



TAMPEREEN  
AMMATTIKORKEAKOULU

# THE EFFECTS OF CULTURE ON CHILDREN'S PAIN

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Bachelor's Thesis  
October 2016  
Degree Programme in Nursing



## **ABSTRACT**

Tampereen Ammattikorkeakoulu  
Tampere University of Applied Sciences  
Degree Programme in Nursing

**KINNUNEN HANNA & OJALA AURORA:**  
The Effects of Culture on Children's Pain

Bachelor's thesis 49 pages, appendices 6 pages  
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This study was conducted in cooperation with Tampere University of Applied Sciences. The purpose of the Bachelor's thesis was to study relevant issues concerning cultural effects on children's pain expressions and experiences. The objective was to provide knowledge for nurses and other health care professionals to think and act in reference to a global perspective when taking care of children and families. The aim of this study is to make pain assessment available for all children irrespective of their backgrounds.

A literature review method was applied to discover the most relevant and extensive scientific knowledge relating to the topic. Additionally, different key words were used to find the most relevant studies of the topic. The final analysis includes twelve articles that are connected to the theme of the research. The results were divided into four categories: verbal expression, behavioral expression, pain experience and family and culture. The results emphasize findings concerning cultural diversity amongst children's pain expression and pain experience.

The findings indicate that children in pain perceive, behave and manage pain differently worldwide. Cultural beliefs and values help nurses to understand pain and its diversity. To improve the quality in care, nurses need to engage more fully with the values and beliefs of the family and children in pain. Children's pain assessment and their families need to be carried out with cultural sensitiveness.

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Key words: child, pain, pain expression, pain experience, culture, family

## TIIVISTELMÄ

Tampereen ammattikorkeakoulu  
Degree Programme in Nursing

KINNUNEN HANNA & OJALA AURORA:  
Kulttuurin vaikutukset lapsen kipuun

Opinnäytetyö 49 sivua, joista liitteitä 6 sivua  
Lokakuu 2016

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Opinnäytetyö toteutettiin työelämälähtöisesti yhteistyössä Tampereen ammattikorkeakoulun kanssa. Opinnäytetyön tarkoituksena oli tutkia kulttuurin vaikutusta lapsen kivun ilmaisuun ja kivun kokemiseen. Opinnäytetyön tavoitteena oli kerätä tietoa sairaanhoitajille sekä muille terveysalan ammattilaisille, jotta he saavat tiedollisia ja taidollisia välineitä hoitaa eri kulttuuritaustasta tulevia lapsia ja heidän perheitään. Tulokset voivat mahdollistaa hyvän kivun hoidon eri kulttuuritaustan omaaville lapsille.

Kirjallisuuskatsauksen menetelmää soveltaen ja eri hakusanoja käyttäen löydettiin oleelliset ja laajimmat tieteelliset artikkelit. Lopullinen analyysi sisälsi 12 artikkelia, jotka sopivat tämän opinnäytetyön aiheeseen. Tulokset jaettiin neljään kategoriaan, joita olivat sanallinen ilmaisu, käytöksellinen ilmaisu, kivun kokeminen sekä perhe ja kulttuuri. Tulokset korostivat kulttuurien monimuotoisuutta lasten kivun kokemisessa ja ilmaisussa.

Opinnäytetyön tulokset osoittivat, että eri kulttuuritaustasta tulevat lapset ymmärtävät ja hallitsevat kipua eri tavoin ja käyttäytyvät eri lailla kivun aikana. Tietämys eri kulttuurien uskomuksista ja arvoista auttaa sairaanhoitajia ymmärtämään kipua ja sen monimuotoisuutta. Parantaakseen hoidon laatua sairaanhoitajien tulisi herkemmin huomioida lapsen tausta ja perehtyä kivuliaan lapsen perheen arvoihin ja uskomuksiin. Lapsen kivun arviointi ja heidän perheet tulisi huomioida kulttuurisella herkkyydellä.

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Asiasanat: lapsi, kipu, kivun ilmaisu, kivun kokeminen, kulttuuri, perhe

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## 1 INTRODUCTION

Pain management and assessment of children pain is a challenge for health care providers around the world. Pain assessment and treatment becomes even more problematic when the child, family and nurse have differing cultural backgrounds. Hanssen's & Pedersen's (2013, 22) study states, that there are cultural attitudes and beliefs about pain. Minorities' pain is likely more to be underestimated and fabricated by health care (Hanssen & Pedersen 2013, 22).

The growth of immigration and tourism (SVT 2013) will be challenging health care systems around the world, due to a more diverse population. Professional skills should be developed, due to the nurse's possible lack of language skills and/or knowledge concerning the influences of culture on pain perceptions and behaviors. Nurses in Finland are obliged to offer culturally appropriate care (THL 2015) so for this reason we have chosen to make the effects of culture in relation to pain and how it presents in pediatric patients as the main topic of our Bachelor's thesis.

Pain treatment is essential in the field of paediatric nursing, untreated pain can lead to long-term consequences (Kuttner 2015). In Finland the nurse's job is to assess the child's pain and give the required medication if needed. Throughout our clinical practices, we have had questions about pain management and the decision making skills behind it. After our clinical experiences, we were left wondering about the issues concerning culturally diverse pediatric patients and how they express pain. For this Bachelor's thesis we want to find answers to our questions and bridge the current knowledge gap.

## **2 PURPOSE, TASKS AND OBJECTIVE OF THE THESIS**

The purpose of this Bachelor's thesis is to highlight relevant research studies on the effects of culture on pain expression and pain experiences in children. Our research question is:

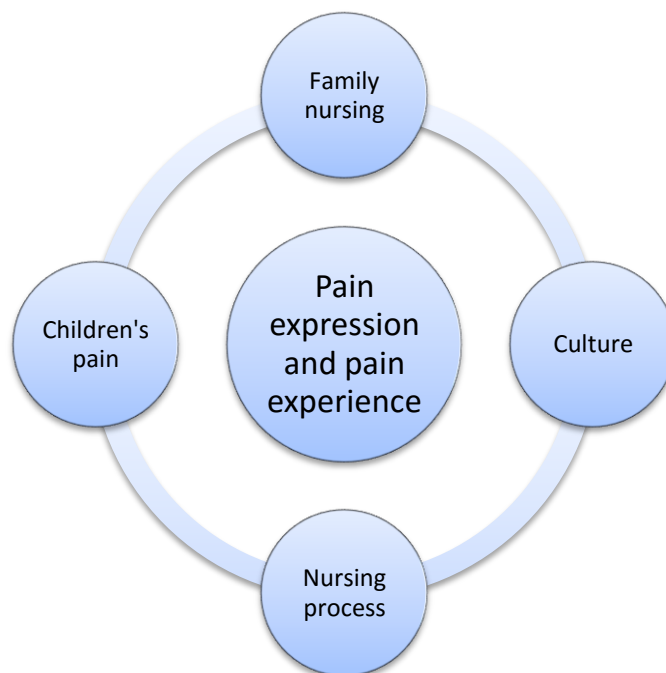
- How does culture affect pain expression and pain experience in children?

This thesis will be beneficial to both nursing students and graduated nurses. We aim to summarize and critically evaluate the theoretical evidence on the influences of culture on children's pain perceptions and pain experiences. This review will increase knowledge and understanding of best practice methods for nursing culturally diverse people. We aim to contribute towards more competent health care, that both understands and has the skills to provide meaningful and effective care for patients with diverse cultures and ethnicities.

### 3 THEORETICAL STARTING POINTS

This chapter offers the reader a comprehensive introduction to the thesis concepts. For us to discuss and analyze children's pain and culturally competent nursing, we must define our main concepts clearly. The following section includes definitions of the key concepts that are used in the thesis.

The main concepts of this thesis are presented in Picture.1. The thesis's main focus is pictured in the center of the flowchart, it includes the child's pain expression and pain experience. The center is surrounded by four factors that affect the child's pain expression and experience. For nurses and caregivers to understand child's pain, particular influences must be acknowledged. A hospitalized child is most often accompanied by their family. This means that nurses not only take care of the child but also the family. Families have their own specific cultures and nurses have their own nursing processes that are initiated after a child has expressed pain.



PICTURE 1. Flowchart of key concepts.

#### 3.1 Children's pain

Mathew (2011, 71) states, in the Indian Journal of Palliative Care, that children's' pain is most often misunderstood, under diagnosed and even under treated due to the unique

and individual challenges that each child presents. Pain is a personal experience and it disseminates into verbal terms that are used to describe pain sensations. Pain can be caused by an illness, medical or diagnostic procedure, nursing procedure, accident, inexplicable pain or by a child's invented imaginary pain. (Kortessluoma 2009, 13–15).

Children's self-reporting is considered to be the most optimal source of pain assessment and management (Kortessluoma 2009, 102; Finley, Kristijánsdóttir & Forgeron 2009, 35). Many researchers have findings supporting that the fact that parents do not give valid information concerning the child's pain experience. Children who can communicate verbally should be interviewed for the most reliable and accurate pain assessment method (Kortessluoma 2009, 102; Olhansky et al. 2015, 169.)

Children are more sensitive to pain than adults, due to the deficiency in modulating and regulating pain. Studies show that neo-natals already have the same amount of nerve endings as adults on their skin (Scanlon 1991, 323.) If a child's pain is left untreated, it may lead to chronic pain, increased anxiety, fear of health care staff and increased sensations of pain later on in life (American Pain Society 2001, 793; Mathew 2011, 72). For these reasons pain must be taken seriously and dealt with quickly, so that long term psychological and physiological consequences can be avoided (American Academy of Pediatrics 2001, 793–797).

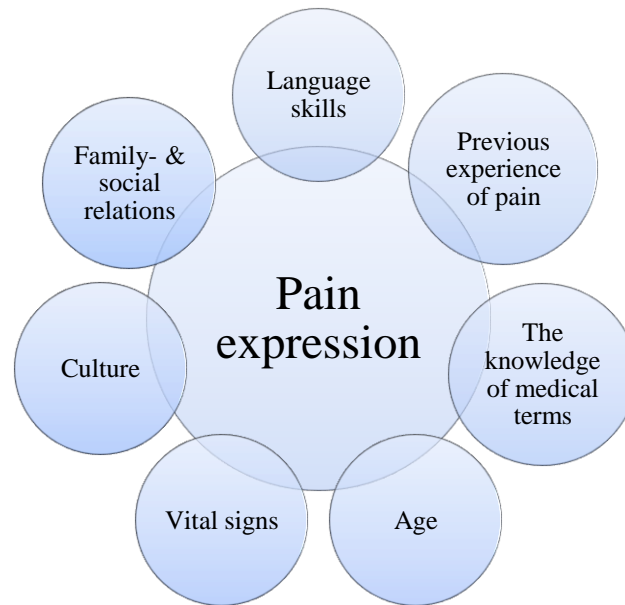
### **3.1.1 Children's pain expression and experience**

Pain is a complex phenomenon that involves the child's age, developmental and cognitive levels, communication skills, previous experiences and the child's own associated beliefs about pain. Pain is also modified by gender, previous pain experiences, situational factors, temperament, and family relations in reference to culture. These personal traits are all part of an individual's lifespan that influence pain experience. Girls are more prevalent of experiencing pain than boys, study results find girls reporting pain more actively than boys. (Morton 1997, 267; Goodman & McGrath 1991, 247–264.)

Several factors affect children's pain expression. A few examples of these are the child's language skills, previous experiences of pain and the knowledge of medical terms (Abdelhamid, Juntunen, Koskinen 2010, 171–173). A person can express pain

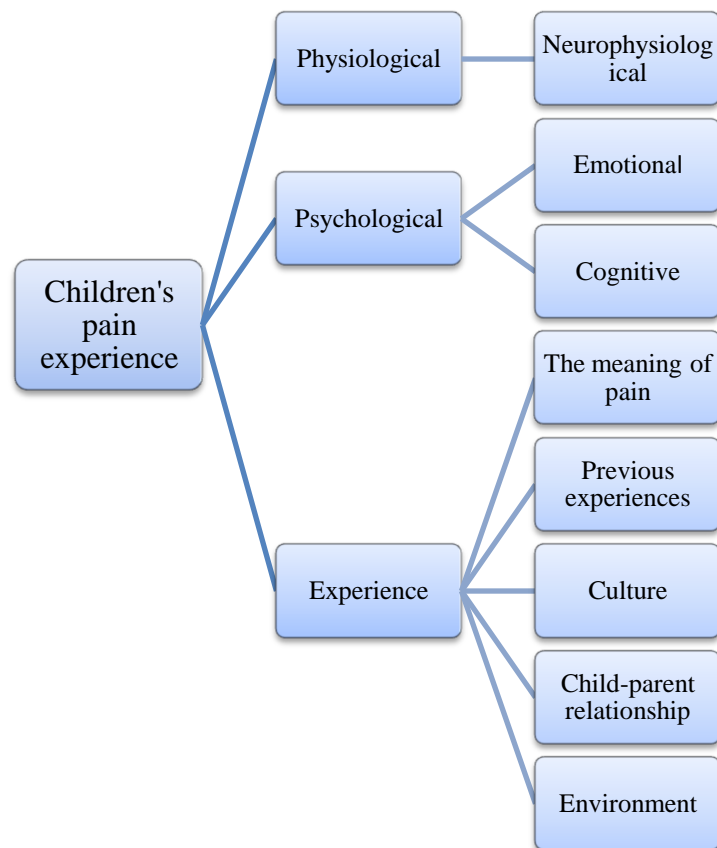


verbally or with non-verbal signs. These signs include vital signs, facial expression, tears, body position, anxiousness, slow movements, sweating, and irregular breathing. In some cultures, handling pain well is associated to masculinity. (Abdelhamid, Juntunen, Koskinen 2010, 171–173.) It is also relevant to ask questions when assessing pain. A small child or non-native speaker might not have a wide vocabulary to define their pain (Olhansky et al. 2015, 169).



PICTURE 2. Factors effecting children's pain expression. Modified from (Abdelhamid et al. 2010, 171–173; Goodman & McGrath 1991, 124–127.)

Finley et al. (2009) study shows that an interviewer’s cultural background can affect a child's pain expression. In the study, African-American children showed less verbal responses to pain than European children did. A possible explanation for this type of behavior is that African-American children were out of their “comfort zones” when talking to a European- American interviewer. (Finley et al. 2009.)



PICTURE 3. The factors affecting children's pain experience. Modified from Pölkki 2002, 24–25.

Morton (1997, 267) suggests that there are several restrictions that may make a child disinclined to report his or her pain, which are not necessarily related to cultural impacts. A child may be afraid to admit their pain as a result of being afraid of displeasing consequence, for example injection or longer stay in hospital. In many cultures, older children do not want to show their pain or distress to their parents so they do not worry them. In some families crying can be perceived as inappropriate for certain genders.

### 3.1.2 Nursing process in pain assessment

To treat pain sufficiently, nurses must assess pain frequently and try to predict possible upcoming painful experiences. Nurses have an active role in controlling and identifying pain in children. (American Academy of Pediatrics 2001.) Since the word “pain” has so many meanings and it refers to so many different variations in different cultures, it is crucial that a nurse understands the diversity of pain and is possible to relate in it. In

addition, the nurse is responsible for knowing the patient's pain history for reliable pain assessment. (Andrews & Boyle 1995, 311.)

Once the child has expressed pain the signal must be received and construed by the health care professionals or parent. (Finley et al. 2009). Joanne Bird (2003, 62) researched pain measurement tools in her study. What she found was that certain limitations might come across when choosing the appropriate pain assessment tools. The problem in many clinical settings is the use of a standard pain tool. Standard pain tools do not serve all patients because of population diversity. These standard tools are not accurate enough to rely on. They are just tools to help healthcare workers to get more information about pain. Internet allows access to various types of pain tools. Many pain tools can be found online and can be used for free. Healthcare professionals must always be aware of the tools merits and limitations. Bird also recommends that nurses and patients should be educated about the pain measurement tools, so that they are successfully used in practice. (Bird 2003, 57–65.)

A couple examples of pain tools that are used in Finland and globally are the Visual Analogue Scale (VAS), Faces Pain Scale Revised (scale 0-10), Wong-Baker Faces Scale (WBFS) and Faces Pain Scale developed by Maunuksela. The 'faces scales' are especially used with children in order to assess pain severity. The different 'faces scales' illustrate a series of facial expressions that show pain intensity. (Suomalainen Lääkäriseura Duodecim 2016.) Culture specific pain tools are debated amongst researchers, since comparison studies made on culturally specific tools have found that they are equivalent to each other (Jordan-Marsh, Yoder, Hall & Watson, 1994).

Schiavenato et al. (2008, 460–471) suggested an alternative approach to assess pain in children with a hypothesis on a 'primal face of pain'. The team assessed facial actions of newborns that had not yet been influenced by any social norms or developmental changes. Between the different ethnic groups, no key indicator differences were found, such as the drawing in of eyebrows, the opening of the mouth, closing eyes or of raising the cheeks. These findings would mean that facial expressions of pain would be constant across the world and there would be no cultural variation amongst newborns. Schiavento's et al. (2008, 460–61) study, suggests that a universal faces scale functions amongst culturally diverse newborns.

Along with the above-mentioned factors affecting the assessment of the pain is also the nurse's understanding of the child's facial expression as a sign of pain rather than another feeling or sensation. A nurse's interpretation may be influenced by their beliefs, individual and family values and experiences that may include the culture of the place in which they work. Even if the pain is correctly assessed, the response may still not be effective enough. Treatment choices are impacted by institutional and social factors, for example when administering opiates to children or a lack of belief in pain treatment. (Finley et al. 2009.) To keep the pain in control, nurses must also implement coping strategies and teach pain management strategies to patients. In hospitals, pain is meant to be monitored constantly. (American Academy of Pediatrics 2001.)

A well-known slogan used in the medical field goes like this: "pain is the fifth vital sign". This can be questioned, since researchers have, since then, invented true vital sign parameters that include life sustaining functions such as body temperature, heart rate, blood pressure and respiration rate. The slogan was trademarked by the American Pain Society (1996) to promote the importance of pain monitoring. The catchy slogan has no clinical evidence to back it up, but aims to increase the awareness of health care workers of the need to become more knowledgeable about pain assessment and management. This knowledge then helps nurses and other healthcare professionals overcome the barriers of efficient pain control. (Quiones 2015, 94–95.)

Important part of the nursing process of pain assessment and management is documentation. Nurses must measure and document the child's pain thoroughly. Documentation must include the treatment method and the responses to the given treatment and treatment side-effects. The mentioned variables should be monitored and documented routinely amongst the process. (American Academy of Pediatrics 2001.) In Finland healthcare professionals are advised to document cases according to a structured Finnish Care Classification Category, this way documentation is standard across the country. Standard documentation is a major improvement in patient safety and in pain control. Nurses document daily nursing actions to an electronic patient information system that is then recorded in a central system for later use. (THL 2016)

### 3.1.3 Special characteristics in children's pain management

Children's nursing usually involves the whole family. Pain management begins with going through previous experiences of pain with the child and their parents. The discussion is led by the nurse who then describes the doctors planned pain management methods and implementations. Before the nurse makes the final nursing treatment plan, the family and the child are encouraged to express their wishes and experiences concerning the forthcoming pain management plan. Both the child's and the family's wishes need to be taken into account before the nursing plan is carried out. A nurse should then make the nursing treatment plan together in accordance with the child's and the family's requests. It is crucial to prepare pediatric patients for their upcoming examinations. Good preparation helps alleviate the child's pain and their state of anxiety. The pain can be eased by showing the child pictures of the procedure in advance or by going through the instruments used in the procedure. Parents are encouraged to be present and involved while the nurse educates the child. (Mustajoki, Alila, Maanselkä & Rasimus 2005, 447.)

There must always be an opportunity for parents to be with the child and give them security and tenderness. A child's sense of security is created by presence of the parent. A child in pain should be continuously observed with the aim is to relieve the pain as effectively as possible. A child can be comforted by stroking their body and taking the child's mind off painful experiences. (Mustajoki et al. 2005, 447.)

Adequate pain management requires the introduction of new interventions in children's pain management. Nurses have a crucial role in children's pain management, because they are the primary group of care providers who are involved in the comprehensive care of the child. This is especially true in relation to implementing non-pharmacological pain management methods and giving guidance to the family. (Miettinen, Hopia, Koponen, Wilskman & Suomen sairaanhoitajaliitto ry 2005, 121.)

Non-pharmacological pain management is the basis for all pain relief and it should always be used when it is possible. (Suomalainen Lääkäriseura Duodecim 2016). Examples of non-pharmacological pain management methods are orienting the mind to some other thoughts, use of mental images, relaxation, massage, cold or heat therapy and arranging a comfortable treatment environment. (Miettinen et al. 2005, 121.)

## **3.2 Culture**

The following section offers a broad definition of culture, multiculturalism and ethnicity whilst explaining how culture is seen in this Bachelor's thesis. Culture is indicated by an individual's developed life-style that includes values, beliefs and myths. UNESCO (2015) defines culture as a framework to human life.

Culture has been defined and redefined multiple times in literature. Nursing theorist Madeleine Leininger (1978, 491; 1995,46) defines culture as shared ideas, rules and meanings that tells a person how to view the world and act in it. Culture is learned from birth in the process of language development and socialization. (Watt & Norton 2004, 37–42). Culture is transmitted from one generation to another mainly by parenting, education, language, differing symbols, literature, art and unwritten traditions. (Saukkonen 2013, 6–7; UNESCO 2015.).

Individuals are fitted into groups by transmitting their viewpoints by socialization. (Watt & Norton 2004, 37–42). A social groups or society's framework consists of spiritual, emotional, intellectual and material affairs. (UNESCO 2015). Culture binds people together due to shared beliefs, these individuals can have a variety of backgrounds, nationalities, languages or even belief systems. (Watt & Norton 2004, 37–42.)

### **3.2.1 Multiculturalism and ethnicity**

The word 'multiculturalism' offers a broad range of definitions when looking it up in the dictionary. The International Federation of Library Associations and Institution (IFLA, 2013) defines multiculturalism as a co-existence of diverse cultures.

Multiculturalism and diversity is increasing due to immigration in Finland, it is shown in the statistics measured by the Ministry of the Interior (2012,3), this increases the need for nurses with cultural knowledge and cultural competence in the future (Järvinen 2004, 34; Leininger et al. 1995, 3). There are multiple definitions and concepts developed for multicultural nursing. When referring to the literature's concepts, we plan to use the same concepts as the researchers have applied in their texts. Multiculturalism

includes sub-concepts such as culture and ethnicity. The two terms have different meanings and for this thesis, it is important to understand the upcoming concepts and differences.

The word culture, ethnicity and race are terms that are often misused globally (Holland & Hogg 2001, 2). Ethnicity as a concept refers to the cultural practices and attitudes that characterize a cognate group. This cognate group consists of individuals who have a certain background that include characteristics such as the same language, religion and ancestry. The term ethnicity can be used when one wants to distinguish one group from other groups. Ethnicity also involves shared meanings just like culture but often these shared meanings concerning ethnicity are developed from historical and political backgrounds. All people belong to an ethnic group. Mistakenly, some people think ethnicity is indicative of minorities within larger groups. Because the term ethnicity distinguishes a specific group of people, the risk of assumptions increases. The belief of the dominant culture may value their own beliefs, values, habits and customs as the norm or right. This type of cultural blindness can lead to restricted beliefs about other people's ethnicity, while their own ethnicity remains unspeakable. (Watt & Norton 2004, 37–42.)

### **3.2.2 Culturally competent nursing**

Cultural competent nursing can be viewed as skills in assessing a patient's cultural needs and the ability to build cultural interactions. The word culture is commonly used in everyday language, but often the underlying focus in nursing situations are forgotten. (Watt & Norton 2004, 37–42). Leininger and McFarland (2004, 73) define the core for transcultural care and present comparative differences and similarities amongst cultures. Health, wellness, values, beliefs and healing patterns are all evolved from culture. (Leininger & McFarland 2008, 83).

High-quality cultural competent nursing can be fulfilled regardless of the nurse's culture or the patients represented culture. Multicultural nursing is based on the need of a patient's care assessment, nursing plan, and the implementation of care and treatment evaluation process. In an extensive multicultural nursing process, a nurse is able to understand the patient's status and the holistic need of treatment. A nurse must see the sit-

uation from the patient's position because the nurse and the patient's meanings and concepts differ. (Abdelhamid et al. 2010, 138)

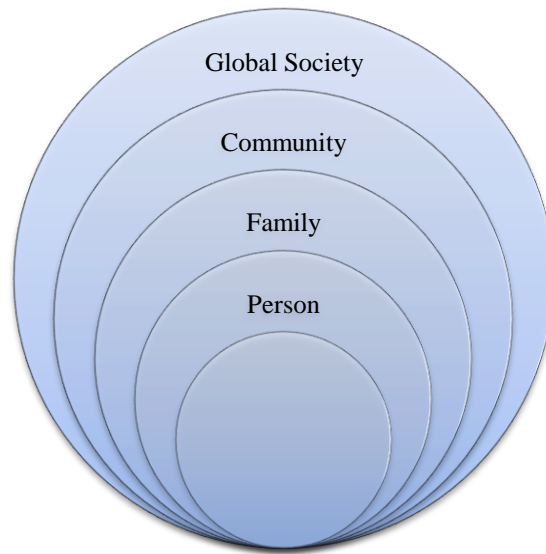
It is necessary to provide culturally competent care, regardless whether the nurse is working in public health care or in the private sector. Many nurses practice in varied settings with patients from broad variation of cultural backgrounds. Good competent care requires the nurse to be comfortable with patients with different cultural background and the environment that they come from and live in. Cultural data that has involvement in treatment is collected from the patient and the family during the assessment. This is used for setting mutual goals and to increase agreement between the nurse and the patient. Transcultural nursing practices enhances the health of the community as well as the health of individual patients. (Andrews & Boyle 1995, 323–324.)

The communication between the nurse and the patient can be very challenging if they do not have a common language. In this case, an interpreter is used. The communication is particularly challenging if the patient is illiterate and unable to exploit written text in their native language. (Abdelhamid et al. 2010, 138)

Purnell's Model for Cultural Competence (Purnell 2000, 2002.) is a framework designed for healthcare workers to improve cultural competence. Purnell as well as other noted researchers (Leininger & McFarland 2002, 161) believe culture is transmitted socially. Around the model's core there are three circles that represent a person, family, community and a global society. The model's core is formed of a pie-shaped figure, which gathers Man's twelve cultural aspects. The core cultural subjects focus on the patient's health, diseases, health habits, ideology, values, attitude towards life, the turning points in life, attitude towards one's own health and healthcare workers. (Abdelhamid et al. 2010, 139.)

These twelve parts that are included in Model for Cultural Competence are heritage, communication, family role and organization, workforce, bicultural ecology, high-risk behaviors, nutrition, pregnancy and child rearing, death, spirituality, health care practices and health care practitioner. All Purnell's twelve parts needs to be considered and understood their being linked in to each other's. The nurse itself can decide the order when assessing the patient's need for care. (Abdelhamid et al. 2010, 139.) The modified model is presented in the picture below.





Picture 4. Modified from Purnell's Model of Cultural Competence. (Retelling: Purnell, 2002.)

### 3.2.3 Culture and pain

Adult literature shows that pain is affected by race, ethnicity and culture. Pain can be shown more frequently; it can be severe or tolerated differently in different cultures. Adults also tend to be more influenced by cultural methods in coping and dealing with pain, pain perception, pain expression and how pain is interpreted (Green et al. 2003, 179; Lasch et al. 2002, 62.) The amount of research conducted concerning children's pain perceptions and the cultural effects are very limited (Mathew 2011, 72).

Pain in children is expressed and treated differently around the world. Pain behavior is culture, race and ethnically bound. Culture not only influences health care beliefs and experiences, it also effects views about pain medication. (Helman 2007, 185; 196).

Responses to pain can be divided into private and public pain. Private pain is shown amongst societies that value stoicism. Stoic cultures keep their pain expressions private, this is especially common with Anglo-Saxons. Pain responses in these cultures are less expressive compared to cultures that express their pain publicly. Studies show that patients from stoic cultures also avoid reporting their pain sensations to health care providers. (Helman 2007, 186; Olhansky et al. 2015, 173.) Emotive patients on the other

hand, are more likely to put pain into words, feel the need of having other people around them, and expect others to validate their discomfort caused by pain. (Helman 2007, 186).

A broad generalization of cultures can be made, if it helps to understand human behavior and culture better. Research concludes that Hispanic, Middle Eastern and Mediterranean patients are most often emotive and expressive when being in pain, while inhibited and stoic patients tend to come from Northern Europe and Asia. These kinds of cultural background generalizations can lead to stereotyping and inaccuracies. It is safer to think that the individuality in pain experience is manifested from emotional and behavioral responses that are particular to the persons own culture, personal history and individual perceptions. (Davidhizar & Giger 2004, 50).

Stoicism in Asian culture appears as in the 'face of pain'. This means that the Asian culture values and idealizes self-conduct, it is important to behave in a dignified manner even in pain. Pain should not be made obvious, even though an individual feels sadness or pain. A patient who complains openly or is assertive can be considered to have poor social skills. In Some Asian minorities, children are expected to behave in the same manner as adults in pain (Jongudomkram, Foregrom, Siripu & Finley 2012, 323.)

Nurses face patients in pain from different cultures on a daily basis. All cultures have their own rituals, for example Catholic patients in pain may wish to pray the rosary or take part in mass, while Jewish patients may ask to speak to a Rabbi. Patients of many Christian religions may pray actively to seek healing. Nurses must be sensitive to all kinds of acceptable rituals for the purpose of healing or pain relief. (Andrews & Boyle 1995, 317.)

### **3.3 Family nursing**

Traditionally the focus of nursing education is on individual patients. However, all the patients - especially when talking about children - are members of some kind of family and families are members of larger societies. Currently, the concept of family varies a lot and there is no agreed definition for a family. All health-care attitudes, beliefs, behaviors and decision makings are made in co-operation with families and larger social

systems. It is crucial that concepts and principals in family nursing are a part of the nurses' values and knowledge. Eventually, almost all nursing processes include families. (Hanson, Gedaly-Duff & Rowe 2005, 4.)

Nurses need to have cultural knowledge and assessment skills in family nursing. All families have their own health beliefs and practices. Timby (2001, 71–81) defines the importance of family and gender roles in culturally competent care. A patient's family position or gender role can affect the patient's reactions and expressions while a nurse observes them. (Timby 2001, 71–81.)

In the case of a child patient, family presence is easily understood by the nurse. However, family nursing is not just limited to the families with children. Family nursing is appropriate at every stage of life, regardless of the age of the patient. Each patient has a unique family and it should be kept in mind when treating patients who come from different cultures and to which they will return when the treatment is over. (Åstedt-Kurki & Kaunonen 2011, 116.) In the Finnish health care culture adult patients are often perceived as individuals, instead of being members of a family or group. (Åstedt-Kurki & Paavilainen 1999, 155–163).

## **4 METHODOLOGY**

A literature reviewing method is used for this Bachelor's thesis. Polit and Beck's (2012, 94) guidelines on how to conduct a literature review will be pursued throughout the review to achieve the most accurate and valuable knowledge of the topic. These literature guidelines (2012, 96) that Polit and Beck describe as the "flow of tasks" are taken to generate evidence that is thorough, comprehensive and up to date.

### **4.1 Literature review**

A literature review is an objective and thorough summary of critical analysis that is based on research of the topic that is being studied. The purpose of this literature review is to draw a conclusion about the topic in question, to highlight the significance of new research, to inspire new ideas and to identify gaps and inconsistencies in knowledge (Polit & Beck 2012, 96.) The main goal of this literature review is to find knowledge on how culture plays a role in children's pain. The authors have used Polit and Beck's (2012, 98) method recommendations on how to conduct a literature review.

A literature review begins with a search strategy. The search strategy helps the researcher identify information about the topic that is lacking. For a traditional literature review, the authors need to use previously published literature as data. When conducting a literature review, large amounts of data will presumably be discovered. The gathered data, must be thoroughly examined and critiqued to achieve a reliable review. It is also recommended to document all phases throughout the review. (Polit & Beck, 2012, 95–96.)

### **4.2 Literature retrieval**

This chapter will guide the reader as to how the literature search and the retrieval of articles was executed. This study uses previously published literature as the main source of data. The respondents collected the data manually, through an electronic library search engine to discover topic-related articles and journals. Initially the Cumulative

Index to Nursing and Allied Health Literature Database (CINAHL) was searched, as it has high-quality and reliable articles that are evaluated by publishers and experts. CINAHL offer evidence-based point-of-care material from medical, health care and nursing journals (CINAHL, 2016). The US National Library of Medicine National Institute of Health (PubMed), was also searched as the secondary database.

To find topic specific journals and articles, the search in CINAHL must be performed under a mode called the Boolean/Phrase ‘key word’ search. The words we used as ‘keywords’, to get the most accurate search results were “child\*” OR “paediatric\*” OR “pediatric\*” AND “pain\*” AND “cultur\* OR “ethnic\*”. When using a Boolean operator, ‘key word’ combinations can be either limited or expanded with a truncation symbol (\*), this truncation symbol was added, to get different end variations and more results. (Polit & Beck, 2012, 99.) We also limited the search, so that most of the ‘key words’ had to appear in the abstract of each journal article. Other limitations we used were English or Finnish language only, full-text and peer-reviewed research articles.

In table number 1, the used ‘key words’ are presented. The main search was performed in CINAHL database. The underlying table presents how many articles were found with each search. The table also provides information about how many articles were chosen after reading the abstract. The third search was the most productive since 399 articles were displayed and ten of the articles were chosen by abstract. A search in PubMed was also carried out, it was identical to the ones in CINAHL. PubMed had less subject related full-text articles than CINAHL. Many of the chosen studies are found in both databases.

Table 1. Our searches in CINAHL.

<p><b>1<sup>st</sup> Search</b></p> <p>Cultur* OR Ethnic* = TI TITLE , AND Pain*= AB, child* OR paediatric*</p>	<p><b>Hits:</b> 71</p> <p><b>Articles Chosen by Abstract:</b> 1</p>
<p><b>2<sup>nd</sup> Search</b></p>	<p><b>Hits:</b> 77</p>

Cultur* OR Ethnic* OR Race* = TI TITLE, AND Pain* = AB, AND child* OR paediatric* OR pediatric*	<b>Articles Chosen by Abstract: 2</b>
<b>3<sup>rd</sup> Search</b>  Child* OR Pediatric* OR Paediatric*, AND Pain*, AND Cultur* OR Ethnic* = AB	<b>Hits: 399</b>  <b>Articles Chosen by Abstract: 9</b>

The literature search in CINAHL rendered us 547 articles in total. We narrowed down the articles first by evaluating the title. The criteria set for the title was that it had to relate to the subject of our study interest. We chose 58 studies that had titles that suited our thesis theme. We read closely the abstracts of the remaining 58 studies and found 12 articles that suited our literature review. 46 studies were eliminated after reading the abstracts, due to not meeting the set criteria and not answering the research question sufficiently.

What reduces this study's reliability is not having access to all of the databases that exist. Via our school's library's portal, we have access to databases such as EBSCO's the Academic Elite search engine and Pubmed the National Library of Medicine. These two search engines are considered to be the world's top two databases for online information. Both databases have medical, nursing and healthcare journal articles (Polit & Beck, 101). We have also used Google Scholar as a database to find existing information for the theoretical starting points.

### 4.3 Inclusion and exclusion criteria

Inclusion and exclusion criteria were formed in addition to find the most relevant articles which would answer our research question. The evidence was chosen by the availability of full text, peer-reviewed, relevancy to nursing, they were original scientific journals and not older than 46 years. Polit and Beck (2012, 95) recommends the use of primary sources only when conducting a literature review. Hereby literature reviews that are secondary sources, are excluded. Closer analysis for the criteria can be found in

section 4.5. The inclusion and exclusion criteria for the selected research articles are shown in the following table. The inclusion and exclusion criteria were present through the literature search, both title and abstract were evaluated by the set criteria. (Table 2.)

Table 2. Inclusion and exclusion criteria.

<u>Inclusion</u>	<u>Exclusion</u>
Peer-reviewed + full-text	Literature review
Relevancy to nursing	Older than 46 years
Years 1970-2016	Does not answer the study question
Original scientific journals	Article does not include "children"

#### 4.4 Data analysis

Polit and Beck (2012, 108) suggest applying matrices to help organize information regarding the subject. It helps the researcher and the reader to see key features of the study methods that are used in the studies of the literature review. Polit and Beck's 'methodologic matrix' sample has been applied in this study. The 12 chosen studies for this literature review are investigated in the methodological matrix (Appendix 1).

Large amounts of data must be thoroughly read for a literature review. According to Polit and Beck (2012, 118) there are numerous ways to approach research evidence systematically. At first, there are 12 chosen journal articles to be reviewed closely by the authors. Analysis of the results may be initiated, after using a critical appraisal tool to assess the quality of the selected studies. A data analysis is about finding similarities, the main themes and differences between the selected data. (Polit & Beck 2012, 118.)

All of the primary studies were sufficiently read and analyzed to the best of our ability. After understanding the complexity of the results, the results were organized, categorized and combined to answer the research question (Holopainen, Hakulinen-Viitanen, Tossavainen 2008, 78). The main themes that emerged were theme related such as pain experience, expression and family culture.

## 4.5 Critical appraisal

Our inclusion and exclusion criteria were carefully set so they would help us to find as trustworthy articles. Journal articles that were not subject-related or did not focus on children were instantly excluded, in order for us to focus the research and to answer the research question. In this literature retrieval we did not exclude articles by age, therefore this meant that all articles chosen that are in age of over 10 years have been assorted, so that no study has modern technology or new methods to decrease the value of the review.

We decided to exclude articles that are older than 46 years, because we believe that there are newer studies available about culture and pain, but also the concept “pain” does not get old and the sense of pain remains relatively unchanged. Leininger (2002, 184) recommends the study of culture in the past and its present history, as certain patterns and values are identified when there is information from a long period of time.

Holopainen et al. (2008, 81) encourage the evaluation of the primary studies, so that the validity of the literature review in general would increase. An important component of the critical appraisal is the evaluation of the primary study’s validity, credibility and applicability. For this thesis, we are especially interested in the primary study’s findings, how do the findings help nurses take care of multicultural children in pain and are the findings important? (Mays & Melnyk 2009, 125.)

Major strengths and weaknesses of the review articles were critically appraised by using an adapted tool by (Polit & Beck 2012, 112–118; CASP 2013, 1–6). Both qualitative and quantitative articles were evaluated amongst the combined appraisal tool guidelines. The critical appraisal tool is found in the appendix (Appendix 2). The tool was used for each article separately and it made it easier to evaluate the articles' trustworthiness, validity and credibility. The results after using the adapted critical appraisal tool for the 12 evaluated articles can be seen in appendix (Appendix 3).

Major emphasis was set on the researchers themselves; it was important for us to find articles that have mentioned the researchers own reflection to the subject. All chosen articles had a section where the researcher mentioned either their own culture or the research assistants culture. All articles mention how the research assistants were select-



ed. The selected assistants came from the same cultural backgrounds and they all spoke the same language as the children and families who were under conduct. These key facts are important when studying a subject where there may be prejudice.

## 5 RESULTS

This section includes the review of the 12 chosen articles that are the most convenient for this study. The chosen articles can be seen in appendix 1. The articles have been categorized under each subheading to help answer the research question.

### 5.1 Verbal expression

In the majority of articles, the most commonly reported method of expressing pain is by verbal expression (Abu-Saad 1984, 12; Azize et al. 2013, 5; Jongudomkarn et al. 2012, 326; Kankkunen et al. 2002; 36; Olhansky et al. 2015, 168; Raval et al. 2007, 100; Raval et al. 2009, 87). Overall, the children's most indicative word used to describe pain is "hurt" (Abu-Saad 1984, 12; Azize et al. 2013, 189; Cheng et al. 2003, 244; Olhansky et al. 2015, 168).

Other terms used to describe pain are mentioned in Abu-Saad's (1984, 12) study that surveyed the Chinese children's responses to pain. Children in the study used expressions such as "like a hurt, horrible, scary, agonizing, cold, angry, tearing, miserable, hot, and stinging" (Abu-Saad 1984, 12). In the study conducted by Azize et al. (2013, 5) documenting the terms used in all English, Arabic and Kurdish groups, children used vowel sounds such as "ee, ooh, ouch, oww". This study group was also compared to each other and what they found was that the Kurdish and Arabic children gave a more dramatic response to pain than the children from the UK (Azize et al 2013, 5).

In an American study, conducted by Olhansky et al. (2015, 168) the Spanish child most likely would say "ay" when referring to pain. Taiwanese children most commonly used the word "pain" to describe their feelings, other terms used to describe the sensation were "uncomfortable, feeling bad or discomfort" (Cheng et al. 2003, 244). The parents in the Finnish study described their child's verbal expression to be "groaning and moaning" (Kokki et al 2001, 17).

In Kankkunen et al. (2002, 36) study, Finnish parent participants noted that a child's crying was different when the child underwent pain. The participants noted that the child's cry would be whimpering for attention and more complaining than usual

(Kankkunen et al 2002, 36). In the generality of studies, crying was mentioned as a part of verbal pain expression (Abu-Saad 1984, 12; Azize et al. 2013, 5; Fortier et al. 2013, 426; Jongudomkarn et al. 2012, 326; 2007,159; Olhansky et al 2015, 168; Raval et al. 2007, 100;).

A mother in Olhanski et al. (2015, 168) study described her child to be in pain if the child would be quiet for more than 20 minutes. The parents that participated in the studies conducted by (Jongudomkarn et al. 2012, 326; Kankkunen et al. 2002, 36 Kokki et al.2001, 15; Olhansky et al. 2015.) noted that a child who has deviant behavior such as unusual quietness would be signaling pain sensations. Most Indian children again, avoided expressing feelings of anger or sadness (Raval et al. 2009, 87).Kokki et al. (2001, 17) compared both children from Finland and Canada. The study results appear to show that the Canadian children would express their pain rather quietly in comparison to the Finnish children.

In Azize et al. (2013, 189) study the Kurdish and Arabic children were more willing to discuss the pain sensation than the children from the United Kingdom. The researcher brought it up thinking it was divergent because the Kurdish and Arabic children had a limited verbal capacity due to their brief residency in the United Kingdom (Azize et al. 2013, 189). In Jondugomkarn et al. (2006, 159) study the Thai child would most likely talk about pain through a ghost story. Pain was considered to be a bad experience, so the child would attribute the bad experience to something external such as pain becoming a “devilish” experience (Jongudomkarn et al. 2006, 159).

## **5.2 Behavioral expression**

Pain related actions were described variously throughout the studies. Most parents in the studies noticed behavioral changes in their children when expressing pain. The type of expressions that were mostly recognized were the child being passive or tossing about, facial expression alterations, touching a painful body part, crying or talking (Abu-Saad 1984, 12; Azize et al. 2013, 5; Jongudomkarn et al 2012, 326; 2007, 159; Kankkunen et al. 2002, 36; Kokki et al. 2001, 15; Raval et al. 2009, 100).

Caregivers or parents can have multiple different and individual ways to detect their child's pain. In two different studies (Jongudomkarn et al. 2012, 326; Kokki et al. 2001, 15) parents said that they would notice nuanced differences in the child's behavior when in pain. A Finnish mother in Kankkunen et al. (2002, 36) study said she would just know with her "mother's instinct" that her child is in pain.

In Fortier et al. (2013, 426) study, Hispanic Spanish speaking parent's reported lower negative behavioral changes and none of the studied parents believed that their child would have trouble sleeping, when in pain (Fortier et al. 2013, 426). Batista et al. (2012, 107) find similar results and conclude that Spanish speaking Hispanic parents have a significantly greater number of misconceptions toward children's pain expressions (Batista et al. 2012, 103).

Parent's noted a child was in pain if they acted passively (Jongudomkarn et al. 2012, 326; Kankkunen et al. 2002, Olhansky et al. 2015, 168). Passiveness occurred in the child as wanting to lay down and these findings were described by a Thai and by a Finnish child (Jongudomkarn et al. 2006, 159; Kankkunen et al. 2002, 36). The Finnish child also told the researcher about wanting to stay in bed, even if friends wanted to play. It is believed that this sort of behavior is culture related after (Kankkunen et al. 2002, 40) compared their findings to children from southern Europe and noticed differences in behavior. Southern European children felt social isolation more acutely and wanted large amounts of visitors when ill. (Kankkunen et al. 2002, 36;40).

Thai children are taught from early age to show 'Kreng Jai', this means that painful experiences need to be endured with patience (Jongudomkarn et al. 2012, 326).

Another change of behavior described by adults in studies is that a child in pain would move around more impatiently (Jongudomkarn et al. 2006, 159; Kankkunen et al. 2002, 36; Olhansky et al. 2015, 168).

Also facial expressions of children in pain can differ amongst cultures. In Kokki et al. study (2001, 15) Canadian children scored higher on the faces' scale for having a more flushed face in pain than a Finnish child. In the study conducted by (Olhansky et al. 2015, 168) Latino descent children would cringe their face as they say "ay". Again a child from India (Raval et al. 2009, 100) would most likely manipulate their facial expression to look neutral when feeling pain.

In Kankkunen et al. (2002, 36) and Jongudomkarn et al. (2006, 159) interviews, both participants said that a child in pain would also touch the painful body part. The Finnish child in Kokki et al. (2001, 15) study refused to wear specific clothes that would touch the painful spot. The study results also mentioned that a Finnish child's pain related actions are more visible than verbal expressions. One action was that the child did not want to let the parent out of sight. (Kokki et al. 2001, 15). Other physical ways to express pain were mentioned in the Jongudomkarn et al. (2006, 159) study, including a Thai child who said that they would lift up the painful body part.

Crying can be either a part of verbal expression or behavioral expression. In Cheng et al. (2013, 244) study, the concept of crying differed from the other studies. The researcher noted that the children in Southern Taiwan thought that the term crying relates to a person whose physical appearance would change, such as the mouth cringing and the eyes squinting, with only crying expressions and tears allowed. Parents in this culture tend to educate the child so that there is no vocalization when expressing pain (Cheng et al. 2013, 244). Jongudomkarn et al. (2006, 156) study conducted on Thai children, noted that one child participant said that the tears would make him feel better.

Other behavioral expressions that were mentioned in the Kokki et al. (2001, 15) study, included Finnish parents who remarked that the child in pain would not let the parent out of sight and that the child would act difficult towards their attempted comforting methods. For as to Jongudomkarn et al. study (2006, 159) Thai children specifically wanted their parents to be with them, to make them feel better and not alone. In addition, a child eating less than usual was acknowledged by the Canadian parents as a sign of pain (Kokki et al. 2001, 15). But then again Spanish speaking Hispanic parents in Fortier et al. (2013, 426) study reported parents noticing less behavioral changes such as eating disturbances, compared to English-speaking Hispanics and Americans.

Most studied parents and children mentioned behavioral changes when in pain. Pain behavior was thought to be deviant behavior compared to the child's ordinary manner (Jongudomkarn et al. 2012, 326; Kokki et al. 2001, 15; Olhansky et al. 2015; 168). Only Thai parents expected their children of both genders, not to show overly excessive pain related behavior due to the valuing and respecting of 'Kreng Jai' (Jongudomkarn et al. 2012, 326).

The pain-related action in Indian children, studied by Raval et al. (2009, 100), brought up the facial expressions when in pain. This study investigated to whom these facial expressions were expressed to. Most often the Indian children reported a preference for showing pain firstly to their mother, then subsequently to their father and lastly to their peers (Raval et al. 2009, 91). Thai children in the (Jongudomkarn et al. 2012, 162) study, preferred expressing pain rather to their parents than to healthcare workers.

### **5.3 Pain experience**

Only three out of twelve studies had researched information about children's pain experience. All of these three studies stated that further research is necessary concerning the cultural influences on children's experience of pain and that health-care workers should be more aware of the fact that in some cultures it may not be acceptable for children to express their pain. (Cheng et al. 2003, 241; Abu-Saad H.1984, 13;Jongudomkarn et al. 2006, 162.)

Thai children defined their pain sensation as a feeling of wanting to "get something out of the body" (Jongudomkarn 2006, 159). Asian-American girls described their pain using expressions such as "feeling like crying", "feeling like being lost", "feeling angry", "sad", "feeling of being alone" when on the other hand boys described their pain with words "hurt", "nervous", "afraid", and "sad". (Abu-Saad H. 1984, 12). Most of the Taiwanese children indicated pain as a "feeling of discomfort or bad and lots of pain". Some children defined feeling of pain as a need to get help. (Cheng et al. 2003, 243). Jongudomkarn et al. shows in their study (2006, 160–161) that Thai children's pain is experienced as "suffering" or "torture" with both an emotional and physical meaning.

Cheng et al. (2003, 247) showed in their study that experiencing pain changes with age; the youngest children in the study (aged 5-7 years) defined the meaning of pain as not being able to play out with friends, while older children (aged 8-10 years) tended to recognize pain as a physical problem or a warning signal. The oldest children in the study (aged 11-14 years) linked pain to a concern for their performance. Asian-American children aged 9-12 are able to recognize the causes of pain. Girls more often than boys were able to identify the psychological reasons for pain. This finding suggests

that with regards to cultural expectations girls are more sensitive and emotional with their behavioral expression than boys. (Abu-Saab 1984, 13.)

When Thai children are experiencing pain and sharing it with their parents, it increases child's distress as the child feels empathy for their parents. The study also indicates that the experience of pain is social because they appear in certain sociocultural contexts. (Jongudomkarn et al. 2006, 156;160.) Cheng et al. (2003, 247) stated that some Taiwanese children noticed that their parents lied about the possibility of having pain during hospitalization. A section of Taiwanese parents might be worried that the truth would augment the feeling of the pain of emotional reactions.

In Abu-Saad (1984, 12) and in Jongudomkarn et al. (2006, 159) studies children were asked to describe their pain using colours. The chosen colours varied from red, green, purple, black and blue. There were no indicated meanings for the colours in the studies, hence the researchers think that the choice of colour and its cultural meaning needs further research. (Abu-Saad 1984, 12–13.)

The physiology of pain is assumed to be similar regardless of culture, but the experience of pain and the purpose of pain varies in different cultures. The answer to the question of how culture affects the child's experience of pain remains unclear. One reason for the lack of differences between Taiwanese children's pain experience when compared to children in the US may be due to the fact that Taiwanese culture is very westernized. Researchers consider whether children's pain experiences are universal. (Cheng et al. 2003, 248.) Cheng et al. (2003, 248) suggest that further research is needed to explore this issue. Health-care professionals should consider a child as an individual member of a cultural group and observe the pain from the child's starting point rather than from their own expectations. (Abu-Saad 1984, 14). Jongudomkarn et al. (2006, 162) state that nursing intervention should include awareness of cultural differences in pain definition and evaluation in the nursing process.

## 5.4 Family and culture

The role of the family is an important subject that affects a child's pain behavior. In three of the studies, the presence of religious belief influences pain behavior in the family (Jongudomkarn 2006, 159; Olhansky et al. 2015, 168; Raval et al. 2010, 100).

In Jongudomkarn et al. (2006, 159) study, most of the participants were influenced by Buddhist traditions, beliefs and practices. This appeared in the study as parents avoiding confrontation and refraining from expressing emotion when the child was in pain and in the hospital environment. A parent talked about positive and negative karma and that guides their beliefs. (Jongudomkarn et al.2012,326).

Thai parents also value patience and endurance; this shows in Jongudomkarn et al. study conducted in 2006. A child participant described the actions of parent's when the child would cry. The child explained that when he cried, his mother would touch him and tell him to be patient. When the crying continued, the mother and father would respond together and tell the child not to cry, the father would then also tell the child to endure the pain. Like it was stated earlier, Thai children still prefer showing pain to their parents rather than to healthcare workers. (Jongudomkarn et al. 2006, 162.)

Raval et al. (2010, 82) studied Indian children whose families are committed to Hindu philosophy. This appeared in the study as the children's reluctance to express any negative emotions. The Indian children in the study would rather show pain than anger or sadness (Raval et al. 2007, 92). Olhansky et al. (2015, 168) studied Hispanics living in the US. One of the participant's parents in the study pleaded to god that everything would go well in the hospital. What was similar with respect to all religions was the fact that when in pain most of the participants in the study turned to spiritual help and guidance (Jongudomkarn 2006, 159; Olhansky et al. 2015, 168; Raval et al. 2010, 100).

Finnish parent's attitudes towards their child's pain experience in the Kokki et al. (2002, 15) study was noted because the parents believed that pain experience is a part of the child's learning tasks. Similar findings were found in the Jongudomkarn et al. (2012, 326) study, where Thai parents perceived pain as an inescapable part of life. In the Kokki et al. (2001, 15) study, Finnish parents considered the children's pain to be genuine and that young children are not capable of pretending to be in pain. In the



Jongudomkarn et al. (2012, 326) study, Thai parents believed they understood their child's pain. The participants described the idea that pain in the family is shared (Jongudomkarn 2006, 326).

Pain coping strategies amongst family cultures had similarities and differences. Families valued traditional pain coping methods more than western medicine (Abu-Saad, H. 1984, 13; Jongudomkarn et al. 2012, 323). Again in the Kankkunen et al. (2002, 36) study, Finnish parents valued all pain coping strategies and trusted that regular pain medication helped the child. The similarities that the families globally shared were wanting to cheer the patient up, to give them attention, to touch the child and to give special foods and natural health products to ease the experienced pain. In all of the studies, children expected to receive these implementations from their family. (Abu-Saad 1984, 13; Jongudomkarn et al. 2012, 323; Kankkunen et al. 2002, 36).

## 6 DISCUSSION

The studies were conducted in six different countries that included Finland, India, Taiwan, Thailand, the United Kingdom and the United States of America. Also three of the journal articles observed different ethnic groups such as Arabs, Asians, Canadians, Hispanics, Kurds and Southern Europeans. The results suggest that culture effects children's pain expression (Abu-Saad 1984, 12; Azize et al. 2013, 5; Cheng et al. 2003, 244; Jongudomkarn et al. 2012, 326; Kankkunen et al. 2002; 36; Kokki et al. 2001, 15; Olhansky et al. 2015, 168; Raval et al. 2007, 100; Raval et al. 2009, 87)

Children across the world tend to express their pain verbally. Vowel sounds and synonyms describing pain are found in studies conducted by (Abu-Saad 1984, 12; Azize et al. 2013, 12; Cheng et al. 2003, 244; Olhansky et al. 2015, 168). Only in the Kokki et al. (2001, 17) study, Finnish participants described their child's verbal expression more as groaning and moaning. In comparison studies (Azize et al. 2013, 5; Kokki et al. 2001, 15) Kurdish and Arabic children gave a more dramatic response to pain than the children from the UK and again the Canadian children expressed their pain rather quietly compared to Finnish children. Cultural comparison studies show concretely the differences between cultural groups and these studies indicate that there is a cultural difference in the intensity of verbal expression.

Worldwide children in pain tend to cry (Abu-Saad 1984, 12; Azize et al. 2013, 12; Cheng et al. 2003, 244; Fortier et al. 2013, 426; Jongudomkarn et al. 2012, 326; 2006, 159; Kankkunen et al. 2002, 36; Kokki et al. 2001, 17; Olhansky et al. 2015, 168; Raval et al. 2009, 100; 2007, 87). The most outstanding difference amongst the findings was that Taiwanese children comprehend the term 'crying' differently. Parents in Taiwan teach their children not to make vocal sounds when crying, only facial expressions and tears are permissible (Cheng et al. 2013, 244). Another difference in the findings indicates that Indian children manipulate their facial expressions; they avoid expressing feelings of anger and sadness (Raval et al. 2009, 87). Children in Thailand are instructed from a young age to endure their pain, so children in pain tend to be patient and avoid bothering others. (Jongudomkarn et al. 2012, 326). In China, India, Taiwan and Thailand certain pain expressions are prohibited due to culture.

The findings indicate that children in pain have similarities and differences globally when expressing pain. Unusual quietness, eating and sleeping disturbances, touching or lifting the painful spot are considered as being signs of pain expression in multiple cultures (Abu-Saad 1984, 12; Azize et al. 2013, 5; Jongudomkarn et al. 2012, 326; Kankkunen et al. 2002, 36; Kokki et al. 2001, 15; Olhansky et al. 2015, 168; Raval et al. 2009, 100). Interpreting pain is a challenge for health care professionals, parents and for caregivers. When healthcare workers survey pain, all possible options must be considered. The research findings in this literature review indicate that parent's feelings, knowledge and beliefs are not always optimal for evaluating pain. The Fortier et al. (2013, 426) study's results show that Hispanic Spanish speaking parents reported lower levels of negative behavioral changes, and none of the studied parents believed that their child in pain would have trouble with sleeping. Lower reporting may be a cultural value of stoicism, so avoiding negative feelings and burdening others may lead to a minimization of pain expression.

Cultural differences occurred in multiply studies, where expressions are most noticeable. The findings in the Azize et al. (2013, 189) comparison study indicate that Kurdish and Arabic children were more willing to discuss pain than the children from the UK. The findings are surprising, due to the children having a limited verbal capacity due to their brief residency in the country, so further research is still required. Kokki et al. (2001, 15) find that Finnish children acted in a more difficult manner towards their parents when in pain, and that the children also felt the need to stay in bed and not see friends when in pain. Comparing these results to the (Jongudomkarn et al. 2006, 156; Kankkunen et al. 2002, 40) studies, they found that Thai children and Southern European children specifically wanted parents and visitors around them when in pain. Behavioral differences occur amongst cultures.

Children's response to pain is influenced by the society in which they grow up. Religion, beliefs, behavior and pain coping strategies are all culture- and family-bound. (Abu-Saad, H. 1984, 13; Jongudomkarn. 2012, 323; Kankkunen. 2002, 36.)

## 6.1 Ethics

It must be acknowledged that in studies involving human or animal participants, ethical issues must be regarded as being of key importance. All scientific fields take ethical issues into consideration, and nursing is notable for ethical reasoning. Moral principles should guide the researcher when conducting a nursing study. These ethical issues and moral principles ensure the rights and welfare of the participants involved in the study. (Polit & Beck 2012, 150)

This Bachelor's thesis focuses on ethical issues concerning children in research. Children are a vulnerable group, who need to be protected throughout the research. Not only ethical but also legal consideration must be taken into account when studying children. Children in the study might be incapable of giving their fully informed consent. Young children do not have the capability to give their informed consent, therefore the child's parents' or guardians' permission should be obtained. All people, depending on their age must participate study voluntarily. (Polit & Beck 2012, 150.)

Our goal is to analyze ethical issues in the studies that we chose to use in the literature review. The nature of the studies is critiqued and addressed when using them in the Bachelor's thesis. No one will be interviewed for this study so there is no need to consider informed consent or to state the participants' confidentiality. Also no permission from the ethical board is needed, due to the literature review's ethical nature's analysis limitations (TENK, Finnish Advisory Board on Research Integrity 2012).

A big ethical consideration that we both had to realize in the beginning was that the research of this topic had to be done with no prior assumptions about the findings. The data analysis was processed with great thought and was guided by ethical consideration throughout. Ethical issues and dilemmas are often resolved by the dominant cultural values (Leininger & McFarland 2002, 171). We tried our best to not build up biases, so that cultures were not stereotyped, dispositioned or generalized in this thesis.

## 6.2 Trustworthiness and limitations

A couple of limitations might affect the reliability of the results. The main literature search was conducted in the database of CINAHL, a couple of the chosen articles can also be found in Pubmed. The search in Pubmed did not bring us any new topic- related articles; this is why the search steps cannot be found in the thesis. By using multiple databases, the review would have been more thorough and executed more systematically. The school library has limited access to additional medical databases; this naturally excluded us from many studies that were conducted in the US. The topic of our thesis is current but has little research evidence to it. The impact of culture and pain has been mostly studied in adults.

When comparing the twelve articles many differences were noticeable. The review includes a wide range of children with different ages and illnesses. The age range in the review varies between the ages of one month to 18 years. Four out of 12 articles studied children at schools, their homes or at recreational settings. These children did not suffer from acute or chronic pain at the moment of the interview. Five studies interviewed post-operative patients, and the interviews were mostly held before and after surgery. In two of the articles, children suffered from acute pain caused by either injuries or diseases. In addition, one research article studied children with acute pain as well as children suffering from chronic pain, mostly cancer patients. The pain intensity and seriousness varies a lot between the articles, we hope that this does not decrease the value of the review. The writers did not want to limit the inclusion criteria of the review too excessively, due to knowing that the subject has had little research carried out on it.

All articles listed their own limitations; the findings that we found important to bring forward are listed below. In the Kokki et al. (2001, 17) study, certain research limitations were mentioned. The researcher compares their Finnish faces scores with the Canadian results without knowing the exact methods the Canadian results have been gathered with (Kokki et al. 2001, 17).

### 6.3 Recommendations

Our suggestions for further research would mainly concentrate on the most common cultural groups that are found in Finland. As it is previously mentioned there is a growing amount of families with foreign backgrounds living in Finland. The majority of families currently come from Russia and Estonia. Also an increasing amount of refugee families have moved of necessity to Finland and around Europe. A nurse in the future will most likely encounter children from various cultures and countries. A nurse needs to know and specifically understand the child's background in order to alleviate pain. The review results show that there are cultural differences in children's pain experience and expression. This subject area in general needs more research and evidence, so that nurses in the future are able to provide efficient pain care.

Finnish nurses and health care professionals may also benefit from studying Finnish children's pain experience, expression and the family's culture. This type of study would give a more specific perspective to understand Finnish culture and the Finnish health care system. Studying Finnish children's cultural pain expressions and experience also helps other cultures understand Finnish people's beliefs and manners in pain. Potential problems that Finnish nurses may face are language barriers with foreign families. Also this issue could be researched further from a nurse's perspective and in a hospital environment. Other useful subject areas to be studied would be the impact of language and the effects on quality of nursing.

To improve the quality in care, nurses need to engage more fully with the values and beliefs of the children in pain. Children's pain assessment and care need to be carried out with cultural sensitiveness.

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## APPENDICES

APPENDIX 1. The 12 selected articles for the review.

	Author	Country	Year	Main variables	Sample Size	Method	Children's Age
1	Abu-Saad H.	U.S.A	1984	Asian- American	24	Interview	9-12 years
2	Azize et al.	England	2013	Children's experience  Uk, Kurdish, Arabic	34	Mixed-Methods	4-7 years
3	Batista et al.	U.S.A	2012	Parent interview, Comparison, Hispanic, Spanish, American	215	Questionnaire	1 month – 17 years
4	Cheng et al.	Taiwan	2003	Children's experiences  Taiwanese	90	Semi-structured interview  Qualitative inquiry	5-7 10 11-14
5	Fortier et al.	U.S.A	2013	Parent report  English-Spanish, Hispanic  VAS, PPM	228 parents	Questionnaire	
6	Jongudomkarn et al.	Thailand	2012	Thai	45 parents	Interviews	2-13 years
7	Jongudomkarn et al.	Thailand	2006	Observed by researcher  Children's experience	17 + 32 = 49	Content Analysis	
8	Kokki et al.	Finland	2003	Family interview	17 children and their families	Interviews	1-7 years
9	Kankkunen et al.	Finland	2001	Parent report  Fin-Can  VAS, PPM	85 children & parents  From 4 hospitals	Questionnaire	Fin 1-6 years  CAN years 2-12
10	Olhansky et al.	U.S.A	2015	Parent in-	60 pa-	Grounded	

	Author	Country	Year	Main variables	Sample Size	Method	Children's Age
				terview Hispanic children & families	rents	Theory	
<b>11</b>	Raval et al.	India	2009	Indian	120	Interviews	6-8 years
<b>12</b>	Raval et al.	India, Gujarati, Hindi	2007	Social class differences	80 children	Semi-structured Interview	5-6 years and 8-9 years

APPENDIX 2. Adapted and a combined critical appraisal tool model for evaluating both qualitative and quantitative research articles (Polit & Beck 2012, 112-118; CASP 2013, 1-6).

	Question	Yes/Y	No/N	Maybe/M
1.	Aim of the study, is it clearly stated?			
2.	Is the article goal relevant for the thesis?			
3.	Is the used methodology appropriate?			
4.	Is it discussed how the researchers decide which method/s are used?			
5.	Is the sample size appropriate?			
6.	Does the researcher tell how participants are selected?			
7.	Are the findings clearly presented?			
8.	Is the study conducted ethically?			
9.	Has the researchers examined their roles in the study? Are the researchers own bias presented?			
10.	Any implications to clinical practice?			
11.	Does the article identify new areas of research?			
12.	Is the study trustworthy?			



<u>Author</u>	<u>Goal</u>	<u>Metho- dology</u>	1	2	3	4	5	6	7	8	9	10	11	12
	care to chil- dren with acute pain													
<b>Jongu- dom- karn et al.</b>	Perceptions of pain among Thai children	Qualita- tive	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Kank- kunen et al.</b>	Identifica- tion and management of post- operative pain, par- ent's percep- tions regard- ing chil- dren's pain	Qualita- tive	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Kokki et al.</b>	Parent's post- operative pain measure in Finnish children	Quantita- tive	Y	M	Y	Y	N	Y	Y	Y	N	Y	Y	Y
<b>Olshans ky et al.</b>	Process of Hispanic parents man- aging post- operative care	Qualita- tive	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Raval et al.</b>	Reasons for emotional expression and control with Indian children with somatic	Qualita- tive	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y



<u>Author</u>	<u>Goal</u>	<u>Metho- dology</u>	1	2	3	4	5	6	7	8	9	10	11	12
	problems													
<b>Raval et al.</b>	Indian children's methods of expressing and controlling anger, sadness and pain	Qualitative	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y