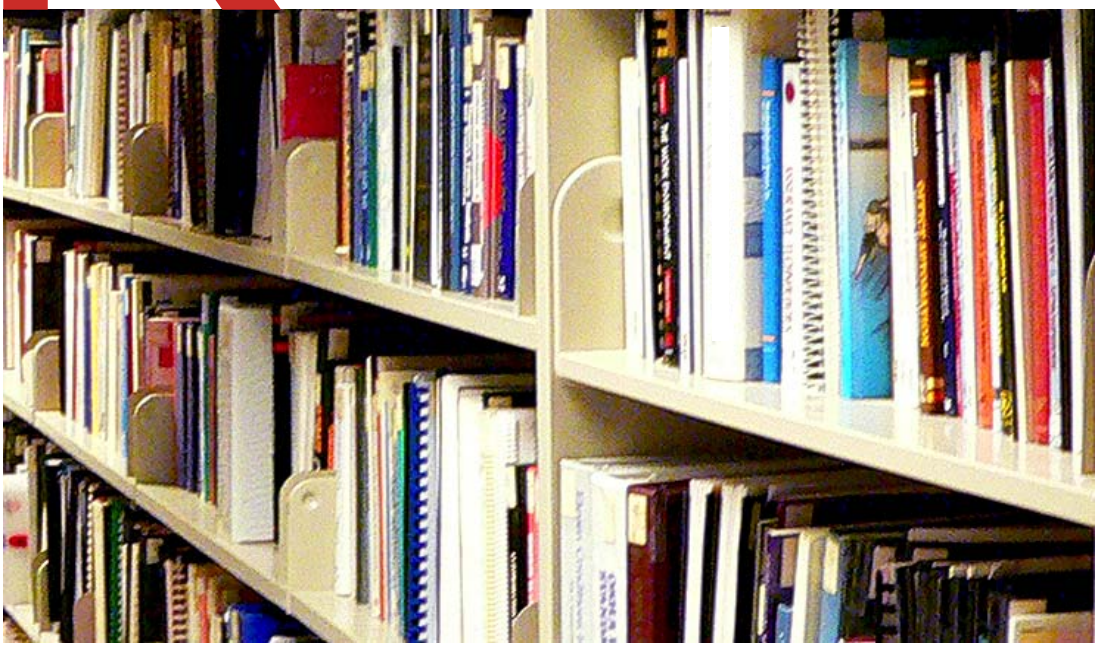
Occupational Rehabilitation

Knowledge Summaries

REPORT **B-081**



The Notion of Ethnocultural Belonging in Rehabilitation Research and Intervention

Daniel Côté

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SUMMARY

In Canada, with its ageing labour force and low birth rate, government must rely on immigration to avoid negative population growth and meet industry's labour force requirements. Immigrants and members of ethnocultural minorities reportedly have higher vulnerability for risks related to OHS and extended incapacity. However, very little is known about the dynamic underlying these more vulnerable groups, about how their living conditions change, about their state of health, and about the difficulties they may face during an episode of extended absence from work. Although the impact of workers' ethnocultural belonging on the return-to-work process adds a layer of complexity to the factors already recognized in rehabilitation (determinants of incapacity and return to work), it has been studied relatively little in this context.

This summary of knowledge aims to identify and describe the themes that emerge from research works that have explored issues related to the influence of ethnocultural belonging on the rehabilitation and return-to-work process. A review of English- and French-language literature was performed on various search engines using a series of key words. Two blocks were created in order to encompass the broadest possible range of the problem: block 1, which includes literature on immigrant workers and OHS, and block 2, which includes empirical studies, reviews, and essays on the issue of ethnocultural belonging and rehabilitation. Inclusion and exclusion criteria were defined in order to circumscribe the selection of documents. A document quality evaluation grid was used to rate the documents' scientific value. The content of the main search results was analyzed using a grounded theory-inspired approach.

Thirty-one documents (articles and reports) were retained for the purposes of this summary of knowledge. Several themes emerged from the content analysis. For block 1, the analysis of the literature reviews reveals seven main themes that cast light on the OHS-related problems encountered by immigrant workers: access to health care and a compensation plan; concentration in higher-risk industries; division of labour on an ethnic or racial basis; harassment and discrimination; lack of knowledge of laws and workers' rights; and language and cultural barriers. In block 2, three main themes emerge. In order of importance, these are: culture and representations of pain (perceptions, attitudes, role of a third party in the therapeutic process, values, etc.); the intervention methods in the context of ethnocultural pluralism (criticism of the established models, recommended solutions); and the factors that enter into the cultural component (defining elements).

The reviewed studies deal mainly with the clinical dimension of the rehabilitation process (therapist–patient relationship). The role and experience of the partners (compensation system, employer, etc.) have been studied only a little. Avenues for research in this area are proposed.

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1. INTRODUCTION

An extended absence from work due to an occupational injury has significant personal, social, and economic impacts. In the changing sociodemographic context of industrialized societies, some groups may find themselves in a vulnerable position in relation to the risks of prolonged disability. Based on their ethnocultural identity or immigrant status, these groups may have a relatively high risk with respect to occupational health and safety (OHS) and the opportunity to return to work sustainably and within a reasonable time frame. Why? Are there situations, specific work contexts, or other aspects of the health care and compensation system that make these groups more vulnerable than others? Although the determinants of prolonged disability and return to work are relatively well known for workers in general (severity of injury, medical history, cognitive and emotional aspects, work environment, etc.), it is not easy to know or understand the reality experienced by newcomers and by established immigrants who are members of the so-called "ethnocultural minorities." The challenges are significant and the shape of this issue needs to be clearly outlined.

1.1 Impacts of immigration on the population structure

The industrialized countries of the West underwent significant sociodemographic upheaval in the decades following the end of the Second World War. After experiencing a high birthrate phase until the early 1960s, states such as Québec saw a sharp decline in the birthrate. At the same time, the improvement in the overall standard of living allowed Québec, as well as Canada, to achieve one of the highest levels of life expectancy among industrialized countries. In a context of economic growth (the "thirty glorious years") and industrial development, Canada had to turn to foreign labour to meet industry's workforce requirements. Although some business segments, such as the textile industry, that required little in the way of qualifications later experienced a clear decline, other segments associated with the new economy or with the knowledge economy grew, necessitating a supply of skilled workers that our population pool is still unable to provide. Canada quickly became an attractive country for workers around the globe who wanted to give a new direction to their professional career or who hoped to find better living conditions.

Countries like Canada, the United States, Australia, and New Zealand, which are often called "immigration countries," rely on these migratory flows to make up for the lack of skilled workers. In Canada, with the ageing of the workforce and the low birthrate, the government has had to turn to immigration to avoid negative population growth and meet industry's workforce requirements [1]. In September 2009, the Québec government launched a campaign, titled *L'immigration, c'est Bienvenue !*[1], to make Québecers aware of the benefits of immigration. The campaign announced a series of employment integration and francization measures[2]. However, the reasons for immigrating are many, and immigrants cannot be spoken of as a homogenous group.

Economic immigration accounted for 65% of immigrants to Québec in 2008, with the Québec government defining three other categories: family reunification (2%) [2]; refugees or persons in

1. See http://www.micc.gouv.qc.ca/fr/immigration-bienvenue/materiel-promotionnel.asp visited on October 21, 2009.

2. See http://www.micc.gouv.qc.ca/fr/planification/plan-mesures.html.

similar situations (persecution or fear of persecution due to race, religion, nationality, membership in a social group, or political opinions)[3] (10%); and other immigrants accepted for humanitarian or public interest reasons (victims of natural or environmental disasters) (1.8%) [2].

Immigration is not a recent phenomenon in Canada. Since the first French settlements of the 17th century, the country has experienced successive migratory inflows that formed the foundation on which the country was built and was able to grow. However, until recently, immigration mainly involved European nationals (e.g. Greeks, Italians, Poles, the British). In the 1950s, the majority of immigrants to Canada came from Europe, while at the turn of the 21st century they came mainly from Asia [3], except in Québec, where defence of the French fact led the Québec government to favour the arrival of nationals from countries whose official language is French. That is why immigrants from North Africa (the Maghreb) and the West Indies are more strongly represented in Québec than elsewhere in Canada [2].

According to the Québec Immigration and Cultural Communities Department [2], the 45,264 immigrants who landed in Québec in 2008 came from Africa (30.4%, with 17.7% from the Maghreb), Asia (28.1%), the Americas (22.7%, with 10.8% from South America and 6.8% from the West Indies) and Europe (18.6%). These immigrants are young (nearly 70% under age 35), nearly evenly split between men and women, and educated (67% of those age 15 and over have more than 14 years of education), and they live almost exclusively in the Urban Agglomeration of Montréal (nearly 87%). As for the number of persons born outside Canada, it totalled 5.4 million in Canada (18.4%) and nearly 707,000 in Québec in 2001 (10%) [2]. Immigrants' contribution is not solely economic but is also social and cultural. This does, however, give rise to questions about the capacity and adaptability of the structures put in place to favour more effective and safe settlement of new arrivals. The challenge is not only economic and raises many questions of an ethnic, communication, and health care and services nature.

1.2 Immigration and ethnocultural diversity: definition questions

Over time and to varying degrees, established immigrants and their descendants have built so-called "ethnocultural" communities that new arrivers subsequently join. The notion of ethnocultural community refers to an identity-construction process (ethnicity) against a backdrop of shared culture [4]. The anchoring level and type of cultural referent involved in this process may vary from group to group and from individual to individual within a given group. The cultural referents are many: language, geographic region of origin, religious and spiritual practices, vocation, lineage, and social class [5]. Moreover, identifying with an ethnocultural community may indicate a voluntary or involuntary distancing from the dominant cultural model of the society of residence and from the historical values it embodies [6]. Of course, this process of ethnocultural construction may also speak to the ambiguous and sometimes unclear feelings that new immigrants experience, caught between the desire to integrate into the host society and the desire to preserve the ancestral heritage of their country of origin. Although the terms "culture" and "ethnic group" have been clarified in the social sciences (anthropology, sociology, etc.), complete definitions are found only rarely in the health sciences, and rehabilitation is no exception. Even in anthropology, the oldest definitions, still in use, remain formal and general and cover nearly all human activities, from kinship systems and hunting techniques to cosmology

3. According to the definition in the the Geneva Convention Relating to the Status of Refugees (July 28, 1951).

and medical beliefs. For example, the most widely quoted definition is from Edward B. Taylor, who defined culture as "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" [7]. More recently, Clifford Geertz defined culture as "an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which people communicate, perpetuate and develop their knowledge about and attitudes toward life." [8]. More than a set of knowledge and practices, the more modern definitions of culture include a process of interchange and socialization through which each human being learns the codes that allow him to communicate his joys, sorrows, concerns, distress, beliefs about health and disease, therapeutic preferences, and how to construct the very idea of health and illness.

In contrast, ethnicity refers, above all, to the feeling of belonging to a specific cultural group [9]. This distinction is important because it allows culture to be placed in the realm of the collective, in contrast to the feeling of ethnic identity, which remains in the realm of individuality [10]. Some individuals may be fully aware of the identity significance of their actions and preferences (e.g. preferences as to type of medical care), while others may not. In both situations, the individual has integrated, both beforehand and throughout his learning process and various life experiences, a set of values, standards, and prescriptions that guide him in his choices and influence how he acts as well as how he reacts to other persons and various circumstances (injury, pain, etc.). Anthropology has warned against certain uses of the concept of "culture," in particular when culture is ultimately used to explain differences in behaviour or perception that can mask divides between social classes, power relationships that govern social relationships, the divides between the genders, and the various ideologies that confront each other in a society or within a given cultural environment [4, 11].

Thus the persons who make up ethnocultural communities do not necessarily fall into the immigrant category, although they do contribute to the country's cultural diversity. Some ethnocultural groups, such as the Italians, Greeks, Chinese, Lebanese, and Jews of various nationalities, have a fairly long history of settlement in Québec and Canada and, over the decades, have developed highly structured communities with their own print and broadcast media and cultural and religious institutions as well as clinics and hospitals that take into account the medical knowledge historically developed in the country of origin (e.g. Chinese energy medicine, acupuncture, Indian Ayurveda). Children born of immigrant parents integrate their parents' world view, heritage, and cultural experience while also integrating the *modus operandi* of the host society.

When an immigrant arrives in a new country to settle, he brings with him a set of experiences that often rise from cultural learning. His path as a migrant may bring his values into opposition with those of the host society, some of whose aspects he may not have mastered. When an immigrant arrives in a new country, he can quickly adapt to the style of dress and the laws in effect without necessarily abandoning the representations of the world that he has learned and that are part of the person he has become over the years. Without prejudging the rightness or wrongness of various cultural representations of health and disease, let us state from the outset that these differences should be better understood in order to facilitate intercultural communication [12]. In the social sciences field, it has long been acknowledged that culture plays a key role in the building of a therapeutic relationship and that it can have an impact on the

effectiveness of the proposed treatment and on the clinical judgement of the health care providers [13]. In medical anthropology, the 1980 publication by Arthur Kleinman of *Patients and Healers in the Context of Culture* introduced a new way of thinking about the therapist–patient relationship [14]. This work remains a reference for considering the representation of disease in a clinical context and for providing patients with solutions adapted to their specific needs, clinical as well as relational and emotional.

1.3 Occupational rehabilitation in a context of ethnocultural diversity

Research in occupational rehabilitation has made significant progress in the last two decades or so, in particular by recognizing the multifactoral nature of the determinants of prolonged disability and return to work [15]. It has been shown that the occupational rehabilitation process involves various social partners (workplace, third-party payer, clinical settings, etc.). These partners or "stakeholders" may have objectives that contradict each other and can even lead to medico-legal disputes [16, 17]. Similarly, communication and information sharing among the partners can suffer from a lack of transparency and generate friction [18, 19]. To these factors can be added all the factors related to the environment and work organization: job insecurity, employment relationship, demands, autonomy, and supervisor support [20-23].

Psychosocial factors can also influence the process; these include overall quality of life, level of activities maintained, early management of the incapacity, and other sociodemographic variables such as gender, age, and education level [24]. Representations (including beliefs and perceptions regarding health, disease, and pain) also influence the rehabilitation process [25]. Beliefs regarding the causes of pain, the perception of incapacity, the role of practitioners, the result of treatment, and so on are other aspects of representation likely to create in workers an expectation or a distinctive behaviour [26]. The relationship to pain changes according to one's beliefs, as does the relationship to one's body and to the various proposed procedures [27].

Although the influence of workers' ethnocultural belonging on the return-to-work process adds a level of complexity to these various factors throughout the rehabilitation and return-to-work process, it has been studied relatively little in this context. In a first approximation, this influence may be understood, on the one hand, from an OHS perspective and, on the other hand, from the perspective of the various proposed procedures by taking into account the relationship to pain of workers who have suffered an occupational injury [28].

1.4 Objectives

Generally speaking, this summary of knowledge regarding the "cultural belonging and return-to-work process" aims to:

- Identify and describe the themes emerging from the research that explored issues related to the influence of cultural belonging on the rehabilitation and return-to-work process.

More specifically, it aims to:

- Identify and describe the main factors that influence the rehabilitation and return-to-work process in patients from immigrant and ethnocultural minority backgrounds;

- Identify the main intervention models proposed by the authors to facilitate and optimize case management of clients from immigrant and ethnocultural minority backgrounds and to foster understanding of the realities specific to this category of workers.

1.5 Methodology

To carry out this summary of knowledge, a review of English- and French-language literature was performed using a series of key words on various search engines. Inclusion and exclusion criteria were defined to set the limits for the documents to be studied. A study analysis and evaluation grid was also used to eliminate studies whose quality was deemed inadequate. The entire process is described in detail in the following pages.

Development and validation of key words

The topic of cultural belonging and its influence on the rehabilitation and return-to-work process overlaps somewhat with other topics such as occupational health and safety among immigrant workers and workers from ethnocultural minorities and the cultural representation of health and disease. To achieve the most thorough possible overview of the literature regarding the influence of ethnocultural belonging on the rehabilitation process and regarding other related topics, two main blocks were formed: (1) immigrant workers and OHS, and (2) ethnocultural belonging and work rehabilitation. The details of the key-word groupings (logical operators AND/OR) are described in a table in Appendix 1.

Literature search

The following bibliographic indices were consulted: PubMed, Ingenta, the Canadian Centre for Occupational Health and Safety (CCOHS) databases, Ergonics Abstracts, OSH Update, and the Commission de la santé et de la sécurité du travail (CSST) databases. The literature search was performed with the assistance of a librarian specializing in occupational health and safety. The reference lists from the retained articles were consulted to ensure that no article was overlooked. The databases consulted and the number of articles retained to evaluate the quality and the content analysis are presented in a table in Appendix 2. A manual review was also carried out by reading the bibliographic references presented by the authors and a global review of the research reports published by the main OHS research and promotion organizations (e.g. NIOSH, HSE, the European Agency for Safety and Health at Work).

Definition of the inclusion criteria

The main inclusion criteria were: (a) the articles, reports and book chapters must deal with the determinants of the occupational rehabilitation process from the perspective of immigrant workers or persons who come from various ethnocultural backgrounds; (b) the workers must be or have been involved in a rehabilitation program (return-to-work-oriented or not); (c) the

articles must have been published in journals that had had a peer review committee for the last two decades, i.e. from 1990 to 2011, the time when the biopsychosocial paradigm for incapacity began being used in occupational rehabilitation in lieu of the biomedical paradigm. As the issue of immigrant workers and OHS is not the main topic of this summary of knowledge and despite the fact that it might bring additional elements of understanding, only literature reviews were retained in order to provide us with the assurance of having thoroughly examined the issue.

Reading and analysis

As they were read, the articles and reports that met the inclusion criteria were evaluated using an qualitative and quantitative evaluation grid previously developed by the author (see Appendix 3) [29]. The grid includes criteria relating to the description of the sample, type of illness, measurement instruments used, description of the statistical and qualitative analyses, internal and external validity of the results (quantitative research), internal consistency, transferability of the results, etc. Only the articles and reports that met the quality criteria were retained for the final presentation of the summary of knowledge. Twenty points were given to the qualitative studies and 17 points to the quantitative studies; a minimum threshold of 12 and 10 points respectively—that is, a score of 60%—was deemed necessary to retain a reviewed study.

An initial summary table of the reviewed studies was produced. It includes the first author, topic (identified inductively based on the emerging themes), type of study (qualitative/quantitative, literature review, theoretical essay), country, year of completion, sample size, sample type (random, stratified, opportunistic, theoretical), diagnosis (if applicable), pain phase (if applicable), quality of the study, and main results (see the summary table in Appendix 4).

In all, 783 articles were reviewed. The block 1 works, which concern immigrant workers and OHS, consisted of 438 documents while the block 2 works on ethnocultural belonging and occupational rehabilitation included 345 documents. After elimination of duplicates, a summary evaluation of the relevance of the resulting documents, and the addition of one document to each block, four works were retained for block 1 and 27 works for block 2.

The content analysis of the retained material was inspired by the grounded theory approach. Grounded theory is part of a wide range of qualitative research methods. Based on an inductive analysis of the empirical data, it aims to “bring out” the themes that emerge from the data or the studied material [30]. The process is called “iterative” as it allows the researcher constantly to return to the analyzed material in order to specify, in light of the other documents studied, whether the emerging concepts remain sufficient, coherent, and representative of the content being studied. Glaser, one of the founders of grounded theory, dubbed it “a spiral approach” [31]. The presentation of the results in the following chapter and the construction of a conceptual diagram are based on this type of analytical approach.

2. RESULTS

The presentation of the results is divided into two main sections. The first (2.1) covers the main themes that emerged from the review of the literature on immigrant workers and OHS risk factors. The second (2.2) describes the main themes that emerged from the studies on how ethnocultural belonging influences the occupational rehabilitation process.

The 31 documents covered in this summary of knowledge are summarized in the table in Appendix 4. The table includes: the first author, topic, type of study (qualitative/quantitative, literature review, theoretical essay), place where the study was carried out, sample (size and type), type of illness (including the injury location and stage, if applicable), the pain phase (if applicable), an overall assessment of the scientific quality of the article or research report (see Appendix 3 for the evaluation grids that were used for this purpose), and, lastly, the main results.

2.1 Immigrant workers and OHS-related risk factors

Four literature reviews were retained to document the issue of immigrant workers and OHS-related risks [32-35]. Generally speaking, the OHS-related risks are well known, although some groups, due to their position or social status, appear more vulnerable than others to them. Immigrant workers are usually defined as a category of so-called vulnerable workers[4]. Several risk factors and situations explain why this category of workers appears more vulnerable. The literature reviews that were retained for this summary of knowledge and that address issues relating to immigrant workers and OHS point to several of them.

Analysis of these literature reviews reveals seven main themes that inform us about the problems faced by immigrant workers when they try out the job market. To make these themes easier to understand, we have grouped them into more general categories whose names are directly inspired by the content of the reviewed articles and reports. The themes can thus be grouped under four broader categories presented in Table 1 below. The four categories describe a hierarchy of approach levels that range from a more macrosocial dimension to a microsocial dimension, i.e. that includes structural (e.g. social disparities regarding OHS), contextual (e.g. work context), relational (e.g. work relations), and personal (e.g. knowledge of the system, language skills) aspects.

4. For example, the Institute for Work and Health (IWH) in Toronto, the National Institute for Occupational Health (NIOSH) in the United States, and the Health & Safety Executive (HSE) in Great Britain are organizations devoted to OHS that use the notion of “vulnerable workers.” There are six distinct categories of worker: (1) immigrant workers, (2) young workers, (3) ageing workers, (4) women, (5) persons with disabilities, and (6) temporary migrant workers.

Table 1: Themes related to immigrant workers according to approach level

		Themes
Level 1 (structural)	Social disparities with respect to OHS	- Access to health care and to a compensation plan
Level 2 (contextual)	Work context	- Concentration in high-risk industries - Concentration in SMEs - Division of labour
Level 3 (relational)	Labour relations	- Harassment and discrimination
Level 4 (personal)	Knowledge of the system	- Lack of awareness of laws and of workers' rights
	Language skills	- Language (and cultural) barriers

Level 1 (structural): social disparities with respect to OHS

The first structural level relates to the social disparities with respect to OHS. At this more general level, the reviewed articles reported significant gaps in terms of access to health care and a compensation plan. Socioeconomic or sociodemographic variables such as education level, language skills, ethnoracial identity, gender, and income influence the vulnerability of these workers. In the United States, access to health care and a compensation plan is not equitably shared, and immigrant workers or workers identified as "ethnoracial minorities" are more affected [35], with the Spanish-speaking and Afro-American populations most frequently being cited as examples. In addition, as this report was about to be published, McCauley reported the existence in the United States of a waiting period of five years (or until citizenship had been obtained) for immigrant workers before they gained access to government assistance programs. In a review of 48 articles and reports that were published between 1990 and 2005 and dealt with immigrant workers in countries recognized for their massive reliance on immigration (including Canada, the United States, and Australia), Ahonen et al. attempted to paint a broad picture of the nature of social disparities with respect to OHS. These researchers noted that the rate of work accidents and fatal accidents among immigrants was higher than in the non-immigrant population [32]. They also found that immigrant workers are more often exposed to toxic substances and psychological distress. Ahonen et al. specify that the highest occurrence of injuries is due to the high concentration of immigrant workers in high-risk industries. They add that, instead of focusing OHS prevention efforts on individual workers (individual behaviours), OHS promotion and awareness campaigns should focus more on the work environment and on external factors such as social, cultural, and economic aspects in order to reach the target groups and specific industries [32]. For Ahonen et al., there is an overlap between the issue of OSH among immigrant workers and the themes of asymmetrical relationships of power inside companies (between employees who hold similar positions), social stratification, and social inequalities in the larger sense (access to education, access to lodging, quality of life, etc.).

Level 2 (contextual): work context

The reviews of Ahonen [32] and McCauley [35], to which can be added that of Benach et al. [33], ascribe the increased vulnerability of immigrant workers to the workers' work context. This

contextual level relates to three main themes: the concentration of immigrant workers in industry with a high-risk of occupational injuries; the concentration of these workers in small and medium-sized enterprises; and the general job insecurity that affects immigrant workers in these types of company.

The construction, agricultural, and service industries are identified as ones with higher OHS-related risks. In the United States, immigrants are said to comprise a large percentage of the workforce in these industries [32]. There is even an occupational profile for the ethnic groups: Hispanic immigrants in the agriculture and Asians in retailing, the needle and pressing trade, manufacturing, etc. [35]. McCauley finds that work context for these workers is not always favourable to the implementation of sound OHS practices or training (protective equipment, handling of chemicals, etc.). Benach et al. add that the concentration in certain higher-risk industries is accompanied by a tendency to hold lower paying and more precarious positions that require little in the way of qualifications [33]. The same finding is reported in a literature review produced by the European Agency for Safety and Health at Work [34].

Level 3 (relational): labour relations

Besides identifying factors of a structural and contextual nature that make some groups more vulnerable than others with respect to OHS, McCauley [35] describes factors of a relational nature that can weaken workers in general and affect immigrant workers in particular, most notably the phenomenon of harassment and discrimination [34]. If the work context is not very favourable to the implementation of OHS policies, prevention measures, and employee training, workers who suffer an accident or occupational injury will be pressured not to report an incident that caused an injury or at least not to report it as resulting from a work activity [35].

Moreover, a climate of fear develops for workers who would like to report an injury but hesitate to do so or who put up with pain out of fear of reprisals, being fired, or getting caught up in medico-legal problems [33-35]. Among immigrant workers, ethnoracial discrimination adds to the complexity of the problem [34]. Another, possibly surprising phenomenon is reported by the European Agency: there is also a form of division of labour within a given company in which the immigrant workers are given or take on more physically demanding tasks [34]. However, the Agency study does not make it possible to say whether this phenomenon is widespread or, conversely, whether it is isolated or marginal.

Level 4 (personal): knowledge of the system and language skills

In the case of immigrant workers, the personal OHS approach level relates to knowledge of the system (health care, compensation) and OHS laws (e.g. Labour Code, *Act respecting industrial accidents and occupational diseases*). The works included in this summary of knowledge deal with two specific themes: the lack of awareness of existing laws and rights, and the language and cultural barriers that can limit the impact of and access to OHS training (when it is offered). Ahonen et al. found that the factor that most influences the reduction of accidents and occupational injuries is not so much having received OHS training as having taken it in an understood language [32]. It is possible that the workers have an adequate level of skill in the official or common language of the host country without it being high enough for them to assimilate the content of a training course. This means that foreign language-speaking workers

who have little or weak mastery of the language of the host country do not derive benefits from such training. Moreover, language barriers make the workers vulnerable on the ground because they understand the provided OHS instructions poorly or not at all [32, 34-36][5]. Generally speaking, although the few literature reviews that deal with immigrant workers and OHS risk emphasize the issue of language and cultural barriers, the accent is mainly on the language factors. To better understand the importance of the notion of culture, one needs to refer to the block 2 studies, which were subjected to a different documentary research strategy that integrated a wider range of methodological approaches.

Remarks on the issue of immigrant workers and OHS risks

The few literature reviews that have been incorporated into this summary of knowledge bring to light a number of issues relating to immigrant workers and OHS risks. The best-documented themes were presented above. Other, less well-documented themes have also been discussed by the authors. Benach et al. consider the phenomenon of work outside the formal employment networks (informal, "irregular" work) [33] and social exclusion, which especially afflicts this category of worker[6]. For example, the possibilities for reclassification may be more limited for poorly qualified workers, just as the sometimes hard-to-obtain recognition of diplomas or equivalences may have an impact on these workers' psychological health.

It should also be noted that immigrant workers do not form a homogenous category and are defined by the single criterion of whether they were born abroad or in Canada. As is true for the entire working population, many sociodemographic or socio-occupational variables influence workers' personal path on the labour market and their exposure to risks related to health in general and OHS in particular. As McCauley [35] notes, immigrant workers' socio-economic profile may vary according to their ethnic group. For example, immigrants from Asia are generally more educated than other immigrants [35]. More detailed knowledge of the immigration trajectory for the various ethnic groups could contribute to a better understanding the patterns or trends in integrating into the labour market [35].

All the studies reported on in this section discuss the issue of the concentration of immigrants in industries specifically identified as being at higher risk of occupational injuries. Might it be appropriate to see this concentration as a required step toward a gradual improvement of working conditions and overall existence? To determine that would require longitudinal studies that followed a cohort of immigrant workers over time and evaluated whether inter-industry mobility and opportunities for promotion in a given company exist (and indentified the related factors).

5. It is interesting to note that non-language-related differences may occur regarding the perception of safety signals. A transcultural comparative study carried out by researchers from the Center for Disability Research at the American insurance company Liberty Mutual established a relationship between cultural belonging and the identification of hazards and warning signals. For example, the colour red is widely associated with danger and used to identify actual or potential hazards in the western world but is seen as a good omen in the Chinese world [37].

6. All the more so when their period of stay is shorter than five years. In this regard, the official Québec statistics show a significantly higher inactivity and unemployment rate among these immigrants. Immigrants whose period of stay was longer than ten years had an unemployment rate of 8.1%, which is close to the Québec average of 7.2% for the 2006–2008 period, as opposed to an 18.1% unemployment rate among immigrants whose period of stay was five years or less. (http://www.stat.gouv.qc.ca/donstat/societe/famls_mengs_niv_vie/tendances_travail/a002_2006-2009.htm)

Regarding detailed knowledge of the issue of immigrant workers and OHS, the reviewed documents note that little remains known about these workers' reality and that research should continue in order to gain a more complete picture of it [32-35]. Regarding the issues specific to rehabilitation, the authors have even less to say. In fact, there are very few studies on the experience of these workers when they enter the compensation system and on the physical, occupational, and social rehabilitation processes that characterize these workers' experience after suffering an occupational injury that results in work incapacity[7]. A recent study by Sylvie Gravel et al. [38] examines the compensation path of a group of immigrant workers from the Montréal area in Québec (Canada) and reveals some surprising facts: their compensation application forms are most often filled out by the employer or a family member (58% for immigrants vs. 8% for Canadian-born workers), a higher percentage of immigrant workers' applications for compensation are contested (64% vs. 24%), and immigrant workers are less likely to obtain a specific diagnosis (64% vs. 42%). The studies included in this summary indicate that immigrant workers have increased vulnerability with respect to the risks of prolonged incapacity. However, this is presented only as hypothetical, even if it may seem a reasonable conclusion in view of these workers' fragility and precariousness and the multiple barriers facing them throughout their integration process. In these studies, cultural barriers were mentioned briefly, often as part of the language barriers, as areas for more extensive research. In the following section and based on a different documentary research strategy (see the methodology section), other studies were reviewed and retained to document the role and importance of the notion of ethnocultural belonging in research and in intervention and rehabilitation. It should be borne in mind that in this block focusing on immigrant workers and OHS risks, only the literature reviews were retained. For the following block, which focused on the notion of ethnocultural belonging in rehabilitation, the net was cast wider and covered a broader range of study types. In both blocks, a grounded theory-inspired approach to content analysis was used.

2.2 The notion of ethnocultural belonging in rehabilitation

Twenty-seven articles were retained to investigate the notion of ethnocultural belonging in the rehabilitation field using the procedure described in the preceding methodology section. While the relationship between culture and health has long been reported, it has been documented relatively little in the rehabilitation field and even less so in occupational rehabilitation. The articles that were retained for this review and that examined these questions raise several issues, some relating to theory and the development of the conceptual framework and others to very specific clinical questions. By applying the principle of data reduction[8] prevailing in qualitative research analysis, the content of the articles was found to have three major foci:

- factors that enter into the "cultural component;"

7. Work carried out by Canadian researchers from the Institute for Work & Health is currently under way. See the "Injured immigrants workers' experience" and "Immigrant Workers' Experiences after Work-related Injury in British Columbia: Identifying Key Questions and Building Research Capacity" projects (projects 273 and 258 respectively) at www.iwh.on.ca/projects/injured-immigrant-workers-experiences and www.worksafebc.com/contact_us/research/funding_decisions/changing_nature_work.asp

8. Huberman and Miles define data reduction as all the processes of selecting, focusing, simplifying, abstracting, and transforming the raw data found in the transcriptions of field notes. Examples are paraphrasing and integrating the data into a broader configuration [39].

- culture and representations of health, illness, and pain;
- intervention methods in rehabilitation in the context of ethnocultural diversity.

  This last focus is divided into three main parts:
  - a look at the criticism levelled at the methods used in rehabilitation;
  - the intervention methods recommended in the literature;
  - the notion of cultural competence and its application in the context of rehabilitation interventions.

2.2.1 Factors that enter into the cultural component

Some of the reviewed articles that look at rehabilitation from the cultural perspective propose a definition of "culture." Stanley Paul (1995) presents culture as a determinant: culture determines or influences behaviours, ways of thinking, feelings, etc. Reframed to fit the rehabilitation context, Paul asserts that culture determines and guides the choice of therapeutic activities, while stressing its shared and dynamic nature [40]. Values, aims, interests, social roles, lifestyle habits, and day-to-day activities also enter into the semantic field of culture according to this author [40]. Maureen Fitzgerald, another author in the rehabilitation field who has examined the definition of culture, affirms that "culture is the learned, shared, patterned ways of perceiving and adapting to the world around us (our environment) that is characteristic of a population or society" [9]. This definition evokes cognitive (mode of perception) and adaptive (mode of adaptation) functions that are the result of learning and a collective sharing of values [9].

In her article, Fitzgerald focuses on a specific area of culture that she regards as a key factor in shaping individual behaviours: the family, and more specifically, family dynamics [9]. According to her, family constitutes the primary cultural unit where values are learned and transmitted [9]. Also according to Fitzgerald, different family models may exist within the same cultural group; these models may recommend values and aims that are diametrically opposed to those proposed in the therapeutic models currently used in rehabilitation programs [9]. For example, one family model may promote the independence of one of its members who is coping with an illness or incapacity, while another model may prioritize interdependence and caring [9]. In a family model based on interdependence, the members of an ill person's family may demonstrate greater caring and be inclined to play a major role in the therapeutic process, including decision making [9]. The issue of family models will be broached later in this article in the discussion of the perception of the family's role during the therapeutic process. Also, questions concerning values of independence versus (inter)dependence will be examined in the "criticism levelled at the models used in rehabilitation" section. No other reviewed documents provide elements that add to the definition of the notion of culture.

2.2.2 Culture and representations of pain

Following the same methodology as was used to identify the four main foci in the approach to the notion of culture in rehabilitation, ten main themes were identified through content analysis of the reviewed and retained articles. These themes are grouped below into five categories, designated using names as close as possible to the wording found in the reviewed articles in order to faithfully reflect the articles' content.

Table 2: Themes related to culture and rehabilitation

Categories	Themes
Pain-related attitudes and behaviours	- Pain-related attitudes and behaviours [41-43]
Perceptions of pain treatment	- Perception of the appropriate treatment [41, 44-46] - Motivation to seek treatment and adherence to it [46, 47] - Expectation of the effectiveness of a given treatment [46, 48]
Perception of work incapacity	- Perception of ability to resume occupational activities [48, 49]
Perception of self	- Feeling of self-identity (perception of self) [45]
Perception of the role of others during the therapeutic process	- Perception of family roles (e.g. family presence, family roles during the therapeutic process) [9, 36, 45, 50]

Pain-related attitudes and behaviours

The reviewed studies fall into two groups. The first looks at clients' pain-related attitudes and adjustment strategies according to their ethnocultural background, while the second sheds light on how clinicians respond to pain depending on their own ethnocultural origin.

First group: studies on patients' attitudes

A few of these studies examined pain-related attitudes and behaviours in patients/clients of diverse ethnocultural backgrounds. For example, Löfvander et al. describe anxiety types related to employment status in two ethnocultural groups in Sweden [41], while Calvillo and Flaskerud focus on the different expressions of pain by questioning the transcultural validity of the concepts used in the world of rehabilitation [42]. For their part, Bates et al. show that the attitude toward the psychosocial approaches proposed can vary tremendously from one cultural environment to another [44].

Löfvander et al. focus on the different attitudes toward pain [41]. They compare pain reactions in two groups of workers in Sweden, both originating from the Mediterranean basin but from distinct cultural regions: Greece and Turkey. These authors look mainly at manifestations of anxiety about the pain experience using the approach put forward by medical anthropologist Arthur Kleinman concerning "explanatory models of illness" [14]. Based on semi-structured interviews, the authors attempt to differentiate prognostic models according to the type of anxiety displayed. They observed a Type I anxiety, defined as the reaction of a person who concentrates almost exclusively on the meaning and consequences of pain (perceived causes, long-term consequences, etc.), and a Type II anxiety, defined as the attitude of a person who

concentrates almost entirely on the symptoms experienced. In Type I, Löfvander et al. identify a fatalism/optimism–pessimism spectrum. Workers who hold a representation of pain on the fatalistic/optimistic segment of the spectrum believe that the critical incidents they have experienced in relation to pain are predestined or related to a divine will or fate. This way of normalizing pain would appear to improve chances of returning to work to a greater degree than the attitude held by the workers with representations on the pessimistic segment of the spectrum, many of whom associate their painful condition with incapacity and the idea of premature death. The workers in the Type I cluster on the pessimistic segment of the spectrum had a more negative prognosis at the end of treatment, whereas the workers in the Type II cluster, who were more focused on the painful symptoms, had a negative prognosis at the beginning of the program but more of them returned to their jobs at the end of the program. While the Löfvander et al. study did not allow for validation of these trends due to the small sample size, it did point to some interesting avenues for research, particularly the relationship between anxiety type and employment status. Their study also highlighted the changing nature of representations and the importance of studying them from a longitudinal perspective.

In their study, Calvillo and Flaskerud conducted a review of the literature on Mexican-American beliefs about pain from the point of view of attitudes toward pain and of cultural diversity [42]. Citing studies that look at pain tolerance in relation to a strong expression of pain in certain patients, the authors introduce a touch of relativism by specifying that a complaint about pain (e.g. crying out with pain or moaning) or any emotional response to pain that the clinician may regard as excessive does not necessarily indicate a loss of control over the situation or a request for intervention by the caregiving personnel [42]. According to these authors, a distinction must be made between an expression of pain that seeks to convey a request for care or attention from one that does not seek to communicate with others but rather to alleviate the pain [42]. For Calvillo and Flaskerud, this attitude would appear to be more frequent in Hispanic-Americans, and the inability to understand such modes of expression may lead to misunderstanding, or worse still, errors in clinical judgment [42].

Second group: studies on clinicians' attitudes

Of the reviewed studies in the second group, the study of Maryann Bates et al. compares and draws up a differential profile of the use of the biomedical paradigm in two rehabilitation clinics operating in different cultural and geographic contexts, one in New England and the other in Puerto Rico [44]. Using quantitative and qualitative data, Bates et al. describe substantially different methods of clinical intervention in the two clinics, despite the fact that both used the biomedical model [44]. Thus, intervention methods change with the context: the clinicians in the New England rehabilitation centre seemed to be much more influenced than their counterparts in the Puerto Rican study by mind–body dualism; they were also less receptive to their patients' complaints and emotional distress and to the psychosocial interventions that these patients might need or even request. In the Puerto Rican rehabilitation centre, it was actually a holistic approach that was used through the integration into the workers' care plan of a gradual return to work[9] and of attention to the emotional dimension of incapacity and to the environmental factors that may

9. The concept of a gradual return to work has been documented in other studies in Québec and involves systematic intervention practices, contrary to Bates' study, where this concept is not enunciated as such, even though the intervention described, which is more intuitive, is similar.

hinder recovery or a return to work [44]. Informal accommodations were thus favoured or encouraged. Similarly, Ferreira et al. examine pain attitudes and beliefs in two groups of undergraduate physical therapy students, one from Brazil and the other from Australia [48]. The authors administered the Health Care Providers' Pain and Impairment Relationship Scale (HC-PAIRS) questionnaire, including 15 statements, to 618 Australian students and 153 Brazilian students between 1998 and 2001. These students had never been exposed to patients suffering from chronic pain. Generally speaking, the Brazilian students were more often inclined to agree with the need to suspend their activities in order to prevent further injury and agreed more strongly with the notion that the persistence of painful symptoms diminishes quality of life and the possibility of resuming normal activities [48]. Regarding the role of people close to the patient, the Australian students were much more inclined to rely on the individual's assumption of responsibility in his cure than on the family's assumption of this responsibility, as was the case for the Brazilian students.

In a qualitative study inspired by the participant observation (or ethnography) method, Meershoek et al. (2011) observe no fewer than 250 clinical consultations run by six occupational health physicians in the Netherlands [43]. The authors report and describe complex interactive situations that lead the clinicians to overestimate the influence of culture and to put non-European migrant/immigrant workers into so-called "problematic" categories. When questioned in this regard, the physicians agreed that there is a danger in using analysis tools based on ethnocultural belonging, when, for example, precedence is given to culture over diagnostic investigation and a deeper understanding of the patient's experience and representations. This categorization by the physicians serves to create a distance between the "us" and "them" and definitely hinders the therapeutic relationship [43]. Without discrediting the use of cultural categories as a means of understanding the patient's reality, Meershoek et al. warn against the essentialization and generalization of cultural categories and the possible labelling that can result therefrom.

Perceptions of pain treatment

The reviewed studies that focus on perceptions of pain treatment in the context of ethnocultural diversity examine perceptions of the appropriate treatment [41, 44], motivations to seek treatment and adhere to it [46, 47], and expectations of the effectiveness of a given treatment [46, 48].

In Sweden, Löfvander's study of patients of Greek or Turkish origin on long-term sick leave reports a series of representations of the appropriate treatment: rest/doing nothing at all, massage, analgesics, or physical activity. The use of analgesics is seen as necessary but on a temporary basis only [41]. In this regard, the study has limitations as it does not consider the issue of the perception of the treatment of choice in light, for example, of the anxiety types described earlier or in light of employment status, work context, or beliefs about the causes. The study conducted by Bates et al., which focused mainly on the attitudes and beliefs of the caregiving personnel in two different cultural contexts, nonetheless identifies treatment preferences: focused on biomedical intervention in New England, the patients at this clinic are very often resistant to psychosocial approaches, which include cognitive-behavioural therapies [44]. The Puerto Rican patients accept psychosocial approaches much more readily, and all the more so since the clinicians there place more emphasis on the expression of emotions, social relations, and the

introduction of accommodations in the workplace [44]. These authors also look at cultural differences from the perspective of intracultural variations. According to them, these variations are explicable in terms of differing socioeconomic standings and places of residence (urban versus rural), although the article does not explain how these socioeconomic and geographic factors may correlate with the perception of the treatment of choice or with the reaction to the treatment proposed. Overall, Bates et al. argue that it is the presence and level of grounding in body-mind dualism that determines the response to treatment: compared with psychological approaches, a strictly biomedical view of chronic pain in patients may generate reservations, indeed even resistance, anger, or dismay because they perceive the caregiving personnel as not really believing them (suggesting that it's all in their heads) [44]. According to Bates et al., given the failure of biomedical interventions, a patient who adheres to this model will tend to have multiple medical appointments until he finds the right doctor who will prescribe him local analgesic injections (nerve blocks), steroid injections, or surgery [44]. The perception held of the causes thus appears to be an important factor in understanding the strategy of seeking therapeutic solutions, particularly in a context of ethnocultural diversity where differing, even opposing, views may come up in the clinical encounter.

In a similar vein, a study conducted by Sloots et al. in the Netherlands explores the reasons for dropping out of treatment (occupational therapy) among an immigrant clientele from the Near East and North Africa [46]. The main reasons stem from contradictory views of the problem and of the solution needed. The patients who were interviewed hoped to obtain a specific diagnosis as well as a treatment proposal for completely eliminating the pain. This expectation appears not to have corresponded to the treatment which the clinicians interviewed were in a position to offer. The result was a mutual disagreement on the aim of the treatment, and in turn, the impossibility of building a relationship of trust between the clinicians and their patients [46]. In this context, the non-adherence to the treatment appears to have been the result of a combination of antagonistic relational and perceptual factors that could not be overcome.

Perception of work incapacity

The perception of work incapacity, or the inability to work, was the focus of two of the reviewed studies. More specifically, they looked at the perception of the ability to resume occupational activities [48, 49]. In Sweden, Norrefals et al. conducted a longitudinal study of the perception of ability to return to work in a group of workers beginning an eight-week rehabilitation program [49]. Nearly half of the 72 persons admitted to the program were immigrants. By administering the Impairment and Disability Evaluation and Analysis (IDEA) questionnaire, the researchers were able to observe that, despite considerable differences in the workers' perceptions of their ability to return to work, both groups (native Swedes and foreign-born) had similar return-to-work rates. However, after three years the researchers also noted significant differences in the workers' health and pain-management habits, with a higher use of analgesics and lower level of activity among the immigrant workers. Despite similar clinical characteristics and medical trajectories, significant differences were noted between the two groups' occupational trajectories, with the immigrants coming mainly from less advantaged socioeconomic backgrounds and less skilled employment categories. Notwithstanding the similar results for the two groups, the researchers concluded that differences in perception (and the related habits) may limit understanding of the program objectives and its long-term effectiveness if these differences in perception are not tackled directly.

The other study that looked at the issue of perception of ability to return to work was conducted by Ferreira et al. in Australia and Brazil on a population of undergraduate physical therapy students [48]. The authors' main hypothesis was that cultural differences can influence perceptions and ways of adapting to pain, and that these differences can also be observed in clinicians themselves. The students were asked to indicate their level of agreement or disagreement with a series of statements taken from the Health Care Providers' Pain and Impairment Relationship Scale (HC-PAIRS). Here are three such statements: "Chronic pain patients can still be expected to fulfill work and family responsibilities despite pain," "Chronic back pain patients have to be careful not to do anything that might make their pain worse," and "As long as they are in pain, chronic back pain patients will never be able to live as well as they did before." The Brazilian physical therapy students interviewed agreed more often with the notion that a patient in pain should limit his activities, as opposed to their Australian peers, who strongly believed in the need for the patient to remain active and fulfil his occupational and family responsibilities [48]. As in the aforementioned Bates study, the Ferreira study shows that the analysis of clinicians' perceptions must also be taken into account in the therapist–patient relationship and that differences in perception are not solely the patient's domain. Like patients, clinicians are also the product of a social and cultural background that colours their values and perceptions. This is what induced anthropologist François Laplantine a quarter of a century earlier to assert that popular representations of health and illness are never independent of scientific knowledge, and conversely, that scientific knowledge is not independent of the cultural and historical conditions in which it evolves [51].

Perception of self

The "perception of self"[10] theme was documented twice in this summary of knowledge [29, 45]. The first occurrence was in a qualitative study conducted by Rogers and Allison on 32 patients of African-Caribbean and South Asian origin[11] living in northwestern England [45]. In addition to presenting epidemiological data on the incidence and prevalence of MSDs in these two ethnocultural groups, Rogers and Allison report interesting data on pain representations and the impact of pain on the feeling of self-identity. In that study, it was primarily the workers of South Asian origin who reported a pain perception quite close to their perception of their work incapacity, as the pain perception predominant in this group is closely related to the impacts of the pain on the social or personal environment. An altered feeling of self-identity can result in a feeling of loss [45].

Similarly, the Côté and Coutu review [29], in which we also participated, examines these identity questions by differentiating issues specific to social construction of gender that may have a strong cultural overlay [29]. At the semiotic level, perception of self appears closely linked to a perception of incapacitating pain [29].

10. Perception of self refers to a process whereby an individual defines himself, for himself, and in interaction with his social environment; it is also referred to as "feeling of self-identity" or "sense of self". One's perception of self seeks to make a certain ideal of the self correspond to society's expectations and values [52]. It is recognized that an episode of long-term disability or the occurrence of a chronic injury can considerably alter this perception of self and the anticipation of judgments by others [53].

11. From South Asia or the Indian subcontinent: Pakistan, India, the Maldives, Nepal, Bhutan, Bangladesh, and Sri Lanka.

Perception of the role of others during the therapeutic process

Perception of the role of others during the therapeutic process is, like the other theme categories, a generic theme that we constructed during content analysis. This category refers to two specific themes related to the healing process: the perception of the family's role during the process and the perception of the clinicians' role. The perception of the family's role is discussed in four articles [9, 36, 45, 54]. By interviewing the medical personnel in an Austrian post-injury in-patient rehabilitation centre, Dressler and Pills seek to identify cultural barriers that may influence communication with patients [36]. Without delving into details and interethnic comparisons, the authors report that in some cultural communities the family's presence is seen as important or even necessary to the therapeutic process, to decision making, and to the patient support process [36]. In a literature review that is closer to a theoretical essay, Fitzgerald reports the presence of family or cultural values that may interfere with the value of personal autonomy underpinning rehabilitation programs. Thus, autonomy (sometimes called "empowerment") collides with the values of interdependence conveyed within certain families or cultural groups; what may be seen as helpful and comforting by some may be regarded as a barrier to the achievement of therapeutic goals by others [9]. The aforementioned study by Rogers and Allison (concerning perception of self) compares two ethnocultural groups (South Asians and African-Caribbeans) whose perception of pain management echoes a perception of the family's role [45]. In their comparative study, the researchers found that the African-Caribbean group placed greater emphasis on autonomy and personal strategies than the South Asian group of patients, who were more concerned with the help provided by family and friends (45, p.85). In their study, Wray et al.'s survey of five occupational therapists revealed that strategies are used by clinicians to improve their relationship with their patients [54]. The clinicians interviewed incorporate the idea of cultural adaptation into a family-centred model [54].

2.2.3 Intervention methods in the context of ethnocultural diversity

The perception of the family's role during the therapeutic process, which was covered in the previous section, appeared in the content analysis to be an important component of the "culture and pain representations" theme. This section on the intervention methods used in rehabilitation in the context of ethnocultural diversity examines this theme in greater depth by addressing (1) the criticism levelled at the models used in rehabilitation, and (2) the methods recommended in the literature.

Criticism levelled at the models used in rehabilitation

A number of factors are described in the literature as posing barriers to the establishment of a therapeutic relationship, and particularly what is described as an insensitivity to cultural variations that clinicians may encounter in the context of their professional practices [55]. The authors who looked at the notion of ethnocultural belonging in the rehabilitation context stressed that the conceptual models used in occupational rehabilitation may be based implicitly on standards and values that have historically risen in Western countries, with all the cultural, philosophical, and scientific heritage that implies [40, 45, 48, 55-58]. The values and objectives of independence, personal autonomy, and self-determination included in many multidisciplinary occupational rehabilitation programs are often cited as examples in the scientific literature on this topic [9, 45, 56, 57]. Two specific practice contexts are identified. The first, which is

mentioned more often, pertains to the sociodemographic composition of a given population (e.g. immigrant context, ethnocultural diversity) [59], while the second relates to the exportation of prevailing theoretical concepts in rehabilitation and the transcultural validity of these concepts [50, 56, 57, 59].

Iwama and his team state that rehabilitation programs whose therapeutic interventions and objectives are based on principles that perhaps do not have all the presumed transcultural validity may disadvantage or exclude patients for whom these values have a less significant meaning [56]. The presence of such a disparity in perception may influence treatment expectations and ultimately, adherence to the treatment [56]. Can other concepts used in rehabilitation be viewed from this perspective of transcultural validity? For the time being, little information is available on the subject, but one might surmise that the clinical concepts used to substantiate the judgment and evaluation made by health professionals and that pertain to their patients' state of health risk producing biases or even distortions in their interpretation of the meaning to be given to certain behaviours or expressions of pain that are deemed "excessive" and thus contrary to the clinicians' expectations [60].

Intervention methods in the context of ethnocultural diversity that are recommended in the literature

In the context of ethnocultural diversity, the evidence on the best practices to be adopted in occupational rehabilitation and disability prevention are somewhat scarce if we exclude the studies and systematic reviews on the best practices to be adopted in the hospital care sector in general [61, 62]. The few articles identified in the rehabilitation sector highlight three central themes: (1) the therapist–patient relationship; (2) the organizational structure of the clinical setting; and (3) the notion of cultural competence and its application in the context of rehabilitation interventions. These themes will now be discussed in greater detail.

The therapist–patient relationship is examined in a literature review carried out by Davidhizar and Giger in 2004. These authors place particular emphasis on the importance of variations in the expression of pain. Resisting the temptation to assign an ethnocultural label based on the observed behaviours, attitudes, and beliefs, they strongly recommend carrying out clinical evaluations based on personal characteristics, by looking, for example, at which practices are in place in the patient's family setting and at his prior experiences with pain and his beliefs about health and illness [60]. For these authors, it is a matter of better identifying the patient's life context and perceptions in order to adjust the intervention methods accordingly. These intervention methods act at the interpersonal communication level and imply a necessary reciprocity in the therapeutic relationship [50].

Like Davidhizar and Giger four years earlier, Balcazar et al. (2009) conducted a literature review on rehabilitation intervention methods in an ethnically diverse context [63]. More systematic in their approach, Balcazar et al. document no fewer than 18 intervention methods that were used in the fields of nursing, counselling, and social work and were the subject of scientific publications between 1991 and 2006. Eighteen models were identified by Balcazar et al. [63]. While the models they identified deal with several aspects of the rehabilitation intervention, all touched on the relational aspect, and more specifically, the development of clinicians' capacity to cultivate better communication with their patients [63].

A study by Dressler and Pils [36] examines the strategies implemented by hospital staff in an Austrian in-patient rehabilitation centre. According to these authors, the implementation of intervention strategies and of interpersonal or intercultural communication strategies by practitioners can only bear fruit if they are based on an organizational structure that is demonstrably respectful of differences and open to taking individual preferences into account in its offer of therapeutic services [36]. Without putting a number on this phenomenon, Dressler and Pils observe that interventions last longer when clinicians and patients do not share the same cultural idiom and that this longer time does not serve to improve the clinicians' understanding of the situation [36]. The result is feelings of powerlessness and frustration that may set the stage for the development of rather tenacious prejudices and stereotypes and that endanger the therapeutic relationship (mutual trust, empathy, etc.) [36]. Along the same lines as Dressler and Pils, Humbert et al. talk about connectedness in the therapeutic relationship. Connectedness refers to the process of developing a therapeutic alliance in the intercultural encounter, and it presupposes an emotional and empathetic link that must be used to define a common goal. [64].

In terms of human resource management, a review by McCauley (2005) speaks about personnel recruitment efforts that, whenever possible, should try to incorporate more health professionals from diverse ethnocultural communities. McCauley also recommends using consultants with strong expertise in cross-cultural communication, or with expertise in specific cultural areas or on ethnic groups that have strong demographic representation in a given sector [35].

Lewis et al. [65] examine the problem from another angle and at an earlier stage. In their opinion, the problem of cross-cultural communication in the health care context must be covered in the academic study programs of future clinicians. Panzarella holds the same view [66]. The notion of cultural competence is at the heart of this debate and will be described in the following section.

The notion of "cultural competence" and its application in the context of rehabilitation intervention

Eight studies out the 31 retained for this summary of knowledge deal with the notion of "cultural competence" [47, 54, 57, 59, 63, 65-67]. Initially developed in the middle of the 1990s in a nursing context and based on the Campinha-Bacote model [68], the notion of "cultural competence" defines and situates the intervention in its relational framework instead of the technical framework in the strict sense [63]. The Balcazar [63] and Munoz [50] teams reworked and adapted the Campinha-Bacote model to define four main axes, namely:

1. **Critical awareness** (or cultural awareness) refers to the stakeholder's ability to become aware of his own cultural bias and of the personal values that may influence his relationship with the client and lead to possible biases in his understanding of intercultural interaction and interpretation situations [50, 63]. Munoz and his team speak more specifically of a self-reflective process [50], while Balcazar and his team speak of the influence of our own social position, which can influence our experience of life [63]. The social position (i.e. all the sociodemographic and socio-occupational variables that influence the variations within a given group and that make the "cultural" explication extremely complex).

2. **Cultural knowledge** refers to the knowledge and view of the world of patients from differing cultural backgrounds. This requires that the stakeholder become familiar with other cultural models, values, belief systems, and behaviours [50, 63]. Munoz and his team introduce the categories of the observable and unobservable to remind us that some factors, such as age, gender, and ethnicity, can be perceived more readily than can less easily observable factors such as socio-economic status, life experience, education, social ranking, male–female relationships, religious affiliation, and level of acculturation[12] [50]. General knowledge about a given culture should not lead one to assume a homogeneity of the individuals that make it up any more than it should not lead one to a strict cultural determinism [50].
3. **Skills development (relationship/cultural skills)** refers to communication in an intercultural context, empathy, and the ability to integrate the client's beliefs, values, experiences, and aspirations into the development of a treatment plan [50, 63]. With an eye to Munoz's observable and unobservable categories, the stakeholder is called on to develop skills that enable him to comprehend, using appropriate questions, his client's social and family dynamics and the contexts in which the client has been able to develop this or that mechanism for adapting to distress or illness [50], including any incidents of racism, sexism, or segregation that the client may have experienced due to his ethnic, religious, or racial characteristics. According to Munoz and his team, experienced stakeholders develop, over time, skills that lead them to distinguish situations where cultural generalization is "allowed" from situations where it is necessary to "individualize" the cultural knowledge [50].
4. **Putting into practice in the context of pluralism** refers to the putting into practice and application of the knowledge and acquired skills [63]. For Munoz and his team, this putting into practice relates to what they term a "cultural encounter" and takes place at two levels: an individual level and an organizational level [50]. To be effective and to optimize the training of the health care personnel, the notion of "cultural competence" must be adopted at the organizational level (policies, continuous training, etc.)

The notion of cultural competence is established above all in the disciplines of counselling, human relations, nursing, and psychology but remains to be validated in rehabilitation [50]. And just how receptive are stakeholders to the notion? Munoz and his team carried out a qualitative study to survey a group of 12 occupational therapy clinicians [50]. In this study, the questioned clinicians felt that their basic training was inadequate for addressing the issues related ethnocultural diversity [50]. Although the Munoz study was well conducted, it relied on an excessively uniform sample that consisted only of clinicians with a certain level of experience. A more heterogeneous sample would have brought a wider range of replies and a more contrasting set of viewpoints that better identified the scope of the problem [50].

12. Acculturation. According to Baré, the term acculturation refers to the complex processes of cultural contact through which societies and social groups assimilate or have imposed on them characteristics or sets of characteristics originating in other societies. [69]. The anthropologists who make use of this notion are interested in the phenomenon of cultural change and population movements. It refers especially to the relationship between modern industrial societies and its nations who come from non-Western societies. The notion may be set alongside the notions of integration, assimilation, exclusion and segregation [10].

On this point, a study by Murden et al. [67] sought to understand how a group of rehabilitation students perceived cultural competence. Murden and his team administered the Cultural Awareness and Sensitivity Questionnaire (CASQ, 15 items) to 72 physiotherapy students at four stages of education (new cohort of students on entry, on completion of university-based studies, on completion of fieldwork, and after one year on the labour market) [67]. It was found that the training of future clinicians is perceived as largely inadequate in the area of cultural competence (90.2%), that cultural factors should be taken into account during the occupational rehabilitation process (95.8%), and that not taking cultural factors into account may adversely affect the success of the rehabilitation (98.6%) [67].

However, the Murden et al. study does not specify how or using which teaching method the development of cultural competence may be covered during students' time in school. Two possibilities are mentioned in this summary of knowledge: the recommendation of either an intensive course or of disseminating "cultural content" in the program's various courses [65, 66]. Adding an intensive cultural competence course supposes that other courses will be dropped to make room for it [66]. Such an addition would require specialized pedagogical resources and skills that the physiotherapy and occupational therapy instructors may not necessarily have mastered [66]. How to manage the content so disseminated and ensure that the teaching meets its objective [65] and how to evaluate the students' cultural competence [66]? Panzarella has an idea as to an answer and recommends including systematic evaluations in specific real-life or simulated situations so that the students are not tempted to view the content as trivial and focus instead on other subjects [66]. The evaluation method using a simulated patient is mentioned as an example that would make it possible to integrate "cultural" content into therapeutic relationship situations and test the clinician's attitude and reaction: how does he react when, say, a patient refuses the involvement of a clinician of the opposite sex or when the patient requires that several members of his family be present? How will he react when the patient disagrees with the program's objectives and with the finality of the treatment (see the section perceiving the role of the family in the therapeutic process) [66]?

Other clinical examples of the intercultural encounter are presented in *Toward Culturally Competent Care: a Toolbox for Teaching Communication Strategies*, a pedagogical guide developed in 2002 by S. Mutha, C. Allen, and M. Welch at the University of California at San Francisco's Centre for the Health Professions [70]. Other studies have also proposed including case studies, role playing, writing and interpretation exercises, introspection (building self-awareness), didactic presentations, and immersion in multicultural contexts [50, 65, 67]. Several questions remain after reading about the solutions proposed by Panzarella (2009) and Murden et al. (2008). Basically, if it is easier to conceive of the relevance of the concentration of content (and of its systematic evaluation) with regard to dissemination, the question of developing the instructional material remains fuzzy and was not directly addressed in the works we analyzed. Who should develop the content of these courses? Who should manage the training programs? Should the health sciences faculties call on instructors from other departments and faculties—social sciences, for example? Or should they, on the other hand, call on specialized resources outside the university environment—in the work environment, for example, or in health and social services establishments? These are only some of the questions that this summary of knowledge was unable to answer but that are nonetheless of great importance in the cosmopolitan reality of major North American cities, where the portion of the workforce that is from immigrant or ethnocultural minority backgrounds is constantly growing.

3. DISCUSSION

The main objective of this summary of knowledge was to identify and describe the themes that emerge from various research studies exploring the issues related to the influence of ethnocultural belonging on the rehabilitation and return-to-work process. Content analysis of the reviewed articles and reports brought out several themes, beginning with a description of the vulnerability factors for OHS risks among immigrant workers and workers from ethnocultural minorities and extending to the definition of culture and the identification of items that are part of the cultural component. The rehabilitation studies particularly stress the influence of representations of disease on the therapeutic process and rightly so: how a problem is defined and the meaning assigned to it can influence how we foresee subsequent phases [71]. In the context of the therapeutic relationship, the issue of representation takes on its full importance, because differing representations can affect compliance with and the outcome of treatment. That is why a number of the reviewed studies discuss the therapeutic encounter as an opportunity for interchange (interpersonal communication), trust-building, and negotiating the various proposed intervention methods. Several authors criticize rehabilitation intervention methods that do not take into account the cultural diversity of the population, faulting them for reproducing so-called "monocultural" organization and health care models. [72]. This criticism leads to a reflection on the best means for transitioning from a model that is insensitive to cultural diversity to a model that takes it into account at every level, including the individual and organizational levels. As for the more specific objective of identifying and describing the main return-to-work determinants in immigrant workers and workers who are members of ethnocultural minorities, our quest is smaller in scale, for research on this topic is in its early stages.

The theme of ethnocultural belonging on the occupational rehabilitation process overlaps with issues relating to gender as a sociocultural category [29]. Gender issues call attention to the definition of family, how a family unit is structured and organized in terms of family roles and the role that close relatives may be led to play during the healing process [9]. Fitzgerald presents the family as the primary cultural unit where the first social learning takes place, including the learning of gender-based differences [9]. The theme of the cultural competence of rehabilitation stakeholders is often defined in terms of their ability to identify and understand how disease and pain are represented by clients from various ethnocultural backgrounds. It has rightly been stressed that intra-cultural variations in how disease is represented may occur [60, 63]. Concepts related to gender (social roles, male–female relationships) and to family values, age, and socio-economic level are examples of factors that can influence the variations in how pain is represented within a given culture [36, 44].

When the issue of the cultural competence is examined, most studies emphasize rehabilitation clinicians' attitude, skills, and perception. Cultural competence is directly associated with the intercultural communication process that links a stakeholder and a client, and it is the quality of this intersubjective link that prefigures the development of a sound therapeutic relationship and mutual trust. According to Munoz et al. [50], the cultural competence model, which has been refined in psychology, nursing, and counselling, does not appear to have been the subject of evaluative rehabilitation studies (or even the study of implementation processes), despite many statements of principle having been made by professional associations whose members are called upon to intervene in the rehabilitation process. For example, the notion of cultural competence is recognized by the American Occupational Therapy Association (AOTA), which has included it

in its practice guidelines and in its educational objectives [73]. On its website, in a section devoted to cultural competence and ethics, AOTA states:

> Cultural competence is key to effective therapeutic interactions and outcomes. It implies a heightened consciousness of how clients experience their uniqueness and deal with their differences and similarities within a larger social context. It enhances the occupational therapy provider's knowledge of the relationship between sociocultural factors and health beliefs and behaviors. It equips providers with the tools and skills to manage these factors appropriately, with quality occupational therapy delivery as the gold standard. Cultural competence is an evolving and developing process that depends on self-exploration, knowledge, and skills. [73]

According to AOTA, incorporating cultural competence into one's practice has a number of aspects, including: (1) involving members of the extended family in the therapeutic process; (2) use of a more formal level of language when addressing elderly persons (e.g. title followed by their last name); (3) acknowledging and working with traditional healers; (4) being cautious about touching, especially with members of the opposite sex; (5) engaging in small talk before beginning a session to avoid appearing brusque or rushed; (6) using the patient's preferred language or using an interpreter; and, lastly, (7) asking questions about the patient's beliefs and cultural practices during the health evaluation process. [73]

Similarly, rehabilitation counselors in the United States have adopted a code of professional ethics that attaches great importance to the population's cultural diversity:

> Rehabilitation counselors will plan, design, conduct, and report research in a manner that reflects cultural sensitivity, is culturally appropriate, and is consistent with pertinent ethical principles. . . . Rehabilitation counselors will be sensitive to diversity and research issues with culturally diverse populations and they will seek consultation when appropriate. [74]

In the absence of proven training models, simply raising awareness of ethnocultural diversity in the health care context and recognizing the importance of representations in that context can constitute a first step toward a better handling of clients' individuality. A clinician who is not adequately equipped to deal with challenges of a cultural nature risks unnecessarily complicating his task by having to devote more intervention time without its having any real impact in terms of mutual understanding [36]. Without a clear willingness to acquire cultural knowledge, it is difficult to develop the empathy necessary to integrate the patient's beliefs, values, experiences, and aspirations into development of the treatment plan [63]. This willingness is at several levels: personal, professional, organizational, and societal [72].

Toward a conceptual synthesis of the notion of culture and of other known rehabilitation indicators

The culture components discussed by the authors and presented in section 2.2.1 are general in nature. Culture is thus presented in relation to the learning process and to an environment adaptation function [9]. Culture's "shared" character and the "transmission" process are seen in the foreground and, associated with an adaptive function, it is also its dynamic or changing

character that is brought out. In the conclusion to an important composite work in anthropology devoted to the theory of culture, Melford Spiro attempts to distinguish between that which relates to the domain of culture (public domain) and that which does not (private domain) [75]. From the outset, Spiro describes culture as a cognitive system, that is, a set of "propositions," both descriptive and normative, that are concerned with the behaviour of individuals and societies. While at the source of individual learning processes, culture is not, however, the only phenomenon at work, and Sprio brings in and contrasts the social experience of individuals that may, in some ways, lead an individual or a group of individuals to develop mindsets/representations of the world that are hostile to the models that have been transmitted through more traditional or conventional channels ("intentional enculturative processes") [75]. This experiential vision is brought out in the reviewed documents, in particular by Stanley Paul, for whom past experiences can influence individuals' learning or interpretation of the events of their daily lives. In rehabilitation, it is recognized that a medical history or a history of pain can influence how a person may perceive a reoccurring painful symptom [76].

In the rehabilitation field, perceptions generally relate to perceptions of intensity, of severity, and of the consequences of pain on day-to-day life. In this summary of knowledge, the authors associated several themes with the notion of ethnocultural belonging. All of these themes have been summarized in the general diagram presented as Figure 1 below. In the diagram, the green categories are cultural domains: gender, social roles, and social hierarchy [29, 40], religious beliefs [36, 50], family structure [9, 45], standards and values [9, 40], and language and communication [36, 44, 48, 63]. These cultural domains are related to categories in the cognitive and emotional realm. The perceptual and emotional dimensions related to intentions, attitudes, and interactions are shown in pale blue on the right side of the diagram. For example, take a patient who believes that pain is a clear manifestation of a bodily injury. The patient may be tempted to limit his physical activities and may even develop a fear associated with movement. Due to his fear of movement and of the risk of injury that may result from it, he or those in his circle may forbid any and all physical activity. In such a context, it can seem predictable that the patient will be hostile to any treatment proposal that involves retraining and a therapeutic return to work.

The general domain of culture, shown on the left side of the diagram, is overlapped by two themes that appeared important in the reviewed documents, namely individuals' social position and the work context. Social position refers to demographic and socio-occupational elements (class, stratification, income, education, etc.) [34, 35, 50, 63, 77] whereas work context refers to OHS issues such as exposure to hazards, the industry, and work requirements [32-35]. Tangentially including themes such as the social position or work context is important because it reminds the reader of the risk of ultimately attributing a therapeutic failure to cultural differences. The questions posed by the historian of anthropological thought Adam Kuper are interesting in this connection because he encourages the clinician to ask himself about the impact of cultural determinants on the therapeutic process with respect to the expression of a given socio-economic position [78].

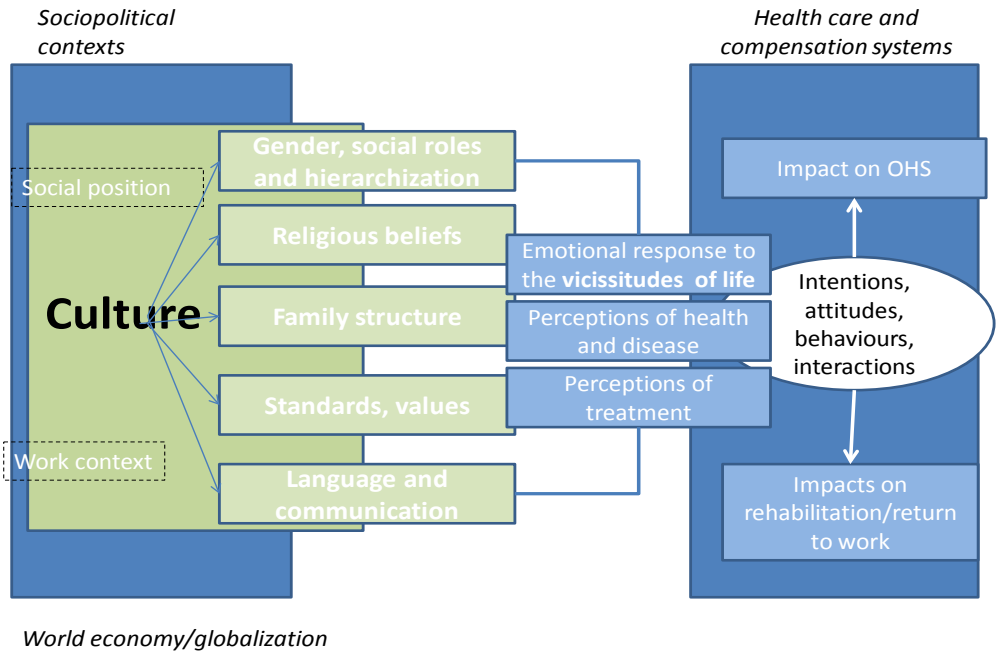

Figure 1: Summary diagram of cultural categories and their influence on the rehabilitation process

Discussion of the methodology used in this summary of knowledge

This summary of knowledge has several limitations. A first limitation is inherent in the quality of the works reviewed. Several reviews, despite the relevance and coherence of the views expressed, are light on details regarding the methodological approach used (key-word selection, databases consulted, inclusion and exclusion criteria, article evaluation method, number of studies retained, etc.). Of the nine literature reviews retained in this summary of knowledge, six leave out this type of information [34, 35, 42, 47, 60, 65], while three adopt a more systematic approach [29, 32, 63].

The second limitation relates to the categorization of the populations concerned and the reference to racial typology which is often confused with ethnocultural typology. Despite the very great relevance of their findings, Davidhizar and Giger [60] confuse the phenotypic, nationalitarian, and religious characteristics. For example, these authors compare groups identified as “Blacks” (phenotype or physical characteristic), “Italians” (national or ethnocultural identity), and “Jews” (religious identity)[13]. The study goes so far as to describe the emotional reactions of Italians as being stronger than those of “Whites.” In this case, the reader can deduce that “White” refers to the Anglo-Saxon ethnocultural majority, but the texts do not specifically say so, which may confuse casual readers. Although it is impossible to provide an exhaustive list in this summary, this kind of mistake, in which racial characteristics are confused with ethnocultural characteristics, appears to be frequent in the studies that make comparisons between the various

13. Jews exhibit notable cultural differences according to their national origin. Two large groups are often cited as examples, the Ashkenazi Jews (from Eastern Europe) and the Sephardi Jews (from the Mediterranean basin).

ethnocultural communities. The studies, in particular those from the United States, speak more of "racial" differences than ethnocultural ones [60, 79-83] in contrast to the European studies [26, 45, 84-89].

The third limitation of these studies relates to the tendency to homogenize the so-called "immigrant" group without considering that immigrant populations come from geographically, socially, and culturally heterogeneous environments. Accordingly, the immigrant population displays within it widely varied sociodemographic characteristics and career and migration paths [2]: immigration for reasons such as economic, family consolidation, humanitarian, and environmental. These different migration paths can influence and colour the occupational experience in the host country.

Proposed avenues of research

Although this summary of knowledge looked at the question of ethnocultural belonging in rehabilitation, it would appear there exists a wealth of scientific literature on the issues relating to the development of cultural competence among health care professionals in various specialized fields. Fields such as psychology, psychiatry, geriatrics, nursing, and social work have explored this concept for some time now [63]. As our literature review did not focus specifically on the cultural competence model, it would undoubtedly be relevant to carry out a review more narrowly focused on the various intervention methods and cultural competence training programs in order to further the reflection process. Identifying the various issues related to the development of cultural competence in personnel and organizations that provide rehabilitation services would make it possible to determine which avenues are most beneficial for intervention and training and transferable to the occupational rehabilitation field.

Other possible avenues of research are suggested by this literature review. First, it is necessary to study on an exploratory basis the experience of immigrant workers or workers from ethnocultural communities with the Québec compensation system. More recently, the work of Sylvie Gravel has examined this issue in Montréal (Québec) [38], as has the work of Peter Smith and Agnieszka Kosny in Ontario [90-92]. However, these studies are situated mainly in the perspective of the pre-illness work context and of OHS risks and do not directly address the issue of the intercultural encounter in a therapeutic context. This type of study should cover intercultural communication and the relationship with the various rehabilitation stakeholders.

The studies reviewed and retained for this summary of knowledge considered above all the relational and communicational dimension of the intervention and placed in perspective the role, attitude, and cultural competence of the rehabilitation clinicians (ergotherapy or occupational therapy, physiotherapy). None of the reviewed studies examined the other professions that also have a role to play in the rehabilitation and return-to-work process (e.g. rehabilitation counsellors, psychologists). This undoubtedly stems from a bias related to key-word selection. It will therefore be necessary to cover a broader range of health care professionals involved in the return-to-work process. As far as possible, the stakeholders' experience should be compared with that of the workers concerned.

Lastly, it should be noted that the reviewed studies examine the impact of ethnocultural diversity on how health care is accessed. As the diversity of the labour force affects every business sector,

it will be necessary to study the impact of such a diversity on how health care and social services are organized. Does a higher concentration of health care professionals from immigrant and ethnocultural minority backgrounds result in a better institutional positioning with respect to cultural competence? Does the presence of these professionals contribute to a better service offer in terms of cultural mediation and interpretation?

4. CONCLUSION

Like many reviewed works, this summary of knowledge places the issue of ethnocultural belonging in the context of massive population movements that affect several regions of the globe, most intensely the industrialized countries. These new immigrants join existing cultural communities and, to varying degrees, integrate into or acculturate to the host society. This does not always happen smoothly, and immigrants' paths are full of pitfalls: language problems, acculturative stress, experiences in the country of origin that can debilitate a person (torture, political persecution, rape, war crimes, famine, etc.), experience of racial or religious discrimination in the host country, and so on. Besides the language barriers and problems of a relational nature (contact with the host society or majority culture), these persons may have trouble expressing their distress due not only to language [90] but also to a relationship of trust that is slow to develop in a health care context they appear to find hard to understand (e.g. medico-legal and administrative procedures, cultural logic of health care systems) [46].

In view of the multiple meanings that pain (or any other disabling illness) may have, the notion of the stakeholders' cultural competence has an interesting potential for the therapeutic relationship, even if its introduction in the rehabilitation field is recent and poorly documented and remains, to our knowledge, more theoretical than operational. Nonetheless, the notion of cultural competence should not be abandoned. On the contrary, it should be examined in greater detail [93]. If the theme of ethnocultural belonging is often dealt with in terms of variations in perception and behaviour toward health and disease, this summary of knowledge proposes another angle of approach by moving the centre of gravity from the cognition field in the strictest sense to that of communication. This may be the main conclusion that should be drawn.

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APPENDIX 1: KEY WORDS USED FOR DOCUMENTARY RESEARCH BY THEMATIC BLOCK

Immigrant workers and OHS

Emigrant OR Foreign OR Immigrant* OR Migrant* OR Emigrant and Immigrants (MeSH)

AND

Occupation* OR Work OR Worker* OR Workplace OR Accidents OR Occupational OR Occupational disease OR Occupational health OR Occupational Medicine OR Work OR Workplace OR Health OR Safety OR Security OR Disease

Ethnocultural belonging and occupational rehabilitation

Chronic Pain OR Pain OR Douleur OR Health OR Illness

AND

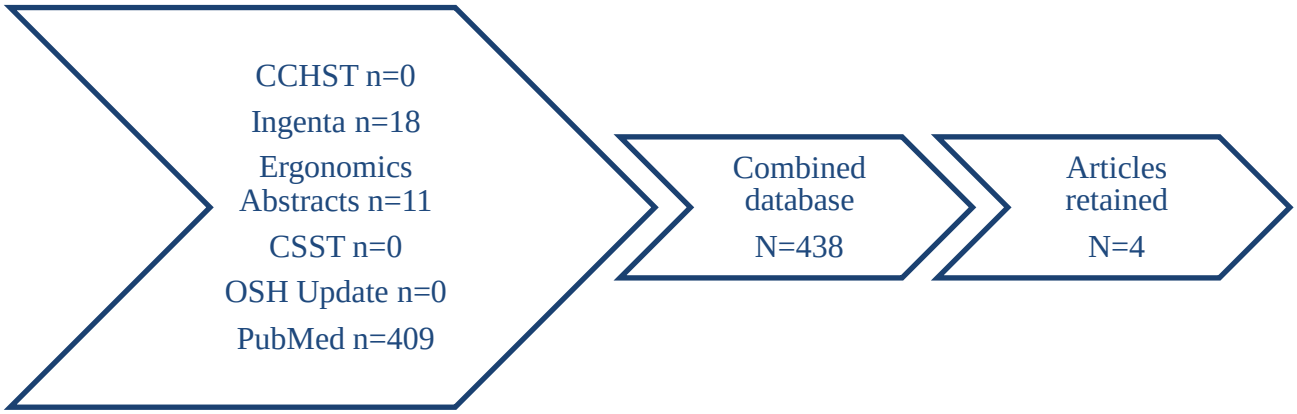
Attitude OR Health Knowledge OR Attitude to health OR representation OR Appartenance culturelle OR Cross-cultural communication OR Cross-cultural comparison OR Cross-cultural difference* OR Variable culturelle OR Cultural Characteristics OR Cultural Competency OR Cultural Diversity OR Cultural factor* OR Cultural OR Culturally OR Culturel OR Culturally responsive OR Culture OR Groupe ethnique OR Ethnic groups OR Ethnic minority OR Migrant worker* OR Migrant*

AND

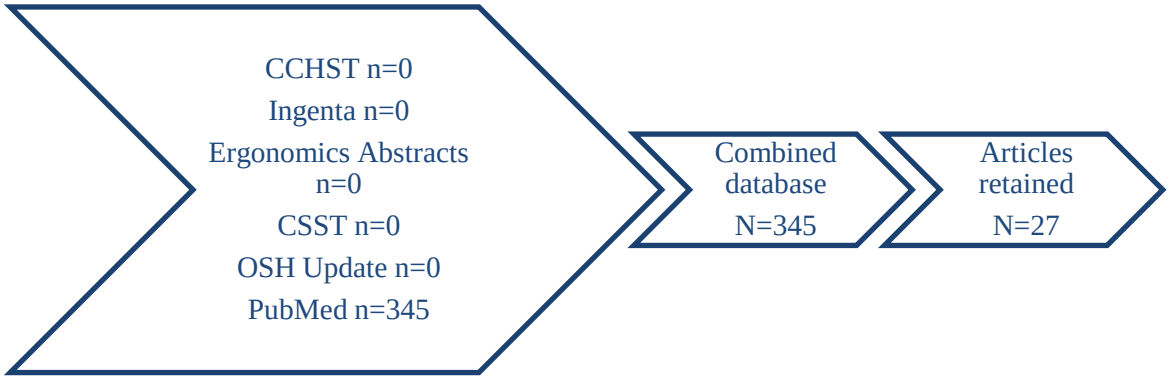
Transcultural nursing OR Occupation OR Occupational therapy OR Therapy OR Insertion OR Intégration OR Rehabilitation OR Réadaptation OR Recovery OR Return to Work OR Maintien en emploi OR Work OR Worker*

APPENDIX 2: DATABASES CONSULTED, NUMBER OF ARTICLES RETAINED FOR THE REVIEW, QUALITY EVALUATION, AND CONTENT ANALYSIS

Block 1 – Immigrant workers and OHS



Block 2 – Ethnocultural belonging and rehabilitation



APPENDIX 3: EVALUATION GRID FOR REVIEWED ARTICLES

Evaluation Grid for Qualitative Studies

20 Excellent; 19–18 Very high; 17–14 High; 13–12 Average; <12 Rejected

Authors and year:	Score
1. Problem and objectives	
a. Is the problem clearly defined?	
b. Are the objectives clearly defined and do they reflect the issues inherent in the aim?	
c. Are the clinical issues clearly identified?	
2. Sampling and context of the study	
a. Are the inclusion/exclusion criteria clearly described?	
b. Are the subjects' sociodemographic characteristics (age, gender, social position, type of disease) clearly described?	
c. Clear distinction between therapist and researcher (the researcher cannot also be the interviewee's therapist)?	
d. When relevant, are the clinical context and treatment details described?	
3. Collection method	
a. Is the choice of method justified with respect to the research objectives?	
b. Detailed description of the data collection method (recruitment, sample, collection conditions)?	
c. Is the collection context described in a way that allows the study conditions to be clearly understood?	
4. Theoretical framework	
a. Are the concepts and ideas that inspire the interpretation of the data clearly presented?	
b. Is the theoretical framework relevant to the research objectives?	
c. Are the authors careful not to overdetermine the interpretation by making use of these concepts?	
5 Analysis method	
a. Are the analysis procedures adequately described?	
b. Do the developed concepts come from the studied material, not from preconceived theories?	
c. Are the internal validation procedures for the findings described?	
6. Findings	
a. Are links with broader theoretical questions made?	
b. Correspondence with existing knowledge (external consistency and triangulation)?	
c. Interpretation of the findings and the summary are consistent with the presented empirical data and the research question/objectives?	
d. Are the external validation questions discussed?	

TOTAL

Evaluation Grid for Quantitative Studies

17 Excellent; 16-15 Very high; 14-13 High; 12-10 Medium; <10 Rejected

Authors and year:	Score
1. Problem and objectives	
a. Is the problem clearly defined?	
b. Are the objectives clearly defined and do they reflect the issues inherent in the aim?	
c. Are the clinical issues clearly identified?	
2. Sampling and context of the study	
a. Are the inclusion/exclusion criteria clearly described?	
b. Is the choice of sampling type justified?	
c. Are the exclusions and refusals compared with the others?	
3. Collection method	
a. Is the choice of method justified with respect to the research objectives?	
b. Detailed description of the data collection method and questionnaires?	
c. Had the questionnaires been validated (or were they recognized)?	
4 Analysis method	
a. Are the analysis procedures adequately described?	
b. Do the analyses allow type I and II errors to be limited?	
c. Are the confounding variables identified?	
5. Findings	
a. Are the subjects' sociodemographic characteristics (age, gender, social position, type of disease) clearly described?	
b. Are the findings presented concisely for each measurement tool?	
c. Do the presented data allow the study's various groups or populations to be properly identified/compared?	
6. Discussion	
a. Is the relationship between the findings and the current state of knowledge discussed?	
b. Are the study's limitations clearly described and discussed?	

TOTAL

Source:

Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. Lancet, 358(9280), 483-88.

Greenhalgh, Trisha (1997). "How to read a paper: Assessing the methodological quality of published papers", British Medical Journal, 315: 305-08.

Verbeek, J. H. et al. (2004). Patients expectations of treatment for back pain. A Systematic review of qualitative and quantitative studies. Spine, 29(20), 2309-2318.

APPENDIX 4: COMPARISON OF THE RETAINED STUDIES BY MAIN TOPIC, TYPE OF STUDY, PLACE, SAMPLE, AND MAIN RESULTS

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Ahonen et al. 2007	Immigrant workers	Literature review	N/A	48 studies from various industrialized countries	N/A	Very high	Concentration of immigrant workforce in high-risk industries. Access to health care and rehabilitation counselling is a major issue for those workers. Immigrant workers have to be considered separately with asymmetrical power relations, social stratification and social inequities in health.
Balcazar et al. 2009	Cultural competency	Literature review	USA	32 studies	N/A	High	Summary aimed at developing cultural competence in the field of health care. Four main dimensions are described: self-reflexive process, skills, knowledge, and attitudes. Institutional support is described as an issue for successful training in cultural competence and practical applications.
Banks 2008	Cultural competency	Review of practice guidelines	USA	Unspecified	Disability	Low	Discussion about self-reflexive process to understand our own cultural determinants and the stigma and discrimination attached to being labelled as a member of a racial or ethnocultural minority. Double discrimination among minority women (fear of being deported to country of origin in case of divorce, social and economic vulnerability, etc.).

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Bass-Haugen 2009	Health disparities	Quantitative, retrospective transversal study	USA	3 million households	Multiple	Medium	Health disparities and unequal access to rehabilitation services. Disparities vary according to ethnic and racial belongings and incomes. Conclusion in favour of developing community-based health centres sensitive to cultural characteristics and of adjusting public policies to improve access to health care.
Bates et al. 1997	Therapist–patient relationship	Qualitative	USA Porto Rico	Transversal	Multiple	Medium	Two rehabilitation clinics based on the biomedical paradigm, but different approaches to health care: dualism (mind–body versus holism), focus on symptoms versus social relations, and the clinicians' different reactions to emotional displays and pain behaviours.
Benach 2010	Immigrant workers	Literature review	International	Unspecified, 28 cited references	Various	Low	Concentration of immigrant workforce in high-risk industries and precarious job status. Harassment, bullying, linguistic and cultural barriers, and little access to occupational health and safety information are common among newly arrived immigrants. Strategies to get closer to that population category are to be developed.
Calvillo and Flaskerud 1991	Therapist–patient relationship	Literature review	USA	Unspecified, 28 cited references	N/A	Low	Ethnocultural belonging influences clinical judgment on pain experience. Therapist–patient relationship may be negatively shaded when clinicians base their interventions on their own cultural standards for defining treatment expectations. Cultural models in health and illness beliefs should be better understood to avoid false clinical judgments.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Carmody et al. 2007	Culturally sensitive intervention models	Qualitative, longitudinal	Ireland	2 participants, convenience sampling	Multiple sclerosis	Medium	The so-called Kawa interview model is presented as an effective tool for grasping patients' perception of illness and the meaning of life (including work), using a metaphoric style of expression. Its utilization among multiple sclerosis patients helps the clinicians to propose a rehabilitation protocol based on the patients' characteristics. Pre- and post-treatment interviews have shown improvement in attitudes and emotions.
Côté and Coutu 2010	Therapist–patient relationship	Literature review	N/A	32 studies	Musculoskeletal disorders	Good	Gender is described as a sociocultural category. Description of different issues related to prolonged work disability and how it can vary according to gender. Illness legitimacy, self-identity process, and domestic strain are three emerging themes reported in this literature review. Gender roles and their impact on the rehabilitation process are also discussed.
Davidhizar and Giger 2004	Therapist–patient relationship	Literature review	N/A	Unspecified, 51 cited references	Unspecified pain	Medium	Clinicians' cultural sensitivity has to be developed for addressing cultural variations in the meaning and behavioural/affective response to pain. The improvement of such consciousness about cultural issues should be encouraged and positioned as a preliminary condition for understanding pain experience and working towards personalized approaches to treatment.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Dressler and Pils 2009	Therapist–patient relationship	Qualitative	Austria	28 therapists	Multiple trauma	Good	Language barriers and cultural aspects attached to pain behaviours and attitudes may influence therapist–patient relationships and the whole rehabilitation process. Cultural differences regarding daily life are perceived as more acceptable to clinicians but less acceptable when such differences have an impact on rehabilitation. Linguistic barriers bring an additional obstacle since language is the foundation of communication. This is particularly true when rehabilitation programs offer psychotherapy where dialogue and cross-personal interactions are important. In a context of increasingly culturally diverse populations, structural or institutional solutions are needed to support people who intervene in the field.
EASHW 2007	Immigrant workers	Literature review	Europe	N/A	N/A	Low	Highlights the tendency of immigrants' concentration in industries known for higher risk exposure; immigrant workers are more subject to work in hazardous conditions, to harassment and bullying. Language limitations among immigrants urge us to use better suited and adapted means to disseminate information regarding occupational health and safety.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Ferreira 2004	Pain and illness representations	Quantitative, transversal	Brazil/ Australia	153 physical therapy students	N/A	Good	Physical therapy students from Brazil and Australia explain their views about pain. Resuming work activities despite pain and the role of family during the healing process are major points of disagreement among the two groups. Slight differences regarding the value of autonomy versus interdependence. Students' cultural background clearly influences beliefs and attitudes toward pain.
Fitzgerald 2004	Therapist–patient relationship	Theoretical essay	Australia	Author's self-reflection from his previous researches and from his own experience as a teacher in rehabilitation	N/A	Medium	Family and culture are defined as two related concepts to be included in rehabilitation. Clinicians tend to consider cultural issues only among people and families that they see as ethnically different (maybe on the basis of skin colour or the most obvious or visible differences). Reflexive practices may help identify clinicians' own cultural influence and the work of culture in their professional and private lives as well as in the meaning they attach to social roles, values, and attitudes towards health and illness.
Humbert 2011	Therapist–patient relationship	Qualitative	USA	Semi-directed interviews with 11 clinicians	N/A	Good	The questioned clinicians perceive their intercultural experience as a way of learning about themselves and about other ways of seeing incapacity. Perception of the clinician's role (placing oneself in a learning situation vs. influencing others) varies according to the level of experience in intercultural contexts.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Iwama et al. 2009	Culturally sensitive intervention models	Theoretical essay	Japan/ Canada	N/A	Occupational injuries	N/A	Rehabilitation models available in Western countries are culturally conditioned according to the authors: individual autonomy, self-management and independence are not central in every culture. A culturally-sensitive approach is flexible, adapted to individual characteristics and provides tools to understand to level to which personal characteristics may be rooted into the sociocultural milieu.
Kondo 2004	Cultural competency	Theoretical essay	Japan	N/A	N/A	N/A	Underlying logics in occupational therapy settings may also be culturally shaped. Social role construction and social hierarchy vary from one society to another. Concepts such as autonomy and independence are not equally meaningful from one society or culture to another. It has to be taken into account in the rehabilitation design. The meaning of work may also vary according to culture.
Lewis et al. 2009	Cultural competency	Literature review	USA	Unspecified, 35 publications cited	N/A	Low	Acquiring cultural competency is a long process including continuous training, immersion or practical training in multicultural clinical settings. Authors propose an intervention model for integrating cultural competency issues in post-graduate rehabilitation training programs. Discussion on cultural relativism and the importance of self-reflexive practice to become aware of one's own cultural conditioning and how it may influence their interventions.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Löfvander 1999	Immigrant workers	Qualitative, longitudinal setting	Sweden	26 first generation immigrants from Greece and Turkey. Mean age: 38, >6 weeks out of work	Chronic pain	Good	Focus on painful sensations or anticipation about the future may influence rehabilitation program outcomes. Anticipation about the future or emphasis on the meaning of pain tends to project a pessimistic view while emphasis on painful sensation helps patients accept pain and leads them to resume work. Focussing on painful sensations is accompanied with a fatalistic vision of one's own health condition. Anxious-pessimistic versus fatalistic-optimistic binary model is described. Discussions on the importance of dialogue during the healing process and the therapist–patient relationship for outlining pain representations.
Madan 2008	Pain and illness representations	Quantitative, transversal	UK/India	855 participants doing repetitive office tasks	Acute pain	Good	Significant differences are shown in pain prevalence and disability due to musculoskeletal disorders among two groups of workers doing similar or identical tasks. Authors put forward the hypothesis of possible cultural differences and especially health beliefs.
McCauley L. A. 2005	Immigrant workers	Literature review	USA	Unspecified. 51 references cited	Occupational injuries	Medium	Immigrant workers are far from being a homogeneous group. Some ethnocultural minorities are over-represented in jobs with high levels of risk, especially those with lower incomes. Three main issues are presented: improving working conditions, giving easier access to health care and compensation, and training in cultural competency among health professionals.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Meershoek 2011	Therapist–patient relationship and social differentiation	Qualitative	Netherlands	6 occupational physicians in the context of 250 consultations	Various injuries	Very good	Through observation and analysis of approximately 250 medical consultations, the authors show the labelling and ethnic characterization process. This results in the construction of a "problem patient" overdetermined by a culturalist explanation. The authors discuss the danger of applying ethnic and cultural classifications in specific cases of diagnostic ambiguity.
Muñoz 2007	Culturally sensitive intervention models	Qualitative	USA	12 rehabilitation professionals (women); mean age: 48.3; convenience sampling, multiple variations	N/A	Very high	A group of rehabilitation professionals considers their training in cultural issues insufficient or inadequate and that cultural competency is essential for daily clinical practice.
Murden et al. 2008	Cultural competency	Quantitative	USA	72 rehabilitation students	N/A	Good	A majority of rehabilitation students believe that cultural factors constitute an important issue in the occupational rehabilitation process. At the same time, they express their needs for a more appropriate training in cultural competence, including exposure to multicultural clinical settings or environment.
Norrefalk 2006	Immigrant workers	Quantitative, longitudinal	Sweden	67 patients, including 30 immigrants. Mean age: 40	Chronic pain	Good	Pain intensity, perception of work disability, and the use of analgesic medicine are higher among immigrants despite similar results in terms of return-to-work outcomes. Linguistic barriers and lower education among immigrants constitute additional limitations. Delay in case management negatively influences the RTW process among immigrants as well as natives.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Odawara 2005	Cultural competency	Qualitative	Japan	2 rehabilitation therapists' reflexive practice in certain cases	Rheumatoid arthritis/Stroke	Medium	Two occupational therapists were interviewed about how they integrated cultural issues into treatment and intervention methods so that the patients feel comfortable with the proposed treatments. Self-reflexive practices are described as basic conditions for cultural competency and the ability to acknowledge patients' personal characteristics. Clinicians' narrative show how they succeeded in helping the patients to reconstruct their own feeling of self-identity in a positive manner so they could manage to reorganize their life despite limitations due to pain.
Panzarella 2009	Cultural competency	Theoretical essay	USA	N/A	N/A	N/A	Discussion of physical therapy programs in the United States with cultural competency as an integral part of educational training. How should cultural competency training be taught? The authors suggest that cultural competency training has to be systematically evaluated in concrete or simulated conditions. Otherwise, there is a risk of students not taking that subject matter seriously. Simulated patient-type evaluation could be cost-effective according to the authors.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Paul 1995	Cross-cultural validity of assessment tools	Theoretical essay	North America	N/A	Diverse, unspecified conditions	N/A	From the premise that rehabilitation assessment tools are culturally biased and reflect the Euro-American middle class, the author wonders whether we should use culture-fair or culture-specific assessment tools. Current norms and assessment tools may be a hindrance to successful rehabilitation in a multicultural context, especially the tools addressing psychosocial issues.
Rogers et Allison 2004	Therapist–patient relationship	Qualitative	UK	32 outpatient clinic's users (13 men, 19 women). Convenience stratified sampling	Acute pain	Very high	Pain experience challenges the self-identity process as a part of a broader social identity construction. Representation of the causes of pain and coping strategies vary according to ethnocultural belonging. Such variations should be addressed in clinical perspectives, for example the value of autonomy versus interdependence.
Sloots 2010	Therapist–patient relationship and adherence to treatment	Qualitative	Netherlands	Patients (N=23), physicians (N=8), occupational therapists (N=2)	Chronic pain	Very high	The main reasons that the interviewed patients abandoned treatment are related to an opposing vision of the problem and of the finality of the proposed treatment: expectation of a specific diagnosis and of complete relief from pain. Results in the difficulty of building a relationship of trust between clinicians and patients.

Authors	Main topic	Type of study	Place	Sample	Type of illness	Quality	Main results
Wray 2011	Cultural competency and clinicians' role	Qualitative	Canada	5 occupational therapists	Unspecified	Very high	Although unfamiliar with the cultural competency model, the interviewed clinicians develop strategies for improving their relationship and the patient's understanding. The clinicians integrate cultural competency into a family-centred model. Discussion on the distinction between the reflexive process and reflection on culture (reflexive/ reflective)