"<sup>44</sup> refers to differences in reporting practices as a trait of organisational rather than national culture. Variations in reporting can thus be just as significant within cultures as it is between cultures. This is not surprising since reporting practices can be severely influenced by a number of factors apart from culture, such as power and frame conditions (e.g. fear of negative sanctions or unemployment). However, both Norwegian and Polish interviewees confirmed the example that migrant workers do not like to write discrepancy reports, which shows that culture might play a role. Nevertheless, the fact that interviewees reported that compliance of the Polish workers to safety regulations got better with time, and that they mostly followed rules and regulation when confronted shows that this is not a static situation. Originating from another culture also influences safety culture. Without being included in a work groups that have the desired safety culture (as Polish are often organised in work groups based on nationality), they also do not have the opportunity to learn the safety culture. The ability to change is there if they get the opportunity. By trying to understand the background for the perception that writing such reports is considered snitching instead of demanding certain behaviour from the Polish workers, managers can find other solutions that will work better for this group. One possible solution is to find other tools that would work better, another is to focus on acquiring the desired safety culture by other means.



Overall, a largely greater part of measures found related to migrant workers were related to linguistic issues, e.g. translations of documents and posters, use of translators in the daily work, having separate safety courses in several languages, offering language courses. Very few measures were found to concern culture. The focus on language is narrow and leaves out many important aspects, where culture is just one of them. Words have a clear meaning to a sender, but how the receiver understands them might be something very different. How words are said, in what context, what additional gestures are added and other disturbing factors might change the meaning of the message. Focus solely on language only solves parts of the problem. Culture should not be simplified to an extent where it is treated as a linguistic issue. One reason for why this is done, might be as suggested by Schubert & Dijkstra<sup>45</sup>; to treat everyone equally. They found in a Dutch study that safety managers had a tendency to deny cultural differences, not to discriminate and to treat everyone equally, as the Dutch social ideal desires. This might be one of many reasons why cultural challenges have received less attention in Norway as well. Another reason might simply be that cultural challenges are more demanding to deal with and to find concrete measures for.

To enhance safety in the construction industry in relation to migrant workers, stepwise improvements need to be done. Both the industry itself as well as the safety issues in it are too complex to fix with one simple quick fix. Frame conditions that surround migrant workers also need to be considered as they influence safety on construction sites, but not everything can be fixed at once. It is therefore suggested to take up cultural aspects as one issue.

### **6.1. Implications for safety management**

The examples above show that there is a need for leadership that understands cultural aspects and organise work in a manner that ensures safety when there are challenges with communication, different perceptions and workers are willing to do the job whatever it takes. Familiarity to the culture of the migrant workers can give an understanding of what the different signs in a culture means, such as the different "yes". By stressing and being aware of cultural aspects and the complexity different aspects together generate, safety can be improved. This can be implemented by safety management through safety training, participation in the execution of Job Safety Analyses and learning processes after minor and major incidents. Further, it is important that managers are aware of what they require from their workers, especially with the knowledge that for different reasons workers might not say no, even though the work might be dangerous. Different organisation of work than what is common today is a way to teach migrant workers the desired safety culture. One problem here might however be that migrant workers on some construction site might constitute the majority. This has to do with resource management. Safety aspects should further be an integrated part of the organisational management.

## **7. LIMITATIONS AND FURTHER WORK**

### **7.1. Additional factors**

The interviews indicated additional underlying factors concerning the migrant workers and occupational safety. These were influencing factors such as individual factors; age, education, experience, family circumstances, level of integration in Norway, and organisational factors; terms of employment and training. These factors are not stressed enough and should be elucidated further. This however, does not take away the importance of stressing the importance of culture.

Neither Polish migrant workers, nor migrant workers in general, are homogenous groups where all members are alike. Even though they have a certain culture, a common language and a set of attitudes and habits. The interviews with the Polish interviewees showed that there are huge differences between individuals, as did the statements from the Norwegian interviewees. The differences within a country might be larger than between countries<sup>28</sup> and individual differences should not be neglected. However, certain traits can be recognised for the group as a whole. It is important to remember that generalisation has its limitations. In this case, however, it is useful to find measures that can serve many on the background of such generalisations. The aim is to improve the safety in the construction industry in relation to migrant workers, as migrant workforce is the new reality in many Western-European countries. Learning about cultural differences and learning how to deal with them is therefore useful.

### **7.2. Transferability**

This study has examined the case of Polish workers in the construction industry in Norway. The study adds knowledge to previous Norwegian studies<sup>1, 3, 46</sup> as it focuses on aspects that are not emphasised in the literature concerning migrant workers in Norway. Together they give a broad picture of the situation in Norway and in other European countries where Polish workers represent a large part of the migrant workforce. The study represents the construction industry, but may also be valid for other industries with migrant workforce and similar conditions.

## **8. CONCLUSIONS**

The factors behind safety challenges arising from the use of migrant workers are complex. Some of them are closely related to the construction industry, which is characterised by its dynamic nature, temporality, variability and uniqueness of each project. Other safety challenges are directly related to the use of migrant workers independent of industry, concerning communication, individual factors and organisational factors. This study had a focus on language and culture.

From the study, it is seen that language is a well-known issue concerning migrant construction workers in Norway, as well as in other Western-European countries that have experienced Europe's workforce movement. Linguistic challenges are easily observed and measures can easily be implemented for linguistic challenges. Most measures related to migrant

workers that were implemented in the sector concerned linguistics, e.g. use of translators and language courses. Communication is however not only about language. The undertaken study shows that there are challenges with communication rather than only with language, and that culture plays an important role for communication. Solving linguistic issues is one of many challenges that need to be coped with, and will therefore not solve all the challenges related to migrant workers. Communication is important for understanding everyday work tasks and to be able to perform them in a safe way and it is crucial for understanding safety information. Good and understandable communication about safety, routines, rules and regulations is important to be able to include migrant workers in the organisations desired safety culture. Language is an important mean for transferring this safety culture, but for the communication, cultural aspects also need to be considered, as they affect communication. To cope with cultural challenges there were not many measures implemented. National culture that the migrant workers have influence their safety understanding, perception, behaviour. A larger focus on cultural aspects in safety management is needed, as well as measures to cope with these issues.

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