Ethnic conflicts and symptoms of post-traumatic stress in children:

A study of children from Bawku in north-eastern Ghana

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Master of Philosophy in Peace and Conflict Studies

(PECOS)

UNIVERSITY OF OSLO

MAY 2010

Dedication

This work is dedicated to my late grandfather, Amenuda Dagba, who took care of me as a young boy, and taught me the value of hard work………...

……….and my dear mum, Manavi Ekpe, who poured all her resources into me, to give me a future that she never had.

Acknowledgement

I express my sincere gratitude to God, who showered His blessings on me and gave me this chance to study for my Master's Degree on scholarship outside Africa. Jehovah God, I'm for ever grateful.

Timothy John Brennen (Prof), of the Psychology Faculty in the University of Oslo, who supervised my thesis, deserves special thanks. Prof, your patience, the high level of professionalism in which you offered constructive criticisms to the work and your useful suggestions contributed immensely to bringing this work to a successful end. Thank you very much, Prof.

My next thanks go to all informants in Ghana, who provided me with the information I needed for this study. Your names may not be printed on the pages of this thesis, but they are indelibly printed in my mind and heart. Thank you very much.

The following individuals deserve special thanks for the immense contributions they have made in my life: My very good friend, Daniel Kanyam (Graduate student, University of Ohio, US) and Ms Bedone Deku (my brother's wife). For paying part of my air fare, for my initial trip to Norway, 'you made it happen'', and I'm very grateful. To my dear brothers Moses and Atsu, and my very good friend, Francis Mensah, your support to me in diverse ways can never go unnoticed. God bless you all.

I give big thanks, to the Norwegian Government, who fully sponsored my Masters Programme, through the State Education Fund (Lånekassen). The following staff at the Peace and Conflict Programme: Anne Julie Schemb, Karin Dokken and Aashild Ramberg, deserve special commendation. I say thank you for the support you gave me in diverse ways.

To all the members of Global Evangelical Church, Oslo: your prayers and emotional support have done a great job. I will be forever grateful to you all.

I, however, invite constructive criticisms, suggestions and pieces of advice from anyone who may read through this work and discover any mistake. Thank you all. ***"Akpe na mi."***

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Abstract

This study investigated whether Ghanaian children exposed to low intensity warfare experience symptoms of PTSD as described in the DSM-IV. It also aimed to find out if there are culturally-specific ways of displaying the symptoms and in dealing with the trauma. Thirteen children from the Bawku area were interviewed in-depth about their reactions to trauma exposure, revealing that they do in fact display symptoms that can be classified as PTSD symptoms. However, though the display of the symptoms were similar to the symptoms based on western subjects as covered by DSM-IV, there were some culturally different ways of display found among some of the children, e.g. a high frequency of dreams and thoughts related to ghosts. Results also showed culturally relevant ways of dealing with the distressing symptoms among the children, e.g. wearing a talisman.

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Abbreviations

APA	American Psychiatric Association
BEM	Bawku East Municipal Assembly
CID	Criminal Investigations Department
CPTSDI	Children's Posttraumatic Stress Disorder Inventory.
CPTSD-RI & AQ	Child Posttraumatic Stress Reaction Index and Additional Questionnaire
CRI	Children's Rights International
DSM	Diagnostic and Statistical Manual of Mental Disorders
GPI	Global Peace Index
IDPs	Internally Displaced People
IES	Impact of Events Scale
NDC	National Democratic Congress
NGO	Non-Governmental Organisation
NPP	New Patriotic Party
POW	Prisoner of War
PTSD	Post-traumatic Stress Disorder

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Introduction

There is a growing concern that traumatic conflict related experiences have damaging effects on the psychosocial development of children. Many empirical studies in many countries confirmed that children exposed to conflicts develop post-traumatic stress disorder (PTSD). This paper intends to extend the research into the Bawku ethnic war in Ghana in sub-Saharan Africa. Sub-Saharan Africa has been a hot-bed of armed conflicts. For example, between 1960 and 1987, sixteen African nations experienced armed conflicts, political or religious violence (Ityavyar and Ogba, 1989). Events in the past two decades have demonstrated that, the conflict situations have not improved. In West Africa for instance, violent and bloody civil wars had engulfed many countries. Liberia and Sierra Leone had just got out of the ashes of years of bloody civil wars. The civil war in Cote d' Ivoire is still ongoing. There is still political instability in Guinea where hundreds of demonstrators were killed by forces loyal to the military junta.

Ghana has been an 'oasis of peace' within the sub-region. The Global Peace Index (GPI) Report for 2009 ranked Ghana as the fourth peaceful country in Africa (making her the most peaceful in West Africa) and the fifty-second most peaceful country in the world(''The Global Peace Index'', 2009).

Ghana has also been noted for being a vanguard of democracy in sub-Saharan Africa. In 2000, Ghana made a giant stride in her democratic governance when she successfully underwent the peaceful transfer of power from one elected government to another. She repeated this feat in 2008 by successful transfer of power from one government to another (cf Gyimah-Boadi, 2009)

Despite this noble achievements by Ghana, she has experienced some inter- and intra- ethnic based conflicts. Most of these conflicts occurred in the Northern part of the country. The bloodiest ones included the Kokomba-Nanumba conflict, the Dagbon chieftaincy crises and the Bawku conflict (Bombade, 2007). However, these conflicts in Ghana are restricted to some small geographical locations and have not escalated into nation-wide combat as in other

West-African countries. One of such conflicts has been going on in Bawku and surrounding towns.

It is well-known that armed conflicts expose populations to war traumas and this have long-lasting psychological effects. A nagging issue in conflict that has attracted scholarly attention is the effects of conflicts on civilians, especially women and children. A lot of studies have been carried out on the conflicts in terms of the physical, social and psychological impacts of the conflicts on children but most of these studies have been done in the Western cultures and included very high intensity conflicts, mostly using western medical and psychological viewpoints for assessment. Also, there has been controversy about whether research in one culture could be directly applied to another culture. A specific controversy is whether trauma and PTSD transcend culture or not. It has therefore become necessary to throw some light on socio-cultural dimensions of assessing the psychological impacts of conflicts on children. This study intends to research into the psychosocial effects of these ethnic conflicts on children, specifically, whether children who were exposed to the conflict related violence in Bawku will display symptoms that can be classified as PTSD. But before going into the study, I would like to give a short background of the conflict.

Bawku is a sprawling metropolis located in the Upper – East Region in Ghana. The area is inhabited mainly by the Kusaasi and Mamprusi ethnic groups. Though these two ethnic groups coexisted for more than one hundred years, there have been serious rivalries between them. Evidence of rivalry between them was displayed before Ghana's independence. This rivalry centred on chieftaincy. The two ethnic groups, the Mamprusi and Kusaasi, are each laying claim to be the Bawku – Naba (the king of Bawku). Each of the two ethnic groups claims to be the rightful people to install the king. The Mamprusi ethnic group used to install the king. In the early 1950s, the Kusaasi ethnic group laid claim to the chieftaincy and a man, Abugrago Azoka claimed he was properly appointed and installed king of Bawku. This set the tone for subsequent clashes between these two ethnic groups up to date.

In 1985, clashes broke out between the two ethnic groups. The immediate cause of the disagreement was a street fight between some 'area boys' over the right to discharge goods from some trucks loaded from the southern Ghana. This escalated into an open conflict between the two ethnic groups. Many houses and warehouses were burnt and many people sustained serious injuries. Also, during the run-up to the National elections in 2000, tension

was high in Bawku. The elections were once again reduced into Kusaasi-Mamprusi rivalry. During the election, a disagreement between the officials of the ruling National Democratic Congress(NDC) party and the opposition New Patriotic Party (NPP) party once again sparked the old rivalry between the two ethnic groups. Youths from the two ethnic groups once again took to the streets burning houses and firing at each other. The violence was only quelled when the detachment of the Ghana Armed Forces was dispatched to the town to restore order. But not after property worth millions of Cedis was lost (Lund, 2003.). These events seem to be the rehearsal for the current conflict. Looking at the events as described above one can see that the symbolic politics theory is playing out in this conflict. Kaufman (2001) explains this theory that people make political decisions based on emotion and in response to symbols. Underlying the symbolic politics theory are two basic terms: myth- a common belief of a group of people that gives a significant meaning to events and symbols- which is emotionally laden short hand references to this myth. These two are developed into a myth-symbol complex that drives every interaction in the intergroup relations. Kaufman noted that ethnic conflicts involve competition for political dominance. With myth of shared history and symbols that evoke that myth, ethnic groups turned to mobilise to defend their group. Some factors are necessary for ethnic wars. These included 1) myths justifying ethnic hostility: when a group identifies a common homeland which must be defended and over which they should exercise political dominance and identify a mythical enemy in another group. The group is driven by the belief that they are superior to the 'enemy other.' 2) Ethnic fears: the fear by a particular group there is a threat to their existence, which is caused many times when a group has been dominated by another group. The fears in the group motivate them to use violence as a means of self-defence. When these factors are in place, any symbolic event can trigger ethnic conflict. This is applicable to the Bawku conflict. Though the two ethnic groups have been living together for so many years, the Kusaasis who claimed to be the earliest settlers and the owners of the land had been dominated by the Mamprusis for so many years, as the Mamprusis have been installing the king of Bawku. The fear of the perpetuity of the dominance, if they do not stage a resistance can explain the Kusaasis approach to the conflict. The Mamprusis also have identified Bawku as a common homeland- since they have been living there for so many years-which must be defended. They also must exercise political dominance. The resistance from the Kusaasis, whom they dominated for many years, seemed to be a threat to the existence of the Mamprusis and need to be quelled.

These situations are playing at Bawku. That is why any little (symbolic) event that occurs cause escalation in the conflict.

The latest clashes between the two ethnic groups that degenerated into the current conflict started in December, 2007. The two ethnic groups engaged each other in open conflict during the celebration of the *samanpiid* festival. Many people were killed. Houses were burnt and many people were internally displaced. Efforts were made by the government to contain the situation. Curfew was imposed on the area, causing the situation to come under control (''Curfew re-imposed in Bawku,'' 2008). But immediately the curfew was lifted, renewed fighting erupted, forcing the government to re-impose the curfew. Many people fled the conflict to neighbouring communities that were relatively peaceful. Some even fled to neighbouring Togo and Burkina Faso (''Hundreds flee Bawku'', 2008).

Meanwhile, the conflict assumed a new dimension. Children were recruited as combatants in the crises. Reports and researches conducted by some non-Governmental Organisations (NGOs), including Children's Rights International (CRI), showed that children were used as combatants. Some of these innocent children were even recruited as arsonists as a result (''NGO condemns use of children,'' 2009).

Statement of the Research Problem

The trauma of being exposed to natural or man-made disasters has psychological and social effects on children. People exposed to war and other disasters suffer symptoms of Posttraumatic Stress Disorder (PTSD) and altered sense of safety and trust (Santrock, 2003). Despite this assertion, psychological effects of conflicts on children have been an under-researched area in Africa. In addition, though sub-Saharan Africa has been a hotbed of conflicts, little empirical work had been done on the effects of such conflicts on children in this part of the world. The corrective measures that needed to be implemented to address the long-term effects of such experiences on children in this part of the world have not been addressed. The various media reports on the Bawku conflict have shown that children have been exposed to the conflict in various ways. The background information clearly showed that the effects of this conflict on children would be far reaching and what had been reported in the media so far was the tip of the iceberg. The psychological damage that this conflict could cause to the children in this area could be damaging. These needed to be investigated and the necessary corrective measures put in place.

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Objectives of the study

The study was conducted to find out whether:

1. symptoms experienced by children exposed to the Bawku conflict would be classified as PTSD as described in the DSM-IV

2. there were cultural variations in relation to Western studies

3. there were gender differences in the display of PTSD in the children exposed to the Bawku conflict

4. there were cultural-specific ways of dealing with the trauma

The conflict area and the study areas

The Bawku East Municipal Assembly (BEM) lies between latitudes 11°, 111 and 10°, 401 North and longitude 0°, 181 W and 0°, 61E. It is located in the North-Eastern corner of the Republic of Ghana. The BEM shares a common boundary with Burkina Faso in the north, the Republic of Togo in the east, the Bawku West District in the West and the Garu-Timpane District in the South. The dominant geographical characteristic of the area is the Zawse Hills. This is about ten kilometres from Bawku, the capital town of the BEM and serves as a good tourist attraction for mountain climbing and paragliding. Other geographical features include the White Volta and the Yuriugungu stream which is a tributary to the White Volta. This stream is inhabited by a lot of crocodiles and thus serves as tourist attraction. . The major vegetation in the area is mainly the Sahel Savannah type, which consists of open savannah with fire swept grassland separating deciduous trees among which may be seen few broad-leaved and fire-leached tree species. The Bawku East Municipality has an estimated population of about 205,849 people. Bawku, the capital town of BEM, is the largest town in the area. Bawku is inhabited by different ethnic groups. The major ethnic groups in Bawku are the Mamprusis, the Bisas and the Moshis, with the Kusaasis forming the majority. This ethnic heterogeneity resulted in heightened ethnic tensions that have been a source of conflict in Bawku for many years (''Bawku Municipal,'' ??).
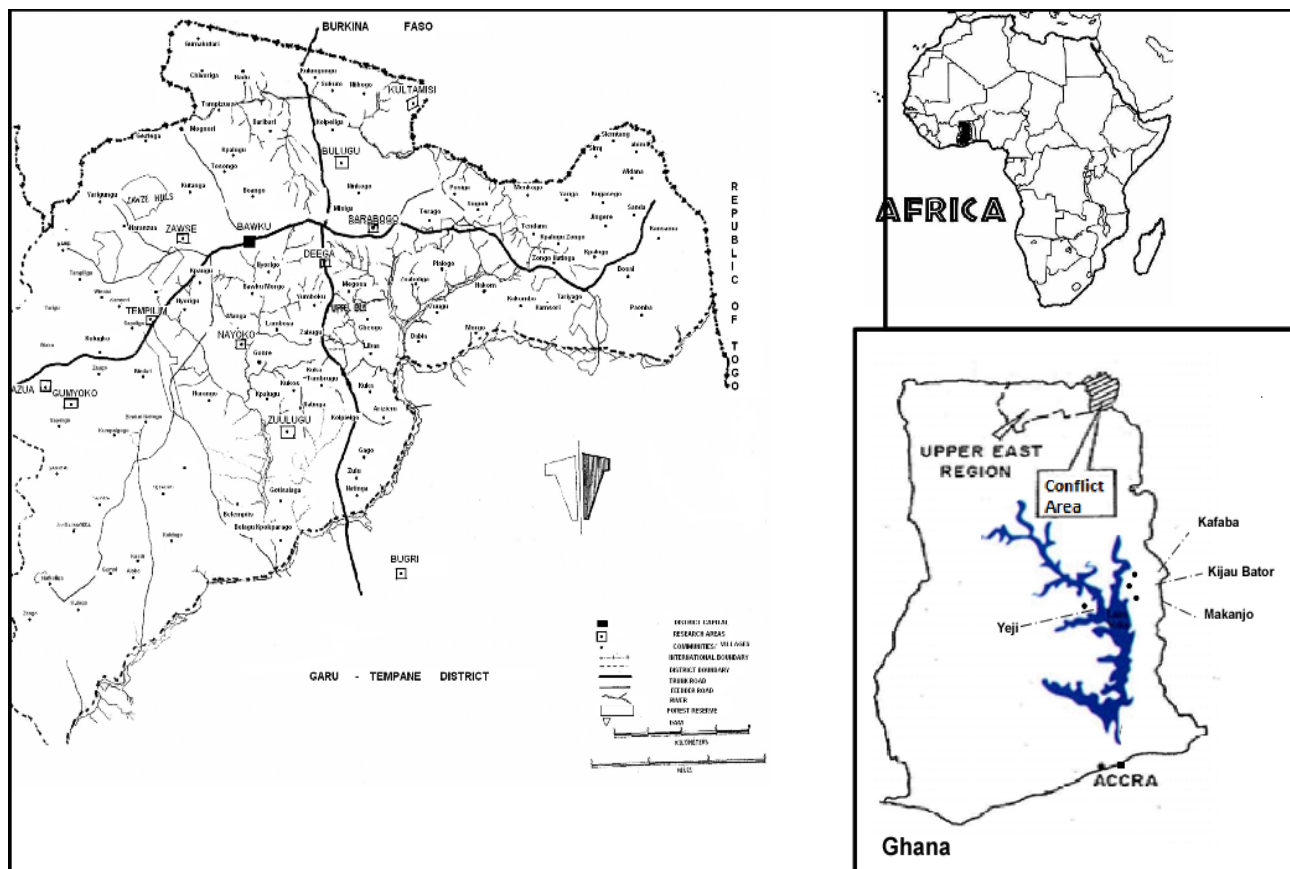
Figur 1: Map of the research and conflict area

Source: Adapted from Aganah, 2008

Yeji: This is a town located in the Brong Ahafo Region. It is the administrative capital of the Pru district. The town was situated at the bank of the River Volta. It is noted for housing diverse people. Some of the people who fled the Bawku conflict sought refuge in this town.

Makango, Kijau Bator and Kafaba No. 2: These towns are located in the East Gonja District of the Northern Region in Ghana. Some of the people who fled the Bawku conflict sought refuge in these towns as well.

History and Diagnosis of PTSD

Though much of the scholarly work on PTSD make it sound like a relatively new diagnostic category, there is evidence that long-term reactions to trauma and trauma related exposures,

also occurred many years back. Some evidence suggested that the occurrence of PTSD dated as far back as the period of Ancient Greece. Some accounts of the Ancient Greece soldiers documented the experiencing of epiphanies, the appearances of gods and goddesses to some soldiers during combats on various military campaigns. Recent analysis suggested that the soldiers might be suffering from PTSD, and not any visitations from any god or goddesses as earlier believed (Wheeler, 2004).

There were also accounts of people documented in diaries concerning the Great Fire of London, that occurred in 1666. An account in a man's diary, showed how he saw the gradual progression of the great fire, while people looked on helplessly, as they were unable to protect their valuables. His response to this experience recorded in the diary showed dreams of the fire and falling down of houses. Even after half a year, he recorded his sleep difficulties, his inability to sleep without great terrors of fires haunting him (Trimble, 1985). These were re-experiencing symptoms under the current classifications of PTSD. A German physician, Eulenberg was credited for coining the concept of "psychic trauma'', a term he used to describe a patient's reaction of outcry and fear following extreme shock (Kleber, Brom & Defares, 1992).

The First World War created an avenue for some empirical works as the focus turned on soldiers who fought in that war. Some soldiers in the war were diagnosed of suffering from a condition labelled 'shell shock'. The cause of shell shock was initially traced to physical sources like exposure to shellfire. This was, however, contradicted by the works of Kardiner and Spegel (Kardiner, 1941, Kardiner & Spiegel, 1947). In their work with war veterans, they established that the shell shock had psychological undertones. Kardiner opined that shell shock was caused by the change in individual's environment, a change that overstretched the individual's coping strategies. The results of the overstretching of the coping resources led to the various symptoms among the veterans. Some of these symptoms included nightmares, aggressive behaviour and reduction in the intellectual functioning. The father of psychoanalysis, Sigmund Freud, and his colleague called Breuer also pointed out that traumatic experiences have psychological effects. They stressed that emotion associated with traumatic experiences were usually suppressed, resulting in the subsequent development of symptoms linked to the trauma (Breuer & Freud, 1955). These earlier observations pointed

the directions to some of the symptoms of PTSD and laid the foundations for many of the subsequent studies.

Later evidences also showed that illnesses of American prisoners of war (POW) were linked to PTSD (Speed, Engdahl, Scwartz, Eberly, 1989). Other researches also showed PTSD among the Vietnam War veterans (Bullman et al 1991).

Posttraumatic Stress Disorder was recognised by the American Psychiatric Association (APA) as a diagnostic category in 1980. In the same year, the disorder was included in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), where it was defined as:

> characteristic symptoms following a psychologically traumatic event that is generally outside the range of human experience. The characteristic symptoms involve re-experiencing the traumatic event; numbing of responsiveness to, or reduced involvement with, the external world; and a variety of autonomic, dysphonic, or cognitive symptoms (American Psychiatric Association, 1980, 236).

The DSM-III was later on revised due to some empirical findings on the psychological disorders. The revised version of the DSM-III, called DSM-III R was published in 1987. This included the diagnostic criteria for PTSD. Further empirical works led to some major revisions in the DSM. One significant idea about the revision was the issue of children. For instance, due to influential study of trauma in children by Eth & Pynoos (1985), age-specific characteristics that concerned children were added to the DSM-III-R. According to the DSM-III-R, when a child is exposed to traumatic events, some of the characteristic symptoms that may be displayed by the child are repetitive play behaviours that show themes of the trauma, display of physical and psychological symptoms such as separation anxiety. The child also displays loss of recently acquired developmental skills such as language skills or toilet training (American Psychiatric Association, 1987). The DSM is now in fourth edition, called DSM-IV. It included some changes to the diagnosis of PTSD as well.

According to the DSM-IV classification of disorders (see appendix 2), a person is diagnosed of PTSD when he or she had some experiences that are classified into criteria A-F. The criterion A included exposure, which included witnessing or experiencing events that involved actual or threatened death or serious injury to the physical integrity of oneself or to others and responding to such experiences with intense fear, helplessness, horror, or disorganised or agitated behaviour. The criteria B, C and D described the major symptoms. The criterion B is known as re-experiencing. This includes flashback in which the individual

relives the event. The individual can have repetitive nightmares. The individual also has intense psychological distress in response to reminders and reacts physiologically to reminders of the traumatic event. The criterion C is known as avoidance, which include the victim's persistent effort to avoid thoughts, feelings, or conversations connected with trauma or avoiding activities, places or people that arouse recollections of the trauma. The final sets of symptoms called increased arousal are categorised as criterion D. This includes sleep disturbance, hyper-vigilance and exaggerated startle response. Criterion E typifies the duration of symptoms in order for a diagnoses of PTSD to be noted. The symptoms needed to persist at least one month in order for a victim to be diagnosed as suffering from PTSD. Criterion F involves the functioning level of the victim. The effects of the exposure needed to significantly affect the vital areas of the individual's life in order for the PTSD to be diagnosed (APA, 1994). Some changes in the DSM-IV that are a significant improvement on the revised version of the DSM-III can be noted in the DSM-IV. For instance, the stressors were revised to include the victim's response to the traumatic events. After the traumatic event, the victim may respond with 'intense fear, helplessness or horror' (APA, 1994:428). Also in the revised version of the DSM –III, symptoms for children included loss of newly learned skills. This was discarded from the diagnostic symptoms of PTSD in the DSM-IV.

Many assessment tools have been designed and used in the diagnoses of PTSD in children. Most of them are structured and semi- structured tools. Some of these assessment tools include:

a). Impact of Events Scale (IES) : The Impact of Events Scale (IES) is a self-report, instrument developed by Horowitz, Wilner and Alvarez (1979). The IES was designed to assess PTSD in adults; however, Malquist (1986) used it as an interview tool to assess sixteen children below 10 years, who witnessed the murder of their parents. This showed that it can be administered to children, especially older children who are 8-16 years.

b). The Child Posttraumatic Stress Reaction Index and Additional Questions (PTSD-RI & AQ): The CPTSD-RI & AQ include two scales-the CPTS-RI designed by Frederick, Pynoos and Nader (1992) and Additional Questions designed by Nader (1999). The CPTS-RI & AQ is a semi-structured interview scale for children. It measures PTSD and guilt and regression. The CPTS-RI & AQ can determine the level of severity of the symptoms, in the victim, from mild, severe to very severe.

c) Children's Posttraumatic Stress Disorder Inventory (CPTSDI): The CPTSDI is a structured interview instrument developed by Saigh et al (2000). This scale can be administered for children between the ages of 16 and 18. The items in this scale are based on the DSM-IV criteria for the diagnosis of PTSD. An earlier version of CPTSDI based on the DSM-III, was developed by Saigh (1987) and used to assess some Lebanese children in which 85 percent met criteria for PTSD (Saigh, 1989). The CPTSDI can be used in research and clinical settings.

As said earlier, these are structured or semi-structured questionnaires. They have been widely used in various researches to assess PTSD in victims. However they may not give enough room for the victims to explain much of their problems.

Empirical studies on PTSD

Empirical research has been conducted on exposure to traumatic events and the development of PTSD. Some studies have established that even the mere exposure to traumatic events via the media including television could cause post traumatic reactions in viewers. The media is a significant way of indirect exposure to traumatic events. For instance, through television coverage, actions on the battlefronts in Congo DR, Afghanistan and Iraq can be brought to millions of audiences across the globe. The effects of media exposure could thus be far reaching. In a classic study, Pfeffermbaum et al (2001) conducted a study to investigate the effects of indirect exposure, through television viewing, on posttraumatic stress symptoms in students following the Oklahoma City Bombing. The study used a survey method to assess this influence in Oklahoma City Schools seven weeks after the bombing event. Middle School students participated in the study. The survey had 56 items that addressed physical, emotional, TV exposure and current posttraumatic stress symptoms. Whereas the physical items determined whether the participants felt or heard the explosion, the emotional exposure established whether the participant knew someone killed or injured in the bombing. The participants' TV exposures were also measured. The posttraumatic stress symptom scale adopted from the Impact of Events Scale was used to measure the posttraumatic stress symptoms in the participants. Initial results showed that some participants were physically or emotionally exposed to the bombing, while others were not. Those who were not directly exposed were separated and given a separate analysis. Results from the study showed that among the participants who did not have direct physical and emotional exposure to the

bombing but had indirect exposure through TV coverage of the bombing, the amount of bomb-related TV viewing was associated with posttraumatic stress symptoms showing that media-related traumatic exposure can result in posttraumatic stress symptoms in children.

Similarly, Pfefferbaum et al (2000) established that media exposure and indirect interpersonal loss were predictors of posttraumatic stress symptoms in children, even two years after the occurrence of the traumatic events. The researchers wanted to determine whether children in towns very far away from the Oklahoma City Bombing, and thus were not directly exposed to the bombing, and also do not have any direct relationship with people who were killed or injured in the bombing, would experience, any bomb related PTSD symptoms. Children who did not have direct exposure to the bombing participated in this study. Questionnaires were administered to the participants to determine their media exposure to the disaster and the Revised Impact of Events Scale was used to determine their posttraumatic stress symptoms associated with the incident and current bomb related difficulties in functioning. The children's exposure to the bombing in both TV and newspapers were measured.   The results from this study showed that participants who had media exposure to the bombing events had significantly higher posttraumatic stress symptoms, showing that indirect exposures including media related exposure to traumatic events can result in the development of PTSD in children.

Another study also supported the claim that trauma related TV viewing can result in posttraumatic stress response in children, and also that the children's response can relate with parents' characteristics (Fairbrother et al 2003). After the September 11 Terrorist Attack on the World Trade Centre, the researchers set out to investigate the occurrence of posttraumatic stress reactions to the terrorist attack and how these related with family characteristics, viewing the disaster related images on television, and coping reactions of parents. The study used survey report of parents on children to establish posttraumatic stress response in their children. A structured questionnaire was administered to the respondents by telephone interview. The parents were asked about their reactions to the September 11 attack and mental health status based on a measure of PTSD which was linked to the terrorist attacks and major depression. They were also queried on their children's TV viewing and the contents of the programs the children watched. Results showed that   9 percent of the parents had symptoms of PTSD related to the September 11 attack. Also, more than 75 percent of the

children were exposed to at least three of the four images related to the terrorist attack on TV. Though the researchers pointed out a limitation of using parent's report to establish posttraumatic stress reaction in children, the result was able to establish a link between traumas related to media exposure and the development of posttraumatic stress reactions in children. This study also established a link between parental characteristics and children's response to trauma.

Direct exposure to terrorism was another form of such exposures that was shown to cause trauma in children. Studies were done to find out the effects of terrorist attacks on children, who were directly exposed to the attack. One of such studies was conducted after the Oklahoma City bombing. After the bombing of the Murrah Building in Oklahoma, in the US, Pfeffermbaum et al (1999) conducted a study to determine the need of formal evaluations for posttraumatic stress response symptoms of middle and high school students in the areas of the attack. A sample of middle and high school children were selected from schools in Oklahoma City Public School district. A clinical need assessment instrument was designed to measure the exposure, initial response to the explosion and posttraumatic stress and other symptoms present in the children. Results show that more than 40 percent of the sample reported knowing someone injured and more than one – third reported knowing someone killed in the bombing. The results also found a significant correlation between exposure, and PTSD symptoms, showing that direct exposure to terrorism also has significant link to PTSD in children.

Some studies also demonstrated a link between some kinds of weapon violence and the development of trauma related symptoms. The link is very strong for life threatening violent events. In a classic study, Pynoos et al (1987) showed that a sniper attack resulted in the development of PTSD in children. The study was conducted after a sniper opened fire on school children in a play park in Los Angeles in the United States. A school girl and a passer-by were killed in the attack while more than a dozen other students were injured. The rest of the students run helter skelter, looking for cover from the bullets of the attacker. A sample of children was selected as participants in the study. These included children who were exposed to the attack and children who were not in the school then and thus were not exposed to the attack. The participants' levels of exposure were determined, based on where each participant was before that attack and the place's proximity to the park, which was the hardest hit. The

participants' responses to the event were then rated on the PTSD Reactions Index. Results of this study show that 60.4% of the participants presented symptoms compatible with PTSD. Also participants' level of PTSD symptoms increased as the degree of exposure increased and that the higher their reaction index scores the higher their exposure level. The participants who were closer to the attack (i.e. those on the playground where the shooting took place) had more severe or moderate level of PTSD symptoms (77%) as compared with children who were in the school but not on the park (67%). This turned to confirm that the degree of exposure influence the levels of PTSD in children.

 Apart from media and direct terrorist related exposure, other empirical research was conducted on war related exposures and posttraumatic stress response in children. For instance, Thabet and Vostanis (1999) conducted a study to estimate the rate of posttraumatic stress reactions in Palestinian children who experienced war traumas, to investigate the relationship between trauma related factors and PTSD reactions, and the nature of frequency of PTSD reactions among the participants. A sample of primary school children between the ages of 9-11 took part in this study. The children were administered with revised version of the Gaza Traumatic Event Checklist and the Child Post-traumatic Stress Reaction Index (CPTSD-RI). The Gaza Traumatic Event Checklist consists of items describing traumatic episodes that children may be exposed to in conflict situations. The parents of each participants and their teachers were also administered the Rutter Scale A1 (for parents) and Rutter Scale A2 (for teachers) respectively. Results show that, 73% of the children reported moderate or severe PTSD reactions, showing that children exposed to war trauma experience PTSD.

Similarly, Schwarzwald, Weisenberg, Waysman, Solomon and Klingman (1993) conducted a study to examine the impact of the SCUD missile attack on Israeli children. Four hundred and ninety-two children between the ages of 11 and 16 participated in the study. A sample of 162 boys and 148 girls were taken from areas hit by the seventeen SCUD missiles. A control group made up of a sample of 65 boys and 117 girls were sampled from schools in areas that were not directly hit by any missile. The participants were administered with ''perceived stress impact'', a questionnaire that assessed various degrees of damage to property and the participants' perceptions of the threat of the missile attacks; ''stress reaction questionnaire'' for assessment of psychological symptoms. Questionnaires were also administered to

teachers of the participants to validate the self-report measures of the participants. Results showed that children from areas hard hit by the SCUD missiles had significantly higher stress responses than children from areas that were not affected by missile attack. This is also a clear demonstration of a link between exposure to war related trauma and PTSD.

Another study also supported the claim that there is a link between war exposure and PTSD and other disorders. In order to investigate this claim, Smith, Perrin, Yule, Hacan & Stuvland (2002) conducted a study in Bosnia – Herzegovina to investigate the level of posttraumatic stress reactions, depression and anxiety reactions and grief in the children caught up in the civil war going on in the area and also to establish the relationship between exposure and these psychological outcomes. Some Primary school children between the ages 9 and 14 years in the city of Monstar or its environment participated in the study. The revised version of War Trauma Questionnaire (originally designed by Macksoud, 1992) was administered to the participants to assess their levels of traumatic exposure. Also the Revised Impact of Events Scale was also administered to the participants to assess the PTSD symptoms in the participants. Other measures were also administered to determine their grief and anxiety levels. The results from this study showed that children were exposed to high amounts of war time traumatic events and experiences and thus have high levels of PTSD symptoms. The children also experienced grief and depression, thus demonstrating that when children are exposed to war-related trauma, they would develop PTSD and other related psychopathologies.

A study was attempted in Rwanda after the genocide which found trauma related reactions among the Rwandese children who survived the Rwandan Genocide (Dyregrov, Gupta, Gjestad & Mukanoheli (2000). After the Rwandan genocide, the researchers conducted this research to obtain a baseline for the type and magnitude of the exposure to traumatic events and the severity of psychological reactions among a representative sample of Rwandese children. Some children were selected from the prefectures in Rwanda to participate in the study. The children were administered with the questionnaire that included exposure to the various war events, the Impact of Events Scale and Grief Reaction Inventory. The questionnaire was translated into the local language and administered to the children. Results showed that children experienced a very high level of exposure to the war experiences and events. The children also experienced high levels of PTSD symptoms. Majority of the

children expressed high level of intrusions and avoidance. This study was conducted in Rwanda, an African country. This seems to demonstrate that PTSD cuts across cultures.

The studies reviewed above used structured interview methods to assess the participants. They had the advantage of getting information from participants at a lesser cost at a short period of time and with less number of researchers. Also, the variability in answers which could be due to the way questions were phrased was minimised.

But this type of research has certain drawbacks. In the first place, since the questionnaires were administered wholesale, each individual participant's understanding of the questionnaire or concepts could not be effectively ascertained. Answers that were given due to the participant's misunderstanding of the questionnaire or concepts in the questionnaires could confound the results of the study. For instance, in the research carried out in Rwanda, translations of the questions into the local language was not enough to justify that all the individual participants in the study understood the questionnaire and the concepts in the questionnaire. The results of the study could therefore be confounded by the misunderstanding of the concepts by the participants. Also, the methods use to determine PTSD in the above study did not leave enough room for each participant to express 'other' feelings or views that were not captured in the questionnaires. Thus vital information that needed to be supplied by the individuals and thus influence the appraisals may be missing. One other vital note in all the above studies was that, despite the claim that war results in the development of PTSD in children and the evidence that high number of war and war-like situations are in Africa, few researches were conducted in Africa. In the above studies only one research was conducted in Rwanda and there were suggestions that some would be carried out in Sierra Leone, but even in all these, the data set is still very few to generalise on the whole of Africa. Finally, any culturally relevant differences that any participants may express due to his or her environment or background could not be ascertained because of the design of the study. For instance, the structured interview techniques used in the study with the Rwandese children was based solely on the interpretations of the PTSD symptoms into the local languages. Little room was left for the participants to express any other feeling or symptoms that might be present but not captured in the questionnaires administered to the participants. Culturally relevant elements were also not included and since no room was left

for the participants to include anything of that nature, important issues that might be socially relevant were overlooked.

Some studies have pointed out gender as a predicting variable in the development of PTSD. In a study of the survivors of the Buffalo Creek Collapse, results show that there were higher symptoms in girls than in boys (Green et al, 1991). A follow up study of the child survivors seventeen years after the collapse of the dam also showed that women had more PTSD related symptoms than men (Green et al, 1994). Similarly, gender was also identified as a predictive variable when participants were considered on the individual symptoms level. Though there was no significant difference between women and men on the criterion B symptoms, women had high levels of criterion D and criterion C symptoms (Fullerton et al, 2001). However, other studies failed to identify gender as a predictor of posttraumatic stress. In a study after the Hurricane Andrew, Shaw and his colleagues found out that though children exposed to the Hurricane had traumatic symptoms, gender had no significant effect in their expression of the symptoms (Shaw et al, 1995). Similarly, Prinstein, La Greca, Vernberg & Silverman, 1996) found no gender difference in the coping response to traumatic experiences in children after the Hurricane Andrew. From these studies it could be deduced that there has not been any conclusive findings to show whether the gender of the individual influences their manifestation of PTSD. However, since most of such earlier studies were conducted in the Western cultures, will there be any gender difference among the Bawku children?

Another risk factor for developing PTSD is the level of exposure. A high correlation has been established between increased physical or emotional traumatic experience and increase in traumatic response. In a study, fourteen months after a sniper attack on the playground at a school in the US, Nader, Pynoos, Fairbanks & Frederick (1990) established that children who experienced high exposure to the attack (i.e. those in the playground and those nearer) experienced increased and persistent traumatic reactions. In another study after the *Jupiter* cruise disaster, Udwin, Boyle, Yule, Bolton & O'Ryan (2000) explained that though other factors predicted PTSD, the degree of exposure and subjective appraisal predicted whether survivors developed PTSD. Finally, Punamaski, Quota & El-Saraj (2001) established a link between level of exposure and PTSD in Palestinian children exposed to the 1993 *Intifada*. This study established that exposure to experiences such as witnessing violence, being

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wounded predicted PTSD three years later. All these studies suggest exposure level as a risk factor in predicting PTSD in victims.

As pointed out earlier, a controversy in research has been whether research in one culture could be directly applied to another culture. One specific controversy is whether trauma and PTSD transcends culture or not.

 To investigate this, William Sack and his colleagues set out to establish whether PTSD syndrome reported by Cambodian youth who fled to the United States of America as refugees would resemble earlier reported symptoms by studies in Caucasian subjects. A total number of 194 Cambodian adolescent refugees who reported prior significant war related trauma were administered the PTSD module of the Diagnostic Interview for Children and Adolescents. The results from their studies is consistent with that of the Caucasians and African-Americans showing that war related trauma goes beyond cultural and linguistic barriers (Sack, Seeley, and Clarke, 1997).

Contrary to this view, some scholars also presented criticisms against PTSD and the view that it transcends cultures. Summerfield (1999) presented strong criticism against the notion of PTSD or any related trauma. The term "trauma" was designed in the West and was so widely defined that so many people could be labelled victims. To him the problems of the victims of warfare are social rather than pathological and thus diagnosing them as trauma victims 'is a pseudo condition.' He also questioned the wholesale transfer of Western knowledge to elsewhere. Explanation models locate the causes of disorders within the individual and therapies including debriefing and counselling are provided as a solution. This idea is transferred wholesale to other cultures. The world view of other cultures where the body, for instance is subjected to the influences of the supernatural is different from the Western conception, therefore the application of western-style therapy to him is ineffective.

A consequence of transporting the Western-diagnostic systems and solutions, wholesale to the non-Western cultural settings, is that the same treatment procedures are implemented without regards to the social and cultural contexts. The differences in local conceptions and treatment are totally ignored (Ajdukovic, 1997). The effectiveness of such programmes in solving the local problems may be questioned since they ignored local resources in the first place.

Another issue Summerfield contended with was the issue of vulnerability. Many Western – backed aid organisations came to war-torn countries with predetermined mindset that there are some vulnerable groups- which are usually orphaned children and women who fell victim to rape. He argued that focussing on an event such as rape may blow out of proportion the differences between people or particular groups (such as children). This runs the risk of disconnecting such a group from the community and the larger context of their experiences and the meanings they gave to such experiences. Ager (1997), for instance, suggested that though vulnerable groups may exist within a population, initial phases of programs should on the onset be directed first towards the general population. After this, then people not coping with their problems may be identified. By this, vulnerability would be identified by proper needs assessment.

Another criticism was that aid agencies focused on trauma. The Western – backed aid agencies moved to the conflict and post-conflict communities with a pre-determined plan of providing psychosocial assistance. However, the indigenous people, towards whom the psychosocial project was directed, may identify material needs which are rather pressing to them (Bracken & Celia, 1998).

In response to the above criticisms, labelling PTSD as a pseudo condition will be too simplistic in my estimation. The various concerns raised should be re-examined. In the first place, questioning the approach of the aid agencies is in the right direction. They needed to do proper needs assessment in other to establish the needs of the victims of any disaster so that proper needs – based solutions should be given to the victims. On the issue of western-backed experts ignoring relevant culturally based solutions, the best approach is to include the indigenous experts and concepts of healing where appropriate, to address the needs of the traumatized people.

The influences of culture have been established in empirical studies by some researchers in the trauma discourse. No human endeavour is undertaken in a social vacuum. Human beings are organised into societies. Hofstede (1980) explained culture as the collective mental value shared by a group of people. The culture of individuals has much influence in their way of life in many ways. In considering the issue of culture and trauma, some of the underlisted factors are worthy of note.

Firstly, there have been reports of differences in ethnic responses to trauma. Williams cited by de Silva, (1993) found differences in the responses to trauma among Indian and British soldiers who fought in the Second World War. As a psychiatrist attached to the soldiers who fought in Burma against the Japanese, he noted some significant differences in the reactions to battle front trauma between the British and Indian soldiers. The soldiers from Britain reported psychiatric illness twice more than the Indian soldiers. The British reported anxiety and psychosomatic problems more than the Indian soldiers. Pole, Best, Metzler & Marmar (2005) also found ethnic differences in the PTSD among the different ethnic groups in America. They found out that Hispanic Americans have higher rates of PTSD than non-Hispanic Caucasian Americans and African Americans. These two studies make some point to speculate differences between various cultures in PTSD.

Another important cultural influence on PTSD is the issue of cultural norms and help seeking behaviour. The way issues could be talked about varies in cultures. For instance, in some African cultures, it is difficult for a rape victim to talk about her ordeal. Joan Giller (in Bracken and Petty, 1998) reported her experiences in Uganda after the civil War in that country. The civilians were exposed to so many traumas in the hands of the military. Most of the women were raped by the soldiers. Giller recounted incidents where raped victims intentionally refused to talk about their ordeal during assessment because of the shame associated with being raped in Uganda. Also, in Uganda, it was difficult for a rape victim to talk about her ordeal in the presence of a man. In one instance, when the man was asked to leave the scene, a lot of the victims came out to talk about their traumatic ordeal (rape). This cultural issue could easily cloud a research. In this situation, women who experienced much trauma due to rape may go unnoticed and therefore might not be assessed and diagnosed at all because of misunderstood cultural norms.

Again, though in the DSM-IV diagnostic Manual, PTSD is framed as a function that transcends culture, some investigations proved it to be otherwise. Some aspects of PTSD were discovered not to transcend cultures. According to the DSM-IV diagnoses, for a person to be diagnosed as suffering from PTSD, the traumatic experience and the resultant symptoms have to affect the victim's level of functioning. This is known as criterion F. But there were suggestions this was not so in some cultures. For instance, Joan Giller reported experiences when she worked in rehabilitating the victims of torture in Uganda. In some of

her empirical works, she realised that, though the experiences of the victims, mostly women, after a survey established a diagnosis of PTSD, their social functioning was not affected. The victims were functioning well in society (Bracken & Petty, 1998). This clearly defied an important aspect of PTSD diagnosis. Though the Ugandan case may not be enough to warrant a general conclusion, it is a test case of the influence a culture may have on the diagnosis of PTSD. Serious work in this direction thus is worth undertaking.

Another important issue in discussing the role of culture in the issue of PTSD is the culturally specific resources available in healing victims exposed to trauma which warrant the diagnosis of PTSD according to the DSM-IV Manual of Diagnosis. The issue of healing in each culture is influenced by each society's conception of health and illness. Therefore the perspective of health and illness is different across cultures. For instance, the Zulus of South Africa see the world as composed of being in a balanced relation of visible and invisible (spiritual) elements. Health is seen as a complete balance between the individual and these elements. When illness occurs, it is seen as disequilibrium between these elements and healing is performed to restore equilibrium (Wilson, 2007). This is basically different from the Western bio-psychological view of illness and health. Some societies also have unique rituals that restore health in trauma victims. Wilson (1989) explained that some rituals in some cultures contribute to psychological well-being of traumatised individuals. One of such rites explained by Wilson is the Sweat Lodge purification rites of the Native Americans. This is a religious rite of thanksgiving and forgiveness and a rite of sacred significance in the Lakota Sioux Native Americans. There were various elements in the Sweat Lodge purification. These included extreme heat, sensory deprivation, singing, restricted mobility, self disclosure and sense of collectiveness. Wilson explains that these elements can bring considerable changes in the various symptoms of PTSD in the individual. Experimental treatment procedures that included Sweat Lodge purification were used to treat victims of PTSD. Results show that this treatment procedure is effective in treating PTSD symptoms (Wilson, 1989).

Method

This chapter deals with the description of research techniques I employed in collecting data for the study. Sub-topics tackled in this chapter include research methods, ethics of research, limitations, population and sample size and access to the research area.

The fieldwork took me to Makango, Kafaba and Kijau Bator in the Northern Region and Yeji in the Brong Ahafo Region in Ghana. These research areas were where the Internally Displaced Peoples (IDPs), some people who fled the conflict had taken refuge.

Choice of Method

As I am researching into the psychosocial effects of conflicts on children, specifically, whether children in affected by the Bawku ethnic conflict would develop PTSD, my source of information and its validity and reliability would depend on the subjective meanings the effect of the conflict has on each child. Since this study involves an in-depth interview, I needed to interact with the participants effectively. I also needed to speak with participants, ask questions woven around the major themes of PTSD and listen to their experiences and make a meaning of what I saw and heard. The nature of data collection and analysis was qualitative; hence the appropriate tools I used in data collection included focus group discussions and in-depth interview.

The Study Population, Sampling and Sample size

The research investigated the psychosocial effects of the Bawku conflict on children who experienced the conflict, in a bid to assess whether children exposed to the Bawku conflict would experience PTSD as described in the DSM-IV. The study population included children between the ages of 8 and 15 years as the target population. I chose this age group because children in this age group would be able to speak well about their experiences. In order to get a balanced story, and get more in-depth information, on diverse issues concerning the conflict and also cross-check some of the stories of the children, I interviewed some elderly people, including a teacher from the area and parents. The sample was made up of seven girls, and six boys. Five of the participants were Moslems. Four were traditional believers and four were Christians. The parents or guardians of two of the participants were white collar workers, while the parents of the other participants were into agriculture-animal rearing or crop farming.

Generally, due to limited resources such as time, finance, researchers are prevented from gaining information from the whole population (Cohen et al, 2004). Even if all these resources were available, it should be reasonable to use a selected number of people for the study and generalise on the rest of the population. In order to obtain the required information at a reasonable cost and time, researchers select a smaller group or subset of the total population to conduct the study. This is known as the sample of the population. An important issue that I considered in the study was the sampling strategy to use. I was constrained by risk factors due to the security situation in the conflict area, therefore the appropriate sampling strategy I used was snowball sampling technique, defined as a sampling method where ''you identify one member of the population and speak to him or her, then ask that person to identify others and so on'' (Chambliss and Schutt, 2006). As I already said, the security risk in researching in a conflict issues made snowball sampling more appropriate and enabled me to reach the target sample relatively easily. Also, since the research area needed in-depth interview in order to discover the necessary variables in the study, I needed to use small sample size. Finally, Cohen et al (2004:93) buttressed the view that in the qualitative style of research, it is more likely that the sample size will be small. I therefore selected a small sample size of thirteen children (and included some elderly people) as presented in the table in the next page (Table 1).

Table 1: Categories and Numbers of Informants interviewed

Category of Informants	No. Interviewed
Teacher	1
Parent	2
NGO Staff	1
Children	(7boys) 13 (6 girls)
Focus Group	Man(1) Women(2) Children (3)
Total	**22**

Access to the Research Area

A vital issue in every research project is access to the institution, organisation or area where research is to be conducted. A related issue is the acceptance by those whose permission is needed in order to conduct your study (Cohen et al, 2004). I am from the southern part of Ghana. Bawku, the conflict area, is far up in the northern part of Ghana. There are linguistic and cultural barriers, as well as that of geographical distance. The conflict area was also not safe, due to the ongoing conflict. I needed to get a foothold in the area. Upon arriving in Ghana, I went straight to the Kofi Annan International Peace Training Centre (KAIPTC). I spoke with an official and explained my mission to him. He directed me to an official, a staff of a local Non-Governmental organisation (NGO). This NGO had been working in peace-building efforts in the Bawku area. During my discussion with this officer, he gave me a general insight of the conflict situation, the role they played so far and the overview of their peace-building efforts. Unfortunately, he was reluctant to facilitate my access to the conflict area because of security reasons, and the fear that since they have an interest in peace building in the area, 'if he helped me to get access to the area and something bad happens, it

would jeopardize their credibility as peace makers.'' It was clear he was not ready to offer any direct help, but during my interactions with him, he mentioned that there were some internally displaced people (IDPs) from Bawku who were staying in the Tudu and Agbogbloshie areas of Accra. With this information, I went to Tudu and Agbogbloshi. I met a lot of people from the northern part of Ghana. I spoke with some of the residents if they could help me get in touch with some people from Bawku. Fortunately, I met a man who volunteered some information to me. I made my intentions, of speaking with people who experienced the conflict and possibly the IDPs, known to him. He expressed his desires of helping me meet some of the IDPs but not until he cross examined me for assurance that I was not a staff of any intelligence service. He informed me that there were some IDPs in the Salaga area in the Northern Region. He directed me to a man who would facilitate my access to the people. I expressed interest in going to Bawku but he advised me to drop the idea due to the delicate security situation in the area. I left Accra to the north to meet this man. I arrived at Yeji the following day and after some initial difficulties met the man. Since his friend in Accra (whom I met earlier) informed him earlier about my arrival, he was expecting me. He helped me get access to some of the people. He speaks some of the languages spoken in the Bawku area. He could speak Kusaal and Mampruli, the dominant languages spoken in Bawku. According to him, he left Bawku some years back after a similar conflict that was shortlived than the current one. He completed Senior Secondary School and was able to communicate effectively in English Language. He therefore acted as my research assistant and interpreter during the interviews. I interviewed some of the children and their parents in Makango, Kafaba No. 2 and Kijau Bator. An unfortunate incident happened, however, that changed my approach of data collection. When we arrived in the household of some of the IPDs, my research assistant spoke with the head of the household and told him of my mission. I also presented my ''To Whom It May Concern'' letter taken from my faculty at the University of Oslo to the head of the household. I explained my interest and sought his informed consent to enable me interview some of his children and himself. He agreed on the interview but protested vehemently that he would not allow me to record the interviews on the voice recording machine I took along. According to him, they had the fear that I might be an undercover agent from the Criminal Investigation Department (CID) in Accra. They feared I might be looking for some information that could incriminate them. They spoke of an incident that took place in Bawku when an undercover agent managed to disguise himself and

arrested some people who were accused of involving in illegal arms dealings. It took me some time to explain and convince them I was not an undercover agent. They later on agreed I conduct the interview without recording on the recording machine. I explained that I need to take notes since I cannot keep everything they said in my head. To this they agreed and my work took off successfully. I wanted to ensure that the concepts in the DSM IV classifications were well understood by my interviewees, so my research assistants and a teacher of one primary school helped translate the concepts into both Kusaal and Mampruli. The concepts were then translated from Kusaal and Mampruli into English.

My initial worry about language barrier was assuaged because most of the children could communicate effectively in simple English language. When they had difficulties in understanding any concept, my research assistant came in to explain before they answered.

Methods of Data Collection

The methods I employed in the data collection included one on one interviews, focus group discussions and field notes. I observed the interviewees and took notes of their actions during the interviews as well. I chose these techniques for my data collection because the research was qualitative in nature. As noted by Hamersley & Atkinson (1983), ethnography often involves a combination of techniques by examining data relating to the same concept from participant observation and interviewing, just to mention a few .

 Focus group discussion

I initially conducted a focus group discussion with a family that included a father with his two wives and three children. I conducted the focus group discussions to enable me have insight into the conflict; assess the children's experiences and how they understood the situations in the conflict and how the conflict affected the people, including the children. In the discussions, I realised children were exposed to the conflict as well as adults. The children also had good understanding of the situation around them. They were also able to talk about their experiences in the conflict.

In-depth interviews

I used in-depth interview techniques (see appendix 1 for interview guide), in order to elicit all the information from the participants. As a point of departure, based on deductions from the

above studies, I used in-depth interview format in my study. This allowed the participants to speak of their experiences in relatively less controlled way. I minimised asking questions that elicits only desirable answers. For instance, instead of asking the participants: "did you experience this or that?'', I asked '' tell me what happened to you during the conflict'' This enabled the interviewee to tell his or her story and experiences and also his or her appraisal of the events and how the events affected him/her. I was also able to ask probing questions too, to clarify issues not understood. Any culturally relevant information from the participant's experiences was also captured.

Though the study focused on children, I involved some adults as well. This was purely to elicit some information that would help me get some firsthand knowledge about the conflict, to enable me frame the interview questions in context and to cross check whether the information that the children provided were accurate.

Before the interview I got informed consent from the participants and the parents or guardians (in case of children). I explained the reason for the study. Here I fell short of explaining to them I was investigating if any psychological harm was done to them due to their experiences in the conflict .This was to prevent the participants from giving answers that would confound the result of the study. I also explained to them, their rights to withdraw from the interview at any time or choose not to answer any question if they so desire.

I interviewed all the children at their home. Their parents or other members of the household were always within a distance of about ten meters. I sat with the participants and my research assistant. I always let the participants feel at ease.

I assured my interviewees to feel at ease and not to get worried. I started the interview by introducing myself, my name, my occupation and asked them to do the same. This warmed them in to the interview. I also used very simple vocabulary that was easy for them to understand. My research assistant was always around and came in to interpret any concept that was not easy for them to understand.

I always ensured to explain to the participants and their parents the reason for the interview was to get information about the various experiences of the children in the conflict and how these experiences affected the children. I conducted the interview in a way not bring my own biases, opinions into the data collection. This was to ensure that the data collected is both

reliable and valid. An important question in research is validity. According to Adcock and Collier (2001), validity wants to establish whether the concept that the researcher wanted to measure has been adequately captured through operationalization and scoring. There were views even on whether measure can transcend context. That is whether a measure in one context can be used in another context. This is quite a challenging issue since the cultural setting of my research area was different from the western context in which the concept of PTSD was developed. An approach of establishing equivalence between different contexts is by using context specific indicators and adjusted common indicators. By these approaches indicators applied to cases are weighed to compensate for differences that arise due to the context. Sometimes the best to do however is to 'adopt a standard definition that ignores nuances of context and apply the same indicator to all cases' (p.536). In the study, I used the measures of the PTSD based on the DSM-IV definitions; however I only used this as a guide to formulate the questions for the interview. I adjusted the questions where appropriate, devoid of any bias.

Field notes and Camera

The supplementary devices I used in collecting the data included notebooks, pens for note taking and camera. I took along recording equipment but I was never allowed to use it. I wrote all the interviews I conducted in notebooks. I always sought informed consent from the participants or their parents before writing down the notes. I used the camera to take pictures of some noteworthy and picturesque items, events and buildings (refer to appendix 3). I also took pictures of some of the participants. This could serve as a reference to remind me of some events or activities I have forgotten.

Ethical considerations

A well known guideline in conducting social science research is ethical considerations. Ethics has been defined as 'a matter of principled sensitivity to the rights of other' (Cavan 1977). In every research, it is important that the researcher follows ethical guidelines including the following, as outlined in Santrock (2003):

1). *Informed consent* which states what the study was all about and any known potential risk must be explained to the participants beforehand in order for them to decide whether to take

part in the study or not. The participants also have the right to withdraw from the study at anytime even after agreeing to take part in the study.

2) *Confidentiality* which states that researchers must ensure that all data collected from the study participants must be kept from every other person. The data when possible should be kept anonymous.

3) *Deception*. When the researcher realised that telling the participants beforehand the nature of the study would affect the outcome of the study, the researcher can withhold some information from the participants in the beginning but deligent care must be taken that this could not harm the participants. Also the participants must be properly debriefed after the study. This leads us to the next point.

4) *Debriefing*. This states that the researcher should inform the participants about the purpose of the study after ending the study. Also, if the researcher withheld some sensitive information that might confound the outcome of the study from the participants, in order to get the informed consent from the participants, that should be explained after the study was carried out. As much as researchers may like to strictly follow these guidelines, sometimes they are caught up in some dilemma. This may be due to the setting in which the research is being conducted, for instance, in war settings where the linking of a data to people could put them at risk. Another dilemma may be whether seeking informed consent from the participants with little education may be enough to establish the ethical convention of informed consent. Their ability to understand consent is a dilemma (Wood, 2006). In my research, for instance, though I as much as possible tried to follow the ethical guidelines, the dilemma I faced was, since I used snowball sampling, telling the participants that I was studying how the conflict affected the participants' psychological health could affect my access to other participants. Therefore when seeking the informed consents and during debriefing, I explained to the participants and the parents that my study intended to find out how the conflict affected the life of the children without talking about psychological health. Also, despite some other dilemmas I faced on the research field, I have done my best as much as possible to ensure my research followed the required ethical considerations.

The mechanisms I used to ensure that the research followed the required ethical guidelines include:

1. Presenting the 'To Whom It May Concern letter' I took from the University of Oslo to facilitate my access and acceptance to institutions and organizations where I went to seek information. I also presented this letter to individuals to confirm my verbal introductions of myself and mission.

2. Before the interviews, I informed my interviewees and their parents what I would use the information they provided for, that is, I assured them that the exercise was only for academic purposes.

3. I gave assurance their names or identities would not be used in publishing the final report of the study.

4. I explained reasons for the study before the interviews, and when it was necessary to use deception, though I fell short of mentioning to them that the study was about how the conflict affected the psychological health of the children, I did debriefing to the participants.

5. I made sure I asked permission from the parents before interviewing children.

I thought by applying those guidelines, the rights of the participants were respected and their privacy protected.

This I believed ensured the research went on smoothly.

Limitations of the study

There is bound to be some limitations in any human enterprise and this research is not an exception. Firstly, the sample size could have been larger but due to time, financial constraints, even security constraints, I interviewed a small sample. Also, since I was not allowed to record the interviews, I depended on writing the points and also keeping some information in my memory. Though I made sure I wrote down any information I got within thirty minutes, I may miss some points due to forgetting or mistakes in writing. This also is a limitation. Again, the use of snowball sampling method to collect data is also a limitation since there is less assurance the sample would represent the total population. The generalization of the result is thus tentative (Chambliss and Schutt, 2006).

Data analysis

In this chapter I will present my research findings based on the data from the primary sources- that is, the interviews I conducted with the children from Bawku. 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 categorise the data into groups, patterns and sub-themes reflecting the major themes in the research topic for the purpose of analysis.

Exposure to Traumatic events

These are the various experiences of the participants in the conflict. The violence the participants were exposed to and their responses to the various experiences. After experiencing such violence the participants experienced some symptoms. These are various symptoms of the Posttraumatic Stress Disorder (PTSD) that people suffer when they experience to traumatic events. These were re-experiencing, avoidance, and hyper-arousal. Finally, the cultural variations were also included the experience of nightmares that included seeing ghosts of people who were killed in the conflict and also fear of ghost of the dead people killed in the conflict.

It was clear that the children were exposed to a lot of violence. The various experiences of the participants included hearing gunshots from the distant, getting caught up in the crossfire and hearing of someone hit by a stray bullet. Other experiences included the curfew that was slapped on the town and the intimidating patrol of the security personnel. Arson was another experience of the interviewees during the conflict.

Table 2: Classifications of the experiences and symptoms of the participants

	1 M	2	3 M	4 M	5 F	6 F	7 F	8 M	9 M	10 F	11 F	12 F	13 F	total
PTSD symptoms														
Criterion A														
1	√	√	√	√	√	√	√	√	√	√	√	√	√	13
2	√	√	√	√	√	√	√	√	√	√	√	√	√	13
Criterion B														
1	√	√	√	√	√	√	√	√	√	√	x	√	√	12
2	√	√	x	√	√	x	√	√	√	√	√	√	√	11
3	√	√	x	√	x	x	√	X	√	√	√	√	√	9
4	√	√	x	√	√	√	√	√	√	√	√	√	√	12
5	√	√	x	√	√	√	√	√	√	√	√	√	√	12
Criterion C														
1	√	√	x	√	√	√	√	√	√	√	√	√	√	12
2	√	√	x	x	x	√	x	√	√	√	x	√	√	8
3	√	x	x	x	x	x	x	√	x	x	x	x	x	2
4	√	√	x	√	√	√	x	√	√	√	x	x	x	8
5	x	√	x	√	√	x	x	√	√	√	√	x	x	8
Criterion D														
1	√	√	x	√	√	x	√	√	√	√	x	√	√	10
2	√	√	x	x	√	x	√	√	√	√	x	√	√	9
3	√	√	x	x	√	√	√	√	√	x	x	√	√	9
4	√	√	x	√	√	√	√	√	√	x	x	√	√	10
5	x	√	x	√	√	√	√	√	x	√	x	√	√	9
Culture	√							√	√			√	√	
	√							√	√			√	√	
	√							√	√			√		

Note: √: means the concept is present   x: means the concept is not been identified as present
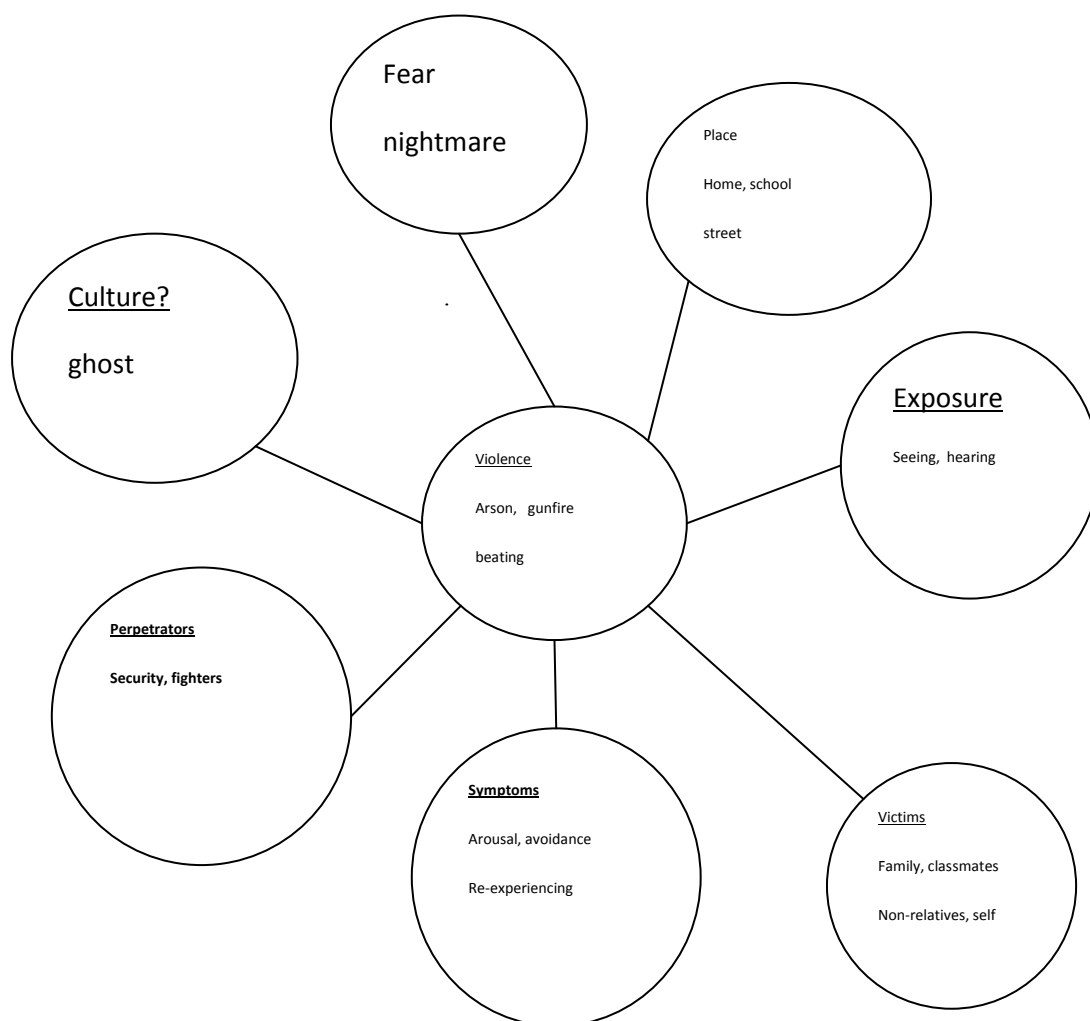
Figur 2: Codes and themes

Exposure to gun shot

The official of the NGO I spoke to in Accra had this to say about one of his experiences on the filed in Bawku

The conflict situation in Bawku is terrible. There was an experience that I would never forget. We went to collect data to test views on a peace building strategy we wanted to implement in Bawku. There was relative calm throughout that week and things seemed very normal. Just in a twinkle of an eye, we heard two gun shots from afar. Before we realised, bullets started running all over just at a distance. We took cover until the situation was brought under control by the security, I mean the soldiers on the ground (NGO officer)

The various dimensions of the gunshots were captured by the interviewees as follows:

Interviewee 13 said ''we heard some gunshots''. Interviewee 12 rendered it this way:

'' ...there were gunshots in the town, you heard it from this side, now and then another direction''.

Interviewee 11, on the other hand, pointed precisely where the gunshots were coming from. According to her:

> one day, early in the morning, I heard some gunshots from the direction of the chiefs palace. I was sweeping our compound, I thought it was Christmas toy guns, but it continued.

The effects of the gunshots on children were captured in the response of one interviewee. According to interviewee 4,

> I woke up early in the morning, heard noise from town and some gunshots. The gunshots were coming from the chief's palace area of the town. The sound of the gunshots came nearer to our house. I heard people making noises as if they are in pain.

This could show that some people might be hurt by the bullets from the gunshots. From the above information, it was clear that the children were exposed to traumatic stressors that were very threatening.

<u>Arson</u>

Apart from the sounds of the gunshots, the interviewees also had other different exposures:

For instance, during the focus group discussion I had with a family, the head of the house (father) had this to say:

'....it was a difficult situation. All that I worked for all my life was set on fire, my house, everything I had in Bawku got burnt just in a day (Father, in focus group).

Many of the children interviewed recounted their experiences. They experienced arson. Some saw houses and other property burnt.

According to interviewee 13,

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> They burnt some people's houses.

This was also confirmed by interviewee 12 who rendered it to wit: I saw some houses burning, recounting her personal experience of seeing some people's property set on fire. She also recounted her experience of seeing a woman and her children burnt by fire.

> A woman and her children were burnt to death in the fire.

Though other interviewees heard or saw other people's property burnt, a particular interviewee (interviewee 4) had their whole compound and property burnt. He recounted

> ......our house was burnt by fire, the fighters burnt our house.

He recounted how they lost their property in the arson:

> One day, we went to school, I and my brothers and sisters. Our mother was not at home. Father also went to Pusiga. Our house was set on fire. The whole compound got burnt. Our things got burnt. We came to meet our house on fire. All our clothes and other things got burnt.

Fortunately, he recounted nobody was hurt in the fire.

He responded *"no"* when asked if anyone or relative got burnt in the fire. He added that

> only our property got burnt in the fire.

Another child (interviewee number 6) also recounted how they lost all their property in arson. She recounted her experiences:

> We came from school one day and all our houses on the compound were on fire. All the houses on the compound were burnt. All our clothes were also burnt. The police came and other people came but they did not stop the fire. My (toy) baby also got burnt in the fire. I can't find it. It got burnt in the fire.

She said with deep emotions.

The general impression in talking with people was that arson was used as a weapon in the conflict. Fighters set other people's property on fire. From these accounts, it was clear that the children did not only hear of arson but they also witnessed events that were threatening to both their lives and other people's lives, which are characteristics of posttraumatic stress disorder.

Witnessing brutalities

One other way that the interviewees were exposed to the conflict was witnessing brutalities. Some witnessed people openly beaten or seriously assaulted. One interviewee (Nr. 10) recounted how some fighters brandishing weapons crossed the roads and assaulted and brutalised innocent people, including men, women and children:

> ...my brother was sick, so my mother said we should send him to the hospital. I carried my younger sister. It was early in the morning. Then some people crossed the road. They had guns. They made line, all of us. Then they speak with you. When you speak or say you are Mamprusi, then they beat you. They beat many people, some men, children and women. My mother spoke Kusaal and they left her. They wanted to beat me. One of them pulled me very hard. And my mother shouted "she's my daughter" and he left me. They beat a lot of people. Some men had blood in their face and wound on their chest and face.

The children did not only see other people brutalised, their own relatives were brutalised as well. One interviewee (no. 7) recounted the assault meted out to their father by the security forces on suspicions that he was supplying arms to the combatants:

> ...we were at home, when police and soldiers came into our house. They brought a big car. They all jumped out of the car with their guns pointing at all of us. They shouted a word to my father who was sitting with us. Some of them put the guns on him. They went to check our rooms. We were very much scared. One soldier slapped him. He used the back of the gun to hit my father's head and blood came out. We all started crying. They kicked him and pushed him into their car. My mother wanted to join the car, but the soldiers pushed her and she fell on the ground. We were crying and they drove away with my father.

She also described her immediate reaction on witnessing these brutal assaults on her father and mother.

> I was afraid. I did not eat in that night.

Witnessing or hearing of death of people.

Some people lost their lives in the conflict. The interviewees recounted some experiences of how they got to know about some killings in the conflict. Some of the children interviewed only heard about these killings.

An interviewee (9) rendered it thus:

when we went to school, we heard some people were killed. Two boys in my class, their father was killed. Then somebody's brother was killed, he was also in my school.

Another child (interviewee 13) explained how she heard about some of the deaths. She recounted how a boy was hit by a stray bullet:

... one boy , he was killed by stray bullet.

Other children also witnessed the killings of other people. This was reported by interviewee (number 10) thus:

One day, we were coming from school and heard some gun fires. Some men were on the street fighting. Some fell down on the ground with blood in their mouth and head. I saw some policemen and soldiers with gun.

In response to witnessing this episode with fear, she noted in her own words: "*I was afraid''*.

Unfortunately, one girl (Interviewee 2) recounted how she witnessed the death of her mother:

...I went to the mills with her. She sold ''Hausa koko'' (i.e. porridge). We went to the mills to prepare the floor for the ''Hausa koko''. When we came back from the mills, we heard gunfire. My mother shouted with pain and fell to the ground. Blood came out of her head and mouth. I tried to pull her up to stand so that we go. Some police came and took us to the hospital. My father came and told me she was sleeping in the hospital so we went home. But I felt she was dead,

She recounted with emotions.

The perpetrators and the victims of the violence

The violence in Bawku was perpetrated by both the fighters and the security. The victims of this carnage included the participants, their family and other people unknown to them. For instance an interviewee recounted the violence perpetrated against the father by the soldiers

.....one soldier slapped him, he used the back of the gun to hit my father's head and blood came out. We all started crying. They pushed him and kicked him into the car.......'' (Interviewee no. 7)

Another also recounted a violence perpetrated against other people by the fighters

''They hit many people with some big sticks. They beat children, men and women. Some men had blood in their face and wound on their chest and face'' (Interviewee no. 10)

Symptoms

When people were exposed to traumatic experiences, there are major symptoms that are identified in the victims. The characteristics 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 the diverse symptoms were expressed by the victims who were exposed to the various experiences in the conflict.

Re-experiencing

In this section, I will throw light on what my informants told me of their responses to their experiences in the conflict. After exposure to a traumatic experience, the victims show symptoms of flashback of the experience, in their minds and also in their dreams. How then did the experiences of the children in the Bawku conflict affect the children? Their responses also included fear and some physiological responses as racing of the heart.

On the thoughts or memories about their experiences in the conflict, interviewees experienced flashbacks, among others. These also manifested in their sleep. This was captured by one interviewee (no. 13):

"... the soldiers with guns in the night and the burning of the houses ... they come to my mind and I'm many times afraid.''

Another interviewee (no. 12) captured her responses to the exposures thus:

> ...the gunshot sounds that I heard from time to time, the soldiers arresting people or coming to our house with guns come to my mind many times.

Also, another respondent (interviewee number 11) also recounted the flashbacks thus:

> ...sometimes, it comes to my mind, how the men with matchets and guns came to our house, if we were Kusaasi people, they would kill us. It comes to my mind sometimes.

Another manifestation of the re-experiencing showed in the sleep experiences of the victims of traumatic events. This shows especially in recurrent and intrusive dreams or nightmares.

This was manifested in the dreams of the victims as recounted below.

An account of one child (interviewee 12), showed some intrusive dreams:

> "... I had some bad dreams ... I dreamt about a boy, shot in the ear. The bullet went through the ears. I shouted from my sleep. When I woke up, I feared the ghosts would come to our house.''

The dream experiences seems to reflect the experiences they had in the conflict. Another child (interviewee 13) also recounted her dream experiences as follows:

> I was asleep one day, I saw our house on fire, when I was running away, a tall man, with a gun, caught me. He threw me into the fire. I was in the air, getting to the fire and I shouted ... then my mother came to wake me up. I could not sleep again. I was very much afraid.

One girl, who witnessed the death of her mother in the conflict (i.e. interviewee 2), recounted her dream experiences, where she saw her mother's apparition:

> ... I dreamt many times seeing the ghost of my mother in the dream. She lied down with blood in her face. I got scared in the sleep and shouted. Other people woke up.

She seemed to have more of such dreams. She recounted another dream.

> ....one day, I had a dream, some strong men with bows and arrows and sticks chased me. I tried to run away but it was difficult for me. I shouted for help and my father and my brother rushed to our room''.

I questioned her on her claim of her mother's ghost, to which she answered she was sure she saw her mother's ghost because she could identify what she saw in her dream as her mother and since the mother was dead, it made sense to see her as a ghost, as generally believed in the area.

These dream experiences were recounted by many of the interviewees; however, there were some exceptions. Some of the interviewees did not experience any disturbing dreams after experiencing the conflict.

For example, the responses from one of the children interviewed (interviewee 11), did not reflect any bad dreams. He recounted:

> many times I have good dreams. I don't have anything bad in my dreams...''

One experience in the response of trauma is physiological.

This was explained by the children as below: On how they felt when they were reminded of the events and effects, some interviewees gave their responses as below:

...... when reminded of conflicts experiences, I don't feel happy. I get worried ... my heart jumps faster; I feel bad things like pain in my stomach. I feel sweat in my body and palm... (I think this is goose pimples).

(Interviewee no. 2)

I feel sad and my heart beats faster

(Interviewee 1)

Avoidance

Another symptom associated with the response to trauma is avoidance. People exposed to trauma tried 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 interviewees tried to avoid the events at Bawku. This is expressed in the interviews below:

I don't want to talk about it everyday. It makes me unhappy.

(Interviewee 1)

I don't want to talk about it to other people, I am afraid when I remember it.

(Interviewee 11)

Interviewee 2 put it this way:

I don't feel happy to talk about it; I don't like to remember it I don't like to remember my mother's death, I feel sad to remember it.

One avoidance strategy associated with the exposure to trauma is losing interest in some positive activities like sports and games etc.

Some of the participants expressed these symptoms, as recounted by Interviewee 4:

I'm afraid to play with Christmas gun, I don't want to remember the noise of the guns in fighting in Bawku.

Some of the interviewees, however, continued to enjoy their positive activities they used to enjoy before the exposure to the conflict. Their responses are captured below:

I still play 'ampe' and other games with friends

(Interviewee 11)

I still play with my friends   (Interviewee 2)

Generally, all the other responses summarised all that the other interviewees said above.

Hyper-arousal

To be diagnosed of PTSD, one symptom after experiencing a traumatic event is hyper-arousal. This means the victims experience some arousal or symptoms of anxiety which were not present before the exposure to the traumatic events. This manifests in the victim having difficulty falling asleep. The victim may have difficulty to fall asleep or stay asleep. Some victims also maintain hyper vigilance and startle response.

Did the children in the Bawku conflict also display hyper-arousal symptoms after their exposure to the conflict? Some respondents reported of some of the signals that show their response. A nightmare recount of some of the victims also confirmed their hyper-arousal symptoms.

One interviewee rendered his experiences thus:

...when on bed, I sleep well sometimes. But when I had bad dreams, I did not want to sleep again. I stay awake because I fear I will have the dream again.

(Interviewee 4)

On whether he felt secured, he answered thus

...I feel sometimes that someone could burn our house again, and I get scared, checking many times to show I'm safe.   This is exaggerated response.

Another interviewee also recounted her experience, showing a manifestation of hyper-arousal thus:

> ......in Bawku, I didn't sleep deep... when on bed, I slept a little then open my eyes thinking about the conflict. (Interviewee 5)

On how the experience affected her concentration, she answered

> ...when I did not sleep well in the night, I dose in class...

She also did not like to be alone, she stated below thus:

> ...when alone, I felt something bad could happen to me, I tried to stay with my father or my mother, or not to go far away from home...

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

> I feel fine when people are around but when I'm alone, I get very scared.

These show that children in the Bawku conflict experienced hyper-arousal, a symptom of posttraumatic stress disorder.

However, some of the interviewees did not display any symptoms of hyper-arousal though they were exposed to the conflict. For instance, Interviewee 3 did not experience any sleep disturbance. He said:

> I sleep well. I go to bed at 8:30pm and wake up at 6:00am.

When asked if he stayed awake in the night, he responded ''no''.

Items identified but not in the PTSD descriptions-culture specific

Some items were identified in the interviews that did not seem to be captured in the PTSD DSM-IV.

Ghost

Interviewee 1, 8, 12 and 13 talked about ghosts. Ghost experiences were not captured in the PTSD DSM-IV manual. Interviewee 1 recounted his experiences thus:

> ...another time, I saw the ghost of my father's wife in my dreams, this happened many times. One day, I shouted and everybody woke up.

Here he was referring to his father's late wife who died in the conflict. He continued when probed further,

> ...my father told me about ghost. When somebody dies, he is a ghost. He can see all of us. When you do something bad, s he can attack you. She is now a ghost ... I tried not to think about it, and then she came to my mind. And then I dreamt about her. I was afraid.

One other boy was afraid to go out because he was afraid to meet the ghost of the people who died and he knew of them.

> ...I don't want to go out in the night. If my mother sends me to buy some item for her in another house in the night, I'm afraid to go. I'm afraid that I will meet a ghost. I think if you meet the ghost of the boy who died what will you do?

One other girl (interviewee 13)

Recounted her fears of a ghost and also her physiological responses when she thought about these:

> ...when I dreamt and saw him (a boy who died in the conflict), when I wake up, I'm always afraid, the boy's ghost, yes that I'll meet him. So when my mother sent me, I'm afraid to go alone. I don't want to be injured by the ghost. Anytime I'm thinking about this then I'm afraid and my heart then beat very much and I'll feel cold in my body and my palm.

Another girl also recounted her experiences

> I'm always afraid that the people who died in the fighting would hurt me, that what would you do when you just meet the ghost of the boy who got burnt in the fire? This thought came into my mind. Because of that I don't want to go out in the night.

She seems to be worried about ghosts in the night and not in the day, as she said below:

> I'm not very much afraid in the day, but in the night, I'm always afraid, when I heard people died. I knew some of them. When I had bad dreams about them, I'm always afraid I'll meet them in the night or maybe they come to my room in the night.

She seems to have learnt about ghosts from the people around her. She mentioned her grandmother as I tried to convince her that the dead people could not hurt her. She responded:

> sir they can hurt, my grandmother told me.

About how she felt when she thought about the ghosts, it was clear thinking about the ghosts gave her a lot of distress:

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> I feel scared. My heart beats so much. When I had a dream about the boy who died, I was very sick and my mother took me to the hospital.

Parents also confirmed the experiences of the children. All that they said were summarised by what one parent said of her children:

> ...the children are afraid to be left alone. Also their performance in school
>
> is not good as it used to be.

It was clear from the above reports that the children's experiences caused them a lot of distress. The belief in the presence of ghosts seems to be woven into the belief of the people, and they have culturally sensitive ways of dealing with this. A local man with some traditional powers was called in to deal with the bad dreams one of the respondents was going through concerning ghosts.

One child recounts how the traditional spiritualist healed him of the ghost experience he had:

> "...when I dreamt about her, I was afraid. Then Liman made a talisman for me and it protects me. Now it stopped. I don't dream very much of Mama Amina any longer''.

All of these experiences were not recorded in the PTSD DSM-IV Manual. Another experience recounted by one of the participants was his idea of how his guardian will react when he was found ''acting lonely.''

In response to a question on what he did when he was feeling lonely, he responded that he did not want his father to know he was feeling lonely because, according to him,

> when I put my chin in my hand and he (my father) sees me, he will be angry that I'm showing he's not looking after me well.

I found this also to be cultural specific. The above experiences as told by children from Bawku have not been captured in the DSM-IV Manual of the PTSD diagnoses. However, what accounted for these differences will be addressed in the discussions below.

Discussion

The study intended to find out whether children exposed to the Bawku conflict experience PTSD as described in the DSM-IV, and if there are cultural variations in relation to studies conducted in the Western environments. Also, the study intended to find out if there are gender differences in the display of PTSD in children exposed to the Bawku conflict, and finally to find out culturally relevant ways of dealing with the traumatic experiences that were due to the conflict. The results of this study 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 responded with fear and agitated behaviour, and after the experiences displayed some symptoms that are classified as re-experiencing, avoidance and arousal (APA, DSM-IV, 1994).

Quite clearly, the sample had experienced trauma of war, and were now experiencing severe psychological symptoms. All the participants had criterion A. As shown in the table 2, all the children interviewed were exposed to the conflict. Most of them experienced traumatic war-related violence. As displayed in the figure 2, the violence most of them experienced included hearing of gun fires, witnessing arson on houses, being caught up in cross fire. Some of them witnessed violence perpetrated against their family members. The perpetrators of the violence included the military, police and the fighters. They also reported their responses to such experiences. These included fear, helplessness and horror. Some of the children also reported that they fell sick after some of the experiences. The symptoms described by the children after their experiences looked a lot like the descriptions of the DSM-IV so that it was relatively straightforward to classify them. As could be seen in Table 2, the symptoms that emanated from the children's descriptions can be classified as re-experiencing, avoidance and arousal as stated in the DSM-IV. Almost all the children displayed the re-experiencing symptom i.e. criterion B. As shown in table 2, as many as 12 participants displayed some of the re-experiencing symptoms out of a total of 13 participants. Most of the children also displayed avoidance symptoms that included efforts to avoid thoughts, feelings associated with the trauma, efforts to avoid activities, places or people that arouse recollections of the trauma, markedly diminished interest or participations in significant activities. The

participants also display arousal symptoms which included sleep disturbances, extra-vigilance, and difficulty in concentration.

The findings that exposure to arson, curfew that disrupted the normal activities, including schools, gunfires and other violence that resulted in the displacement of most of the participants were among the most common conflict related experiences for children in Bawku, and is plausible and in accordance with the type of conflict occurring in Bawku. Houses were set on fire, fighting flared up unexpectedly between the rival ethnic groups. The number of security personnel on the streets and other places increased periodically. Families fled the conflict to other communities that were safer, as IDPs. However, unlike other places like Uganda (Dodge, 1986), children in this conflict did not seem to be the main target. The findings are consistent with findings by Schwarzwald et al (1993), which found out that exposure to war-related events, such as SCUD-missile attacks in Israel, were related to the development of PTSD in children. It is also consistent with findings by Smith et al (2002) and Thabet & Vostanis (1999) which established a link between exposure to war related trauma and PTSD in Bosnian and Palestinian children who experienced various conflicts. The results show that posttraumatic stress symptoms were a response to the stress of combat. Given the massive exposure to violence reported by the participants, it is no doubt that the children also reported so much traumatic stress symptoms. An important element identified as a protection in traumatic situations has been social support (Rabalais et 2002). In many Ghanaian communities, life is interdependent. Extended family system is still in place with aunts, uncles and many times members of the community acting as a source of support (Assimeng, 2006). These are plausible sources of coping that minimised the manifestations of some of the symptoms related to difficult experiences like the Bawku conflict. However, since the families of the participants were displaced by the conflict, the source of the support that may be offered by these relevant members of the children has been affected. This is an explanation of why children reported such high symptoms.

The study also predicted that there would be cultural variations in the display of symptoms by the participants as compared to the Western contexts. As could be seen in the data, though most of the symptoms are related to PTSD, some variations were, however, identified in the display of PTSD symptoms by the participants. A significant symptom in the display of PTSD is the experience of distressing nightmares. One conspicuous trend that emerged out of

the data was the ghost stories by the children. The children recounted experiences where they had nightmares which had content with encounters with the ghosts of people who died in the conflict. Some of them also explained that they had fears of meeting the ghost of the people they knew, who were killed in the conflict. They therefore got scared of going out, especially in the night, in order not to meet such people. Though these experiences affected the functioning of the participants, it was not captured in the DSM-IV as a symptom of PTSD. However, I saw this as culturally relevant. This is not a confirmation of Pole et al, 2005 that a particular ethnic group are susceptible to PTSD. One way that victims of traumatic events display PTSD was experiencing traumatic and distressing dreams, classified under criterion B of the DSM-IV. The fear of the ghost that made them avoid going out was an avoidance symptom, classified under criterion C of DSM-IV. The symptoms needed to be interpreted in the context of the prevailing culture in the specific society. People's perceptions, description of terms, and traumatic reactions are shaped by culture (Nader, 2008). The individual's internalised beliefs, based on his or her socio-cultural background also influences responses to trauma (de Silva, 1999). Barret and Behbehani (2003) stated that in the western cultures, for instance, dream experiences are not considered to have any significant impact, but in the Arabian cultures, for instance, dreams are given serious thoughts as the belief rife in this culture is that dreams have impact in foretelling the future. Efforts are thus made to seek interpretations. Their research in Kuwait established that the dreams of children during the Iraqi invasions had the contents centred on the invasions. Explaining the symptoms of the children in this study thus needed to be done within the cultural context. Religion shapes the worldview of the Ghanaian, and the people of Bawku are not exempted. According to Nukunya (2003), religion is the belief and practices that are linked with the supernatural. The Ghanaian religious practices are woven into the belief in the Supreme God, and the spirits. Ghanaians also believe in the continuous existence of man in the spirit world after death. The belief in ancestral spirits and ghost is not news to the Ghanaian. As reported in the data, some of the children's explanation that they got the information about ghosts from their families can explain that the belief in the existence of spirits is deep seated.

The study also intended to find out whether there are culturally relevant ways of dealing with the symptoms of the PTSD. As stated by Hofstede (1980), people's culture influences their perceptions of an event. The western model of therapy uses psychotherapy in treating PTSD. However, the meanings given by people in other cultures are different. As evidenced in the

data, when children were suffering from the nightmares and the fear of the ghosts, their parents ascribed the causes to the spirits, and they invited the 'medicine man' to offer healing. The results were effective as recounted by the children. In Ghana, religious sentiment underpins every facet of life. Spiritual meanings are ascribed to many things. The universe is given a spiritual interpretation. Many events that occur are given spiritual interpretations (Nukunya, 2003). It is therefore not surprising that the experiences of the children were interpreted as spiritual and the medicine man was brought in to offer healing. Results also showed that the medicine man's healing processes were effective. This is consistent with findings by Wilson (1989), that some culturally specific healing procedures that were not recognised by the Western-based knowledge may be effective in treating symptoms of PTSD. A criticism of the concept of PTSD has been that experts with the knowledge on PTSD relegate the local contents that are relevant in dealing with the distress of the victims. It is therefore important to take note that some non-western healing practices are relevant in other areas and efforts must be made to incorporate them into dealing with PTSD.

Finally, the study intended to find out whether there were any gender differences in the display of PTSD in the children. The results show no clear gender difference. As could be seen in table 2, the girls and the boys were exposed to the conflict in Bawku. Both also related that they experienced symptoms that could be classified as PTSD. The symptoms of both the boys and the girls were similar. The finding is consistent with findings by Shaw et al (1995) who found no significant difference in the display of PTSD symptoms by victims of the Hurricane Andrew.

It, however, failed to confirm findings by Fullerton et al (2001) that showed differences in PTSD of women and men. Generally, findings on gender differences had not been conclusive. The reason why this study might be different is that it used in-depth interview while the rest used structured tools.

Conclusion

Studies in many Western cultures proved that children exposed to war develop posttraumatic stress disorder. Despite a lot of empirical evidence supporting this claim some scholars also

offer serious criticism to the claim. An issue that has been contended many times has been whether the issue of PTSD transcends cultures. Some people maintained the view that the concept of PTSD is a western-phenomenon and thus cannot be relevant in other non-western cultures. The conflict of Bawku offered an opportunity to undertake empirical study on this issue. The fundamental question this research intended to answer was whether children in Bawku would experience posttraumatic stress symptoms due to their experiences during the ethnic war. After painstaking in-depth interview of some children from Bawku who were exposed to the Bawku conflict, it was clear that the children display symptoms that can be classified as PTSD.

The study found that the children exposed to the Bawku conflict displayed symptoms that were similar to those in the DSM-IV based on western subjects. Findings also showed that there were cultural variations in display of some of the symptoms and there were culturally relevant ways of dealing with PTSD. No gender difference was found in the display of PTSD.

This study has expanded the PTSD research to an ethnic-based, low-intensity conflict in Ghana. The study experienced some limitations. The time limit was a factor. I needed a short period to undertake my research in limit of graduate study work. I advocate for a replication of this study with a longer period. The information picked on the field showed the conflict has been going on intermittently. I suggest a longitudinal study that will include a larger sample than the current study. I also suggest that the effects of the conflict on other psychopathological problems be investigated in any subsequent study. I also recommend that a study with a wider coverage by clinical psychologists and other relevant professionals (including local people) should be conducted into this phenomenon.

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APPENDICES

Appendix 1

<u>**Interview Guide**</u>

A person develops Posttraumatic Stress Disorder after exposure to extreme traumatic stressors involving direct personal experience of an event that involves threatened death or serious injuries or witnessing an event that involves death, injury of another person

A child's responses after exposure to trauma involve intense fear, helplessness disorganized or agitated behavior.

The characteristic symptoms of trauma exposure include:

a).persistent re-experiencing of the traumatic

b).persistent avoidance of stimuli associated with trauma and numbing of general responsiveness.

c).persistent symptoms of increased arousal.

The interview guide below is designed to elicit symptoms of PTSD (if they exist) in children exposed to the Bawku conflict. And to check if the symptoms are similar to those experienced by children from the Western cultures

I will debrief the children after the interview. I will not just send them away.

I will seek permission from parents, guardians or teachers before interviewing children.

A. Experiences and exposure

1. My name is Francis. I will like to ask you some few questions about the Bawku conflict and will be grateful if you could answer me as clear as you could remember. You are free not to answer if you do not want to. You are free to stop the interview at any time. You are free to ask any question

2. You were in Bawku during the conflict. What happened? Tell me what happened to you or other people? Tell me all that you saw or heard during the conflict?

3. Where were your parents, brothers and sisters?

4. Was any of your family injured in the conflict?

5. How did you feel after seeing / hearing/ going through all that happened?

(6).In what ways do what happened to you affect you?

(7). Tell me your sleep experiences after all that you heard/saw/ happened to you (a) Immediately (b) one-two month later.

(9). Did you go to school during the conflict? (a) How did you feel in school? (b) how did you feel without going to school?

(10) Do you still remember all that happened? Which of them do you remember often? How do you feel when you remember what happened? Do you feel all that happened in the conflict will occur again?

(11) Do you still visit places where you had those (bad) experiences? How do you feel when you get there? Or why don't you like going to those places?

12. What are your plans about the future? What do you intend to become in the future?

13. Why do you want to be ………… in the future?

14 What do you expect people to do about this conflict?

B. Symptoms

Re experiencing

1. Do you still have thoughts or memories about the conflict?

2. Tell me some details of the memories?

3. Tell me of your sleep experiences, after the conflict.

4. Do you feel sometimes what happened in the conflict is happening to you again? Explain further such experiences that keep coming in your mind.

5. How do you feel when someone reminds you of what happened during the conflict?

6. How do you feel in your body or any part of your body when you have reminders of what happened in the conflict?

<u>Avoidance</u>

7. Do you like talking about your experiences in the conflict to other people?

8. If interviewee answered ''no'' to the question (7) above, ask why?

9. Do you have difficulties remembering important part of the bad things that happened/happened to you in the conflict?

10. What plays, games do you play with your friends, brothers and sisters before the conflict in Bawku?

11. Do you still play the games you play before the conflict?

12. Do you feel as though people are not that close to you?

13. How do you feel when you are alone?

<u>Hyper-arousal Symptoms</u>

14. Tell me about your sleep experiences, specifically, your experiences in falling asleep and staying asleep.

15. How do all that happened to you affect you in school and at home? Explain

16.How do you feel on your security? Do you feel very safe in your environment? Explain

17.Do you feel sometimes you are in an impending danger? How do you guide against such dangers?

18.Do you feel relaxed always in your environment (eg home, school)?

Appendix 2

DSM-IV PTSD

Criterion	Symptoms
A. Exposure	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 2. A response of fear, helplessness, horror, or disorganized or agitated behaviour
B. Re-experiencing	1. Recurrent, intrusive distressing recollections of aspects of the events 2. Recurrent distressing dreams 3. Acting, feeling as if reliving the experiences 4. Intense psychological distress in response to reminders 5. Physiological reactions to the reminders
C. Avoidance	1. Efforts to avoid thoughts, feelings, or conversations related to the trauma 2. Avoiding activities, places or people that arouse recollections of the trauma 3. Lack of ability to recall important

	aspects of the trauma 4. Diminished interest or participation in significant activities 5. Feeling detached from other people 6. Restricted range of affect 7. Sense of foreshortened future
D. Hyper-arousal	1. sleep disturbance 2. Outburst of anger 3. Difficulty in concentration 4. Hyper-vigilance 5. Exaggerated startle response
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

Appendix 3: Research Photos.

Note: Photographs of participants are not included

Appendix 3 (a) A new house under construction for a displaced family.

Appendix 3 (b) some of the displaced children

Appendix 3 (c) A displaced girl preparing meals for the family

Appendix 3 (d) A boy wearing a talisman.