

# Post-traumatic Stress Disorders among Children in Kirkuk in Northern Iraq

How the war and post conflict affect the children's  
academic learning at school

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Master thesis in pedagogy,  
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## SUMMARY OF MASTER THESIS IN PEDAGOGY

TITLE:

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- How the war and post conflict affect the children's academic learning at school

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## **Research question:**

Post-traumatic stress disorders among children in Kirkuk in Northern Iraq—How does the war and post conflict affect the children’s academic learning at school?

This is the main research question for this thesis. Kirkuk is well known as the oil city in Iraq. The original history of the city goes back to 2400 BC, when the city was the capital of the kingdom of Gutium. Gutium was also the name of the Kurdish people at the time. Kirkuk has been a conflict area throughout history with a current population of about 902,019 (2007) comprised of Kurds, Arabs, and Turkmens. The non-ending conflict is about whether Kirkuk is Kurdish, Arabic, or Turkmens.

The main purpose of this research is to encourage a greater understanding of how traumatic experience affects school children and their learning. The focus will be specific traumatic experiences connected to war and conflict areas, with Kirkuk as the research stage.

The purpose of this thesis is to examine how PTSD affects academic learning among children. Learning and PTSD theories have been presented, followed by interpretation and reflection and analysis, in order to be able to respond to the theme.

## **Methodology/ Literature**

The methodology in this thesis is case study, based on relevant theories and qualitative in depth interviews. The reason I chose this method is that the qualitative method focuses on a few devices, provides a broad description, and says “a lot of little,” and this thesis may later lead to a boarder research based on quantitative researches. Also, because PTSD affects individuals in different ways, I therefore find it interesting to base research on case studies. The respondents’ interview results are analyzed and studied carefully based on the theories and some existing previous researches. The findings have been both presented as case stories during chapter five and analyzed during chapter six.

Both older and newer literatures have been used to discuss the theme. Dale H. Schunk’s (2008) relevance learning theories have been presented among them; Bandura’s social

cognitive learning, conditioning theories, cognitive information processing theories and further PTSD theories have been presented with focus on DSM-IV. The focus has been on discussing how experiences lead to changes and what that means for learning. I have also used two previous researches; one survey done by Brit Oppedal, Karoline B. Seglem, and Laila Jensen (2009), *a survey of young refugees in Norway about traumatic experience and its effect*, and Broberg, Dyregrov and Lilled (2005), who researched on individuals exposed to a fair accident in Sweden. They linked school dropout with the trauma event.

Further, I have presented Horowitz's (1986) theory of stress response that was one of the earliest theories in this area. The theory focused on the fact that the traumatic experience shook the individual's personality.

### **Results/main conclusions:**

Learning is a result of experiences that lead to change and further lead to permanent changes in behaviour. PTSD theories have shown that trauma events change behaviour in individuals and in many cases lead to disorders. However, not all trauma experiences will lead to chronic PTSD. It depends on the degree of the trauma event, age, environment, and whether the trauma is repeated. Horowitz, in his theory of stress responses, focused on the fact that the traumatized individual swung between two extremes: between the need to slide away to protect themselves against being overwhelmed by the traumatic memories and the need to get an opportunity to express and work through the experience.

The main findings in this thesis are that trauma experiences may lead to disorders, such as flashbacks, nightmares, and arousal. Newer researches have shown a correlation between trauma experiences and learning difficulties, and they refer to the fact that individuals that suffer from trauma events are disturbed by nightmares and flashbacks; as a result of that, they develop sleeping difficulties that result in concentration problems during the day.

The respondents that have been presented individually as case stories during chapter five all indicate a form of suffering from trauma events, and it also has been linked to their academic learning. Two of the three respondents had to drop out of school the year they were exposed

to the trauma event and still struggle with schoolwork. All three respondents explain that they have difficulties concentrating and suffer from flashbacks.

The main conclusion here is that, based on the theories that have been presented and the research results in this thesis, PTSD may lead to learning difficulties on the basis of various factors, and it is necessary for clinic help to be provided to stop the development of chronic PTSD.

Further research that focuses on the relationship between PTSD and learning is important to develop good clinical support tools for children and to assist them at an early age so that they do not grow up with the trauma disorders. Trauma experiences, like other experiences, change the individual's personality. That may lead to learning difficulties, lower confidence, and the individual forming a negative image of their life and their environment. I hope this thesis leads to further research on the theme.





# Dedication

*I would like to dedicate this thesis to my parents, as a small symbol of my gratitude, for encouraging me to follow my dreams and for always having faith in me.*



# Abstract

The well-known Kurdish city of Kirkuk has been a conflict and war-zone for ages, and this has left marks on the civilians. The non-ending conflict is about whether Kirkuk belongs to the Kurds, Arabs, or Turkmens. Throughout history Kirkuk has been a Kurdish city, going back to 2400 BC. Since the Iraqi war in 2003 the city has been exposed to explosions and conflicts nearly every day with many deaths; it has also left marks on the survivors in Kirkuk, regardless of their nationality.

Those who suffer most from war and conflicts are children, and they are, unfortunately often forgotten in this war. These conflicts have led to big trauma events and trauma experiences for the children of Kirkuk. A case study approach with children in Kirkuk was used to study how PTSD affects the children's academic learning. The case study is based on interviews with three child respondents and seven key informants. Different learning and PTSD theories have been presented and used to discuss the findings. The results of the study indicate that PTSD may affect academic learning.



# Acknowledgement

This thesis is the result of two-and-half years of work, whereby I have been accompanied and supported by many people. It is a pleasant aspect that I have now the opportunity to express my gratitude for all of them.

First and foremost I would like to thank the respondents and the key- informants of this, the interviews is the core of this thesis, without their sharing this wouldn't be the same.

I would like to express my deep gratitude to my thesis supervisors: Christian Brandmo for his good supervision and constructive feedback that made this thesis possible, special thanks to Jon-Håkon Schultz, supervised me at the beginning of the process, and big thanks to my B supervisor Dr. Yusif -*psychology Faculty at The Salahadin University of Erbil*, for all guidance and good advice while I was doing the interviews in Kurdistan.

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Deep thanks to my parents and sisters who have always supported and have faith on me. Thanks to my husband, for unconditional love and been extremely understanding and supportive of my studies.

I am greatly indebted to all my friends, especially to Shno Rawanduzi, who supported me and was my main link to others during my research in Kurdistan. Last but not least, a deep thanks to my very good friend, Nor Fares, who has shared thoughts over long phone conversations.

*November 2012*

*Avin Rostami*

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# List of Abbreviations

PTSD            Post traumatic stress disorders

DSM- IV        Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition

CRIES- 13     Children's Revised Impact of Event Scale

# 1 INTRODUCTION

## 1.1 Objectives of the study

It is natural to start with saying a few words about the relevance and significance of the study and connect it to today's pedagogy. It is obvious that traumatic experiences affect individuals, although in different ways. The main objective of this study is to investigate how traumatic experiences affect academic learning among children in South Kurdistan in northern Iraq. Its relevance has to do with the importance of knowledge about how post traumatic experiences affect children's academic learning at school and the whole school processes in general, in order to help children who suffer from traumatic experiences that interfere with their daily life and learning.

The study aims to shed light over how traumatic experiences may influence learning, at school. - I hope the study helps to point out the importance of preparative measures as clinical help for those children. The study is also relevant to academic learning among Norwegian children who have experienced trauma, but it perhaps is more relevant in work with Norwegian refugee children who suffer from trauma experiences from the country they fled from, surrounded by war and insecurity.

In light of this, I have also created some specific key informant interview guides, which will have an important role in the discussion about the children's experiences and learning at school. I interviewed teachers and parents of the respondents to make sure to cover both the school and home aspects and also because the teachers and parents are those who have been able to observe possible changes in the children both during the event and after. From here on out, the teachers and the parents will be described as key informants.

## **1.2 Research question**

While working with the interview guides, through collaboration with my supervisor, I believe that it is appropriate to form some specific research questions in order to address the intended research objectives. The following specific research questions guided this study:

- 1 How did the children experience the traumatic event?
- 1 How did the children understand the traumatic event?
- 1 How does the traumatic event affect their academic learning?

## **1.3 Selection of topics**

At the start of my master study I knew that I wanted to write about trauma and children and formulated a research question about PTSD and refugee children and how their traumatic experience would affect their learning in a new “homeland,” in this case, Norway. I developed new thoughts during my visit to Kurdistan in the summer of 2009, where I stayed for about one-and-a-half months and volunteered with a Kurdish-Norwegian organisation, Komak and the Sport and Youth ministries of Kurdistan Iraq. During this experience I met some youth from Kirkukk, who told me stories about children's unsecured situation both at school and at home. I was touched by their stories, and it did not take long before I began to become curious and started to reconsider my thesis's topic. The faculty of University of Oslo were very supportive and open to my changing my topic.

Right after I got back I started to formulate a new research approach and started to rewrite the project outline. I found it necessary to shade light on those children's daily life during a horrible life situation and the affects their traumatic experiences have had on their learning at school. Unfortunately, there is no easy remedy to help those children, and I also have not found any preview research about it. I hope that this case study can be a beginning to future research and help for the children.

### **1.3.1 Why this topic?**

There are two arguments why I chose this as my study topic. First is my discernment of the importance of understanding how traumatic experiences affect learning. A second argument has to do with my background as a refugee and my own personal traumatic experience. I will explain both arguments below.

The main purpose of this research is to encourage a greater understanding of how traumatic experience affects school children and their learning. The focus will be specific traumatic experiences connected to war. There is, unfortunately, little focus on that. “They smile on the outside, laugh, and act just like other children,” said Marit Netland. But inside, they have recurring mental images, can smell the blood, and can hear cries for help inside their head. But they avoid talking about it, and the lack of knowledge among the people they meet is great. Psychologist Marit Netland has studied Bosnian refugee children in Norway. She continues and says that refugee children with traumatic experiences arrive in Norway annually, but the understanding about the subject is not complete (Ingvild Bjørnvold 1998).

A wider understanding will not only point out the problem but hopefully will also lead to more improved and newer research about the theme. It is obvious that traumatic experience affects them, although in different ways, and because of that children have a need for varied treatment; it also depends on the type of traumatic event and the degree.

This thesis will hopefully contribute to the importance of traumatic understanding at school and how it affects children. Even if the research study is outside of Norway, it may still be conducive to forming an understanding. The two main keywords for good learning are motivation and security, but when these two are missing, learning will not take place. Motivation has been considered to be an important factor in Norwegian curricula for years. But the teachers’ and schools’ knowledge is limited, and there is a need for a wider understanding, especially in regard to refugee children. I hope that this study will be able to shed light on the problem and lead to further research about the theme. Even though the study research dealt with children outside Norway, it will still be relevant. At the same time, I hope that it will help the children in Kirkuk also, by leading to more specific research and a wider understanding about the importance of prevention.

The second reason that I chose post-traumatic stress disorders as my study theme has to do with my background as a refugee. The reason that I'm so interested in the topic is because it has some connection with my background. It may also have affected the research and my role as a researcher during the interview process in Kirkuk. Because of that, I find it important and necessary to tell some about my background.

### **1.3.2 Being an objective researcher with a refugee background**

I should perhaps start with telling that I was born as a refugee. My father was a Kurdish political activist northwest of Iran, in the Kurdish area. Because of the life threatening conditions, my parents fled to North Iraq in 1983 with many other Kurdish political activists that were members of the Kurdish political party: KDP (Kurdistan Democratic Party).

I'm the second girl of four; like me, all three of my sisters were also born in South Kurdistan. Here after, I am going to use South Kurdistan for North Iraq. My parents had to flee many times to different places in South Kurdistan. That was quite difficult for us. Because we never knew what we could expect for the next day, we all grew up with a feeling of constant fear. The longest we have ever stayed connected in a place was the six years when we lived in a refugee camp what belonged to KDP, named Dole. Dole was placed between four mountains. The name Dole means Valley; that fit quite well with the geography of the place.

My three sisters and I started school in Dole. If you looked at the place from outside, it looked really nice, and it was (and is) surrounded by beautiful nature, but the truth behind it was not as beautiful. Nearly daily, most the men were getting attacked quite often by Iran, and Turkish military aircraft were around often, spreading fear. We had to eat dinner quickly every day, and it still sticks in my mind that my father often had to remind me to eat fast before the bombing began because we were getting bombed during dinner time. So we had to eat quickly and run to hide. But there was really no safe place to hide either; we all used to run to hide under bridges; some were empty, and some were full of water.



Sometimes we had to stay under the bridges in water up to our knees for hours, even during in the cold.

School time was the time when we could almost forget the circumstances and just be kids with dreams. However, even the school was not a normal school. The school building was used for many different occasions, such as meetings, weddings, funerals, and school for adults (most women were illiterate) in the evening. It was also a place where they would wash the corpses of the martyrs—political activists that got killed. After they were finishing washing the corpses where we had class at the same time, we washed the floor covered with blood during breaks. Those situations were not a one-time case; they happened over and over again during our childhood for about six years—between 1990 and 1996. But despite all that, I finished up to fifth grade before we again moved to another place where we stayed for about eight months before we moved to Hawler (the capital of South Kurdistan). We stayed in Hawler for about two years, and I had just started eighth grade when we got the opportunity from the UN to flee to Norway in 1999.

It's quite surprising that those memories are still so clear even after so many years. I remember I was struggling a lot the first two years in Norway. I used to get flashbacks from the sad events and lost my concentration quite often. Sometimes I felt guilty that I had left my friends behind. I was and still am easily frightened; I know that my three sisters also struggle with some of the memories, even though we rarely talk about it. We all react to loud noises and darkness. Surprisingly, we never got any psychiatric help; neither did my parents. That is also a strong reason that I chose PTSD as my thesis topic. My purpose is to someday help other youth and children with a refugee past. Sometimes one has to experience it to understand it fully.

## **1.1 Significance of the study**

In my perspective, this study adds to the stock of knowledge concerning how children with traumatic experience from war “survive” but how those experience affect their learning and motivation—which affects their learning as well. Unfortunately, Kirkuk is a war-torn city

and the knowledge about PTSD and its effect on learning is quite low in the community and even at the schools. Teachers have no knowledge about PTSD and how it affects learning; they have perhaps some basic understanding that traumatic experiences affect individuals somehow, but they are missing in-depth knowledge about how those experience affect the children's learning skills and their motivation for learning.

Therefore a study of this kind provides understanding about PTSD and learning at school in war-torn areas.

## **1.2 Organization of the thesis**

The thesis is structured into nine chapters. During chapter one I present the significance of the study and introduce the problem statement. During chapter two I give a brief historical background of Kirkuk, which is the research place for this study, because I find it necessary to give the readers of this thesis an understanding of Kirkuk in general and specifically about the school system and today's situation to get a deeper understanding of the situation.

Chapter three introduces the theoretical framework of the study: The chapter starts with definition of the learning concept followed by different learning theories. Further I introduce PTSD and give a brief definition, followed by a discussion about PTSD and children in war, and ending with a discussion about learning and motivation based on Raundalen and Schultz's (2007) *Krisepedagogikk*.

The fourth chapter introduces the methodological aspects and emphasizes the qualitative nature of the research for this study. I also present aspects such as research strategy, design, and the data collection method that has been used here.

Chapter five presents the main findings of the research study, where I present the three case story, followed by more discussion and results from the interviews and the CRISE -13 scale. Chapter six contains the final discussion of the thesis. This chapter presents analyses and discussions based on the results from the interviews and the theoretical chapter. Chapter seven addresses a short summary of the thesis and conclusion; I also present further

recommendations of working with children in war-torn areas. The thesis ends with recommendation for further research .

### **1.3 Summary**

This chapter has presented an introduction to the study. The chapter has presented the objective and research question that were addressed in the thesis. The chapter has also presented the significance, scope, limitations, and challenges of the study. Lastly, the chapter has given a brief view of why this topic has been chosen as a case research.

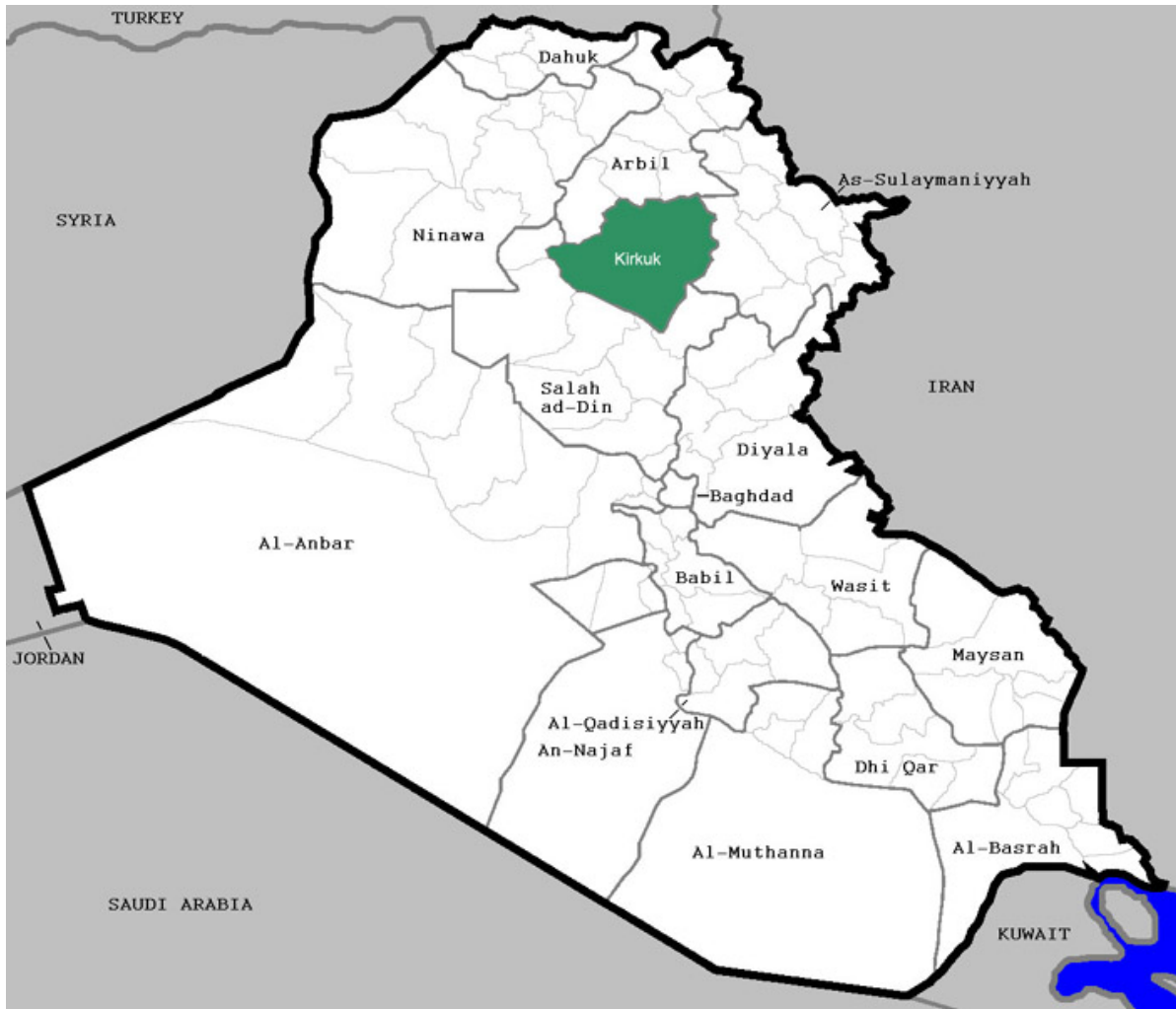
## **2 SETTING THE STAGE**

### **2.1 Introduction**

It is appropriate to start this chapter with a short introduction. During this chapter I will present a historical background about Kirkuk to facilitate an overall understanding about the past conflicts and war. Further I will point out today's situation in Kirkuk in terms of war and conflicts. This information is necessary to form a complete image of the everyday life and how it affects the individuals and the children who are the core in this case study.

Another important aspect here is the school system. It is important to say something about the school system because it definitely has an effect on the children's academic learning, both at school and outside school. The chapter ends with some facts about the Iraqi war and its effect on the children.

### **2.2 Kirkuk, Northern Iraq**



**Figure 1: Map of Kirkuk** (Source: <http://www.payvand.com> )

### **2.2.1 Historical background of Kirkuk**

Kirkuk is known as the oil city in Iraq by the Iraqi government. The city has been taken over by many different nations throughout history. The original history about the city goes back to 2400 BC, when the city was the capital of the kingdom of Gutium. Gutium was also the name of the Kurdish people at the time. The name of the city was Arraphkha at the time. Arraphkha was also known as the city of the gods. The city was back in Kurdish hands after 6<sup>th</sup> century BC. At the time a local kingdom called Garmakan governed; they also derived from Garmian, which were also Kurdish.

The archaeological remains go back 5,000 years (Johan Pike, 2007). The city has seen much immigration by Arabs and Turks. Arab Muslims invaded the city about 7<sup>th</sup> century AD. The biggest immigration to Kirkuk, known as Arabization, took place during the Baath era, which was the political party led by Saddam Hussein. Arabization refers to a growing cultural and language in a non-Arab area; the goal was to gradually change the area to Arab-speaking and incorporate Arab culture. The main goals behind this action were to make the city Arabic, and to achieve this, the Baath party forced Kurds to move and to immigrate to other Kurdish areas. Since April 2003, thousands of internally displaced Turkmen and Kurds have returned to Kirkuk and other Arabized regions to reclaim their homes and land that has since been occupied by Arabs from central and southern Iraq (Xoshnaw, 2007). There is currently a population of 902,019 (IAU, 2007); a referendum was to have taken place at the end of 2007, but it has been delayed because of various reasons.

### **2.2.2 Today's situation**

The city is still struggling because of the old minority conflicts, and the rest of the Baath party are behind many explosions and murders of civilian on a daily basis. This has resulted in a lasting fear among the people of Kirkuk. It was named the “capital of Iraqi culture” by the ministry of culture in 2010 (Hasan, 2008). “People are dying every day in Kirkuk because everyone wants to control the city, which over the years was under the Sunni Arabs and the Turkmen. In the past two years, it has come into Kurdish hands,” said Saleh Younis, political analyst and spokesperson for North Political and Sociological Group (N.P.S.G.), a local organization that monitors political tension in northern Iraq (Cairo Institute for Human Rights Studies, 2010).

The conflicts between the people of Kirkuk are not the only reason behind the terrible circumstances; beside the rests of the Baath party, Al-Qaeda has also been behind many explosions and murders. “Al-Qaeda in Iraq has been blamed for some of the bloodiest insurgent attacks in the country since the US-led invasion of 2003” (BBC.news, 2006).

Those who struggle most are children because they are not able to live normally; they are even afraid to go to school or play outside. There are so many different sad stories where

innocent people were killed. “Most of the wounded, which include women and children, are in a critical condition,” Kirkuk’s police chief told AFP news agency (BBC News, 2007).

The conflicts between the minorities continue; all are fighting about their right to own the city. Kurds say the city is their Jerusalem. A sizable Turkmen minority says Kirkuk has always been theirs. Arabs living here are terrified—some rightly and some wrongly—that they’ll be punished for the Arabization campaign that Saddam waged here when he evicted or killed Kurds and gave their homes to poor Arabs from the south along with large cash payments (Quil Lawrence, 2005). The Iraqi Baath government also compelled urban Kurds to leave Kirkuk. It transferred oil company employees, civil servants, and teachers to southern and central Iraq. The Baathist government renamed streets and schools in Arabic and forced businesses to adopt Arab names. Kurds could only sell real estate to Arabs; non-Arabs could not purchase property in the city (Talabany, 2007).

### **2.2.3 The school system**

The school system in Kirkuk is similar to the rest of Iraq, with preschool, primary education, secondary education, post-secondary, and university. Pre-school is between the ages of 4 and 5 years. Primary education (grades 1-6) is compulsory, and universal literacy is a key goal. Secondary education is divided into ‘Intermediate’ (grades 7-9) and ‘Preparatory’ (grades 10-12) levels. The last two years of Preparatory schooling (grades 11 and 12) are divided into two streams: literary and scientific (UNESCO, 2004). The education is free for all at all levels.

Groups and ethnicities divide most of the schools in Kirkuk. There are schools for Kurds, schools for Turkmen, and schools for Arabs or Assyrians; however, one will also find, for example, Turkmen teachers working at Kurdish schools. The demand for classes in languages other than Arabic in the Kirkuk region is high. In 2007, 305 schools offered classes in Kurdish; 148 in Turcoman; four in Assyrian; while 700 taught only in Arabic (Samad, 2007: 1).

Most people in Kirkuk speak three languages: Kurdish, Arabic, and Turcoman. “During Saddam’s reign, the only language taught and used in Iraqi schools was Arabic; it included also Kirkuk, but following the fall of the regime in 2003, minorities were granted the constitutional right to be educated in their mother tongues.”(Samad, 2007: 1).

Even though there are many bomb explosions, there is no teacher training concerning how the teachers can work with traumatized children. One can also appreciate that the teachers are also affected by the situation; it will more or less have an influence on their teaching.

#### **2.2.4 Some facts about the Iraqi war and its effects on the children**

Stress sustained over a long period of time is likely to cause serious effects. More than half a million Iraqi children have been traumatized by conflict, according to a 2003 UNICEF report. César Chelala (the global health consultant and a contributing editor for *The Globalist*) did an interview with Dr. Haider Maliki: “According to Dr. Haider Maliki, 28% of Iraqi children suffer some degree of PTSD, and their numbers are steadily rising. It is easy to see children’s psychological status being affected by daily explosions, killings, abductions, threatening noises and turmoil in Iraq’s main cities” (Chelala, 2009: 1).

What is surprising is that Dr. Haider Maliki, who is the only child psychiatrist working at a government hospital, hasn’t even been trained as a child psychiatrist (Chelala, 2009). Despite this, Dr. Maliki and his team at the Central Pediatric Teaching Hospital in Baghdad have treated hundreds of children suffering from PTSD. In a country that has been through many conflicts and a big war during the last few years, and the need for experts in PTSD increases with the number of children who suffer from PTSD. Therefore it is also difficult to find a concrete figure of the number of children who suffer from PTSD. According to Dr. Haithi Al Sady (the dean of the Psychological Research Center at Baghdad University), who has been studying the effects of PTSD in Iraqi children, “28% of Iraqi children suffer some degree of PTSD, and their numbers are steadily rising. It is easy to see children’s psychological status being affected by daily explosions, killings, abductions, threatening noises and turmoil in Iraq’s main cities” (Chelala, 2009).



Information collected by UNICEF from different sources supports his assertion. By the end of 2007, approximately 75,000 children had resorted to living in camps or temporary shelters. Many of the 220,000 displaced children of primary school age had their education interrupted. This is in addition to the estimated 760,000 children already out of primary school in 2006.

Hundreds of children held in prison—some as young as nine years old—are kept in overcrowded cells and are frequent targets of sexual abuse by prison guards, according to information from current and former child prisoners (Chelala, 2009).

### **2.3 Summary**

This chapter presented the educational policy context of Kirkuk. The chapter provided a brief historical overview of Kirkuk based on the general educational systems in Iraq. The chapter started with historical information about Kirkuk and was followed by today's situation. Lastly, I introduced a brief view of the school system. I have ended this chapter by giving some facts about today's Iraqi children's situation in general based on an article from César Chelala that was published on [www.theglobalist.com](http://www.theglobalist.com) in March 2009.

# 3 THEORETICAL FRAMEWORK

## 3.1 The learning concept

Learning has a central place in this case study. The main focus is on how traumatic experience affects academic learning but also how different individuals (children) experience traumatic events and what effect it may have on their short-term and long-term learning. To be able to discuss that, it is necessary to discuss different learning theories and analyze how they explain learning and which factors affect learning and in which ways. Therefore I will start with a brief definition of the concept based on learning theories. Learning is usually suggested to be linked to other key concepts, like motivation. Motivation may affect learning in different ways, and to be able to give a relevant definition of the learning concept, I find it quite important to include the motivation concept. However, I will start with the learning concept and then continue the theory chapter by presenting different motivation theories that I consider appropriate in this case. Both the focus on learning and motivation concepts are necessary for the further case analysis.

## 3.2 What is learning?

### 3.2.1 Different definitions of learning

It is important to start by presenting different views and perspectives on learning in learning theories. It is appropriate to start with giving a brief overview of different learning theories. We find them grouped into four major categories: conditioning, social cognitive, cognitive information processing, and constructive (Schunk, 2008).

Conditioning theories focus on environmental variables and that learning is a change in behaviour. In an academic learning context, the conditioning theory means that “students’

thoughts and beliefs exist, they are not necessary to explain learning” (Schunk, 2008, p. 515). Social cognitive theories assume that learning can occur by doing or by observing others. The motivation concept has a central role in social cognitive theories. The learning process is affected both by external conditions, such as stimuli, and also by cognitive and emotional conditions. Social cognitive theories mean that both reinforcement and feedback is important to inform the students about their learning process and work and also to motivate them to continue to improve (Schunk, 2008).

The cognitive information processing theories focus on learning involving the forming of networks in memory. They focus on the acquisition, storage, and retrieval of information, and they give less attention to the motivation concept in learning. Constructivist theories are cognitive in nature like social cognitive and cognitive processing theories, but constructivist theories place greater emphasis on learners’ construction of knowledge and beliefs. Learning is explained as a process whereby the learner takes in information from the environment and combines it with their own present knowledge. The “learner’s constructions are aided by instructional conditions that stress social interactions” (Schunk, 2008, p. 516).

Learning can be defined as a relatively permanent behaviour change as a result of experiences (Haugen red Bjerke, 2006: 196). When we learn something, we change and develop in another way. But there is also a difference between positive and negative learning; all learning is not positive. I will use an example from Haugen red Bjerke (2006) here to illustrate how learning may be affected by experiences.

Many children have an unpleasant and painful experience in connection with spray vaccines as children, and according to Haugen red Bjerke (2006), this experience will most likely result in fear or anxiety of doctors and nurses as well as medical offices in the future. This is relevant to elicited how children get affected by trauma events.

“Learning is an enduring change in behaviour, or in the capacity to behave in a given fashion, which results from practice or other forms of experience” (Schunk, 2008: p. 2). According to Schunk (2008) there are three criteria for defining learning. First, learning is behavioural change in the capacity for behaviour. That means that learning includes new actions or modifying existing ones. The second criterion is that behavioural change (or

capacity for change) endures over time. This does not include temporary behavioural changes like, for example, changes that are brought by such factors as drugs, alcohol, and fatigue. Schunk (2008) says that these changes are temporary because, when the cause is removed, the behaviour returns to its original state. Also, it is debatable how long changes must last to be classified as learned. But what does it mean to changes caused by trauma events? Trauma events can also be classified as a permanent change in the behaviour, even though, in many cases, the changes don't show because it can be a change at the very individual level over a long time, and that is not easy to point out. The third criterion is that learning occurs through practice or other forms of experience.

Haugen has focused on three factors in the definition of learning and its influence by experience: 1) relatively permanent, 2) behavioural change, and 3) experience. He explains that "relatively permanent" is taken to rule out short-term behavioural changes or changes in us due to fatigue, indisposed, the influence of alcohol or drugs, etc. Relatively permanent change means changes that will stay permanent in us and not only for the short term. Haugen (2006) explains that behavioural change is a broader concept of learning; also, behavioural changes do not include changes that are caused by the natural growth of a child and physically changes but rather the changes include the small ones, like changes in attitude. The third term in the definition of learning is experience (Haugend red Bjerke, 2006).

The experience concept is also a broad concept in line with the concept of learning. It can last from a few seconds to weeks or months or perhaps years. An example of a short-term learning experience may be grammatical correction in the classroom context; on the other hand, students learning to have more positive attitudes towards each other is a long-term process. But learning is also a process and only when this process results in change does learning take place. However, it is not necessary that learning is apparent to others or expressed in observable behaviour. What we have learned only appears when the situation is appropriate. Learning varies from the theoretical angle we discussed. In social cognitive theory we find the following definition:

"Learning is largely an information processing activity in which information about the

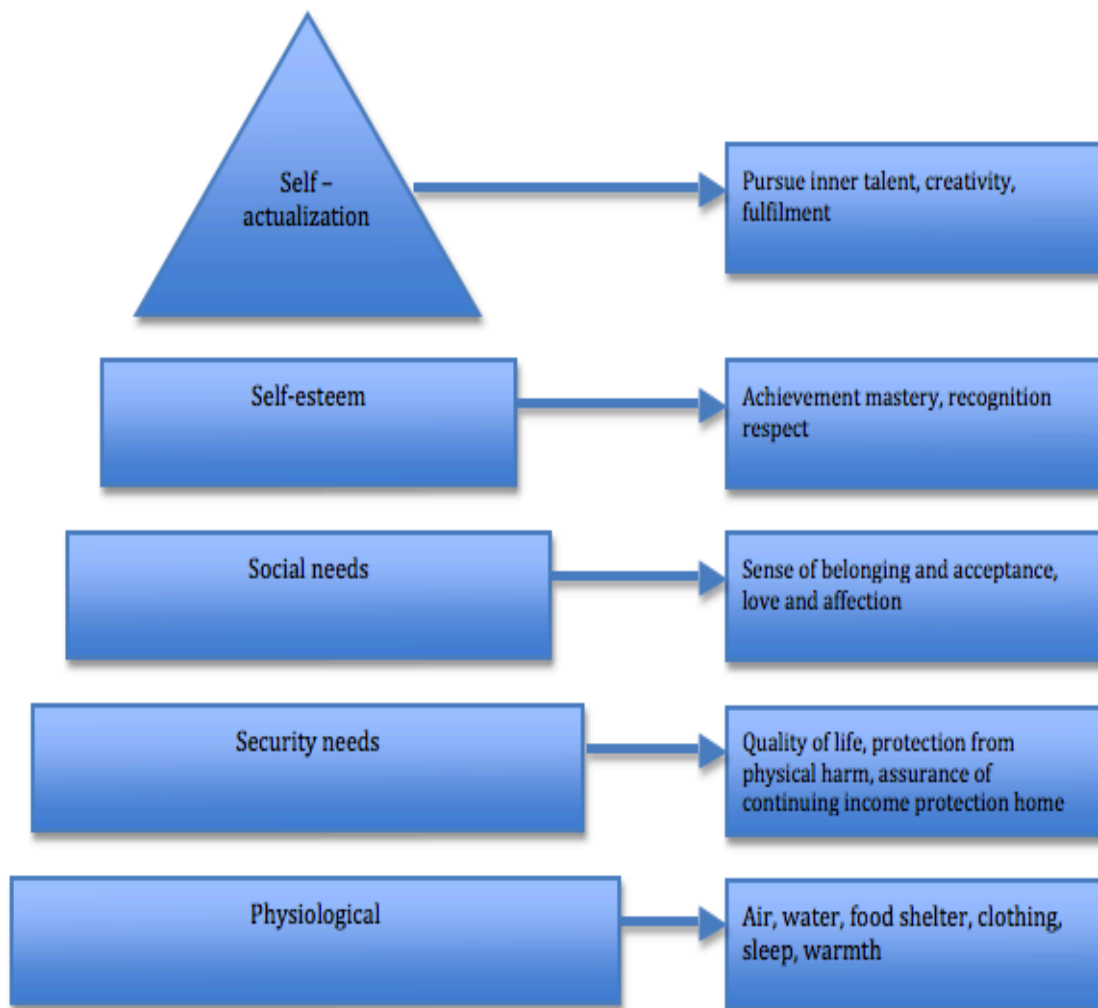
structure of behaviour and about environmental events is transformed into symbolic representations that serve as guides for actions” (Bandura, 1986, p. 51).

On the other side, Operant conditioning theory focuses on what people learn by doing and that active trial and error is the basis for learning. “Social cognitive theory distinguishes between learning and performance of previously learned behaviours” (Schunk, 2008, p. 81). Conditioning theories contend that learning involves connecting response to stimuli or following response with consequences, but social cognitive theory asserts that learning and performance are distinct processes. “Whether we ever perform what we learn by observing depends on factors such as our motivation, interest, incentives to perform, perceived needs, physical state, social pressures and type of competing activities“(Schunk, 2008, p. 83).

Both Haugen and Schunk focus on how experiences result in behavioural changes, and they both distinguish between temporary and permanent changes. It is, however, difficult to categorize changes caused by trauma events as only temporary or permanent changes because it depends to which degree the trauma event has affected the individual, age, duration, and previous experiences. Therefore trauma events can be both temporary and permanent changes.

### **3.3 Hierarchy of Needs Theory**

Abraham Maslow (Harper & Row 1987) proposed that humans are born with certain basic needs and strive to satisfy those. Maslow’s hierarchy of needs is represented in the shape of a pyramid, with the largest and lowest levels of needs at the bottom and the need for self-actualization at the top. The four lower layers of the pyramid contain what Maslow called "deficiency needs": physiological (including sexuality), security of position, friendship and love, and esteem. With the exception of the lowest (physiological) needs, if these "deficiency needs" are not met, the body gives no physical indication, but the individual feels anxious and tense.



**Figure 2: Maslow's hierarchy of needs theory**

(Source: *Maslow, A motivation and personality* (2nd ed.) Harper & Row 1970)

When the physiological needs are relatively satisfied, the individual's safety needs take precedence and dominate behaviour. These needs have to do with people's yearning for a predictable, orderly world in which injustice and inconsistency are under control, the

familiar frequent and the unfamiliar rare. In the world of work, these safety needs manifest themselves in such things as a preference for job security, grievance procedures for protecting the individual from unilateral authority, savings accounts, insurance policies, and the like.

Safety and security needs include: personal security, financial security, health and well-being, and a safety net against accidents/illness and their adverse impacts (Maslow, 1943).

For example, individuals who live in war zones are concerned about obtaining a minimum of security needed for survival. In this case, the children who have been interviewed and used as informants live surrounded with insecurity daily. According to the hierarchy of needs theory, their needs stop at level one because they are missing security and their lives are affected by physical harm. “As Maslow’s (1954) hierarchy of needs suggests, effective treatment of PTSD or any other disorders can not be accomplished in the context of deprivation proponent survival” (Foy, 1992, p. 22).

After physiological and safety needs are fulfilled, the third layer of human needs is social. This psychological aspect of Maslow’s hierarchy involves emotionally based relationships in general, such as family relations and social life. What is interesting is that this also fits with the research area, where people, after school and work, stay home and avoid going out and doing things that are considered to be part of a normal life, like, for example, going to the movies, eating out, or visiting each other. Also, I cannot claim that they never go out, etc., but what I observed was that the city was quiet, and there were almost no people out after 5 p.m. And the children had received strict orders to go straight home after school.

The satisfaction of love and social needs will, in turn, create the conditions that are needed for self-esteem and can control the individual motivation. The self-esteem need can be related to achieving prestige, attention, and competence.

The need for positive self-esteem and self-actualization cannot be achieved right away, and it depends on the individual’s motivation. Maslow stresses the dangers associated with self-esteem based on fame and outer recognition instead of inner competence, and he sees healthy self-respect as based on earned respect. He also explains that internal motivation is

important to achieve individual goals.

According to Asbjørensens, Manger, and Ogden (1999), it is human nature that the better one is at succeeding in gaining knowledge and insight, the more knowledge one would gain. Maslow emphasizes that self-actualization is strongly linked to the realization of goals beyond one's own personal sphere. Further, Asbjørensens, Manger, and Ogden (1999) explain that it is not that easy to make a list of points concerning how Maslow's Hierarchy of Needs Theory or motivation theory can help to understand motivation at school or educational context. By understanding motivation at school and educational context on the basis of Maslow's Hierarchy of Needs Theory one may well argue that full attention to school work can only occur when more basic needs are satisfied, such as the physical needs, security needs, and social needs.

“A child who is suffering from malnutrition, lack of confidence, or lack of love and attachment will naturally have their attention focused on things other than knowledge and understanding” (Asbjørensens, Manger and Ogden 1999: 91). Even though the school can be a safe arena for children who perhaps suffer and have lack of the basic needs, there are also examples of insecure schools environments. Asbjørensens, Manger and Ogden (1999) give examples, such as schools, where the pupils are exposed to bullying. They do not give any examples about how it affects those children who also meet in an insecure school environment in addition to an insecure environment at home, such as children who are exposed to war. According to Maslow, and how I understand his theory, under such conditions, prerequisites for motivation at school deteriorate.

Maslow's theory also demonstrates a clear interaction between the person-environment and behavioural aspects. The theory points out exceptions of the environment and the individual needs for learning.

### **3.3.1 Criticism of Maslow's theory**

Maslow's theory has been criticized for its vague formulation and thin scientific basis. It has also been criticized for, on one hand, being too idealistic of a human view and, on the other hand, underestimating the flexibility and inequality between people. Therefore it is



necessary to include other theories that complement the theory despite its vague scope. It is also necessary to focus on to which degree the absent needs can be interpreted as nonexistent.

### **3.4 Cognitive theory**

The cognitive theories focus on the behaviour and how it is affected by our thinking. How we think about situations, plans and also, our expectations, and our understanding of reasons for our success or failure affects how and what we do. Understanding of motivation in the cognitive approach is diverse as well as social cognitive theory and factors that affect learning. The reason that I find it appropriate to highlight the above-mentioned theory is that the social cognitive theory focuses on which expectations individuals have of themselves, which I consider necessary to discuss the results of in light of a social-congestive perspective. How the individuals understand themselves and reflect over their situation during learning will certainly affect the learning outcomes. However, the theory focuses on one's own belief of the capacity to implement a concrete task. This is relevance in this case, where I discuss how children's traumatic experiences affect their learning. I will start first with Albert Bandura's social-cognitive theory.

#### **3.4.1 Albert Bandura's social-cognitive theory**

The social-cognitive theory (Schunk, 2008) focuses on the individual's expectations of himself or herself related to a concrete task and not the individual's assessment of how good they are or not primarily. The individual's expectations are also related to the outcomes of a concrete task or activity and whether the result will be valuable or rewarding for oneself. Bandura focuses on the individual's self-reflection and says that individuals evaluate and change their thinking and actions through self-reflection. Self-reflection also includes understanding "self-efficacy," which is a key concept in Bandura's social-cognitive theory. Bandura explains self-efficacy as believing in one's own capacity to perform actions required to cope with future situations. This belief and personal competence will affect the behaviour in different ways. The belief is also the source of the individual's choice and actions.

According to Asbjørensens, Manger, and Ogden (1999), expectations about coping affects the individual's thought patterns and emotional reactions. Bandura doesn't focus on the relationship between self-acceptance and performance; he means that the most important factor is one's own belief in one's own capacity to implement a concrete task. "Social cognitive theory makes several assumptions about learning and the performance of behaviours" (Schunk, 2008: 79). These address the reciprocal interactions among persons, behaviours, and environments. They also focus on the differences between enactive and vicarious learning and the distinction between learning and performance. However, Bandura discussed human behaviour within a framework of reciprocal interactions among behaviours, environmental variables, and personal factors, such as cognitions. "These interacting determinants can be illustrated using an important construct in Bandura's theory, which is perceived self-efficacy, or beliefs concerning one's capabilities to organize and implement actions necessary to learn or perform behaviours at designated levels" (Schunk, 2008: p. 79).

This can be transformed in a learning situation where the person is a student, and behaviour is equivalent learning while environment can be both the students' social environment and school. This is relevant due to the research question that intends to find out how trauma experiences in the environment affects academic learning in children. But before I discuss this I find it necessary to present another theory— the hierarchy of needs theory.

### **3.4.2 Bandura's triadic reciprocity model and PTSD**

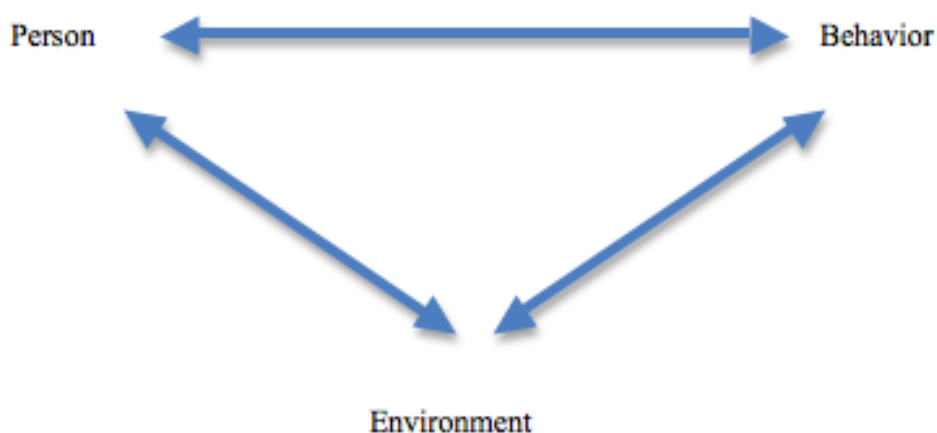
Bandura recognizes that chance encounters and fortuitous events often shape one's behaviour and places more emphasis on observational learning and the importance of cognitive factors in learning. Bandura also suggests that human activity is a function of behaviour and person variables as well as the environment and that reinforcement is mediated by cognition.

I find it necessary to emphasize what effects fortuitous events have on shaping one's behaviour and how those changes can affect learning. To do so, I find it necessary to focus more on the function of behaviour, person variables, and environment. Bandura discussed human behaviour within a framework of triadic reciprocity among (1) behaviours; (2)

personal factors, including cognition; and (3) environmental events. But if one can't look at this with an understanding that the three factors in the triadic reciprocal causation model make equal contributions to behaviour. The relative influence of behaviour, environment, and person depends on which factor is strongest at any particular moment. This applies to a learning situation as well.

In a school context, this has a huge influence on the learning outcomes. "Student's behaviours and classroom environment influence one another in many ways" (Schunk, 2008, p. 80). Schunk discusses a student-teacher relationship and how the three factors affect both the student's learning and the instructor's teaching, but in this case, it is natural to transform it into a more challenging learning context due to PTSD.

With that as a point of view, I find it natural to develop another model on the basis of Bandura's triadic reciprocity model of causality.



**Figure 3: Bandura's triadic reciprocity model of causality.**

(Source: Schunk, 2008: p.80)

It is interesting to discuss the theory in light of PTSD with a focus on learning in war-affected societies (environment). How do trauma events in the environment affect behaviour and how does the behaviour affect learning in the individual? Another important perspective

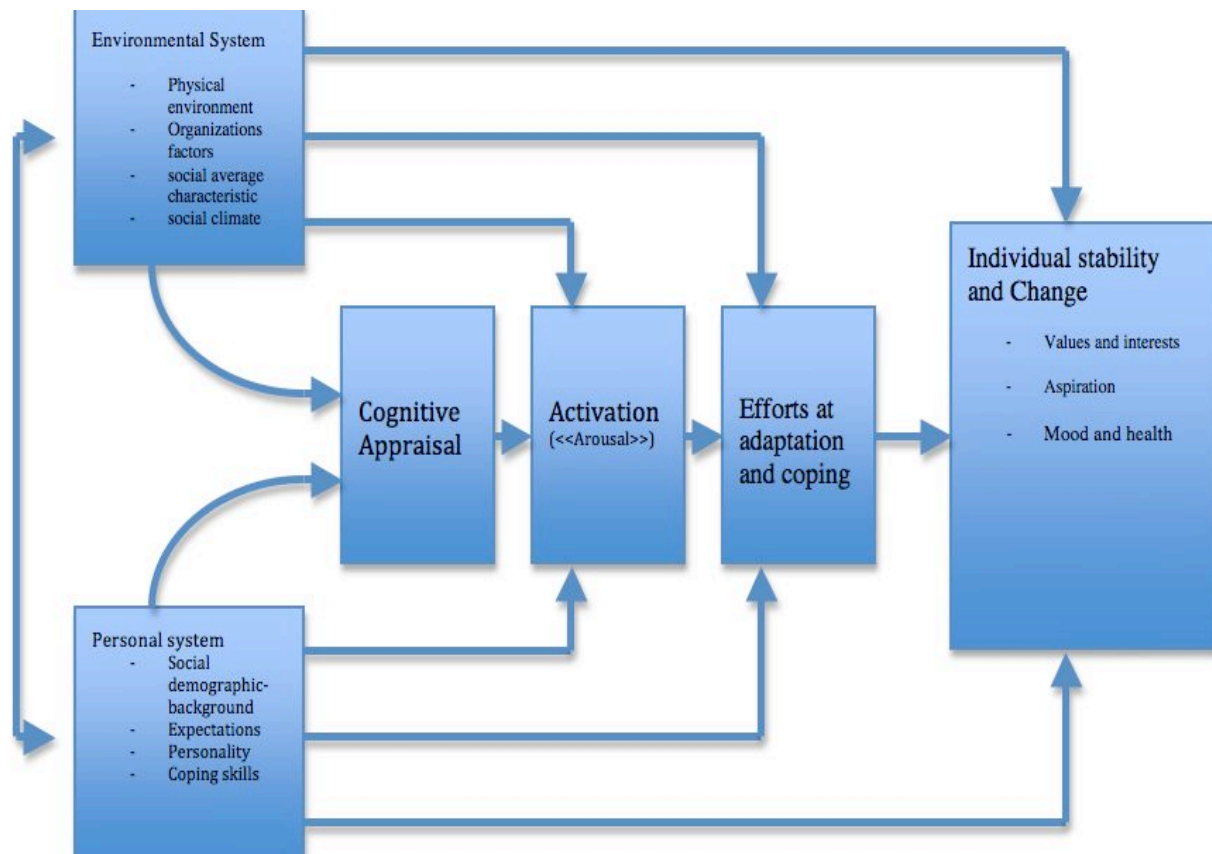
to look at here is the socio-ecological perspective, also known as social ecological model, as a methodological framework used in the social sciences to examine the dynamic relationships between individuals and includes multiple levels of perspective of the social environment.

“In socio-ecological perspective on social development, Rudolph Moos analyses the environment’s impact on stability and changes in the individual behaviour and attitudes” (Asbjørnsen, Ogden and Manger, 1999, 53).

The relevance of this theory here is that the ecological perspective is a system theory that attempts to provide a “big picture” perspective to social phenomena that occur at different levels in society and within different systems. Also, the theory focuses on how different factors have an impact on the individual and the influence of environmental factors at multiple levels (e.g., family, school, nation) that shape individual behaviour.

Moos assumes that it is difficult to measure the effect the learning environment has on the individual because the individual has contact with several environments at the same time. Moos say that it will be difficult to determine the significance of each environment. The ecological perspective provides insight into research through investigation of the issue or problem from multiple perspectives. Moos’ focus on the social environment distinguishes between various levels of the individual, such as the biological, relational, and cultural levels within social organizations. This is also essential for how trauma events affect learning differently in each individual and can be a good explanation of the different outcomes and how students respond differently to the same trauma events.

According to Asbjørnsen, Ogden and Manger (1999), Moos has a broad perspective on the learning results and includes personal values and interests, self-esteem and health, as well as the aspirations and achievements.



**Figure 4: Model of the Relationship between Environmental and Personal Variables and Student Stability and Change**

(Source: Moos 1979: p.6)

It is natural to continue this section with Bronfenbrenner’s ecological systems theory. Bronfenbrenner focuses on the quality and context of the child’s environment. “He states that as a child develops, the interaction within these environments becomes more complex. This complexity can arise as the child’s physical and cognitive structures grow and mature” (DPJ Ryan, p. 2).

Bronfenbrenner focuses on the overall perspective of the child and says that it includes analyses and explanations about how the child's success in a specific area has an impact on the child in other areas. For instance, the child's behaviour can be affected by health and social life as well as how they cope with school. (Asbjørnsen, Ogden and Manger, 1999).

### **3.5 Post-traumatic stress disorder**

Post-traumatic stress disorder is an anxiety disorder that can occur in those who have been exposed to particularly frightening and terrifying life-threatening experiences or stresses, such as extensive natural disasters, accidents, war, kidnapping, rape, torture, abuse in marriage, sexual abuse, armed robbery, or serious physical illnesses (Thingnæs, 2005). With post-traumatic stress disorder, one may have experienced losses in the form of death or loss of a body part; it could also be a threat to one's life.

#### **3.5.1 PTSD: Infusion, avoidance, and arousal**

Post-traumatic stress disorder (PTSD) may develop in response to a trauma conferring threat of injury or death (Yehuda, 2002). According to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), PTSD is characterized by three different types of symptoms, namely re-experiencing the traumatic event, avoiding cues related to the trauma, and hyper-arousal (American Psychiatric Association, 1994).

Post traumatic stress disorder (PTSD) definition (from ICD-10) :

Arises as a delayed or protracted response to a stressful event or situation (of either brief or long duration) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone.

Predisposing factors, such as personality traits (e.g. compulsive, asthenic) or previous history of neurotic illness, may lower the threshold for the development of the syndrome or aggravate its course, but they are neither necessary nor sufficient to explain its occurrence.

Typical features include episodes of repeated reliving of the trauma in intrusive memories

("flashbacks"), dreams or nightmares, occurring against the persisting background of a sense of "numbness" and emotional blunting, detachment from other people, unresponsiveness to surroundings, anhedonia, and avoidance of activities and situations reminiscent of the trauma.

There is usually a state of autonomic hyperarousal with hypervigilance, an enhanced startle reaction, and insomnia. Anxiety and depression are commonly associated with the above symptoms and signs, and suicidal ideation is not infrequent. The onset follows the trauma with a latency period that may range from a few weeks to months. The course is fluctuating but recovery can be expected in the majority of cases. In a small proportion of cases the condition may follow a chronic course over many years, with eventual transition to an enduring personality change.

As mentioned in the definition above and according to Brunvatne (2006), in most cases improvement can be expected, but the condition in a few people might have a chronic course over several years, with eventual transition to enduring personality change. How individuals experience the trauma and how it affects them later on their life is also dependent on the individuals themselves.

Brunvatne (2006) states that many of those who have experienced a traumatic event master the traumatic symptoms and manage quite well. Even though they will have a normal family and everyday life, most of them will still have to deal with some problems daily, such as nightmares; that is quite usual among traumatized people. Many people struggle with nightmares over years or perhaps for a lifetime. According to Brunvatne (2006), many of those who manage quite well may also be vulnerable to stress later in life, such as death, divorce, or conflicts with older children. Further, Brunvatne (2006) explains that what protects against permanent damage can be both personality prior to the trauma, cognitive capabilities, and living environment. He also emphasizes that family, social networks, and positive attitudes from the surrounding community are important.

Traumatic experience affects individuals in different ways, and it is dependent on the individuals' personality and the environment they are surrounded by. Many of those who have experienced a traumatic event will struggle with nightmares. Family, social networks, and positive attitudes are important. Some traumatized people will perhaps experience side effects many years after the traumatic event.

### **3.5.2 PTSD according to the DSM-IV**

DSM-IV text emphasizes that traumatic events can be directly experienced in a number of ways. The DSM-IV focuses on children and PTSD, and “The DSM-IV text also indicates that being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war or in a concentration camp, natural or manmade disasters, severe automobile accidents or being diagnosed with a life-threatening disease” (Saigh and Bremner, 1999: p. 7).

PTSD criteria A in DSM implies a person that witnesses circumstances or was confronted with one or more events that involved mortal danger or threat of serious injury or death, as well as threat against ones physical integrity, and he responds with intense fear, helplessness, or horror. Children may express this instead by disorganized or agitated behaviour. According to Gjestad, the “danger” experience will always be the result of interaction between the person and situation, and therefore, it is quite difficult to specify situations as objective physical dangers; it can even be impossible. It can be supported by the fact that the stress researches prove that stress at a high level is also subject based and depends on a number of factors, both within and outside of the person. Both research and clinical experience indicate that it includes traumatic events.

“Researches within copying psychology in the start were mainly focused on the events character and how they gave reflection in the reactions” (Gjestad, 2005: s.5)” But the researchers realized that it was not enough and that those conditions didn’t fulfill explanations of after-effects; other conditions must also be taken into consideration, like the person and the environmental factors.

Gjestad also indicates the importance of what the victim felt during the event and what he/she feels about the person who performed the action as well as other subjective conditions that are important in understanding a trauma. “The lower the objective threat levels are, the more you play the second subjective factors into creating stress reactions” (Nader, Pynos, Fairbanks and Frederick, 1990, referred to in Gjestad ,2005).

The victims’ interpretations of the event have to be taken into consideration as a subjective factor to fully understand the trauma. Therefore it is quite difficult to understand this tension



field between PTSD as a stress factor and as fear. The differences in the individuals and the many factors that influence the reactions makes that person's traumatic perception quite a unique experience. To understand that, one needs an overview of the detailed circumstances of both events, other situational factors, personal factors, and social conditions. PTSD develops when there are not normal habituations of the anxiety that are caused by traumatic memories. Both the individual and the environment around him can help the process go in a better direction, and different conditions prevent the improvement process. Gjestra gives an example: a repressive environment that conveys the message that this is uncontrollable and not to endure will easily be able to prevent further improvement.

As I have presented, there are some common specific factors and outcomes for experiencing trauma, but there are still some specific differences to be found in how children experience a traumatic event. "DSM-IV indicates that younger children may experience trauma related nightmares that may revert to generalized nightmares over time" (Saigh and Bremner, 1999: p.8)

### **309.81 DSM-IV Criteria for Posttraumatic Stress Disorder**

A. The person has been exposed to a traumatic event in which both of the following have been present:

(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others (2) the person's response involved intense fear, helplessness, or horror. **Note:** In children, this may be expressed instead by disorganized or agitated behaviour.

B. The traumatic event is persistently reexperienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. **Note:** In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.

(2) recurrent distressing dreams of the event. **Note:** In children, there may be frightening dreams without recognizable content.

(3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated). **Note:** In young children, trauma-specific reenactment may occur.

(4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

(5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma

- (2) efforts to avoid activities, places, or people that arouse recollections of the trauma
  - (3) inability to recall an important aspect of the trauma
  - (4) markedly diminished interest or participation in significant activities
  - (5) feeling of detachment or estrangement from others
  - (6) restricted range of affect (e.g., unable to have loving feelings)
  - (7) sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)
- D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:
- (1) difficulty falling or staying asleep
  - (2) irritability or outbursts of anger
  - (3) difficulty concentrating
  - (4) hypervigilance
  - (5) exaggerated startle response
- E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than one month.
- F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- Specify if:*
- Acute:** if duration of symptoms is less than 3 months
- Chronic:** if duration of symptoms is 3 months or more
- Specify if:*
- With Delayed Onset:** if onset of symptoms is at least 6 months after the stressor

### 3.6 Three important and necessary conditions defining an experience as a traumatic experience:

#### Experiences the event quite negatively

The event may be experienced quite negatively because it is physically and emotionally painful; or it can be experienced as a likely cause of injury or pain, emotional pain, or death. Unlike in the criteria A in DSM-diagnoses, events that indicate emotional pain or threat can be traumatizing. Also, a person's psychical integrity or experience of oneself is relevant for traumatic stress.

Still, events that involve physical pain, injury, or death or threat will have a stronger traumatizing effect compared to events that involve psychic pain. According to Gjestad, the reason for this may be that there are far more individual variations of what involves psychic pain than physical pain.

## **Sudden**

Events that involve sudden danger or threat of danger will usually be more traumatizing than events that involve dangers that gradually develop. This gradual increment can be customized by the individual, both cognitive and emotional through gradual changes.

Example: Experiencing someone near death from disease over a long time with nursing will usually be experienced differently than when someone dies suddenly.

## **Lack of control**

Human are always trying to protect themselves, and this protection is also the main component in humans surviving. We are trying to protect ourselves from dangers by controlling our environments and therefore taking controlling is quite important in understanding and studying traumas. According to Gjestad, feelings of having control are important because training and mental readiness create less grounds for traumatizing than if the feeling of powerlessness or helplessness takes its place. But also here the psychological mining in the individuals will have an important role. For example, physical pain that is voluntary (childbirth, medical examination) in many circumstances will be less traumatizing than if the pain was not voluntary. But here also one has to take into account individual differences.

### **3.7 Response in children exposed to war**

War causes major psychosocial disorders in humans worldwide. We find deterioration of psychosocial health in both children and adults affected by war in the form of, for example, anxiety, depression, post-traumatic disorders, substance abuse, relational problems, grief, aggression, hopelessness, and loss of motivation this is well documented (Nordanger m.fl., 2006).

Those who have experienced war have not usually only experienced an isolated single traumatic event, such as an accident or disaster. War often involves several events, such as murder, violence, and abuse, in addition to social support and other common protection systems that are often swept away. Traumatic events are often complex reactions, especially when they occur in childhood and adolescence. Such trauma may contribute to undermining

overall development and functioning both physical, mental, social, and personality wise (Nordanger m.fl., 2006).

Brit Oppedal, Karoline B. Seglem, and Laila Jensen have conducted a survey of young refugees in Norway and say the following about traumatic experience and its effect: “Post traumatic symptoms can be disruptive in daily life. More young people we spoke with in connection with the study were told that they have problems with sleep or they wake up at night and are afraid. It is therefore not surprising that many people also have problems with concentrating an school, and that it may be difficult to get up in the morning” (Oppedal, Seglem and Jensen, 2009).

Raundalen and Schultz (2007) explain crises in three criteria: *direct exposed*, *indirect exposed*, and *associated conditions*. This can help to give an image of the children’s understanding of how the trauma event(s) affect them, which is one of the research questions for this case.

In the *direct exposed* criteria, the children perceive themselves as a part of the war; it includes children with experiences from war or conflicted areas or children who have family members and relatives in war areas. While the *indirect exposed* children have experienced war or escape, or perhaps have themselves been participating war, in the *associated relationship* the child has association to the war through friends, who have family member in a war areas; but the experience can vary.

The respondents I chose for my research can be categorized under both the criteria *direct touched* and *indirect touched*; in case 1 and case 2 they have been exposed to acts of war, but the respondent in case 3 can be categorized under criteria 2, which means *indirect touched*. In her case, she was not directly physically exposed to war but was instead exposed through her uncle’s family, who died in a bomb explosion. There are also other ways to categorize children in war like: 1- *children who witnessed war*, 2- *children who saw war*, and 3- *children who lost relatives to war*.

The informants I have used for this study can all three be categorized in category 1- children who witnessed war; at the same time case two and case three can also be categorized under

category 3- *children who lost relatives to war* because both of them have been witnesses of war and have been exposed to war as well as having also lost relatives and family members. There are also some common similarities one can find in all three cases, such as flashbacks of the traumatic events, fear, insecurity, and

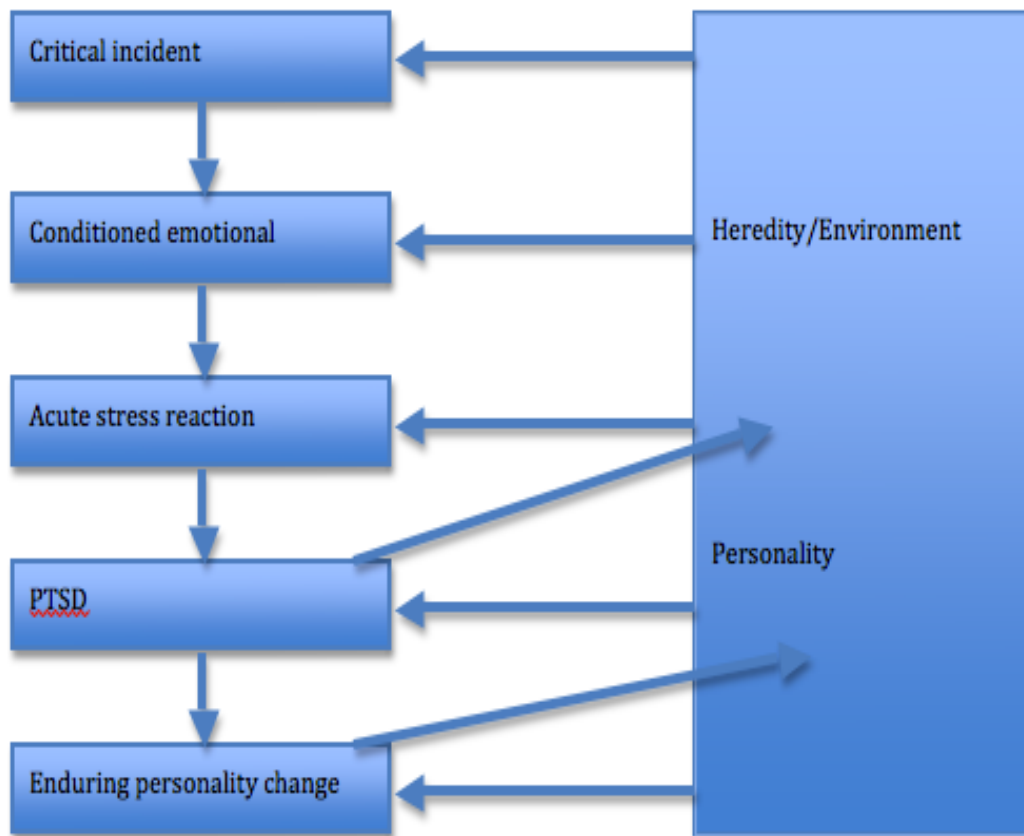
bitterness (UNICEF- study by Christian Children's Fund, 1995).

### **3.7.1 Traumatic experiences**

“Traumatic experience can vary, depending on intensity, durability, frequency, opinion and other factors and therefore there are not any easy relation between cause and consequence” (Gjestad 2005: p. 5). Even to persons who have been exposed to the same traumatic event can and will expel quite different symptoms. According to Gjestad, the traumatic experience can be affected by some specific factors; he explains that earlier experience with traumatic event, age, gender, cultural background, biological factors, and a subjective understanding of how much danger the person was exposed to are decisive factors for the traumatic experience. He also indicates that social support after and during the event affect reaction type, intensity, and durability. Therefore it is important to take those factors into consideration.

### **3.7.2 Cognitive–Behavioural Model of PTSD**

In the cognitive-behavioural theoretical understanding, individual personalities develop by interaction between the already existing personality and what the individual gets from the environment. With this as a clue, one can present a model to understand the post-traumatic stress disorders. A model where a modification forms can also be used to understand the more persistent strain. It is necessary with a model like that to understand and work with a theoretical understanding during the healing process with a person exposed to a traumatic event (Iversen, 2007).



**Figure 5: Model for development of PTSD**

(Source: Ivarsen 2007: p.53)

The interaction model emphasizes how individual factors, inheritance, and environment affect the way a traumatic experience or crisis is perceived. It also affects the adoption of how to work with traumatic experience and the individual’s cognitive and emotional understanding as a result of the traumatic experience.

According to Iversen (2007), the individual factors, inheritance, and environment also will have assumptions in experiencing and processing future trauma and crisis events.

This model will be used to discuss and understand the case study individually and the impacts as a result of the individual factors, the family as inheritance, and the whole society, especially the school as environment. It is necessary to get a whole picture understanding of the state of the children’s traumatic experience.

### 3.8 Trauma theories

Discussion of different trauma theories is important and relevant to answer the research questions and discuss the link between PTSD and learning. The first trauma theory I present here is Horowitz's theory, followed by some other trauma theories.

Horowitz's (1986) theory of stress responses was one of the earliest theories. The theory focused on the fact that the traumatic experience shook the individual's personality.

"Horowitz focused on that the traumatized individual swung between two extremes; between the need of slide away to protect themselves against being overwhelmed of the traumatic memories, and the need to get the opportunity to express and work through the experience" (Raundal and Schultz, 2007:p. 20).

According to the theory, if the person didn't succeed with processing the traumatic events, the result perhaps is chronic PTSD. Horowitz was one of the first researchers that pointed out that trauma processing also involves broad social-cognitive processes. The social-cognitive processes embrace: the belief in life, view of oneself, and hope for the future. But Horowitz also distinguished between two forms for successful management. He defined one as the more risky, which consisted of successful displacement, and the safer as thorough processing through therapy.

Horowitz was one of the first and most influential social-cognitive theorists. He moved from a more psychodynamic to a cognitive processing theory. He believed that processing is driven by a "compilation tendency," the psychological need for new, incompatible information to be integrated with existing beliefs (Barlow, 2008).

"Horowitz also theorized that there is a basic conflict between the need to resolve and reconcile the event into the person's history" (Barlow, 2008, 69). According to Horowitz, a person with PTSD oscillates between phases of intrusion and avoidance. He meant that the event stays in active memory without becoming fully integrated and therefore it is still able to stimulate intrusive and avoidant reactions that he called chronic PTSD. Traumatic experience leads to a strong experience of fear, helplessness, and horror, and the result of all of that will be that it will be very difficult to sustain the same picture of its own life and the

world as a safe place. Horowitz's theory relevance for this case study has to do with whether a trauma experience can result or lead to PTSD and how the trauma event affects the children's academic learning.

Another theory that I find necessary to explain is, based on the case from my research, is repressed-memory theory. According to Chris Brewin, trauma memories are stored and remembered differently compared to the daily memories, like where one was and what one did in different situations (Raundalen and Schultz, 2007: p.23). The PTSD symptoms, along with traumatic memories get dissociated from the ordinary memory systems, and to be able to "heal" the PTSD symptoms, it is necessary to work with transferring the dissociated memories to common memories that are possible to talk about.

According to Raundalen and Schultz (2007), the repressed-memory theory is not opposed to the newer cognitive trauma theories. Among the newer theories we find Ehlers, who focuses on the paradoxical fact that persons with chronic PTSD symptoms are both afraid of the present and of what is coming in the future, while the traumas belongs to the past. It is because of this that traumatized individuals have stored trauma memories in a way that they feel a threat in the present instead of a manageable past. There is a collapse in the interaction in the brain between the memories about the event and assessment and the evaluation one did afterwards. Those theories are important in clinical therapy work with individuals with PTSD in order to reflect over how the adaptation of the symptoms has succeeded.

Many trauma researches have supported those elements of this trauma research, especially the establishing of the avoidance strategy. The avoidance strategy focuses on the fact that the individual will either dare or approach the trauma memories, and that prevents the improvement process and leads to the maintenance of the PTSD symptoms. Those theories are important to point out why motivation for learning decreases in individuals with PTSD symptoms. These are also relevant in discussing achievement and future goals among traumatized individuals and their learning situation in the present.

### **3.9 PTSD and learning**



PTSD has many outcomes and affects individuals in different ways. But a traumatic event often implies that the child feels helpless and vulnerable (Dyregrov, 1998). But it is not a requirement that only a child-experiencing trauma directly will develop PTSD; being a witness to serious incidents, other people's death, or serious injuries can also cause traumatic after-effects. Children who experience trauma situations do not necessarily develop long-term post-traumatic problems (Olsen, Sand and Sørbye, 2002). It depends on the living conditions, internal resources, and the environment in general. According to Olsen, Sand and Sørbye (2002) disruptive acts can work into the student's way of living. Flashbacks, sounds, and thoughts of traumatic experiences can disrupt students' concentration in school and disturb the learning process; those symptoms often come during class and while doing homework, when the student sits at rest and when it is quiet in the environment.

Previous researches that have studied similar traumatic events' effects on school adjustment and performance as linked to the school's handling of the traumatic experience, have shown a correlation between learning challenges and traumatic events. There has been a research study about the topic in Sweden by Broberg, Dyregrov and Lilled (2005). The case event for their research was a fire event; according to the police investigation, there were 397 victims of the fire, 63 of whom died. The research started in March 2000; at the time the survivors of the fire were contacted, 263 of them participated in the research study. The interesting aspect here was that this study is the first that has documented school dropout as well as lower grades (that has been albeit thru self-reports) as a result of post-traumatic experience, according to Olsen, Sand and Sørbye (2002).

“Many primary victims, who suffered from flashbacks, nightmares, hyper-vigilance, etc. Problems were especially often reported for subjects demanding high concentration (e.g., mathematics, physics and grammar)” Olsen, Sand and Sørbye (2002).

Crises and traumas can affect school attendance negatively. Those crises can be defined as crises in family: divorce, accident, unexpected deaths; and there are also external crises, such as war and natural disasters. Clinical work with children from those categories have shown that there is a decrease in school attendance (Raundal and Schultz, 2007: 53).

Further, Raundal and Schultz (2007) explain that children with PTSD symptoms suffer from reduced concentration because their overworked inner thoughts take all the energy, and therefore there is not any strength and energy to concentrate on the school work and requirements. Raundal and Schultz (2007) focus on the motivation concept. Motivation is an important subject when one discusses learning, and much of the literature about learning is about motivation. The fact that motivation has a central role in learning is not new. One of the most important factors to promote motivation is self-efficacy, and it can decline after a trauma experience and crisis events. A frequently observed reaction after serious crises or traumas is reduced confidence in the future. The motivation perspective and its link with learning has been pointed to previously in this chapter; it will be discussed more during chapter 6, the discussion section.

### **3.10 Summary**

This chapter started with a brief view of the learning concept followed by a question: What is learning? Different learning theories have been mentioned to give a definition of learning. Learning leads to changes, and change itself is learning. Both Schunk (2008) and Haugen and Bjerke (2006) put an emphasis on how experiences lead to both temporary and permanent changes through behaviour changes. Shunk (2008) says that learning is an enduring change in behaviour, or in the capacity to behave in a given fashion, which results from practice or other forms of experience. It is also important to discuss how trauma experiences change individuals and how it affects academic learning, which is the basic research point in this thesis. In social cognitive theory, learning is defined as an information processing activity; information about the structure of behaviour and about environmental events is transformed into symbolic representations that serve as guides for actions (Bandura, 1986).

How the individuals understand themselves and reflect over their situation during learning will certainly affect the learning outcomes. In a learning situation where the child is affected by trauma events, how the child understands and reflects over the situation where learning

takes place is important for learning itself and how the child, in the future, will be able to handle leanings situations that are affected by trauma events. Also, it's important for the child to be able to handle the outcomes of the trauma events, such as disturbances that are natural in individuals who suffer from trauma events.

Further, it was natural to continue this chapter with Bronfenbrenner's ecological systems theory, where he focuses on an overall perspective of the child and says that it includes analyses and explanations about how the child's success in a specific area has an impact on the child in other areas. In light of this, one can study the effects and impacts of a trauma event in academic learning among children and also how the trauma events affect other aspects of the child's life.

This led to part two of the chapter, which starts with a definition of PTSD followed by PTSD according to DSM-IV. PTSD is characterized by three different types of symptoms, namely re-experiencing the traumatic event, avoiding cues related to the trauma, and hyper-arousal (American Psychiatric Association, 1994).

Further, I have pointed out some important conditions to defining an experience as traumatic. This led to a view of trauma response in children in war zones. The reason I chose to focus on this is that the respondents for this thesis also live in a war related conflict area and also have been exposed for several trauma events. It was appropriate to also mention traumatic experiences and how they affect individuals differently, both based on individual differences and life situation. Many individuals that have experienced a trauma event master the traumatic symptoms and manage quite well, but even though they will have a normal, everyday life, most of them will still have to deal with some problems daily, such as nightmares; that is quite common among traumatized people. Many people struggle with nightmares and flashbacks over years or perhaps for a lifetime Brunvatne (2006).

According to the DSM-IV, traumatic events can be directly experienced in a number of ways. "The DSM-IV text also indicates being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war or in a concentration camp, natural or manmade disasters, severe auto mobile accidents or being diagnosed with a life-threatening

disease” (Saigh and Bremner, 1999: p. 7). Brit Oppedal, Karoline B. Seglem, and Laila Jensen, in their survey, concluded that individuals with trauma experiences may develop problems with sleeping or they may wake up at night, afraid. It is therefore not surprising that many of them also have problems with concentrating at school and that it may be difficult to get up in the morning. While Iversen (2007) focuses on individual factors, inheritance, and environment, and he says that those factors will lead to assumptions in experiencing and processing future trauma and crisis events.

Also, Olsen, Sand and Sørbye(2002), in their research, emphasize that trauma events affect concentration and that in “many primary victims, who suffered from flashbacks, nightmares, hyper-vigilance, etc., problems were especially often reported for subjects demanding high concentration (e.g., mathematics, physics and grammar)” (2002). The chapter ends with pointing out the context between learning, motivation, and PTSD.

The chapter discusses different trauma theories that are appropriate when we discuss trauma experiences in light of academic learning. The chapter’s last section discusses the main concepts for this case, namely post traumatic stress disorders and learning, and the chapter ends with a presentation of the research questions that are the background for the theoretical progress.

Based on the selection of the above theories, I set up to answer the following research questions:

- 1 How did the children experience the traumatic event?
- 1 How did the children understand the traumatic event?
- 1 How does the traumatic event affect their academic learning

# 4 METHODOLOGY

## 4.1 Research strategy, design and challenges

### 4.1.1 Research strategy

All empirical social research requires a research plan. The plan has to embody the task of the research about which research design is going to be used and what data collection methods are suitable for the research (Bulmer & Warwik, 1993). The plan is called a research strategy. In this case, before I could make my research strategy, I had to ask myself what it is I'm looking for and what I want to research on, as well as which research methods would be appropriate to use in this research. The main object for this research was to investigate traumatic experience outcomes and how it affects learning at school among children in war, and in this case, children in Kirkuk (North Iraq). With these questions as the main object, it was most logical to choose a qualitative research strategy for the research.

Because a qualitative research strategy is naturalistic, the researcher does not try to manipulate the context that has been chosen to investigate. Patton (2002) says the only “manipulation” present in the situation is the presence of the researcher because in most qualitative research the only measurement instrument is the researcher himself.

### 4.1.2 Research design

Choosing research design reflects on the decisions about priority during the research process. To figure out what research design should be used to the specific study one should look closer at the questions that are to be investigated. According to Robert Yin (1990), the first and most important step in a research study is categorizing questions into question boxes; in this way, one will be able to again identify the researching design. It indicates putting the research questions into questions boxes: how, why, what, where, how much. In

this way, one will have a clear idea about the researching. “A case study is when a how or why question is asked about a contemporary set of events over which the investigator has little or no control” (Yin, 1994). It is also important to have clearly formulated research questions.

I have chosen to take advantage of the qualitative method research design. There are both advantages and disadvantages in using qualitative as a research method. I will start with the disadvantages. According to Key (1997), there will be difficulties in establishing the reliability and validity of the approaches and information because of the subjectivity of the inquiry. Key also says that it is difficult to prevent or detect researcher-induced bias, and the scope is limited to the in-depth, comprehensive data gathering approaches required.

The qualitative method produces more in-depth, comprehensive information, which in my research case is quite necessary to be able to see the connection between events and consequences, and it also allows me as a researcher to get a broader and deeper understanding. The qualitative method “uses subjective information and participant observation to describe the context or natural setting, of the variables under consideration, as well as the interactions of the different variables in the context” (Key, 1997). In my opinion, the most important advantage in using qualitative methods is that it seeks a wide understanding of the entire situation.

The strength of this method is that it is flexible, seeking the unique, and at the same time open to new information. It focuses on a few devices and provides a broad and detailed description, so it says “a lot of little” and thus can give me a bigger and broader understanding of the phenomenon of PTSD and learning (Holme and Solvang, 1998). In addition, qualitative inductive research generates hypotheses on the basis of empirical findings. It is therefore also suitable for developing new theory. I find it first necessary to give a wide overview about qualitative depth interviews as a research method in PTSD.

According to Ryan (2002), qualitative methods are flexible; there is a balance between theory, method, and data, and this process causes the researcher to constantly face choices, both practical and theoretical. Therefore the researcher often has to ask questions of oneself;

for example, if the problem formulation is good enough and if it covers the area that the researcher is planning on researching. This process is quite difficult for the researcher. I had to ask myself many different questions like whether I did it right, if I focused on the right analyses, if there were other things I should focus on more on, and if my interview questions were good enough and would give me what I was looking for. Sometimes it makes one doubt. But those questions are also a part of the research process, and it is impossible to escape from them. Those questions also help one to develop the research process and to consider all possible causes and explanations to achieve results. However, it is important to select a topic and an issue that is motivating enough to drive the process forward, even when you are going uphill.

### **4.1.3 Challenges and limitations**

In the qualitative naturalistic inquiry, the research instrument is the researcher. There are many implementations for the research because of that. Holmersdorttir (2008) calls it “observer’s paradox,” by which he means how the presence of the research may affect the behaviours of the research participants and respond. On the other hand, the time limitation is important to take into consideration because researchers who do observation and do more than one interview with research participants over a longer time will notice that the research participant will be less nervous and more act like “themselves.”

As I have mentioned before, I wanted to do a second interview, both to make sure to ask about things I may have not asked about or to go deeper in more important topics they had not talked about during the first interviews, as well as “follow up.”. Unfortunately, I had limited time and didn’t have the possibility to do a second interview, but I made sure to have either the teachers or the parents follow up with them and “keep an eye on them” for the next two weeks after the interviews. This factor is taken into consideration when analyzing the cases. Despite the limited time and security “mental” pressure, I believe that I have collected valid data from my research during the interviews.

#### **4.1.4 Case study design**

According to Ringdal (2001), research design is the researcher's plan for an investigation. He further says that choosing a design is also choosing, in many ways, a “package solution” containing both technique for data collection and analysis. All social science research aims to contribute to a better understanding of the society we live in by looking at how certain people, groups, and institutions act and interact within their frames (Holme and Solvang, 1998). There are two main types of methodological approach, namely the qualitative and quantitative methods.

The qualitative method focuses on a few devices, provides a broad description, and says “a lot of little,” while quantitative methodology focuses on many devices, distribution, number, and quantity of a phenomenon. Qualitative methods seek knowledge through people’s perception of their situation, how they see the world through their glasses, and how they interpret, understand, and experience events. Basically, there are epistemological differences in the two approaches.

The components of qualitative methods mean that universal knowledge is seldom possible, and the little that can be generalized to apply to all is so unspecific that it has no practical significance, or it will be wrong in specific situations. Components of quantitative methods mean that contextualized knowledge is so subjective that it is of little practical significance for anyone other than the few people who are in the studied context (Bryman, 1988).

I have chosen a case study design for my research because I think that the method is best suited to answer my research questions. The aim of division of the main case approach in the research questions was to equip me with information that makes it easier and more secure to answer the main objective of the study. There are three types of cases: the critical case, the unique case, and the revelatory case (Yin, 1994). But it is also important to remember that cases are not chosen because of the level of the rare or extreme but rather because they will provide a suitable context for certain research questions to be answered. I chose my cases because I believe that visiting Kirkuk and talking both to the students and their teachers and parents is a suitable context for me to conduct the investigation.



## 4.2 Sample, respondents and key informants

According to Patton (2002), the main differences between qualitative and quantitative methods are the different logic under sampling approaches. For my research, the focus was persons (and smaller groups). Because the focus in qualitative research is most often on small samples like persons, groups, classrooms, etc., that makes them purposeful. In the early phases of this thesis, I knew that I wanted to investigate, in some way, young people exposed to a traumatic event and the effects as a result of the event experience on their learning.

### 4.2.1 Pilot study

“A pilot, or feasibility study, is a small experiment designed to test logistics and gather information prior to a larger study, in order to improve the latter’s quality and efficiency” (NC3Rs, 2006). A pilot study should be a part of a good research strategy besides careful research planning. Normally a pilot study is small in comparison with the main experiment, and because of that, it can provide only limited information. However, the pilot study may provide vital information on the proposed procedures or treatments. There are some logistical issues that may be revealed by a pilot study, like testing the reliability and validity of the results.

Based on that, I wrote some check points in advance:

- Introductions: if it was informational enough and easy to understand the purpose behind the interviews
- My objective role during the interview
- The interview questions: if they are too flexible or too structured
- The respondents’ body language

To that purpose, I planned a pilot interview with a Kurdish girl whom I knew through other friends but who was not a close friend of mine at the time. The reason I chose to do the pilot interview with a non-close person was to be able to stay as objective as possible and also not to affect the result by my own relation to the person and his or her story.

She is a 19-year-old Kurdish girl. She is born as a refugee and came to Norway with her family about two years ago. I know that I should have chosen a younger subject, since my case interviews require younger youth and children, but it was not easy to get in touch with any whom I know would fill the requirements the task required, and I also knew that an older person could give me a tidy evaluation about the interview after finishing it. I used a voice recorder and took notes during the interview.

I did the pilot interview in November 2009, about a month before my fieldwork, so I had some time to do the necessary changes and improvements. The interview took about a half hour. The evaluation was that I had to be more specific and give more time to the respondent to think and talk, while not interfering and trying to hold a “mask” as an objective researcher. At the same time, I did not want to seem inhumane while listening to those terrible stories; it was not easy.

After the interview, I asked her how she felt about the whole interview and specifically about my role and the interview questions. I got some good feedback that helped me to develop the interview guide even more, such as cutting some of the questions and having them as “help” questions if necessary as well as giving the respondent more time to answer.

It's obvious that the researcher should use an interview guide in meeting with the respondent (Ryen, 2002). But the discussion may be about the level of formalization and techniques used to build the interview guide. “The degree of pre structuring depends on the focus, research questions and developing criteria. Therefore, the different degrees for formalisation can be argued” (Ryen, 2002: 97). There are two important things to take into consideration in forming the interview guide.

First, to not have too much structure because it can lead to perhaps misunderstanding phenomena that are important for the respondent, and it can also lead to the researcher being less aware and the interview tending to be a more mechanical interaction. With a too structured interview guide, one will be able to capture the respondent's perspective. With a detailed structured interview guide, one will also risk excluding the meaning of the context, which is the most central in qualitative research methods.

There are many arguments for structured interviews because there are risks that important phenomenon will not be captured if they are not included in forms (Ryen, 2002). Therefore it is important with a semi-structured interview guide that it is not too structured and binds the researcher too much to the interview questions that are formulated in advance. There are many ways and levels in formulating interview guides, but in a qualitative interview, a semi-structured interview guide is more common. The main thing here is to be flexible and let the respondent talk. Do not disturb or interrupt the respondent. That is important to remember during the interview process.

I started with making two separate interview guides adapted for the respondents (children) and for the informant (teachers and parents) interviews. I also made some small changes during the process. The respondents and the informants were the main focus. I tried to be as objective as possible, but at the same time, I was open and aware for new questions related to the information the respondents and informants come up with. But it was also good to have the structured written questions and notes, which helped me to cover the research area and helped the respondents and informants to stay in the research scope. It was even more important for me because of the limited time and situation.

#### **4.2.2 Selection of respondents**

There are too many choices in terms of settings, actors, events, and processes to make a sample of respondents; one also must not underestimate the pragmatic considerations when choosing the environment. In the open depth interview, the access to relevant information is important. Ryan (2002) therefore recommends one try searching for a variety of information-rich respondents, which means respondents with different experience and ways of living or perhaps age, which is an important key issue in this case (Ryen, 2002).

“Sometimes the selection is straightforward because you have chosen to study a unique case whose identity has been known from the outset of your inquiry. Or, you already may know the case you will study because of some special arrangement or access” (Yin, 2009: 91).

I started my research with fieldwork. I prepared in advance before I went to Northern Iraq (the Kurdish area). I connected with the Student Union of Kurdistan in Hawler through a

friend of mine. The Union helped me to prepare the process; they also helped me to get in touch with the University of Salhaddin-Hawler (which is one of the oldest and biggest universities in the area). The Union also helped me to with residence during the research. The Union also has local teams in most of the cities, including Kirkuk, and with a lot of help from them, I got in touch with respondents who filled my research demands. I also got in touch with relatives of a friend (who lives in Norway). They also helped me with my stay in Kirkuk for the two nights I spent there and also informed me about some informants; I have used one of them in my research.

The sample was made up of two girls and one boy. All the participants were Muslims. I also interviewed the children’s mothers and teachers. Most of them were Kurdish except for a teacher and mother who were Turkmens. In the qualitative style of research, it is more likely that the sample size is small (Cohen et al., 2004:93). Therefore I selected a small sample size of three children (and included their mothers and teachers) as presented in Table 1.

**Table 1: Categories and Numbers of Informants interviewed**

<b>Category of Informants</b>	<b>No. Interviewed</b>
Children	3 (1 boy, 2 girls)
Teachers	3
Headmaster	1
Mothers	3
<b>Total</b>	<b>10</b>

### **4.2.3 Key informants**

“The key informant interview has a very specific purpose. It involves identifying different members of the community who are especially knowledgeable about a topic (who we call “key informants”), and asking them questions about their experiences working or living within a community or health care system” (Susan, 1999:2). The key informants are also

important for getting broader information about the research topic and for addressing other aspects of the research problem. Those interviews help one to fill in all the missing information. People in the community who are familiar with the issue, with their particular knowledge and understanding, can provide insight on the nature of problems and give recommendations for solutions (Susan, 1999).

In my research I chose to complement the key informant interviews after finishing interviews with the respondents. In this way, I will be able to get more information about the respondents and also to fill in missing information, to get a border insight in the respondent's life and living situation. The key respondents are also important to get general information about the society and school system; at the same time, they can give valuable information about the respondents' changes and learning skills before and after the traumatic event(s). I will use the term background informants instead of key informants to not create confusion when the information is discussed.

### **4.3 Entering the field and the interview process**

According to Patton (2002), entering the field for research involves two closely related, but separate, parts, which are: the negotiations with gatekeepers, also the people "... ho have a say who is let in and who is not" (Durkheim & Terre Blanche, 2006: 312) and the people that allow you to physically gain entry to the fieldwork. One of this researches major gatekeepers was my friend, Shno Rwandzi, who works for the Kurdistan democratic student union in Hawler. Through her, I met another major gatekeeper, the leader for the Kurdistan democratic student union in Hawler. I also got some contacts and got in touch with a third gatekeeper through a friend in Norway, who had relatives in Kirkuk.

#### **4.3.1 In-depth interview**

According to Patton (2002), there are three types of qualitative methods: open in-depth interviews, participatory observation, and document analysis. In this survey, I chose open in-depth interviews with open questions that elaborate on people's experience, exceptions, meanings, feelings, and knowledge. It is important for me to be able to get and create a whole picture of the situation for a basic understanding of the situation and the outcomes

and consequences of it; basically, to be able to point out the correlations behind the main problem and also the correlation between the traumatizing experience and learning.

### **4.3.2 What is an in-depth Interview?**

“In-depth is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspective on a particular idea, program or situation” (Boyce and Neale, 2006: 6). By using in-depth interviews, one gets the opportunity to see the situation in a broader way. This method is useful for getting information about a person’s thoughts or behaviour with the main topic of research or when one wants to explore new issues in depth. There are also some advantages and limitations of in-depth interviews.

According to Boyce and Neale (2006), the primary advantage of in-depth interviews is that they provide more detailed information than what is available through other data collection methods, like for example, surveys. The method also facilitates a more relaxed atmosphere in which to collect information, and the informants (the interview participants) may feel more comfortable having a conversation about their feelings and experiences as opposed to filling out a survey, which is more common in quantitative methods. Another advantage may be the non-verbal information that the informant gives during the face-to-face interview. It will help the researcher to see if the respondent feels uncomfortable, doesn't understand, gets bored, or lies. Consequently, the researcher can be flexible and make the necessary corrections, while adjusting the situation and creating a confidential climate and atmosphere that makes it possible to have a good, open conversation. This is important when interviewing traumatized children.

An open-depth interview forces the researcher's control over the interview situation and the response rate. In addition, it opens it up for spontaneity by the respondent and even controls the conversation. On the other hand, it gives the researcher a unique opportunity to add or create new questions to helping the informant continue. The disadvantage of the method is that it is resource-demanding and that the analysis of the data is difficult with the risk that the researcher can affect the data. The method forces the researcher to always try to be objective, which may be difficult in interview situations when the respondent gets

emotional. The researcher can also risk interpreting the data too much. The open in-depth interview divides in other groups. I chose to use the naturalistic interview for my research.

### **4.3.3 The Interview process**

I arrived in Kurdistan the 23<sup>th</sup> of December 2009 in the evening. I was not able to go to Kirkuk because of the December holiday. Therefore my contact person in the Union recommended that I get in touch with their local team in Kirkuk, prepare the research, and tell them who and what I'm searching for in the research. During this time I also got in touch with the university and had some meetings with them and asked them if they could help me in any ways with the project. They were willing to help, and recommended I get a B-advisor there, which I did, Dr. Yousif H.S Mustafa (Psychology). I had some meetings with him in advance that helped me a lot because he was familiar with research in this area and knew of issues that could show up during research, like security issues and community issues. But the most important issue in this case was the security issue. This also made the whole processes more difficult. I will come back to these afterwards.

I also planned to translate the interview guides and the CRIES-13 form into Kurdish. Unfortunately, I could not do it because of the limited access to the Internet at the time and because of the holidays; the translating center could not help me with translating. But I did translate them myself and wrote them by hand because it was also difficult to find computers with the Kurdish alphabet, even at the university. But the translating didn't cause any trouble for the research.

I went to Kirkuk (with my friend) the January 3. We went right to the family that I got in touch with in Norway who are relatives of a friend of mine (who lives in Norway). The same afternoon I met with the leader and another member of the local student union. They were very helpful and open. I told them about my project and what I was looking for in respondents and informants. At the very beginning of our conversation, they told me about their experience that day. When they were looking for the address where I was staying, they stopped the car and got out to ask some children on their way home from school about the address. One of them tried to answer them and show them the way, while another one interrupted and said:

***“Don't tell them the way. Look at them, they may be terrorists and have bombs in their car.”***

This sentence affected me a lot, knowing that people, especially children, live a life full of fear and insecurity. This woke me up and made me more motivated to do my best in the research.

The same day I got in touch with a school leader. In regard to their safety, I chose not to disclose any names (either in school or here). The school was exposed to an explosion attack at the end of 2006. Both teachers and students received physical injuries. It is also important to mention that most of the schools have two shifts: in the morning for first grade to fifth and after lunch for the other students from sixth grade on. I met the leader after lunch. I informed her about the research and asked her if I could use some of her students as respondents, and she was open to it. She introduced me to two of the students who got injuries in the explosion in 2006. I talked with them and asked them if they would allow me to interview them. They were willing, and because of the limited time and, again, security, we called their parents right away and asked them for permission. This fortunately was all right.

I also asked if I could use them as key informants and have interviews with them, which I did the same day in the evening. Unfortunately, we could not stay long at the school because of the security of the union's car, which was parked outside the school main door. The school leader told us that it was not that safe to have cars parked like that because most of the explosions are bombs fastened to civilian's cars. I did interviews that day at the school: two interviews with the students as respondents and two key informant interviews; one with the school leader (who also was teaching because of the lack of teachers) and a teacher. Both of them had been teaching the respondents both before and after the explosion and were familiar with their conditions. In the evening I did interviews with the students' mothers (key informants) at their home.

The day after that I went to another school that the union leader was familiar with. He told me about some possible respondents, and I chose one of them with consideration to the research demands. That same day I finished two interviews with respondents and four key



informant interviews. It is important to mention that there was always limited time because of the security , and the leader who was with me all the time and who drove me to the places where I did the interviews was always armed. There was always a security issue, such as: we could not always drive wherever we wanted to; sometimes we had to drive around; it was very limited with interview time, as well as my entire stay in Kirkuk. But I tried my best to do the interviews. It was three intensive and demanding days in Kirkuk.

Beside the interviews, I used CRIES-13 and ended the interviews with each respondent filling out the CRIES-13 form. The *trauma-related symptoms* were measured by means of the Children's Revised Impact of Event Scale (CRIES-13) (Weiss & Marmar, 1997). This scale consists of 13 items divided into three subscales: intrusion (three items), avoidance (four items), and arousal (five items). All items were scored on a four-point scale: not at all = 0, rarely = 1, sometimes = 3, and often = 4.

A subscale consists of intrusion and avoidance (CRIES-8). This subscale (CRIES-8) is recommended for screening purposes (Perrin et al., 2005). A total score of 17 or above implies a high probability for diagnosis of PTSD. Two of the three pupils had a high probability of a diagnosis of PTSD.

The respondents and informants were contacted by phone. Because the informants were all under the age of 18, I contacted the informants' mothers and asked them for permission. They were informed about the research purpose and how the data and information were going to be collected, stored, and used. Afterwards I asked them about participating in the research. I also asked the school leaders for permission for doing interviews at the school, with students as respondents and teachers as informants. Fortunately, they didn't have any objections and also lent me a room to use for the interviews. I also got permission to use a voice recorder during the interviews.

#### **4.3.4 Opening**

“The staging of the interviews should stimulate the interview persons to describe their thoughts about life and world” (Kvale & Brinkmann, 2009: 141). Because the interviewees want a clear comprehension, so they can be ready to talk about their experience and feelings, the researcher will create good contact by listening, showing attention, and

showing understanding and respect; it is also important to make a relaxed environment for the interviewing and be aware about what the interviewee wants to be informed about. Kvale and Brinkmann (2009) call the introduction a “Briefing”; therefore I started with presenting myself, the purpose of the research, and general information about the research. I also told them some about myself with the purpose here to create confidence and a trusting atmosphere. The openings were about three to four minutes. I tried to be formal and started with asking them questions from the interview guide’s introduction. This was to make sure to be neutral and make some distance. That is important for creating a safe and open atmosphere in the early stage.

#### **4.3.5 The main phase of the interview**

Ryen (2002) refers to McCracken and says that the biographic “grand-tour questions” follow. Those “actual” opening questions, according to McCracken (referred in Ryen, 2002), cannot be pre-specified. When it was time and the respondents/informants seemed to be ready, I started with the main questions and guided the conversation to themes that I find most important. Themes that I needed to highlight were the informant’s feelings and experience of the event, which seemed to be difficult to describe in words, in an open way. Therefore I found it necessary to add “helping questions”; with this I mean more specific questions about a specific theme. The main purpose here was to let the respondent tell her/his story in their own way.

Ryen (2002) emphasizes the importance of techniques to follow up the main questions, therefore I tried to carry the conversation by adding leading questions, use of key words, repetition of phrases and content, as well as using encouraging body language, such as nodding. At the same time I had to be careful not to interact with the respondent because of the topic’s sensitivity. Perhaps too much encouraging and extra questions or marks distribute the “safe” atmosphere; in this case, the respondents were children and youth, which are a more demanding research group.

In general, the conversation started easily, but the comprehensive interviews (case one) were way easier and had more flow compared to interview two (case two) and interview three (case three). The reason may be that the respondents were younger in those two last

cases. Sometimes I had to lead the interview in a new direction to illuminate this slant, and sometimes I had to explain the questions for them, which from the beginning I informed them that they could ask me about more explanations if necessary and when they did not understand. In general, I started with general questions, followed with more concrete and specific questions.

At the end of each interview with the respondents, they were asked to get permission to fill out a form, CRIES-13, and all three respondents agreed to fill out the form. Based on the fact that the form is not available in Kurdish, I translated the form to Kurdish in advance and went through the form orally with the respondents. In this way, they had the opportunity to tell if they did not understand; at the same time, I did get an opportunity to ask questions based on their answers while filling the form. Those questions illuminated things, areas they already had been telling about, but in this way I got more useful information.

#### **4.3.6 The interview ending**

According to Ryen (2002), it is important to try to have a positive end. This phase is also called “debriefing,” where, before the ending of the interview, the interviewer asks the respondent if there is more to add or if they have any questions. (Kvale & Brinkmann, 2009). It is also sensible to build opportunities for continued contact if it would be necessary later on (Ryen, 2002). Therefore I made an agreement to call them if necessary. I had to follow a schedule, but I tried not to stress the informant with that, and when I felt that I had what my research needed, and when the informants started to repeat themselves or began being more silent, I went back to the interview guide and had a quick peek to check if there was anything important that I might have forgotten to ask about. At the very end I asked them if there was anything else they would like to share or tell. Case one emphasized the struggling with school and concentration after the event.

Interviews about PTSD or psychic interviews in general are difficult, especially with children, and they may sometimes “reopen a healed wound”; therefore it was important for me to inform them about that. During the weeks following the interview, they could get more flashbacks from the event, etc., and they should talk with someone they trust about it and not keep it inside themselves, which they had already done.

I also talked with the teachers and mothers (who were informants in this case) about following up with them and letting them know that they had someone to talk to if things got difficult in the coming weeks after the interviews as a result of the interviews. I unfortunately did not have the opportunity to go back and do a second interview with them and follow up after the interview.

#### **4.4 CRIES- 13 (Children's Revised Impact of Event Scale)**

The Impact of Events Scale (IES) was originally developed by Horowitz et al. (1979) to monitor the main phenomena of re-experiencing the traumatic event and of avoidance of that event and the feelings to which it gave rise. Hence, the original 13-item, four-point scale, has two subscales of Intrusion and Avoidance (Children and War Foundation). The IES was not originally designed to be used with children, according to Children and War Foundation, but it has been successfully used in a number of studies with children aged 8 years and older. However, two separate large-scale studies (Yule's of 334 adolescent survivors of a shipping disaster, and Dyregrov's of children in Croatia) found that children misinterpret a number of items. These separate studies identified identical factor structures of the IES and these were used to select eight items that best reflected the underlying factor structure and so produced a shortened version—the IES-8 for children. (Children and War Foundation)

Also the Impact of Events Scale 8 (IES) is designed for use with children aged 8 years and above who are able to read independently. It consists of four items measuring Intrusion and four items measuring Avoidance—hence it is called the CRIES-8.

The Children and War Foundation therefore developed a new instrument. The Children and War Foundation was established to support good quality research studies into the effects of war and disasters on children. They got permission from Dr. Mardi Horowitz to make this version freely available to clinicians and researchers through their website:

[www.childrenandwar.org](http://www.childrenandwar.org).

The IES is self-completed and can therefore be administered in groups.

#### **Scoring**

There are eight items that are scored on a four-point scale:

Not at all = 0  
Rarely = 1  
Sometimes = 3  
Often = 5

There are two sub-scales:  
Intrusion = sum of items 1+3+6+7  
Avoidance = sum of items 2+4+5+8

Despite the theoretical criticisms often made against using such self-completed scales in different cultures, the IES has now been applied in a variety of cultures, including studies with children. It is now clear that post-traumatic stress symptoms in children are more similar across cultures than they are different. Indeed, Intrusion and Arousal are robust factors of the Impact of Event Scale in children from different cultures.

However, one cannot make a clinical diagnosis from scores on the self-completed scales alone. A proper clinical diagnosis relies on much more detailed information obtained from a structured interview, over a longer period of time, that assesses not only the presence and severity of stress symptoms but also the impact on the child's overall social functioning.

The Children and War Foundation has also developed a 13-item version of the IES for children, adding five items to evaluate Arousal. According to Horowitz (1979), these items do not always load on a separate factor.

## **4.5 Validity**

“Validity refers to a truth that one can grasp through words, and can be referred to a stable social reality”(Ryen, 2006: p.177). There was a social reality that I built my research work on and collected necessary data to analyze and discuss the main issues, in this case PTSD and children in war. Kvale describes validation in six stages: 1. Thematizing, 2. Designing, 3. Interviewing, 4. Transcribing, 5. Analyzing, and 6. Validity Reporting.

Validity is closely connected to the theoretical framework and the quality of the research. Validity will increase by continually checking, questioning and interpreting findings theoretically. This can be done by the researcher controlling own interpretations,

questioning the results and have a theoretical understanding of what one should investigate (Kvale 2006). It is also important to think about the validity of the selection of groups, the transcription process, and by asking critical questions at the end. Validating entails a reflected judgment as to what forms are relevant to a specific study, the application of the concrete procedures of validation, and a decision on what the appropriate community is for dialogue validity (Kvale & Brinkmann, 2009: p.254). Those six stages are important in the assessment of the research results.

With this as a background, I will in the following clarify what I have done to promote the validity of this thesis. After selection of the method of data collection have been made and we have considered whether it is beneficial due to the research question, the researcher must choose informants. To have the least variation in the children with trauma experiences I wanted to children with different economic background, age and gender. During my fieldwork I got in touch with different children, but after having been talking with them and hearing about their trauma experiences I chose the participants that are presented in chapter five. For me it was important to have the variation, to be able to elucidate the research theme as much as possible.

## **4.6 Summary**

This chapter has presented the research methodology undergone in this case study. The research strategy, research design, the reliability and validity of the research tools applied has been discussed. A case study design is applied with such research methods as qualitative depth interviews. The chapter was intended to illustrate how the data was collected and how the respondents have been connected. The methods and procedures discussed in the chapter are also important if there is a need to conduct a similar or the same study over again and for assessing the reliability and validity of data collection and the conclusion drawn from the data.

# 5 RESULTS: THREE CASE STORIES

In the three case stories (results chapter) I will present variation between how differently the informants experience the traumatic event considering their external factors and their individual and inertial understanding of the event. There are also different outcomes in symptoms. For example, Kurde is afraid of being alone and since the event she has nightmares and cannot sleep alone or allow her mother to go out. Dana has become more quiet and somehow is always on watch, but he also is overprotect of his sister, brother, and mother. Despite that there may be some common symptomatic outcomes, but in general, there are more differences than common symptoms. Dana has also been exposed to a traumatic experience earlier to the age of 6, and it makes him perhaps more vulnerable.

## 5.1 Introduction

During this chapter the results will be presented separately for each respondent in the form of a case story. The case stories are based on the interviews with the respondents and also the interviews with the background informants, which includes both teachers and the respondent's mothers. I find it important to separate the information that comes from the respondents and the information that comes from the background informants, therefore I'm specific about it during the case stories; also, it is rather evident where the information comes from.

The background informants can also be called key informants, however, I decided to use background informants as a term here because they give valuable background information about the environment that the respondents are surrounded by. I also asked them if they had seen any specific changes in the children after the trauma event, and their observations of the children strengthened the information that had been collected during the interviews with the respondents (children).

During the interviews with the respondent's mother, I got more information about how the respondent's behaviour and their relation to others and society had changed, as well as if they had observed that the respondent struggled with concentration while working on

homework. She also gave information about the respondent's changes in emotional outlook. The teachers gave more specific information about the respondents at school and in the classroom. They also shared some important information, like for instance, the headmaster at Bayan's school (case one) shared that nearly 70% of all the pupils had to do over a year after the explosion at their school, and several teachers struggled with coming back to work and quit; some still have difficulties during school. She also told me that they have not received any clinical support. Further, the teachers told how the pupils have changed after having experienced a trauma event and that they often get more quiet than usual; they seem to "day dream" or "their mind gets away," losing concentration and struggling with the subject, which results in bad grades. More specifics about those changes observed by the teachers and mothers will be presented in each case.

There will also be a short section about each respondent's actions after they have been exposed to a trauma. The purpose here is to point out how they react both emotionally and physically. Each case ends with a section based on a specific symptom the single respondent struggled with; for instance, Bayan (case one) struggled most with having *guilty feelings*. More about the reason she has guilty feelings will be presented at the end of the case.

There will also be a table based on the DSM-IV that shows which symptoms the respondents have according to the seven criteria in the DSM-IV. It is relevant to point out to which degree the respondents are affected. The results from the CRIES-13 will also be presented in a single section.

## **5.2 Case story one: Bayan struggles with concentration**

"Bayan" is a 17-year-old girl in the ninth grade. She lives with her mother and five brothers. They come from a poor but hardworking family. She does not have any hobbies; she focuses a lot on school. She has only girl friends and loves to talk with them, mostly about school, and they meet only at school. She goes right home after school because her family may get quite worried otherwise! She loves the subject about society because her teacher makes it more interesting by being open and creative and including them in discussions. Bayan explains that the time she spends with her friends at school is the best time of the day.



About two years ago Bayan get hurt in a bomb explosion at her school. At the time it all happened, she and her classmates were at the classroom and were learning about society. They were finished, and they and their teacher were on their way out the door when it exploded. Everyone ran and tried to hide themselves under the tables as everything, including the windows, fell down on them. Bayan had a head injury.

Bayan feels that the event has affected her a lot and that she is not like before: “My brain does not take things!” She loses her concentration but mostly when she is trying to do homework or working at school. She also says that she always has a strange feeling deep down inside, like she is afraid all the time. She can get worse sometimes. She gets pictures from the explosion more than twice in a week, and whenever she hears about an explosion or hears some loud voice she gets reminded of it and gets afraid. She has sleeping problems. Many times she awakens in the middle of the night or has nightmares about the explosion. She also says that she was much worse before, right after the event. She also says that she finds it difficult to be at school because she gets reminded of that day. Bayan and her friends do not talk much about the event; they avoid talking about it. She gets sad sometimes but is mostly afraid. She tries a lot not to think about it, but she cannot do anything about it, and sometimes she get really angry when she gets those thoughts about the event. Bayan struggles a lot with her concentration and says, “Mostly I have difficulties with paying attention to my homework.”

Bayan’s mother says that Bayan gets headaches and complains about losing her concentration. She says that they avoid talking about other explosions because Bayan gets sad and says, “God knows how many people lose their lives and how many end up like me.” Many times Bayan wakes up in the middle of the night and feels afraid. Bayan’s mother also says that Bayan is not able to concentrate when she does her homework and keeps saying, “Why am I like that? Why don’t I remember? Mother, what if I cannot pass the exams...why did I get in this explosion?”

Bayan’s teacher, who is also the rector, tells that not only Bayan but many of the other students also struggle a lot with school after the explosion and that all of them do not want to continue at school; when the windows closed by a strong gust of wind, they were afraid,

and about four of them fainted. Even the teachers had difficulties with continuing their job. Before the explosion about 70% of the students used to pass the exams at the end of the year, but after the explosion only 35% passed the exams; the others had to do the year over again. But those who are most affected are a couple of the students who got hurt. Bayan’s teacher says that it is more difficult because when the teachers are traumatized, some of the teachers quit after the explosions.

### 5.2.1 Reaction

There are some specific reactions one can point out in Bayan as a result of the explosion event, such as nightmares, daily intrusive flashbacks of the traumatic event, and bitterness. She is bitter because she is no longer a “good student” and is not able to do as well as she was before; she often had headaches and concentration problems. She often “falls off” in the classroom, and she is mad at herself because of that. She often startles from loud sounds and get easily frightened. She blames herself that she is not doing so well at the school and that she didn’t pass the exams.

### 5.2.2 Guilty feeling

I have already mentioned that Bayan has a lot of guilty feelings that she is no longer a “good” student, and she blames herself for not doing well at school. At the same time she also has guilty feelings for affecting her family members because of that, and they are very protective of her; she understands why, but does not like it. She was saying over and over again during the interview that the only thing she wants is for everything to get back to normal again.

**Table 2: Classifications of the experiences and symptoms case one**

	case one
PTSD symptoms	
Criterion A	
1	√
2	√
Criterion B	

1	√
2	√
3	√
4	√
5	√
Criterion C	
1	√
2	√
3	X
4	√
5	X
6	X
7	X
Criterion D	
1	√
2	√
3	√
4	√
5	√
Criterion E	√
Criterion F	√
Total	18

Note √: means the concept is present      x: means the concept has not been identified as present

### **5.3 Case story two: Dyar gets flashbacks from the trauma events**

“Dyar” is a 12-year-old boy and comes from a poor family in Kirkuk; he was born and has grown up there. He lives with his older brother, younger sister, and their mother. He lost his father in a gas explosion. They have their own little house in a decent neighborhood, which is a mix of Kurdish, Arabic, and Turkmens. Dyar has a close relationship with his little

sister. He has a lot of friends—just boys. He talked about what they are playing at school. He explained that he likes to go to school, and his favorite subject is mathematics. Besides school, he likes to write and do mathematics tasks. When I ask him about his dreams, he answers and says: “I have a lot of dreams, many different dreams, but I love to spend time with friends and play.” He gets quite still when we start to talk about the explosions in Kirkuk and about the war. He explains that he has a lot of bad experiences with the unstable situation in Kirkuk, and he explains that there are a lot of explosions in Kirkuk and that he doesn’t know what to say; he then gets quiet again. He repeats over again that he doesn’t know what to say. Then he starts to talk about an explosion after I asked him if he had any specific examples. The explosion was in his aunt’s home (2006), and he gets sad, his eyes fill with tears, and he tries not to cry. Afterwards I start to talk with him about the loss of his father, and he get very sad and starts crying a lot. He says that he misses him a lot and that he thinks a lot about him and gets reminded about him almost all the time. He explains that he get reminded of his father at school too.

We begin to talk about the explosion at his aunt’s house, and he gets very sad and starts to cry a lot; he is sad because they lost their home. He explains that he got very sad and was terrified when that happened. Further, he explains that sometime he feels like it is happening over again and gets as afraid as the day he heard about the explosion. He sometimes gets reminded about it even though he doesn’t want to; he tries to stay away from the places that remind him about the explosion, especially his aunt’s house: “I try a lot to not go there...” He says that most of the time he gets afraid even though he doesn’t want to, that he sometimes gets pictures about the accident (gas explosion), during school also. To avoid thinking about that he stays away from others and tries to avoid them. He also tells that he doesn’t talk about it with anyone even though he gets afraid a lot, but he gets most afraid when he is alone.

Dyar has traumatic experiences from two different events. The first one is from when he was about 6 years old; his father got killed in a gas explosion at their home. At the time Dyar and his mother were not home. They came home and saw Dyar’s father’s body parts everywhere. Dyar remembers this event quite well, and both he and his mother explain that he is quite affected by it. His mother tells a story that goes back to the middle of December

2009, when she was washing clothing in their bathroom. When their heat oven began to burn, and she tried to extinguish the fire, Dyar held her and shouted loudly and repeatedly: “Mama, do not go in there please, do not go in there please. The same will happen to you like Daddy.” Dyar’s mother also explained that she has observed that Dyar had trouble concentrating sometimes when he does homework: “His mind is somehow not there,” she tells me.

Dyar’s second traumatic experience is from the bomb explosion at his aunt’s house. He did not directly witness the incident, but he has been affected by it a lot. No one lost their life in this explosion, but still he says that he got very scared when he heard about it, and he gets reminded of it every time he hears about an explosion. He avoids going there most of the time because he get very afraid: “I don’t want to be like that, but I can’t do anything about it.”

### **5.3.1 Reaction**

The most visible reactions one can point out in Dyar as a result of the traumatic experience may be that he is more “quiet” and likes to be alone; he “forgets” himself often—both his mother and his teacher talked about this. He also tries often to avoid going to the places that remind him of the explosions.

### **5.3.2 Over protective**

Dyar has also developed a way to be to over protective of his sister, brother, and his mother. She told about a situation, which happened about four days before I interviewed him, where the warm cable started to burn a bit in the bathroom and there was a lot of smoke. His mother tried to get inside to take control of the situation, but Dyar held her hand and started to scream and beg her to not go inside. According to his mother, he kept saying, “Pleas, Mom, please, don't go inside, it will happen the same to you as it happened to Dad. I don't want to lose you.

**Table 3: Classifications of the experiences and symptoms case two**

	case two
PTSD symptoms	
Criterion A	
1	√
2	√
Criterion B	
1	√
2	X
3	√
4	√
5	√
Criterion C	
1	√
2	√
3	X
4	X
5	X
6	X
7	X
Criterion D	
1	√
2	√
3	√
4	√
5	√
Criterion E	√
Criterion F	√
Total	15

Note √: means the concept is present    x: means the concept has not been identified as present

## 5.4 Case story three: Kurde is afraid to sleep alone

“Kurde” is a ten-year-old girl and comes from an affluent working class family. Her family consists of her parents and her three sisters and a brother. She goes to the fifth grade. She

lost her uncle and his family in a bomb explosion. Her uncle and his family were living in another city in Northern Iraq, and they were on their way to visit Kurde's family. On their way, they went to a restaurant and lost their lives in a bomb explosion. The only ones who survived was Kurde's cousin, who is the same age as Kurde, and her aunt.

She tells that most of the time when she goes to sleep, she starts to think about her uncle and his family. She tells that she thinks a lot about them and that she sometimes talks about the explosion to her friends and that she says, "I lost my uncle and his family in an explosion..." She also says that she mostly thinks about the event when she is outside and she gets afraid and cries to God to protect her and her family and that this will not happen again. She says that for the most part she does not think about the event when she plays with her friends, but she gets reminded a lot of that when she is home or when she visiting at her uncle's home. She chooses to not talk about it with her family at home because her mother told her not to do it and to not disturb her sisters when they are studying. Because of that, she tries not to get sad or cry.

Kurde also had to do a year at school over again, and she and her sisters had to take a break from the school the year that happened. She also explains that she often loses her concentration when she does her homework even though she does not want to. She also gets reminded and afraid when she hears about explosions or hears a "big" voice. She also gets angry and frustrated sometimes when she thinks about it; it happens mostly when she is trying to sleep or when she gets nightmares about it. Kurde feels she is on duty and attentive most of the time. She gets nightmare about it, and "if I woke up because of that, I try to get myself to think about school or nice things and sometimes when I get very sad my mother will stay awake with me." She tries not to cry "because I'm afraid that my sisters will wake up because of me...and they have to go to school."

Kurde's mother also tells that Kurde struggles a lot with concentration and that her ratings decreased at school. Kurde's mother says that Kurde does not want to sleep alone and that she sleeps with her since the traumatic event. She tries to be near her and kisses and hugs her more then she used to do before. Kurde's mother invited her children to go out for

dinner, but none of them wanted to go along; they try to avoid restaurants and are afraid that it will happen to them also.

Kurde's teacher describes Kurde as a pretty quiet girl and that she is more quiet than normal. She mostly sits alone and writes. Her mind is often in other places, and she doesn't concentrate well; however, she is much better now that she was about six month ago. "During the class many times she gets her mind away when I ask her a question or when I give them homework..." Compared to the other students, she is more quiet and loses her concentration.

#### **5.4.1 Reaction**

Before the event, Kurde was a more open and active girl, both at school and at home according to her mother and her teacher. But she changed a lot after the explosion. She has nightmares almost every night, and she sleeps in her parents' bedroom frequently. The nights she sleeps in her own room, she mostly wakes up from nightmares and wakes her parents up "because she is afraid," according to her mother. She also gets very sad thinking about the explosion and the fact that she lost her uncle. This seems to be a topic that the family will not talk about either.

#### **5.4.2 Insecurity**

Since the explosion event, Kurde has become more and more insecure. She is afraid mostly. Both she and her brother and sisters deny going out besides school. Her mother tells about an episode during the interview and says, "It was in celebration (Muslim holy-day), and I invited them all out to eat at a restaurant, but all of the declined to go and persuaded me to stay home." She continues to tell of situations like that, when she has asked them to go out, to the park, or shopping, but Kurde and her brother and sisters have all declined to go along and let her go. She says, "We stay home for the most part."

### **Table 4: Classifications of the experiences and symptoms case three**



	Case three
PTSD symptoms	
Criterion A	
1	√
2	√
Criterion B	
1	√
2	√
3	√
4	√
5	√
Criterion C	
1	√
2	√
3	X
4	√
5	√
6	X
7	X
Criterion D	
1	√
2	X
3	√
4	√
5	√
Criterion E	√
Criterion F	√
Total	17

Note √: means the concept is present    x: means the concept has not been identified as present

## 5.5 The results from the CRIES-13

Two of the informants reported post-traumatic stress reactions of clinical significance according to CRIES-13.

*Trauma-related symptoms* were measured by means of the Children's Revised Impact of Event Scale (CRIES-13) (Weiss & Marmar, 1997). This scale consists of 13 items divided into three subscales: intrusion (three items), avoidance (four items), and arousal (five items). All items were scored on a four-point scale: not at all = 0, rarely = 1, sometimes = 3, and often = 4.

A subscale consists of intrusion and avoidance (CRIES-8). This subscale (CRIES-8) is recommended for screening purposes (Perrin et al., 2005). A total score of 17 or above implies a high probability for diagnosis of PTSD. Two of the three pupils have a high probability of a diagnosis of PTSD.

## **5.6 Summary**

During this chapter I have presented three case stories, which this thesis is based on. The stories are based on the results from the qualitative depth interviews that I conducted in Kirkuk during my fieldwork in December 2009-January 2010. It is obvious that the traumatic experiences have affected the children in different ways, therefore I have focused on having a short overview of their reactions after the trauma, and specifically how the traumatic events have affected their personality and life.

Three key concepts have been used here to point out those changes and effects: *guilty feeling*, *over protective*, and *insecurity*. Even if those concepts are each linked each to a specific case, we cannot assume that we wouldn't find the same challenge in the others too. It is distributed in this way to provide a general but specific explanation of the case stories. I have also presented three tables, one for each case. The table based on the DSM-IV shows which symptoms the respondents have according to the seven criteria in the DSM-IV. And according to the tables, Bayan (case one) with 18 points is the one who is the most exposed to the trauma symptoms; Kurde (case 3) is next with 17 points; and Dyar (case two) scores 15 points.

This chapter ends with a conclusion based on Children's Revised Impact of Event Scale (CRIES-13), and due to that, two of the three pupils (presented in the case stories) have a high probability of a diagnosis of PTSD.

# 6 ANALYSIS AND DISCUSSION

## 6.1 Introduction

The previous chapters reflect many aspects of PTSD in light of learning at school. This chapter will provide a comparative analysis and discussion based on the results in Chapter 5 in order to answer the research questions of this study, while relating the findings to the reviewed theories in Chapter 3. These major issues are reviewed as follows: traumatic experience and individuals, understanding trauma, and traumatic experience and its impact on academic learning.

However, the choices one makes during research are dependent on the validity of the data. Because in analyses of qualitative interviews the researcher tries to find inner correlations in the data, during the analysis process one develops a deeper understanding of the topic that is central for the study.

The starting point is the informant's own understanding as it appears through their own experiences, using different and relevant theories to discuss the findings. Also, it is important to be clear on this point to not mix one's own thoughts or understandings with the informants'. According to Dalen (2004), a prerequisite for future analyses is that they are valid and rich and that there are full descriptions from the informants. Theoretical validity is another important factor here. It is about in which degree the researcher uses keywords, patterns, and models and gives a theoretical understanding of the phenomena that the study includes. That's important due to the validity of the research and also to future work.

With this as a brief introduction, I will start with relating the comparative analysis and discussion with the research questions of this thesis. From there I will go deeper into the results and continue the analysis of findings by using theories that have been presented in Chapter three.

During the analysis I will present my research findings based on the data from the primary sources—that is, the interviews I conducted with the children in Kirkuk. Questions I posed to the interviewees have been woven around the major themes in the research topic. The

major themes included exposure; the various symptoms (re-experiencing, hyper-arousal and avoidance); and the culturally relative symptoms.

I will therefore categorize the data into groups, patterns, and sub-themes reflecting the major themes in the research topic for the purpose of analysis.

### **Relating Comparative Analysis and Discussion to Research Questions**

In this section, the main research questions and the three objectives set out for this study will be answered by using the findings presented in Chapter 5 and the theories on PTSD and learning reviewed in Chapter 3 will also be related. Each of the research objectives, including the relevant major issues stated above, will be discussed in the following sections.

## **6.2 Data analysis**

### **6.2.1 Exposure to traumatic events**

These are the various experiences of the participants in the conflict and the traumatic experiences the participants were exposed to and their responses to the various experiences. After experiencing such traumatic events, the participants experienced various symptoms of the Posttraumatic Stress Disorder (PTSD) that individuals suffer when they experience traumatic events. These were re-experiencing, avoidance, and hyper-arousal.

It was clear that the children were exposed to dangerous and life-threatening events. The various traumatic experiences of the participants included exposed to a bomb explosion, injured at school as a result of a bomb explosion, and losing relatives and family members in a bomb explosion.

### **6.2.2 Symptoms**

When people are exposed to traumatic experiences, there are major symptoms that are identified in the victims. The characteristic symptoms include persistent re-experiencing of the traumatic event (criterion B), persistent avoidance of stimuli associated with the trauma (Criterion C), and persistent symptoms of increased arousal (criterion D). Also, the victim must experience these symptoms for more than one month (Criterion E). Through the

interviews with the children, who were exposed to the various traumatic experiences, it has been observed that they have diverse symptoms of PTSD.

### **6.2.3 Re-experiencing**

In this section, I will present the informants' explanations about their responses to their traumatic experiences. After exposure to a traumatic experience, the victims show symptoms of flashbacks of the experience, in their minds and also in their dreams. How then does that experience of the children in Kirkuk affect the children's learning at school? Their responses also included fear.

On the thoughts or memories about their traumatic experiences, interviewees experienced flashbacks, among others. These also manifested in their sleep. This was captured by one interviewee ("Bayan," who has been presented in case one, was injured in a bomb explosion at her school):

... but I had many nightmares right after the explosion, but not so much now.

...we are still at the same school, and we all get afraid; it is sad and hard, for all of us because one gets reminded of the explosion. It has affected all the students in a way, more or less. But it has affected me very much, maybe more than the others.

Another interviewee (case two) captured her responses to the exposures thus:

...I get pictures from it, like flash backs.

...I get flashbacks about my father's death too.

Dyar explains that sometimes he feels like it is happening over again and gets as afraid as the day he heard about the explosion.

Further, I ask if he gets those flash backs during school time?

Yes, sometimes, not always, but sometimes.

Also, Kurde (case three) recounted the flashbacks thus:

...When we are going out, I get reminded about the explosion and ask God to not let this happen to us again.

...sometimes I think about my uncle and then go sleep.

### **6.2.4 Avoidance**

Another symptom associated with the response to trauma is avoidance. People exposed to trauma try as much as possible to avoid thoughts, feelings, and conversations about the traumatic events and to avoid activities, situations, or people who arouse recollections of the trauma.

There were various ways that the children tried to avoid being reminded of the traumatic events. This is expressed in the interviews below:

... mostly we don't want to talk about it. We try to not talk about it.

(case one)

Kurde (case three) says below, when I ask in which situations she gets reminded about the explosion:

...when I try to sleep I start thinking about it.

Further, I ask her what she does in those situations:

... I talk to myself, and tell myself things about school sometimes.

Dyar (case two) avoids talking about the explosions and says: "They know about it, but I don't talk about it," when I ask him if he talks about the explosions with his friends. Dyar also struggles with being at his aunt's house, and he says that he avoids going there most of the time.

Losing interest in some positive activities, like sports and games and usual activities are one of the avoidance strategies associated with the exposure to trauma.

Some of the participants expressed these symptoms, as recounted in Kurde (case three):

Kurde's mother invited her children to go out for dinner, but none of them wanted to go along. They try to avoid restaurants and are afraid that it will happen to them also.

What I experienced in Kirkuk is that after school and also after about 5 p.m. all the streets become empty; the city gets so quiet that it's scary.

I ask Bayan what she is doing besides school, and she responds:

There is nothing to do!

### **6.2.5 Hyper-arousal**

One of the symptoms after experiencing a traumatic event is hyper-arousal. This means that the victims experience some arousal or symptoms of anxiety that were not present before the exposure to the traumatic events. This manifests in the victim having difficulty falling asleep. The victim may have difficulty with either falling asleep or staying asleep. Some victims also maintain hyper vigilance and a startle response.

All the three respondents reported some of the signs that show their response. A nightmare recount of the victims also confirmed their hyper-arousal symptoms.

Bayan (case one) rendered her experiences thus:

...it is a fear felt deep within me, all the time.

She tells that she gets reminded about the explosion most when she hears about new explosions and that it makes it quite difficult because there are new explosions daily in Kirkuk.

Further, I ask her if there are times that she gets afraid just from hearing a loud sound, even though it is not an explosion.

...yes, I get very afraid and my body starts shaking.

On how the experience affected her concentration, she answered:

...I feel it has affected my very much, and I feel like my brain doesn't take in information sometimes, like it does not work.

She also did not feel relaxed. She rendered her feeling thus:

...I feel like I cannot pay attention to the subjects during school time or when I'm doing homework. I feel like my brain is busy all the time, like something is disturbing, and I'm thinking and thinking, but I don't know what I'm thinking of.

Bayan is the only one who also addressed the physical response:

...I get very afraid, and my body starts shaking.

Her mother also told me that Bayan suffered a lot of headaches after the explosion and she still does some, although fewer than before.

There are some things that caused Kurde to think about the event:

... scary things like explosions and things like that. When I try to sleep I start to thinking about it.

I asked Dyar (Case two) if he thinks about the events during school, and he answered thus:

Many times it comes in front of my eyes; I see pictures.

On whether he felt secured, he answered thus:



I get scared.

These show that the children experienced hyper-arousal, a symptom of post-traumatic stress disorder. All of them had sleeping problems, but to different degrees; Kurde is the one who struggles the most with nightmares and getting to sleep. Bayan wakes up during the night, and she struggles a lot with nightmares, especially right after the explosion. Dyar is more difficult to talk to; he gets very emotional quickly, but according to his mother, he also struggled a lot with nightmares and gets very afraid in situations that are similar to his experiences.

### **6.2.6 PTSD symptoms and learning**

So far in this section I have categorized the interviews and analyzed whether the respondents in this study exhibit PTSD symptoms based on DSM-V. The analysis shows that all the three informants do exhibit PTSD symptoms both based on the interviews and CRIES-13 form. The focus in this study is how those PTSD symptoms affect learning, linked with school education, both at school and working on homework at home.

I will continue the analysis based on PTSD and its effect on learning by using examples from the interviews.

There were various ways that the interviewees were affected by the traumatic events. This is expressed in the interviews below:

...I feel like I cannot pay attention to the subjects during school time or when I'm doing homework. I feel like my brain is busy all the time, like something disturbs me, and I'm thinking and thinking, but I don't know what I'm thinking of.

Bayan (case one)

On how the experience affected her concentration, she answered:

...I feel it has affected my very much, and I feel like my brain doesn't take information sometimes, like it does not work.

This was explained by Dyar (case two) below: On if he get flashbacks about the events during school time...

...yes, sometimes, not always, but sometimes.

I asked him if he thinks about the day his father got burned in the gas explosion during school, and he answers, “Yes,” but when I ask if he loses concentration at school because of that, he responds, “No.”

However, both Dyar’s mother and teacher have seen changes after the explosion at Dyar’s aunt’s house. They say that he is more quiet and struggles with “being present.”

“During the class, many times she gets her mind away, and when I ask her a question or when I give them homework... Compared to the other pupil she is more quiet and loses her concentration,” explains Kurde’s (case three) teacher.

### **6.3 Discussion**

The study intended to find out whether children exposed to the war and conflicts in Kirkuk experience PTSD as described in the DSM-IV and how those traumatic experiences affect their learning at school. Also, the study intended to find out if there is a noticeable correlation between learning and traumatic experience. The results of this study that have been presented in Chapter five provide a number of findings regarding children’s exposure and symptoms of PTSD.

As stated earlier, a person experiences PTSD when he or she experienced a traumatic event and responds with fear and agitated behaviour and after the experience displayed some symptoms that are classified as re-experiencing, avoidance, and arousal (APA, DSM-IV, 1994). All the children interviewed were exposed to PTSD symptoms.

As shown in the table’s presented for each case in chapter five, all the three respondents were exposed to the war-affected situation in Kirkuk, and all of them had experienced trauma events, either directly or indirectly. As a result of that, they suffered from different PTSD symptoms, such as: nightmares, flashbacks, fear, and physical response. All three participants also display arousal symptoms, which included sleep disturbances, extra-vigilance, and difficulty in concentration.

Two of the informants reported post-traumatic stress reactions of clinical significance according to CRIES-13.

### **6.3.1 How did the children experience the traumatic event?**

This question is related to two issues of traumatic experiences and individuals. As it has been mentioned and pointed out during the previous chapters, learning is dependent on the security and the environment that the individual is a part of. Safety is an important factor for learning. The reason I find Abraham Maslow's hierarchy of needs theory appropriate here is that it points out different human needs in different life stages: the largest and lowest levels of needs at the bottom, and the need for self-actualization at the top of the hierarchy of needs pyramid (theory). The four lower layers of the pyramid contain what Maslow called "deficiency needs." Safety and Security needs are after physiological needs, and it is level two on the pyramid. Safety and Security needs include: personal security, financial security, health and well-being, and a safety net against accidents/illness and their adverse impacts (Maslow, 1943).

For example, people who live in war zones are concerned about obtaining a minimum of security needed for survival. One may discuss how people who are always concerned about obtaining a minimum of security needed for survival will be able to learning and be motivated to learn.

Bandura focuses on learning as an interaction between the individual, environment, and behaviour. Happenings in the environment affect the individual, and again, it results in a specific behaviour. Forensics trauma events in the environment may affect the individual, and that will perhaps lead to PTSD; again, the PTSD will change and affect the behaviour. Bandura also suggests that human activity is a function of behaviour and person variables, as well as the environment, and that reinforcement is mediated by cognition. Schunk (2008) also focuses on the children's behaviour and the environment; he transformed it to a classroom environment. He focuses on how both the student and classroom environment affect each other.

But to be able to figure out to what degree a child struggles with traumas and why, one has to look at the child's trauma history. How the child experienced a specific traumatic event has a huge effect on how it affects the child. The child's trauma history is also important to find out whether the child/individual managed to handle the trauma and how it affected her or him. It is actually difficult to look at one specific trauma event in this case because, unfortunately, the informants for this case are children who live in a war conflict where they are exposed to trauma events often.

Another important theory is socio-ecological perspective on social development. Rudolph Moos analyzes the environment's impact on stability and changes in the individual's behaviour and attitudes. He focuses on how individuals and the environment affect each other and between various levels of the individual, such as the biological, relational, and cultural levels within social organizations. This explains why children that are exposed to the same trauma may respond to the trauma event differently.

As displayed in the figures on each case in chapter five, the violence most of them experienced included being exposed to a bomb explosion and gas explosion. They also reported their responses to such experiences that included fear, helplessness, and horror. Only one of the respondents reported a physical response. The symptoms the children described after their experiences looked a lot like the descriptions of the DSM-IV; it was relatively straightforward to classify them. The symptoms that emanated from the children's descriptions can be classified as re-experiencing, avoidance, and arousal as stated in the DSM-IV.

All the respondents displayed the re-experiencing symptom (i.e., criterion B, seen in table 2). Also shown in table 2, all of the children displayed avoidance symptoms that included efforts to avoid thoughts, feelings associated with the trauma, and efforts to avoid activities, places, or people that arouse recollections of the trauma. One of them also reported markedly diminished interest or participation in significant activities. But it is also important to remember and be aware that "traumatic experience can vary, depend to intensity, durability, frequency, opinion and other factors and therefore there are not any easy relation

between cause and consequence” (Gjestad, 2005: p. 5). Even persons who have been exposed to the same traumatic event can and will after all have quite different symptoms.

According to Gjestad, the traumatic experience can be affected by some specific factors. He explains that earlier experience with traumatic events, age, gender, cultural background, biological factors, and a subjective understanding of how much danger the person was exposed to are decisive factors for the traumatic experience. He also indicates that social support after and during the event affect the reaction’s type, intensity, and durability. Therefore it is important to take those factors into consideration.

Dyar (case two) struggled a lot with different traumatic experiences. He lost his father in a gas explosion and he later lost his uncle and his family in a bomb explosion. Those two events have resulted in his always feels unsafe and he is often afraid. He explains that sometimes he feels like it is happening over again. Dyar often tries to avoid going to the places that reminds him of the explosions. Those are both typical features that include episodes of repeated reliving of the trauma in intrusive memories (flashbacks) and avoidance of activities and situations reminiscent of the trauma, according to the definition of PTSD from ICD-10. Bayan (case one) also struggles with the same issues; she has flashbacks from the explosion about twice a week, and whenever she hears about an explosion or hears some loud noise, she is reminded of it and gets afraid. But Kurde (case three) struggles most with sleeping; she has nightmares about it. Kurde feels she is on duty and attentive most of the time. Dreams or nightmares are also another key feature of PTSD.

Bayan, her peers, and their teacher were injured in a bomb explosion at their school during class; they received various injuries on their bodies. Bayan’s injury was to the head. That is the only traumatic event that she has been exposed to directly. However, Kurde has not been directly exposed to a traumatic event, but she lost her uncle and his family in a bomb explosion. Kurde’s uncle and his family were living in another city in Northern Iraq, and they were on their way to visit Kurde’s family when they lost their lives in a bomb explosion at a restaurant. The only one who survived was Kurde’s cousin and her aunt. This has affected Kurde greatly.

What I found interesting is that all three pupils who have been presented here were exposed to a trauma that involved an explosion, which is unfortunately quite “usual” in Kirkuk, but yet they all go to school and try to live an apparently normal life, but with a more detailed impression you can see how much this uncertainty and lack of control affects them daily.

### **6.3.2 How did the children understand the traumatic event?**

Individuals’ understanding is affected by previous experience. Those experiences change us, both positively and negatively; that’s what we call learning. Learning can be defined as a relatively permanent behaviour change as a result of experiences (Haugen and Bjerke, 2006: 196). I will use the example from Haugen and Bjerke (2006) that has also been presented in the theory chapter. Most of us have an unpleasant and painful experience in connection with spray vaccine as children, and according to Haugen and Bjerke (2006), this experience will most likely result in fear or anxiety of doctors and nurses as well as for medical offices in the future. Also, all experiences do change us in a way, in knowledge, skills, and emotions. The level of the changes and how we change is also dependent on our previous experiences.

#### **Experiences ⇒ changes ⇒ learning?**

All three informants have been presented as case stories to reflect over their changes after the traumatic event they have been exposed to. As it appears in the case stories in chapter five, all of those traumatic events have affected them, but it not easy to point out how. Also, they do not understand why those experiences have changed them and that their experiences from those traumatic events have affected their understanding of themselves and the outside world; that those events have affected their learning ability and social life.

In order to illuminate it, I will use some examples from the case stories here. Bayan (case one) feels that the event has affected her a lot and that she is not like before. She has flashbacks about the explosion more than twice a week, and whenever she hears about an explosion or hears a loud noise she is reminded of it and feels afraid. Bayan struggles a lot with guilty feelings. She feels that she is no longer a “good” student, and she blames herself for not doing well at school.

Bayan has been affected in different ways, and she is aware that it has resulted in her constant fear. She mentions also that she is not alone about that; her classmates also struggle

with that after the explosion at their classroom.

Both Dyar (case one) and Kurde (case three) also struggle with feeling fear most of the time, feeling overprotective, re-expressing the event, and having nightmares and flashbacks from the events. However, it is more difficult to point out their understanding of the traumatic event, even though it emerges clear through the interviews that they have some understanding that they are more afraid now after having experienced the event or losing someone in a traumatic event.

### **6.3.3 How does the traumatic event affect their academic learning?**

The main intent of this case study is to find out how those traumatic experiences and PTSD symptoms affect the children's academic learning. It is appropriate to start with looking back at the definition about the learning concept. Learning is a relatively permanent behaviour change as a result of experiences.

Haugen (2006) explains that behavioural changes are a broader concept of learning. But those behavioural changes do not include changes that are caused by natural child growth and physically changes; rather, the changes include the small ones, like changes in attitude. Those changes can be a result of both negative and positive experiences. It is thought natural to describe traumatic experiences as negative experiences. However, there are different factors that experience has influence on: 1) relatively permanent, 2) behavioural change, and 3) experience (Haugen, 2006).

*Relatively permanent* is taken to rule out short-term behavioural changes or changes due to fatigue, being indisposed, the influence of alcohol or drugs, etc. Also, relatively permanent change means changes that will stay permanent and are not only short-term. *Behavioural change* is a broader concept of learning; also, behavioural changes do not include changes that are caused by natural child growth and physical changes, but rather the changes include the small ones, like changes in attitude.

The *experience* concept is also a broad concept in line with the concept of learning; it can also last from a few seconds to weeks, months, or perhaps years. An example of a short-term learning experience may be grammatical correction in the classroom context; on the

other hand, students learning to have a more positive attitude towards each other is a long-term process. Only when this process result in change has learning taken place, but it is not necessary that learning is visible for others or can be expressed in observable behaviour. Because what we have learned only appears when the situation is appropriate.

An important theory that I have presented during chapter 3 is Bandura's social-cognitive theory. The theory focuses on the individual's expectations of himself or herself related to a concrete task and not the individual's assessment of how good they are or not primarily. Self-reflections are a key concept in social-cognitive theory. Bandura emphasizes that individuals evaluate and change their thinking and actions through self-reflection. The belief in one's own capacity and personal competence will affect the behaviour in different ways. But when a child struggles with PTSD, he or she also struggles with self-reflection because the child does not have the necessary understanding of how the trauma events affect him or her.

As stated by Brit Oppedal, Karoline B. Seglem, and Laila Jensen (2009), post-traumatic symptoms can be disruptive to daily life. They also point out that, as a result of having problems with sleep or waking up at night and being afraid, it may be difficult to get up in the morning. This affects concentration during school and, in many cases, leads to poor school results.

Horowitz (1986) developed one of the earliest theories of stress responses. The theory focused on the fact that the traumatic experience has shaken the individual's personality. As mentioned earlier, Horowitz focused on that the traumatized individual swung between two extremes; between the need to slide away to protect themselves against being overwhelmed of the traumatic memories and the need to express and work through the experience; to protect themselves and, at the same time, to express their inner feelings connected to the trauma experiences—to find security or to feel that they are not alone and to work out those feelings. That is pretty clear in all the three informants. Kurde avoided going to her uncle's house to avoid being reminded about the trauma, but on the other hand she talks about the trauma event with her friends, and sometimes with her mother. She says the following:

...I'm telling them about my uncle's family and telling them that my uncle and one of his sons died in the explosion, and his name was...



We find also the same symptoms in Bayan, who still struggles with being at school, where she was exposed to a bomb explosion, and at the same time she talks about the event with her mom and friends. When I asked her if she and her classmates talk about the event she said:

...sometimes, but mostly we don't want to talk about it. We try to not talk about it.

Dyar mostly tries to avoid going to his aunt's house, and he says that he tries not to think about the traumatic events. Contrasted to the two other respondents, Dyar prefers to not talk about the traumatic events at all, even though he thinks about it a lot. When I asked him to tell me about the explosions in Kirkuk he said:

... I don't know what to say, my brain is stopped!

He says that he thinks about the events a lot and in different situations, including school, and that it disturbs him, but he does not lose concentration at school because of that.

Another relevant theory here is repressed-memory theory. According to Chris Brewin, the trauma memories are stored and remembered in a different way compared to the daily memories, like where one was and what one did in different situations (Raundal and Schultz, 2007. 23). This was clearly evident through the interviews.

The interview guide for this study was divided into four sections: personal information, such as age, interests, hobbies; friends and family; school; and traumatic experiences. The purpose of the interview guide can be associated with repressed-memory theory. It is easier to talk about daily things and situations than traumatic events, and therefore it was necessary and natural to start the interview with usual things and situations; at the same time it helped me to indirectly get to know the informant, and it also made it easier for the informants to talk.

The PTSD symptoms due to the traumatic memories get dissociated from the ordinary memory systems and to be able to "heal" the PTSD symptoms it is necessary to work with transferring the dissociated memories to common memories (Raundal and Schultz, 2007).

None of the children have received any help, such as clinical help or follow up. The knowledge about traumatic experience is small both in the society and also at school.

However, how the traumatic experience has been handled is different among the informants. Bayan (case one) got a lot of help talking about it, both at home and at school. Both Bayan and her mother mentioned that they used to talk about the explosion often right after the event; also, teachers at Bayan's school talked about it during class. The headmaster at Bayan's school went from class to class and also talked with the teachers about it; but yes, she also admitted that it was difficult for her because she does not have the necessary knowledge to handle a situation like that, where both teacher and pupils get injured at school, and she also pointed out that as many as 70% of the pupils had to do a class over again.

Both Bayan (case one) and Kurde (case one) had to do a class over again because their results were not good enough to pass. At the school Bayan attends, she was not the only one that had to do the class over again. Not only that, many teachers also struggled after the explosion and quit. Kurde (case three) and her sisters had to take a break from the school the year the explosion happened. They struggled with going outside and suffered from extreme fear.

However, all three respondents have noticed that the traumatic experience has influenced their learning. Kurde (case one) explains that she often loses her concentration when she does her homework even though she tries hard to focus and concentrate. Kurde's teacher has also observed that Kurde can be very quiet, and she mostly sits alone and writes while her mind is in other places. She also says that Kurde struggled a lot with concentration at the beginning (right after the explosion) but that she is much better now than she was about six months ago. Compared to the other pupils, she is more quiet and loses her concentration more often.

Dyar (case two) thinks a lot about his father and the day he got killed in the gas explosion at their home, even during school. He explains that he has a lot of bad experiences with the unstable situation in Kirkuk, and further he explains that there are a lot of explosions in Kirkuk.

It was difficult to talk about the explosion and their experience with it and how it affected them, with Kurde and Dyar perhaps because they are young and it is not easy for them to put words to their feelings.

Dyar avoided talking about the details of the trauma events and gets very upset during the whole interview; he cries, and when I asked why he cries, he responds and says:

...I don't know what to say, my brain is stopped!

I observed that he also squeezed his hands together hard with a very blank look.

Kurde (case 3) explains:

...at the beginning we all were crying because he was very kind to us, and he always made jokes and kidded with us.

She started crying during the interview. She also admitted that she gets sad and cries often when she is reminded of the event and her uncle but that her mother doesn't allow her to cry.

...She says that my sisters are studying and it will disturb them and make them sad.

It is also important to mention that I had to start right away with the questions about traumatic experience in the interview with Kurde. Also, I had to drop questions about her school, friends, and family, although I got some information about her because of the limited time and security situation. That has also been pointed out in chapter four under the "Entering the field" section.

On the other hand, it was much easier to talk about that with Bayan. Bayan explains that she loses her concentration, mostly when she is trying to do homework or at school. She also feels afraid all the time deep down. She can also get worse from time to time. She used to be a good student with good grades. Therefore it is quite difficult for her to accept that she is not that good anymore, and she blames herself even though she studies hard and works a lot on her homework; she feel that it is not good enough. She also says that she was much worse before, right after the event. She also says that it is difficult to be at school.

Newer theories focus on the paradoxical fact that persons with chronic PTSD symptoms are both afraid of the present and for what is coming in the future, while the traumas belong to the past. As it has been pointed out previously, all three respondents have experienced different traumatic events (directly or indirectly) in the past, but they struggle with those

experiences in the present. At the same time they always are afraid for what is coming in the future. It is because traumatized individuals have stored trauma memories in the way that they feel a threat in the present instead of a manageable past. There is a collapse in the interaction in the brain between the memories about the event and the evaluation one does afterwards.

Dyregrov (1998) emphasizes that PTSD has many outcomes and affects individuals in different ways. But a traumatic event often implies that the child feels helpless and vulnerable. This was also obvious in all three informants. They feel helpless because they do not know what to do to handle the PTSD symptoms and to stop having nightmares and to end the flashbacks. All three said that they do not want to cry and be sad or think about the trauma, but they don't know what to do.

The respondents also try to avoid places, people, and sounds that remind them of the trauma. This is also a central strategy to the theories of PTSD. The avoidance strategy focuses on that the individual either dares or wills to approach the trauma memories, and that prevents the improvement process and leads to the maintenance of the trauma.

Olsen, Sand and Sørbye (2002) explain that not every child who has experienced trauma events necessarily develops long-term post-traumatic problems and that it depends on the living conditions, internal resources, and the environment in general. According to the teachers and mothers (who also were interviewed) all three children struggled more right after the trauma event, but they are "doing better" now. On the other hand, all three got very upset during the interview and started crying when I started asking about the trauma events they had been exposed to. If we look at their living conditions, all of them live under constant fear and insecurity, both at home and at school, and are surrounded by an environment (that includes family, friends, teachers, and classmates) that also is exposed to suffering from traumatic events daily.

Olsen, Sand and Sørbye (2002) are concerned about how traumatic experiences affect the pupils' learning at school. According to them, the traumatic experiences can disrupt student's way of living.

Post-traumatic symptoms, such as flashbacks, sounds, and thoughts of traumatic experiences can disrupt a student's concentration in school and disturb the learning process. Those symptoms often come during class and while doing homework, when the student sits at rest and when it is quiet in the environment.

PTSD research has also highlighted the importance of the school's perception of traumatic events concerning how school adjustment and performance is related to the school's handling of traumatic experiences. Unfortunately, none of the children got any help after the trauma because there is lack of knowledge on the topic at the schools and they do not have the skills and information needed about PTSD in Kirkuk.

The research done by Broberg, Dyregrov and Lilled (2005) focused on the link between learning and success or failure at school with post-traumatic stress disorders. Their study is the first study that has documented school dropout as well as lower grades (that has been albeit through self-reports) as a result of traumatic experiences.

There has been a research study about the topic in Sweden by Broberg, Dyregrov and Lilled (2005). The case event for their research was a fire event, and according to the police investigation, there were 397 victims of the fire, 63 of whom died. The research started in March 2000; at the time the survivors of the fire were contacted, 263 of them participated in the research study.

There are similarities between their research results and the result of this study due to the fact that the children received low grades. Both Bayan (case one) and Kurde (case two) had to take the same class again because they could not fulfill its requirements after they suffered from the trauma outcomes. They also point out that there have been dropouts as a result of the traumatic experiences, which is not evident in any of those cases that I have presented.

They also found "many primary victims, who suffered from flashbacks, nightmares, hyper-vigilance, etc. Problems were especially often reported for subjects demanding high concentration (e.g., mathematics, physics and grammar)" Olsen, Sand and Sørbye (2002).

I have not focused on any specific subjects during the interviews, but I asked about their favourite subject and the reason for it. However, all three pupils struggled with concentration both during school and while working on homework at home. One of the things that all three respondents pointed out was that they all get very affected by loud sounds and hearing about explosions on the news and around their society, which they unfortunately hear quite often. Raundal and Schultz (2007) say that children with PTSD symptoms suffer from reduced concentration because their overworked inner thoughts take all their energy, and therefore there is less energy available to concentrate on the school's work and requirements. I want to use Bayan as an example here.

...I feel it has affected me very much, and I feel like my brain doesn't take information sometimes, like it does not work.

Crises can be categorized into three criteria: *direct exposed*, *indirect exposed*, and *associated conditions* Raundal and Schultz (2007). By *direct exposed* criteria, the children perceive themselves as a part of the war; it includes children with experience from war or conflicted areas or children who have family members and relatives in war areas. Both Bayan (case one) and Dyar (case two) have been *direct exposed*, while Kurde has been *indirect exposed*, which means children have experienced war or escape, or perhaps have themselves been participating in war; in the *associated relationship*, the child has association to the war through friends who have family member in a war areas, but the experience can vary. But all of them can also be categorized under *associated relationship* because they are exposed daily to war by hearing about it at school, new bomb explosions in Kirkuk, on the news, and other relatives and family members who get exposed to a trauma event. It also makes it harder to work through the trauma experience given that they are exposed daily. They even are afraid to go outside because of explosions.

A study by Christian Children's Fund (UNICEF, 1996) that included 200 Angolan children, who were interviewed and reported post-traumatic experience. I find it interesting to divide the children's trauma experiences into groups. It makes it easier to: 1. find similarities between the children's trauma history, 2. compare how they have been differently affected even though they are categorized in the same groups as below.

**Table 5: Classifications of which trauma event(s) the children were exposed to**

Respondents	<i>Children who witnessed war</i>	<i>Children who saw war</i>	<i>Children who lost relatives to war</i>
Bayan	√	√	X
Dyar	√	√	√
Kurde	√	√	√

Note √: means the concept is present      x: means the concept has not been identified as present

Also, how a traumatic event is experienced depends on the individual's understanding of the trauma. The event can be experienced quite negatively because of physical and emotional pain or because of injury or pain, emotional pain, or death. All three respondents for this study experienced the events as emotional pain. But we can also again categorize them as following:

**Table 5: Classifications of how the children experienced the trauma event(s)**

	Physical pain	Emotional pain	Injury	Death (relatives/ family members)
Bayan	√	√	√	X
Dyar	X	√	X	√
Kurde	X	√	X	√

Note √: means the concept is present      x: means the concept has not been identified as present

Unlike in the criteria A in DSM-diagnoses, events that indicate emotional pain or threat can be traumatizing. Also, a person's psychical integrity or experience of oneself is relevant for traumatic stress; for instance, Kurde in case 3 has not been *directly exposed* to a traumatic event, but she lost her uncle and his family suddenly. Suddenness is also one of the three individual variations of what involves psychic pain. Events that involve sudden danger or threat of danger will usually be more traumatizing than events that involve dangers that gradually develop.

Experiencing a death or disease after a long time of nursing will usually be a different experience than when someone dies suddenly. This is found in all three cases that have been presented. All of them were exposed to an unexpected trauma event, and this, linked with

the situation in Kirkuk, made it worse because there is always a chance that an explosion will happen wherever individuals are located. Also, the second need of Maslow's hierarchy of needs theory is missing. These needs have to do with people's yearning for a predictable, orderly world in which injustice and inconsistency are under control and the familiar is frequent and the unfamiliar rare. In general, this includes: personal security, financial security, health and well-being, and a safety net against accidents/illness and their adverse impacts (Maslow, 1943). For example, people who live in war zones are concerned about obtaining a minimum of security needed for survival and only after physiological and safety needs are fulfilled. The third layer of human needs is social report, that involves emotionally based relationships in general, such as family relations and social life.

Control is the last but not least important condition defining trauma events according to Gjestad (2005). Individuals always try to protect themselves, and this protection is also the main component in humans surviving. We are trying to protect ourselves from dangers by controlling our environment and therefore controlling is quite important in understanding and studying traumas. *"I don't know what to do, I don't know what to say, there are many explosions in Kirkuk daily."* All three respondents said similar sentences, which can be interpreted as a sign of feeling powerlessness or helplessness; according to Gjestad (2005), feeling in control is important because training and mental readiness creates less grounds for traumatizing than if the feeling of powerlessness or helplessness takes the controlling place. Also, all three informants feel control, but again here also the psychological meaning in the individuals will have an important role. For example, physical pain that is voluntary in many circumstances will be less traumatizing than if the pain was not voluntary. But here also one has to take into account individual differences.

The discussion will now focus more on PTSD linked to the motivation and learning concepts.

#### **6.4 PTSD and academic learning**

In this section, I will focus on different learning theories that have been presented during the theory chapter. The purpose here is to discuss how traumatic experience affect academic learning in general, and specifically at school or related to schoolwork.



“Learning can be defined as a relatively permanent behaviour change as a result of experiences” (Haugen and Bjerke, 2006: 196). It is clear that every experience, both daily and long-term, affects how individuals change and develop, which also results in learning. “The basic motivational question is to explain which behaviour or action an individual performs at each moment in time: the *initiation* and *persistence* of an intentional, *goal directed activity*” (Lens and Vansteenkiste, 2006).

In an educational context, one may focus on what motivates the pupil to learn and what prevents motivation for learning. Children and adults who are exposed to a traumatic event will be affected, but the degree depends on the individual’s background and, of course, self-perception that will be discussed further.

The discussion continues based on cognitive theory and socio-ecological perspective. The cognitive theories are concerned about how the behaviour is affected by our thinking. Also, how we think about situations, plans and our goals, or expectations and our understanding of reasons for our success or failure affects how and what we do. It is appropriate here to add the self-reflection term. Bandura focuses on the individual’s self-reflection and says that individuals evaluate and change their thinking and actions through self-reflection. Self-reflection also includes understanding “self- efficacy,” which is a key concept in Bandura’s social-cognitive theory.

How the child understands himself will have a strong effect on their developing and thoughts for the future. The child may reflect on his or her effort on homework and schoolwork. In a “normal” life situation the pupil will be able to see the results in light of the effort he put into the subject, but this is different in pupils with PTSD symptoms.

For instance, Bayan (case one) used to be a good pupil who did her homework and got good grades, and her family was proud of her, but after she was injured in a bomb explosion, she changed and she was not as good as she used to be. Also, she can be described as an internally-motivated pupil with large self-regulated learning skills, and she has not changed; what has changed is that she gets distracted by the trauma experience and the symptoms of PTSD. She gets frustrated and doesn’t understand why she cannot understand the subject even though she reads and works harder than before. There are times when she gets mad. She is also aware that the explosion has affected her, but she is not that

aware that she reflects how the explosion affected her and that it may have to do something with her poor concentration. This is why she only continues to criticize herself and blame herself for not being good at school anymore.

According to Chris Browin Trauma Memory, the trauma events that result in PTSD symptoms will end in chronic PTSD symptoms if the individual who was exposed to a trauma event doesn't get help with transforming the dissociate memories to common memories. As it has been pointed out before, none of the pupils received any clinical help to work with the PTSD symptoms. The conclusion here is that PTSD symptoms will lead to chronic PTSD symptoms. Also, there are chronic PTSD symptoms found in all three respondents, such as nightmares, flashbacks, avoiding going to places that remind them of the trauma event(s); they struggle with those symptoms even over two years after the trauma.

Chronic PTSD symptoms here lead to lower or no future time perspective because the pupils are afraid of trauma experiences that have happened in the past in the present. At the same time, they are afraid to have goals and plans; that will also result in lower motivation for learning.

I will refer to Maslow's Hierarchy of Needs Theory, where he clearly says that only when the security needs which comes after the physical needs are satisfied will the individual be able to go over to other needs, such as social needs, self-esteem, and self-actualization.

If we discuss the phenomena by leaning on Maslow's Hierarchy of Needs Theory, we can perhaps conclude that pupils who do not have a secure life will not be able to achieve a high self-esteem and self-actualization, which includes future plans and dreams. Only when the pupil is motivated to make future plans and have goals will they be able to use self-regulated learning. That fits quite well in this case, where the pupils not only have been exposed to trauma event(s) but also daily live an unsecure life, where they are threatened with explosions almost every day.

Olsen, Sand and Sørbye (2002) say that trauma experience acts into the pupil's way of living. PTSD symptoms, such as flashbacks, sound, and thoughts (that also has been noted in the respondents during the interviews) can disrupt a pupil's concentration in school and disrupt the learning process. Those symptoms come often during the class and during working with homework, especially when it is quiet in the environment. Examples here can be while working with homework at home or during school tests, where the pupils need to be quiet and concentrate. Struggling with concentration due to their overworked inner thoughts takes all the energy to concentrate on the schoolwork and requirements (Raundal and Schultz, 2007). All three respondents said that they get flashbacks and think about the trauma during homework and classes and that they get both afraid and sad.

## **6.5 Summary**

The main findings in this thesis are based on theory in chapter 3 and the case studies in chapter 5 that are presented in this chapter. Trauma events that result in PTSD symptoms will lead to chronic PTSD symptoms if the individual who was exposed to a trauma event does not get help with transforming the dissociate memories to common memories. Also, there are chronic PTSD symptoms found in all three respondents, such as nightmares, flashbacks, and avoiding going to places that remind them of the trauma event(s); they struggle with these symptoms even over two years after the trauma.

Those experiences affect learning in general as well as academic learning, which has been the core of this thesis. How a traumatic event affects children and their learning also depends on their life situation and environment. Learning can be defined as a relatively permanent behaviour change as a result of experiences, and based on this, we can say that trauma events change the individuals and their thinking, which also, again, affects the learning process.

Children who suffer from trauma events struggle with nightmares, which prevents them from getting deep sleep, and this leads to a struggle with concentration during the day, especially during class. Studies have shown that individuals who suffered from flashbacks, nightmares, hyper-vigilance, etc., often performed poorly in subjects demanding high

concentration (e.g., mathematics, physics, and grammar). It is necessary to receive clinic help and therapy to handle the trauma events and to make sure that those trauma events don't impact the future.

## 7 SUMMARY AND CONCLUSION

According to different learning's theories, all experiences may lead to changes in behaviour that also change the learning process. Learning is also a relatively permanent behaviour change as a result of experiences. Motivation is necessary and is a driving force behind learning. Academic learning is highly affected by the motivation degree. On the other hand, motivation is affected by many other factors, such as the environment, interests, the situation, and the individual himself. But what does it mean for children who have been exposed to trauma events?

Studies in Western cultures proved that children exposed to war or other traumatic events that have been life threatening develop posttraumatic stress disorder. The present study found that the children exposed to explosions and traumatic events in Kirkuk displayed symptoms that were similar to those in the DSM-IV based on Western subjects.

Trauma events may lead to PTSD symptoms, and if they have not been worked with, may lead to chronic PTSD symptoms. Horowitz's (1986) theory of stress responses was one of the earliest theories. The theory focused on the fact that the traumatic experience shook the individual's personality and that the traumatized individual swung between two extremes; between the need of slide away to protect themselves against being overwhelmed of the traumatic memories, and the need to get the opportunity to express and work through the experience.

Both needs mentioned above were founded in respondents for this study. On one hand the children avoided the places and situations that reminded them about the trauma event, and on the other hand all the three respondents expressed that they wanted to talk about the trauma event and that they do talk about the it rare with family members and friends.

Researches emphasize the fact that trauma events should be worked with to provide relief for chronic PTSD. Those symptoms affect the individual in different areas: flashbacks, thoughts, and avoiding places and people who remind the children of the trauma event, which interferes with concentration while doing homework and during classes. The children who have been presented in this thesis as respondents, struggle with not having security, which leads to a lack of a feeling of having control of their life.

However it is important to remember that individuals are affected differently even though they have been exposed to similar trauma events. Those differences are due to the individual's social and cultural background. There are many researches and theories that claim that trauma experiences may disturb learning, as well as long-term learning, but only if the trauma experience leads to chronic PTSD symptoms.

What I found interesting was to look at the phenomena based on Maslow's Hierarchy of Needs Theory. Also, the question here is: If individuals who doesn't have security and safety in life, are they still able to achieve self-esteem and self-actualization, which affects motivation for learning and having a future time perspective in a large degree? Both self-esteem and self-actualization will affect the individual's ability to learn, to have goals, and to make plans to achieve those goals.

When individuals are exposed to trauma events, and at the same time live in a situation that reminds them of the trauma experience daily (for instance, warzones), they will be more aware of survival. At the same time, they struggle with those trauma experiences to a large degree that they may not be able to strive to achieve self-esteem and self-actualization.

The study was guided by the different theories divided in three areas, namely: learning, motivation, and PTSD. Experiences result in changes and then learning takes place, but not all changes can be categorized as positive changes. Mostly, trauma events lead to changes that limit the individual on the basis of that it leads to stress disorders. The individuals that suffer from stress disorders may also have difficulty in learning situations because they are disturbed by the trauma event, such as flashbacks and nightmares.

This study has expanded the PTSD research to a war-related and high-intensity conflict in Kirkuk. The study experienced some limitations. The time limit was a factor, as well as the security limitations.

The study was undertaken based on qualitative in-depth interviews with a small group. The fieldwork was conducted in December 2009 and January 2010. Data were collected using interviews and CRIES-13 scale. This involved three respondents and seven background informants. Examples from the interviews has been used to discuss how the trauma event(s) affect the children's academic learning.

Three case results have been presented based on the data, and the interviews with the respondents have been categorized into four categories: re-experiencing, avoidance, hyper-arousal, and PTSD-symptoms and learning.

Even though the research area was Kirkuk in Northern Iraq, this study is also relevant to other children and pupils with traumatic experiences from war-torn areas, such as pupils with refugee backgrounds in Norway. The study also indicated how important it is to get help handling trauma events to avoid chronic PTSD symptoms that may lead to learning difficulties later.

Marit Netland who did a research based on Bosnian refugee children in Norway (1997), believes that all refugee children who come to Norway need help to deal with their experiences, which she claims they are entitled to under the Barnekonvensjonen. Netland also means that nightmares and flashbacks are the main disturbance among children with trauma experiences.

Likely Brit Oppedal, Karoline B. Seglem, and Laila Jensen have conducted a survey of young refugees in Norway and say the following about traumatic experience and its effect: "Post traumatic symptoms can be disruptive in daily life. More young people we spoke with in connection with the study were told that they have problems with sleep or they wake up at night and are afraid. It is therefore not surprising that many people also have problems with concentrating at school, and that it may be difficult to get up in the morning" (Oppedal, Seglem and Jensen, 2009).

There has been a research study about the topic in Sweden also, by Broberg, Dyregrov and Lilled (2005). They also came from to that trauma events affect the quality of sleeping and that results inn concentration difficulties during the day.

The interesting aspect here was that their study is the first that has documented school dropout as well as lower grades (that has been albeit thru self-reports) as a result of post-traumatic experience, according to Olsen, Sand and Sørbye (2002).

“Many primary victims, who suffered from flashbacks, nightmares, hyper-vigilance, etc. Problems were especially often reported for subjects demanding high concentration (e.g., mathematics, physics and grammar)” Olsen, Sand and Sørbye (2002).

Two of the respondents for this thesis also struggled with the school during the year they were exposed to the trauma event and that resulted in a school drop out for a year. Also two of the informants reported post-traumatic stress reactions of clinical significance according to CRIES-13.

One of the key informants who is a teacher at one of the schools I interviewed one of my respondents, told me during a interview, that nearly 70% of the pupils had drop out the year their school was exposed for a bomb expulsion and that also resulted that many teachers quit and others that stayed struggled with being at the school and had physical attacks during the school time.

The conclusion here is that trauma experiences affected individuals differently, but there are some common factors. The most common factors are that the individuals whom have been exposed for trauma events may develop sleeping difficulties because they struggle with nightmares and flashbacks from the event.

This lead to struggling with the concentration during the day and therefore they also may struggle with academic learning and concentration during the school.

To be able to form an understanding about the trauma event and to learn to handle with it, it is necessary with clinical help. It is also important that this starts at the early stage, to avoid developing chronic- PTSD.



PTSD may not have a direct impact on learning, but outcomes from PTSD may be a barrier to learning to take place. Therefore it is necessary to create a general picture of the children, based on environment, home situation, and the life in general and (trauma) experiences, to be able to guide and help children with trauma experiences.

I believe that the teachers could have an important role, in guiding and supporting the pupils whom struggle from trauma events, and use adoptive learning's method so that pupils achieve learning despite the obstacles caused by trauma experiences. Therefore it is important that the teachers have basic knowledge about PTSD and how it may affect learning.

It is also important that the family members of the children whom suffer from trauma events, shows understanding and support the child. Again basic knowledge about PTSD is important for understanding the behavioural changes in children that has been exposed for trauma events and to understand that it may indirectly affect learning.

Based on this as the ending words in this chapter, I will recommend further research in the next chapter.

## 8 RECOMMENDATION

I recommend that a study with a wider coverage by clinical psychologists and other relevant professionals (including local people) should be conducted concerning this phenomenon in cooperation with the schools.

I also suggest long-term research on how the trauma events from childhood affect the individual's learning or lives as adults.

In future studies, the researcher suggests the following research to be done among the children in Kirkuk:

- a) Doing a comparative qualitative study among the children who are exposed to several traumatic events between two groups: one from children suffering from PTSD and another who are doing well under similar circumstances. That may be relevant for developing programs to handle trauma in war-related zones.
- b) Developing preventive and supportive programs for children exposed to severe traumatic experiences that are yet still doing well.
- c) Developing teacher training at schools for the teachers of Kirkuk so they can learn how to handle children with traumatic experiences during school.

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## **APPENDIX A INTERVIEW GUIDE FOR IN-DEPTH INTERVIEWS**

I'm going to ask you some questions, and you can answer them, as you like.

### **1. Question about: age, class degree, school, family member and friends**

- Which school do you go?
- Your family members?
- Who do you have most close relationship with in your family?
- How about friends? Do you have many friends?
- Whom of your friends you like most?

### **2. Questions about the school and subjects**

- What is your favorite subject?
- Are you good in it?
- How is your relationship with the teachers?
- Do you like school?

### **3. General questions**

- Except form the school, and you homework, what do you like to do, as a hobby?
- What is your biggest wish/ dream?
- Do you walk to your school?

### **4. Questions about the trauma event(s)**

- As you know there has been war and explosions lately in Kirkuk.
- Do you have any sad or bad experience from that?
- Do you want to share and tell about some of them? You can tell me as you like.
- Is there any happenings that affected you most?

- Do you remember the happening?
- Do you think about it during school time?
- Do you get flash backs from the event during school time?
- What do you do when you get those flashbacks?
- When or in which situations do you think about that most?
- Did you witnessed or got injured during the event?
- Do you try to avoid the place that gets you remained on it?
- Do you try to avoid talking about that? Or do you talk about it with anyone?



- Do you get those flash backs during school time?
- What you do in those situations?
- Do you have any problems with sleeping?
- Do you get any nightmares about the event?
- Do you talk with anyone about that, with your family members or friends?

Thanks for your time.

## **APPENDIX B INTERVIEW GUIDE FOR KEY INFORMANTS**

Interview guide – key informants (parents and teachers)

Have you observed any behavioural (within the child) changes after the trauma event?

How is he/she during doing homework's at home?

Does he/she get more afraid compared to before the trauma event?

How is he/she during the class?

Have you noticed any behavioural changes during the class/school?

Compared to before the event, does she or he better or worse in work with subject and schoolwork in general?

Have you noticed if he/ she gets afraid, get disturbed during the classroom?

## APPENDIX C INFORMED CONSENT FORM FOR INTERVIEWS

### Investigator:

“My name is (Avin Rostami), and I am master student at faculty of educational sciences at university of Oslo, Norway . I am inviting you to participate in a research study for my master thesis. Involvement in the study is voluntary, so you may choose to participate or not. I am now going to explain the study to you. Please feel free to ask any questions that you may have about the research; I will be happy to explain anything in greater detail.

“I am interested in learning more about learning and trauma events. You will be asked to answer some questions about your everyday life, family, friends and school, also your experiences connected to a trauma event. This will take approximately about 1 hrs. of your time. All information will be kept anonymous, this means that your name will not appear anywhere and no one except me will know about your specific answers. If confidential, I will assign a number to your responses, and only I will have the key to indicate which number belongs to which participant. In any articles I write or any presentations that I make, I will use a made-up name for you, and I will not reveal details or I will change details about where you work, where you live, any personal information about you, and so forth.

“The benefit of this research is that you will be helping us to understand how trauma experiences effect academic learning. This information should help us to better understanding the impacts of trauma events and experiences on learning. The risks to you for participating in this study are that your information can get out. Numbering the interviews will minimize these risks and I will not use your name in any time, I will only use a self- made name. If you do not wish to continue, you have the right to withdraw from the study, without penalty, at any time.”

Participant - “All of my questions and concerns about this study have been addressed. I choose, voluntarily, to participate in this research project. I certify that I am at least 18 years of age [or have a signed parental consent form on file with the \_\_\_\_\_ department].

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Signature of participant

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date

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Signature of investigator

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date



## APPENDIX E CLASSIFICATION OF THE EXPERIENCES AND SYMPTOMS DSM IV

Criterion	Symptoms
A. Exposure	<ol style="list-style-type: none"> <li>1. Experienced, witnessed, or confronted with events that involved actual or threatened death or serious injury or threat to the physical integrity of self or others and</li> <li>2. A response of fear, helplessness, horror, or disorganized or agitated behaviour</li> </ol>
B. Re-experiencing	<ol style="list-style-type: none"> <li>1. Recurrent, intrusive distressing recollections of aspects of the events</li> <li>2. Recurrent distressing dreams</li> <li>3. Acting, feeling as if reliving the experiences</li> <li>4. Intense psychological distress in response to reminders</li> <li>5. Physiological reactions to the reminders</li> </ol>
C. Avoidance	<ol style="list-style-type: none"> <li>1. Efforts to avoid thoughts, feelings, or conversations related to the trauma</li> <li>2. Avoiding activities, places or people that arouse recollections of the trauma</li> <li>3. Lack of ability to recall important aspects of the trauma</li> <li>4. Diminished interest or participation in significant activities</li> <li>5. Feeling detached from other people</li> <li>6. Restricted range of affect</li> <li>7. Sense of foreshortened future</li> </ol>
D. Hyper-arousal	<ol style="list-style-type: none"> <li>1. sleep disturbance</li> <li>2. Outburst of anger</li> <li>3. Difficulty in concentration</li> <li>4. Hyper-vigilance</li> <li>5. Exaggerated startle response</li> </ol>
E. Duration	One month or more
F. Level of functioning	The victim should have significant impairment in important areas of functioning

Source: American Psychiatric Association (1994). DSM-IV

