
# WORRY AMONG PRIMARY SCHOOL CHILDREN IN SOMANYA, GHANA

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**Thesis submitted in partial fulfilment of the requirements for the degree in Master of Philosophy in Health Promotion, University of Bergen, June 2006.**

## DECLARATION

I hereby declare that this Thesis is as a result of my own research work carried out in the Research Centre for Health Promotion, University of Bergen, Norway. This was under the supervision of Mai-Bente Snipstad (Cand. Psychol). The work has neither in whole nor in part been present in any other University except for references to the work done by others, which have been duly cited.

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## ACKNOWLEDGEMENTS

I am thankful for the financial support I received from the Norwegian Educational Funds.

My sincere thanks go to the various personalities who contributed immensely to the successful completion of this thesis. I owe a depth of gratitude to all the staff at The Research Centre for Health Promotion (HEMIL), University of Bergen, for the various help I gave me during this programme. My personal gratitude goes to Maurice Mittelmark for the able manner in which you encouraged me in my study. Special thanks go to these personalities, Professor Gro Therese Lie (HEMIL-centre) and Professor David Lackland Sam (Faculty of Psychology, University of Bergen) for following this study with keen interest.

To Joyce Komesuor, a colleague at the HEMIL-centre and a fellow Ghanaian, thank you for going the extra mile to be my research assistant. I know this meant taking time off your tight schedule to assist in the data collection.

My deepest appreciation goes to the heads and teachers of the Somanya Presbyterian and Catholic primary schools for the readiness with which they accepted to participate in the study. My thanks also go to the two teachers who helped me organize the children for the study.

In order to produce quality work, a research seminar group was formed under the able leadership of Professor Elisabeth Fosse (Assistant director at HEMIL). I am grateful for this initiative without which my work would have lacked the

quality it now has. I am also thankful to the other members of this review group namely; Francis Namisi (PhD student at HEMIL-centre) for taking time off your busy schedule to read through this work and offer feedback which proved precious; my colleague Kelly Galloway, it was always refreshing to receive your commendations and recommendations.

To Seth Bavon (University of Ghana), my colleagues Nkomba Kayeyi and Oliver Mweemba for your assistance through the quantitative analysis, especially the SPSS programme. My thanks also go to Daniel Appiah (University of Bergen) for your timely help.

This work would not have seen the light of day, without the able guidance of my supervisor Mai-Bente Snipstad. You backed this work with your vast experience in the study of children in general, and on worries among children in particular. This fed into the feedback you gave which has greatly enriched this work. I am very appreciative for the many sacrifices you made in order to give my work priority.

To my parents and my siblings, you gave me a peaceful environment whilst at home to concentrate on my study and whilst abroad; your regular support through words and deed gave me no cause to worry.

The greatest thanks go to all the children who participated in this study. Your readiness to share your personal issues of serious concern cannot go unmentioned. The experiences you shared have been documented both for your benefit and that of posterity.

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## LIST OF ACRONYMS

| | |
|---|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| HIV | Human Immunodeficiency Virus |
| HIV/AIDS | The continuum from HIV infection and progression to AIDS |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |

**ABSTRACT:** This study assessed the content, frequency and distribution of worries among primary school children in Somanya, Ghana. In part one, 85 primary school children aged between 10-to-15 years listed their worries through a list generation technique and a focus group discussion. In part two, the worries generated by the children were categorized and a questionnaire was constructed for measuring frequency of typical worries. 120 primary school children of same age range ranked the frequency with which they worried. The list generation described the content of the children's worries, and were grouped under six main categories respecting the child's life namely, '*Personal care'; 'Education'; 'Breaking norms'; 'Family relationships'; 'Safety and Environment'; and 'Sickness and death'*. The children's responses to the frequency scale indicated that their topmost worries related to *'Care'*. The study documented gender and age difference in worries. The girls in this study listed more worries than the boys. Younger participants (10-12 year olds) listed more worries than older ones (13-15 year olds). However, statistical analysis did not reveal an overall gender and age differences in frequency of worrying. The children also indicated that they talked more to adults (parents, teachers and other adults in their families) about their worries. The thematic content of worries revealed systematic differences between orphaned and non-orphaned children. Orphaned children related more worries on the well-being of their current caregivers, sickness and death of parents. Their worries also demonstrated problems of adjusting into their new families. Implications of the findings are discussed in relation to the child's sense of secure base. The role of parent/caregivers as moderators and mediators of important issues and life experiences have been emphasised.

### *1.1. Background to the Study*

Child care is an important responsibility in any culture. In Ghana, this responsibility is normally undertaken by the nuclear and extended families. However, poverty and HIV/AIDS are affecting the family and this basic function of care.

The HIV/AIDS epidemic has grown to increasing levels in Sub-Saharan Africa. Ghana, a country with a population of 20.5 million has a prevalence rate of 3.1%, as of the end of 2004 (Ghana AIDS commission 2005). It is estimated that 111,921 children have been orphaned in the country. The Yilo Krobo district (population approximately, 132,000) is one of 20 districts in the country which have been hit hardest by the epidemic, with an orphan population estimated at 3,000. Out of these, 100 are being taken care of in the two orphanages in the district (Ghana News Agency 2005). This indicates that a greater number of the children orphaned are living with relatives or other persons in the communities. Such living arrangement is not new to the Ghanaian culture. It has always been common to give daily child care responsibility to other family members, in-laws and non-family members such as neighbours. Siblings also provide care when a mother is temporarily unavailable (Sabaa 2004).

One of the current challenges is that the number of children being orphaned keeps increasing (Ghana AIDS commission 2005). The increase in orphan population put a strain on the extended family which has for sometime now been weakened because of urbanization (Nukunya 2003). In addition, HIV/AIDS contributes to losses in the parenting-generation. In ordinary circumstances, the parenting-generation is to replace the older generation with regard to child care.

In the context where families are affected by HIV/AIDS, the role of parents/caregivers may change to meet children's needs. When it is difficult to secure these needs, caregivers may become stressed and even feel helpless because they are unable to do anything about their situation. When parents/caregivers live in a state of constant stress, a state of fear and helplessness, their children often lack a sense of basic trust and security needed for healthy emotional development (Appleyard & Osofsky 2003).

Another factor affecting the family and child care is poverty. In Ghana, poverty-related strain on the family is a reality for many. It is common to see parents/caregivers' who have been compelled to involve children who are in their care in income generating activity. This is one of many measures

parents/caregivers have taken in order to provide for the needs of their dependants. According to Chant and Jones (2005), low-income people in Ghana become involve in a variety of work activities from a relatively early age. This they do almost invariably while they are still studying at primary school or have just entered secondary education.

Traditionally, children start early to participate in unpaid work, such as domestic labour, helping out on semi-urban horticultural plots farmed by parents or guardians. However, the current trend goes beyond unpaid jobs to engagement in income-generating activities. Today, income-generating activities undertaken by children mainly comprise of assistance to relatives on market stalls and in small family businesses, or engagement in own-account informal services and commerce such as street-vending. For children who attend school these remunerated works frequently involve about 1–2 hours of activity before and/or after the school day, as well as at weekends.

### *1.1.1 Children in the Ghanaian context.*

Ghana is a multi-ethnic society; however values about upbringing of children often show few variations among different ethnic groupings. Within the traditional system, it was the responsibility of parents, extended family

members and other community members to bring up children both in matrilineal and patrilineal families. Among some ethnic groups, there was a general belief that biological parents were not necessarily the best people to bring up children and therefore children could be raised by other adults. There were also distinct male and female roles and responsibilities, especially with respect to labour. Females were responsible for household chores while males were responsible for other chores such as farming. Some evidence suggests that adolescents today still hold to these traditional gender norms quite strongly (Awusabo-Asare, Abane & Kumi-Kyereme 2004).

According to Nukunya (2003), traditional institutions in Ghana such as the extended family are being undermined because of rapid urbanization and increased mobility. There is a drive from communal towards more individualistic lifestyles. For instance, the nuclear family is replacing the extended family. The HIV/AIDS pandemic seems to have interrupted this transition because affected nuclear families cannot help but fall back on extended family relations as sources of social support to care for orphaned children.

The kind of relationship that exists between children and their parents/caregivers in the Ghanaian context has always been guided by implicit and explicit cultural values. For instance, as a measure of respect, it is encouraged that a psychological distance is kept between children and their parents (Botchway 2005). This does not mean that children do not communicate with their parents, but rather they do so with utmost respect and dignity as to any adult in the family and in the community as a whole. Parents and other older members of the community serve as educators in all spheres of the child's life. Thus in addition to formal education, adult members of family are expected to teach morals and discuss issues of sexuality with the young as their age and maturity may require. However, a study done in Dodowa, southern Ghana, indicates that the parent-child relationship has deteriorated due to poverty of parents, economic independence of children, pressure from work and the feeling by parents that children have become rude (Afenyadu & Goparaju 2003).

According to Akumfi (2002), these problems have been compounded by the invasion of foreign cultures, some of which are detrimental to the Ghanaian culture. The blind imitation of some of these foreign cultures, especially those portrayed through the electronic media, has brought a lot of untold hardships

resulting in social vices such as armed robberies and sexual immorality. These hardships are putting a strain on family relationships and affecting communities as a whole.

The extent to which children perceive these social and economic changes and incorporate them in their everyday life is less known in the Ghanaian context. This study assesses children's worries in relation to contemporary changes in their communities. Knowledge on how children feel about these challenges can provide useful information for addressing children's needs.

### *1.1.2 The study site.*

Somanya, the district capital of the Yilo Krobo district was the site for this study. This was chosen because it is one of the towns which had high concentrations of known HIV/AIDS seropositive cases in Ghana since the outbreak of the epidemic (Anarfi & Awusabo 1993). It therefore has a high number of orphans and a protracted period of dealing with the effects of the epidemic.

Somanya (approximate population: 20,600) is predominantly a low-income town of about 69 kilometres east of Accra, the capital of Ghana. It is largely an

Adangbe-speaking patrilineal settlement. Crop farming is the principal economic activity in the Yilo Krobo district, and Somanya serves as one of the major market centres in the district.

### *1.2 Problem Statement*

Many families and communities are undergoing major changes in Ghana's social and economic environment from the effect of poverty and HIV/AIDS. These problems have far-reaching implications on the state of mind and focus of parents/caregivers regarding attention given to children. To be able to respond empathically to the child, caregivers must be able to notice and interpret the child's needs and respond appropriately. They need to be sensitive to both the verbal and non-verbal cues exhibited by the children in their care.

Parents/caregivers' ability to be empathetic can be hampered by their state of mind, especially in cases of stress. This may lead to a limit in their physical as well as emotional availability for the child. Whilst parents may be concerned about the current demand of care laid on them, there is also the possibility for children to be worried about the challenges their parents/caregivers and the community are going through. It is less known how children within the study site (and other parts of the country, for that matter) perceive the challenges

faced by their parents/caregiver in relation to their care in the current circumstances. Therefore, this study explored children's worries in the face of the current socio-economic changes.

### *1.3 Aims of the Study*

This study aimed at assessing what children in Somanya worry about in their everyday lives, in the context of the contemporary changes in their families, community and the influence of HIV/AIDS. The study had the following aims;

- To explore the worry phenomenon among children in Somanya
- To examine the content of worries
- To asses frequency of worrying
- To assess the relationship between worrying and age, gender and orphan status.

### *1.4 Relevance of the Study to Health Promotion*

The study draws attention to the impact of the social environment on health besides individual behavioural factors. The social environment takes into account the nature of communities and social networks. According to Dahlgren and Whitehead (1991; in Naidoo & Wills 2000), the social environment is an important determinant of health which influences an individuals potential for health. Whilst lifestyles have often been seen as a major determinant of health, the health promotion discipline places emphasis on other factors such as the

context of human development. This is because the social environment makes both direct and indirect contribution to health promotion. The social environment provides social support among other things which influences people's lives within the family and the community, and thus can either sustain or damage health (Naidoo & Wills 2000; Keith & Tones 2001).

In addition, this study placed the voice of one of the vulnerable group, children, on the agenda by assessing the content of their worries to be acquainted with how they understand the social environment around them. Two key principles of health promotion are involvement and empowerment. The key aim of these principles is that people are entitled to contribute to assessment, planning and decision-making that affect them. Often empowerment advocates have only had adults in mind, but this current study suggests that similar considerations should apply to children. This study therefore has the potential for influencing development of interventions by professional bodies and Non-Governmental Organizations (NGO) interested in children within this area. It can assist in the development of strategies for health by providing empirical data on children's worries in Somanya, Ghana. This can be helpful in developing community-based interventions for meeting the needs of children in the study area and beyond.

# Literature Review

### *2.1 Theoretical Framework*

The use of theory served as a theoretical lens for the study questions as well as a means to offer broad explanation (Creswell 2003). The theories on which the study was grounded are the attachment theory and the ecological theory of human development.

#### *2.1.1 Ecological systems theory.*

The ecology of human development theory propounded by Bronfenbrenner has been defined as the "*mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing individual person lives*" (1979: 12). This process is affected by relations between the various settings of human development as well as by the larger context in which the settings are embedded. In this theory therefore, the child is viewed as developing within a complex system of relationships affected by multiple levels of the surrounding environment. It is envisioned that the environment relates to series of nested structures that includes, but extends beyond, home, school, and neighbourhood settings in which children spend their everyday lives. Each layer of the environment is viewed as having a powerful impact on children's development.

As the closest environment to the child, the family is not static but rather dynamic. It is both affected by and in turn affect social, cultural and historical development of the child (Bronfenbrenner 1979). Bronfenbrenner sees an individual in the family context not as a passive and static entity on which the environment exerts great influence but rather a dynamic being who interacts with and thereby restructures, the many environments with which he/she comes into contact. Such interactions are bi-directional and characterized by reciprocity. The family is considered the most important context for the development of the child. It is suggested that an individual's perception of the environment is often more important than 'objective reality' and such perceptions influences the individual's expectations and activities.

The ecological settings of families have been changing rapidly. The very demographic features of the family are changing so fast such that the developmental niche of children within them is affected (Gardiner & Kosmitzki 2002). In Ghana, this has been complicated by the HIV/AIDS pandemic in affected communities. As such, some children experience death of parents at quite an early stage in their life and may be cared for by another person other than their biological parents (Ghana Statistical Service 2004). There is no doubt

that such interruption in the child-caregiver relationships influence the child's sense of security.

### *2.1.2 Attachment theory: The meaning of close relationship for the child's sense of security*

Development and emotional functioning of children occurs in a context of relationships (Bronfenbrenner 1979; Osofsky 2004). Children largely depend on their caregivers as sources of safety and protection. The theory of attachment by Bowlby (1969) emphasizes that in times of need, children rely on caregivers' support in seeking a secure base. This functioning appears to be strongly tied to the presence and functioning of their primary caregivers and their caregiver's reaction to and ability to make sense of the events around them. Thus the bonds of affection that develop between children and their caregivers have been indicated to play a central role in fostering children's social and emotional development.

Primary caregivers serve as both mediators and moderators of events in the family and the community as a whole (Appleyard & Osofsky 2003). Children need adults as mediators to understand what goes on in their environment (Klein 1994). This is important for their cognitive development and helps them build narratives which they can draw on later in life. The importance of the

caregiver functioning help children re-establish regulatory operations and their sense of safety (Chemtob & Taylor 2002; in Osofsky 2004).

Closely linked to the caregiver functioning is what has been described as "maternal sensitivity" or "psychologically available parenting". That is, a caregiver's ability to make accurate attribution about why a child is feeling the way she/he is feeling and the ability to attend to the child's emotional cues.

The caregiver's state of mind and emotional reactivity may reduce or increase her psychological availability and empathy for the child. The psychological availability of caregivers is affected by their pre-existing emotional states, such as anger and stress. This influences the caregiver's attentiveness to the child's emotional signals. The caregiver's sensitivity in turn affects her emotional and behavioural responsibility. This makes the caregiver more or less effective at helping the child to moderate his or her reactions (Kilpatrick 2005). Thus, although children may not be directly affected by the events in their family or community, they may still be influenced by the responses of their caregivers. Caregivers therefore serve as moderators by regulating the effect of events on the children through their behaviour and the way they convey both verbal and nonverbal information to their children (Osofsky 2004). In the absence of close

relationships, these mediating and moderating functions may be lacking, thus affecting the child's sense of security. This may compel children to apply their own interpretations to life events which can make them vulnerable, depending on their age and maturity, to misunderstanding and misjudging risk due to their cognitive immaturity.

## *2.2 Review of Related Studies*

### *2.2.1 Definition of worry.*

Central to research on children's worries is the controversy in explaining the distinction among the construct of 'worry' and other related constructs, most notably 'anxiety' and 'fear'. Anxiety is commonly seen as a response which involves affective behavioural, physiological and cognitive components. Fear occurs when the individual is actually confronted with a dangerous situation. It involves physiological arousal. Worry, on other hand, takes place in the absence of actual danger and is primarily concerned with thinking about threatening scenarios. As such worry is more concerned with cognitive processes (Borkovec, Robinson, Pruzinsky & DePee 1983; Silverman, Greca & Wasserstein1995; Muris, et al. 2001).

In the current literature, there are a number of definitions of worry. Romer & Borkovec (1993) defined worry in childhood as primarily an anticipatory

cognitive process involving repetitive, primarily verbal thoughts related to possible threatening outcomes and their potential consequences. In relation to children, Parkhurst & Asher (1985; in Davey & Tallis 1994) described worry as a state in which children become overly concerned about negative outcomes and overestimate their likelihood. A common line of thought which runs through these definitions is that worry is a cognitive phenomenon which has a link to reality, out of which children may derive threatening scenarios in relation to themselves and or others.

### *2.2.2 Functions of the worry process.*

The ability to mentally represent the future is a necessary starting point for the worry process. According to Vasey, Crnic and Carter (1994), worries become prominent in children after the age of seven. Worry serves both pathological and non-pathological functions. Pathological worry is closely associated with anxiety and represents a clinical dysfunction. On the other hand, non-pathological worry is seen as a routine and acceptable activity that occurs more or less daily, about various issues and mostly in the form of thoughts with a narrative course. Typically, worry is associated with real-life triggers, which are both present and future-orientated. Worry tends to focus upon problems which are real or likely, rather than imaginary or remote (Gladstone & Parker 2003).

Worry has been found to have potential benefits in relation to acting as a stimulant for action. It may serve an adaptive function and thus resemble problem solving which lead to effective preparation for the future (Silverman, Greca & Wasserstein 1995). In a study by Gladstone and Parker (2003), a majority of participants perceived their worry as a somewhat efficacious problem-solving activity. However, when worry becomes excessive it may have negative consequences because of its repetitive nature due to constant rehearsal. It may not even yield solutions to the problems involved (Silverman, Greca & Wasserstein 1995). In the study by Gladstone and Parker, the participants indicated that they perceived worry as having a negative effect on their health. This seeming contradiction is clarified in the sense that worry may 'mimic' problem-solving, but the worry process is unlikely to achieve a satisfactory end or conclusion because of its characteristic rehearsal of threatening scenarios.

Although worry is often implicated in pathological cases; it seems to be a common phenomenon in normal children (Muris, Meesters, Merckelbach, Sermon, & Zwakhalen 1998). In their study of worry in normal children, Muris et al. (1998) revealed that out of 193 children (8-13) participants, almost 70% reported that they worry now and then. What is of concern, then, is the content of these worries, as well as the intensity.

### *2.2.3 Content of worries.*

The content of worry is a parameter which refers to what an individual worries about (Tallis, Davey & Bond 1994). Research conducted on worry in childhood has often indicated a consistent line of evidence respecting the thematic content of worry. Vasey, Crnic and Carter (1994) studied the developmental pattern of childhood worry. The study revealed that worries about physical well-being were relatively frequent among 5-to-6-year-old. It however decreases with age, whereas concerns about behavioural competence and social evaluation became more prevalent with increasing age. These marked age differences show that 8-9 and 11-12 years-olds worries about behavioural competences, social evaluation and psychological well-being. However, as the child grows the worries shift from physical references and prominence is given to psychological/abstract items. These psychological and social issues have tended to bother on family, friends and classmates. Similar results are found in the current literature (Gullone 1999; Murris, et al. 2000).

The content of children's worrisome thoughts reflects developmental changes in their emerging perceptions of themselves and their relationship to their physical and social environment (Vasey 1993). Such developmental influences on children's worries also reveal ones life circumstances, current and cultural elements which change with time

MacMullin and Odeh (1999) studied children between 8-14 years in the Gaza Strip. They assessed the worries of the children facing brutalities in the struggle between Israelis and Palestinian militants. Some brutalities these children experienced included tear-gas assault on family members, raids and beating. The content of the children's worries revealed that state/national and community/societal issues were foremost amongst the children's worries. Evidence of children worrying directly about themselves was ranked lower on their worry scale. This indicated that worries relating to the individual were of least priority among these children. The explanation offered is the cultural collectivism of the Palestinian society. The study also revealed a significant difference between boys and girls, as well as age differences. The girls in this study reported higher levels of overall concern than the boys. With regard to age, the analyses revealed a marked reduction of concern by older children. This is inferred to be due to the fact that the children learned to accept such conditions as part of their life.

In a similar study, Snipstad, Lie and Winje (2005) explored worries among children between the ages of 8- to -15 years from three primary schools in a Tanzanian community with high visibility of the HIV/AIDS epidemic. The content of the children's worries reflected a wide range of issues, of which the

majority related to education, health, care/abuse and safety. The content of the children's worries also demonstrated their preoccupation with the HIV/AIDS epidemic in their communities irrespective of themselves being orphaned or not. This study seems to support other evidence in the current literature which suggests that the content of children's worries is changing in relation to changes in their environment, specific events and life experiences (Gottlieb & Bronstein 1996; Henker 2004).

#### *2.2.3.1 Cultural differences in worry content*

Children's worries appear to vary depending on culture. Evidence in western literature indicates that worry in childhood is predominantly self-referent. The proportion of childhood worries which focus on threats to the self is reported to be higher than those involving threats to others (Borkovec 1986; Vasey 1993; Murris, et al. 2000).

However, the data from The Gaza Strip (Middle East) and Tanzania (Africa) gives a different picture where children's worries reflect a preoccupation with others above self. Thus, in individualistic cultures childhood worries predominantly deals with the self whilst in collectivistic cultures worries of children tend to focus on others. In this regard, Gullone (2000) suggest the

development of locally appropriate assessment tools for this phenomenon in any given culture.

### *2.2.4 Frequency of worries.*

Another parameter of worry is frequency. This is measured in terms of how often an individual engages in worrying (Tallis, et al.1994). Studies reporting frequency of children's worries have demonstrated consistent pattern of demographic differences in terms of age and gender (Vasey & Daleiden 1994). Girls are documented to score higher on worry frequency than boys. For instance, girls have been documented to report more worries than boys on issues about family, personal adequacy, personal health or well-being and imaginary concern. Age differences also appear in studies of worry frequency where younger children (9-12 years) report more frequent worries than older children (13-18 year olds) (MacMullin & Odeh 1999; Vasey 1993).

### *2.2.5 Attachment and worrying.*

From a developmental perspective, normative information on the content of children's worrying seems to suggest that the family environment mediates the development of worries (Muris, Meesters, Merckelbach, & Hulsenbeck 2000). In the study by Muris et al., a sample of 159 primary school children (9-13

years) responded to questionnaires on their perceived parental rearing behaviours and self-reported attachment style. The results indicated that perceived parental rearing behaviour and self-reported attachment styles were positively associated with worry among children. Children who perceive themselves as insecurely attached reported higher levels of worry. Also self-reported attachment style appeared to be related to worry. These findings are consistent with the notion that family environment factors such as parenting behaviour and attachment style contribute to the severity of worry in children. This is because disturbances in early parent-child interactions make children feel insecure and thus promote the development of worries.

In a study commissioned by the Health Education Board for Scotland (HEBS) (Hill 1999), a cross-section of primary school children living in a range of urban and rural settings in Scotland were encouraged to talk about what made them feel happy, sad, afraid, and safe, reflecting their emotional and mental well-being. The study revealed that the children's ideas about the main factors affecting their well-being centred on their intimate relationships in the family and peers. This is attributable to the fact that parents and peers are the closest units of relationships and are more likely to contribute to the child's sense of well-being. In addition, the children indicated that their main confidants for

dealing with their worries were mainly their parents. Thus for children, their worries may emanate from attachment figures. When they want to deal with their worries, they turn to these same people, to re-establish realistic expectations of what is happening around them.

### *2.2.6 Assessing worries among children.*

The assessment of worry among children has been done from many different perspectives using different methods such as standardized instruments, list generation procedures and narratives.

In the study by Muris, et al. (2000), the 159 primary school children responded to questionnaires on their perceived parental rearing behaviours and self-reported attachment style. The children completed a number of instruments, which were modified to fit a child sample. These included; a questionnaire measuring perceptions of parental rearing behaviours; a single-item measure of attachment style; and the Pen State Worry Questionnaire for Children (PSWQ-C) which indexes severity of worrying. The PSWQ is an instrument designed for the assessment of pathological worry. Another standardized instrument is the Worry Domain Questionnaire (WDQ), which is recommended for assessing non-pathological worry (Davey &Tallis 1994). Although such instruments have

many advantages such as standardization, they have the disadvantage of overlooking important areas of children concerns, because children respond to worries predetermined by adults (Silverman, et al.1995; MacMullin & Odeh 1999). To allow for representative views from children, other methods had to be used.

MacMullin and Odeh (1999) studied children (between 8-14 years) in the Gaza Strip by using the following three-part method, namely; generation of worry lists by the children; questionnaire survey constructed out of the children's data, here the children ranked the frequency of their worries; and focus group discussion in which the children elaborated on their worries and suggested ways to manage them. This sequential method has also been used by Snipstad, Lie and Winje (2005) in assessing worries among children in Tanzania.

### *2.2.7 Talking about worries.*

According to the primary school children in the HEBS study (Hill 1999) described earlier, the main confidants for the children were relatives (mainly parents) and friends. The children also cited examples when they received help or had helped others of their own age. The results suggested that younger children are most likely to turn to parents, other relatives and teachers.

However, as children grow they increasingly saw peers as their main helpers in discussing their worries. Gordon and Grant (1997) found that the most common strategy among teenagers for dealing with a problem was to share it with someone else, often someone of similar age.

Similar findings (Rogers, Pilgrim, & Latham 1996; in Hill 1999) indicate that most teenagers deal with personal worries either by sharing with peers or not talk about it at all. It was also indicated that children talk about different issues with different people. Majority of young people in the teen years continue to value the advice of parents though they are likely to discuss different issues within the family (e.g. career choices) compared with friends (e.g. fashion and music). Furthermore, children deal with some of their worries with non-related adults like teachers (Hill 1999).

### *2.3 Rationale for the Study*

The rationale for this study was to investigate worries of primary school children living in Somanya, one of the communities affected by the HIV/AIDS epidemic. HIV/AIDS is a recognized threat to children and their families. Children can be affected by HIV/AIDS in several ways. They can be made orphans, vulnerable with sick parents, or their already poor families may have

to take in an orphaned child to share in the meagre resources of the household (UNAIDS, UNICEF & UNAID 2004). There is the likelihood that both children and adults feel challenged by the current circumstances. The challenges parents/caregivers meet trying to satisfy the needs of their children can affect their sensitivity and responsiveness in the care they give. This can affect the security the children enjoy.

Life circumstances substantially influence people's ability to acquire, maintain and sustain good health. Research has shown that experiences and exposures across the life-course, particularly early on in life, have long-term implications for health and may be one of the root causes of health inequality in later life (Holland 2000). The study thus assessed what life circumstances sticks to children's minds as worries and how often they engaged in worrying. It also tried to get a picture of how children perceive some aspects of their life circumstances.

### *2.4 Research Questions*

The study addressed the following questions:

1. Do children in Somanya, Ghana worry?
    a. What is the content of their worries?

b. How much of the worry content relates to issues of HIV/AIDS in the family and community?

2. Is there any difference in content and frequency of worries in children who live with parents, one or none?
3. Is there any age difference in worry patterns?
4. Is there any gender difference in worry among children?

### *2.5 Operational Definition of Terms*

For the purposes of this study, unless otherwise stated, the following definitions pertained to the use of the following words;

- Children: in keeping with the Convention on the Rights of the Child (1989), this term refer to all human beings under the age of 18.
- Participants: participants were primary school children between the ages of 10-15 years.
- Worry: in this study, worry refers to issues that children are concerned about, or issues they think about to the extent that they feel unhappy.

# Methodology

### *3.1 Choice of Research Method*

This study used mixed method procedure, a relatively new research approach in the social and human sciences. It is distinct because it combines the advantages of both the qualitative and quantitative methods that have been developed and applied, extensively, in the social sciences (Creswell 2003).

The study used qualitative methods of data collection and analysis followed by the use of quantitative methods of data collection and analysis. The two methods allowed for the measurement of three parameters of worries namely, content, frequency and the distribution of worries by age and gender. The findings from these two phases are integrated at the interpretation and discussion section of the study. The data collection methods that were used in this study included list generation; focus group discussion; and questionnaire. The study utilized the list generation technique for two main reasons, namely; to allow children to project their concerns with limited adult influence. Secondly to contextualize the worry phenomenon peculiar to this study site.

The methods were useful for assessing the distribution of the phenomenon under study, worry. The qualitative phase gathered data on the content of the children's worries in a specific context. The quantitative phase assessed the

frequency of worries among a larger group and the distribution of these by age and gender. In addition, the combination of qualitative method of data collection and quantitative method of data collection was useful for building a new instrument, a locally appropriate worry scale (Creswell 2003).

### *3.2 Sample Population*

Participants were classes 5 &6 schoolchildren between the ages of 10-15. They were drawn from two government-owned primary schools in Somanya of the Yilo Krobo district in Ghana. It is general knowledge in Ghana that government-owned schools are attended by children from varied socio-economic backgrounds and therefore children from such schools will give typical reflection of children in primary schools in the study area.

The participants were contacted at their schools. The reason for using the school setting is that it afforded the researcher the opportunity to reach the specified category of participants at the same time and therefore save time. The parents of participants were not required to provide individual consent for their children to participate in the study; instead, the principals of the schools were able to give consent on behalf of the parents and the participants. In addition, children were also informed that they could choose to be part of the study.

### *3.3 Phase 1 of the Study: Children's Worry List*

#### *3.3.1 Study sample.*

This phase included list generation and focus group discussion. Eighty-five (85) primary school pupils (from classes 5 & 6) from two schools took part in the list generation process. Fifty (50) of these were from the first school out of which one (1) participant's list was omitted because he had a learning problem which affected his writing skills. The other 35 participants were from the second school. Four (4) of the participants did not write readable sentences so their lists have been removed from the analysis. The analysis of the qualitative part therefore is based on lists from 80 participants who are between the ages of 10-15 years old and a focus group discussion with 5 participants.

#### *3.3.2 Demographic features.*

There were 46 girls and 34 boys. The age range for the participants was 10-15, with an average age of 12, 2 years. The average age for girls was 12, 7 whilst that of boys was 12, 4 years. For the purpose of this analysis, two age categories are used, that is, 10-12 and 13-15 year groupings. This had been done following conclusions drawn from related studies which indicate marked differences in worries among preadolescent children and adolescents. This is because worries, irrespective of culture, seem to follow developmental

progression in terms of age and cognitive maturity (Vasey 1994; Gullone 1999; Murris et al. 2000; Snipstad et al. 2005).

Out of the 80 participants, forty (40) lived with both parents; 15 came from single parent families; 20 lived with relatives (uncles, aunts, grandparents); and 5 lived with guardians (persons other than relatives). Participants were asked to indicate the family/marriage status of their parents in which 46 participants indicated that their parents lived together; 19 wrote that their parents were separated; and 15 were either single or double orphans.

### *3.3.3. Materials.*

The data collection consisted of paper-and-pencil data. Here, respondents generated list of their worries.

### *3.3.4 Procedure.*

The procedure followed in this study was modelled after the study by MacMullin and Odeh (1999) on worry among children in the Gaza Strip, and that of Snipstad, et al. (2005) in their study among children in Tanzania. The procedure for this part of the study followed two sequences namely; (1) collection of lists of children's worries and; (2) focus group discussion.

### *3.3.4.1 Collection of lists of children's worries*

The data collection began with a visit to two primary schools in Somanya owned by the Ghana government. The choice of a government owned schools was because such are regular schools which are attended by all categories of children. This step of the study was done with the assistance of a fellow student from the Research Centre for Health Promotion, University of Bergen. This choice was a matter of convenience and also because she comes from the study site and readily could assist in translation.

In the first school visited (referred to as school A), the study was introduced to the headmistress. After going through the introductory letter from the university and explaining the study into more details, she assigned a male teacher who was in-charge of one of the upper classes to offer assistance when the research was to be conducted. It was agreed upon that the study should be conducted another day, so that the children could be given prior notice. With reference to the second school (referred to as school B), the headmaster was approached and upon holding a brief staff meeting with teachers in the upper classes (5 & 6), a female teacher who handled one of the upper classes was asked to help organize the children for the study.

Before the children could begin the exercise, teachers were asked to leave the classrooms. The purpose of this was to prevent the teachers from influencing worry statements the children will write (MacMullin & Odeh 1999). The children were introduced to the study and sheets of paper with instructions on top were distributed to them. The instructions were read to them and the children were guided to fill in the details on age, sex and who they lived with.

The lists generation were done similarly in both schools using English language. This is because English is the language of instruction in the schools, and even though the mother tongue is Adangbe, it is not written by these children. In cases where children encountered difficulty, translation was done into Adangbe. For instance, the instructions had to be translated into Adangbe for children in school 'A'. This helped the children understand the instructions well. The translation was done by the fellow student who functioned as a research assistant. All answers were written in English. The word 'worry' had been defined on top of the sheets as "*things that happen in our homes, school and community that you think of a lot"*. To further explain this phenomenon, the introduction suggested that these thoughts may make one feel unhappy, sad or afraid. The children were then asked to give examples to ascertain whether they had grasped the concept. Following these examples, they were then left to

write their own specific worries. The researcher informed the children that they could get help to spell any words they found difficult to put into writing. Quite a number of the children made use of this assistance. This was necessary because it is common among school children to speak fluent English but also have a difficulty in putting some of the words into writings.

Even though the teachers agreed to go out of the classrooms, a group of teachers in school 'B' later came into the classroom almost at the end of the process to make suggestions. Since the time allotted was almost up, the exercise was brought to a close. The suggestions from the teachers were taken note of and they were not included in the questionnaire.

#### *3.3.4.2 Focus group discussion*

Focus groups are fundamentally a way of listening to people and learning from them because they create lines of communications. It can be used within a main study for in-depth exploration (Morgan 1998). In this study, the use of this qualitative method was necessary to explore deeper into worries dealing specifically with HIV/AIDS, one of the interest areas of the study.

There are varied opinions about the optimum group size for focus groups; however an important criterion is that the groups reflect the characteristics of the participants in the main study as well as the topic being discussed (Bloor, Frankland, Thomas & Robson 2001). The characteristics of the participants of the focus group discussion (FGD) indicate that three were boys and the remaining were girls. The participants were within the age range of the 10-15 years old. Two of the participants lived with single parents, two lived with both parents and one lived with the grandmother.

The FGD was held in Adangbe with five (5) pupils from school 'A' consisting of two children each from two-parent families and single parent families and one who had lost both of his parents. These participants were purposively selected. The discussion was done in Adangbe because it was perceived that the use of the native language would facilitate communication. The research assistant was the main moderator, after having been coached on the purpose of the discussion and the questions involved. She communicated the children's responses there and then so that the researcher wrote these down in a wording closest to the children's own. The choice of pupils from school 'A' was because they wrote very little (an average of 4 worry items per participant). In addition, it was a puzzle that the entire list which had been generated by the children had

not made any reference to the HIV/AIDS epidemic, even though it is implicated to be a major problem in this study site. The FGD was also used for clarification on items such as 'killing' and 'fighting which had been written without elaboration from the children.

The FGD purposely prompted the children to speak about the HIV/AIDS pandemic in general. This helped in assessing the children's knowledge as well as awareness on the disease and assist in the identification of worries relating to it. As such there were four key questions which the discussion revolved around namely; "What do you know about HIV/AIDS?"; "Do you ever think about it", "what do you think can be done to prevent it?" and "do you discuss HIV/AIDS related issues?" From this discussion, two worry statements relating to HIV/AIDS were included in the worry scale to ascertain the frequency among the larger group of participants.

#### *3.3.4.3 Validity*

Validity is used in qualitative research to determine whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of the account (Creswell 2003). As expressed by Silverman (2000), validity in qualitative research means truth. This is indicated to be the extent to which an

account accurately represents the social phenomenon to which it refers (Hammersley 1992; in Silverman 2000). The qualitative part of the data was drawn from participants own generated worries as they listed them.

#### *3.3.4.4 Reliability*

Reliability has been referred to as the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions (Hammersley 1992; in Silverman 2000). As typical of qualitative research, the establishment of reliability represents reporting and proper documentation rather than obtaining same results. The study documented procedures, which allows for evaluation and replication. The assignment of worries into categories was confirmed by other studies (Silverman, et al. 1995; MacMullin & Odeh 1999; Snipstad, et al. 2005).

## *3.4 Phase 2: Construction and Administration of Children's Worry Scale*

### *3.4.1 Sample size.*

One hundred and twenty (120) participants from classes 5 and 6 consisting of sixty (60) participants each from schools 'A' and 'B' took part in answering the questionnaire created from the children's worry lists. In school 'A', 50 children had taken part in the first part of the study of which one participant's list had

been taken out. In the second phase of the study therefore, only 11 participants were asked to join to make up the 60. These 11 consisted of children in the chosen classes who were absent on the first day as well as some children from class 5. The children were then assisted through the questionnaire.

In School 'B' the 35 who took part in the first part were called. To create a group of 60 participants, the other pupils in classes 5 & 6 were made to form a queue and after numbering them those with even numbers were asked to take part in the study. This had been the idea of the headmaster because the research team had indicated that all categories of children should be included in the study. Following these, participants who had taken part in the first phase of the study moved into one class and new entrants moved into another. This was to allow the later group to be given more attention in regard to the instructions. The two groups were guided through the exercise simultaneously. This was because it had been realised from school 'A' that allowing all the 60 children in one class room made the exercise difficult. Thus the later procedure used in school 'B', made necessary adjustment for those new in the study to be given needed attention in terms of the instructions and what they were required to do.

### *3.4.2 Demographic features.*

There were 53 boys and 67 girls. Following the age groupings as earlier, 63 were found to be between the ages of 10-12 and 57 between the ages of 13-15. According to caregiver status 51 participants indicated that they lived with both parents; 30 lived with single parents; 35 lived with persons such us grandparents, uncles or guardians, 3 stayed in orphanages and 1 participant had checked more than one response. Among the 120 participants were 98 non-orphans and 19 orphans and 3 with missing data on this question. The characteristics of the 120 participants are presented in table (1).

**Table 1:** Demographic features of respondents to the questionnaire

| **Characteristics** | **Number of respondents** | **%** |
|---|---|---|
| Sample size: | 120 | 100 |
| **Sex** | | |
| Boys | 53 | 44 |
| Girls | 67 | 56 |
| **Age range** | | |
| 10-12 years | 63 | 53 |
| 13-15 years | 57 | 47 |
| **Immediate caregiver(s)** | | |
| Both parents | 51 | 43 |
| Single parent | 30 | 25 |
| Others* | 38 | 32 |
| **Orphan status** | | |
| Not orphan | 98 | 82 |
| Orphan | 19 | 16 |

* ‘Others’ takes into account relatives (such as aunts, uncle, and grandparents), guardians and living at a centre for orphans.

### *3.4.3 Measuring instrument.*

#### *3.4.3.1 Construction of the children's worry scale*

Following the gathering of the worry lists, a preliminary analysis was done. All the children's worries were written down on foolscap sheets. It was pretty obvious for some of the worries to belong to naturally occurring themes. For instance, it was chosen to place statements as "*I worry that I don't have school uniforms"* in categories that deals with school or education. For some worries however, it was not easy to place them in anyone particular groupings because they could belong to more than one sphere of the child's life. A typical example is this "*I become worried when my mother sends me to sell in the morning and I am late for school*". In such cases, the worry item was placed in one of the categories it may be related to. As such these categories created were not mutually exclusive. There could be some overlap between the categories. For instance, the items which were placed under education could as well be issues of care or poverty.

However, categorization was necessary and one category was chosen for each statement. This guided the construction of the worry scale and ensured that typical examples of each category of worry were chosen for inclusion in the questionnaire. The categorization therefore covered such themes as "School

related worries"; "Family/home and care related worries"; "Sickness, death and orphan related worries"; and "Community related worries".

In constructing the questionnaire, attention was given to typical and recurring as well as rare worries. Recurring worries included money for buying lunch at school, being beaten in school, running errands at home, among others. There were worries which occurred rarely such as worries about children who had lost parents or as one child put it "*worry about an orphan child*". These rare ones were included in the questionnaire to ascertain the scope of the larger group. In addition, there were certain worry items which were peculiar for specific groups of children. For instance, children who had lost their parent indicated repeatedly that they worried about the death of their parents, whilst children whose parents were separated wrote about worries in relation to their parent's separation. Such group-specific worries were included in the questionnaire in order to assess the frequency with which the affected children worried about these issues.

The focus group also generated additional worry items which were included in the questionnaire. The FGD also served to validate worry items that were generated (Creswell 2003). In the questionnaire, care was taken so that the worry statements followed the same wording by the children or a similar

rendering. All categories of worries were represented in the questionnaire. The questionnaire consisted of 29 items which were subjected to a four point Likert-Scale ranging from, 'All the time' (4-points); 'Sometimes' (3-points); 'Once a while' (2-points) and; 'Not at all' (1-point).

In addition to the worry items, the children were asked about who they talked to about their worries. It was perceived that children may talk about their worries with different persons depending on what category of worry is involved. Therefore the question "*Do you talk with anyone about these worries?"* was posed after every main worry category. The main categories were "School related worries"; "Family/home related worries"; "Sickness, death and orphan related worries"; and "Community related worries". The options to choose from included; *'I talk with my teacher'*; *'I talk with my parents/guardians'; 'I talk with my brothers and sisters'; 'I talk with my friends'; 'I talk with another adult in my family'; and 'nobody'*. Participants could mark one or more of these options since they may utilize more than one alternative. The inclusion of the option '*another adult in my family*' was against the backdrop that in the Ghanaian context the traditional setting makes such provisions available whereby children can talk to older person's of their family in cases where they feel they cannot talk to their parents/caregivers (See Appendix II).

### *3.4.3.2 Reliability of instrument*

The internal consistency of the worry scale used was 0.84 which is above the recommended 0.7 value for Cronbach's alpha coefficient (Pallant 2005). The items on the questionnaire had been classified into four subscales which assessed different domains of worry. These included;

- The '*Care scale'* with 7 items (alpha value of = 0.77). This subscale registered items on general daily care and family relationships;
- The '*Sickness/death scale'* with 12 items and a Cronbach's alpha of 0.71.The sickness/death scale covered worries on parent's deaths, death in general, HIV/AIDS and orphan related worries;
- The '*Safety and norms'* 5-item scale with alpha values of 0.73. It consisted of worries on safety and breaking norms in the community;
- The '*Education*' scale had an inter item correlation which ranged from 0.2-0.3. The reason for using the inter item correlation for this subscale is that most of the items could belong to the Care scale. However, because they directly dealt with school related worries they had been classified separately in the questionnaire and as such the internal consistency between the items was not very strong on their own. In addition, Pallant (2005) recommends the inter item correlation for scales with less items.

In deriving the subscales, factor analysis had not been a priority because the items had already been classified using the children's worries. In addition, the sample size was below the least size of 150 recommended (Pallant 2005).

### *3.4.4 Procedure.*

#### *3.4.4.1 Administration of the worry scale*

The data collection entailed the administration of the worry scale to 120 pupils. This phase was conducted in English and Adangbe. The children were assisted to fill in demographic details such as age, sex, and caregiver status. Once again teachers were asked to go out from the classrooms before the children started the exercise.

The procedure followed in schools A and B were similar with one exception. In school A the instructions were read in English and translated into Adangbe as in the first phase of the study whilst in school B the entire process was conducted in English (upon the insistence of the headmaster). After reading the instructions on top of the questionnaire, the children were guided to fill in the questionnaire. Systematically, each question was read aloud, and the next was not read until all the children had filled in their ratings. In addition, any question for further clarification was answered. In school B, a pupil asked for the meaning of the word 'orphan'. Therefore, it became necessary to tell the meaning to all the children since it was realised that it might be a difficult word for some of the children to understand and therefore might influence their responses. It is important to note that all items on the questionnaire had followed the exact wordings of the children or similar renditions. The problem

of understanding was not encountered in school ‘A’ because they had the questionnaire translated into Adangbe for them. However, it stands to reason that there could have been other difficulties but none were brought to the attention of the research team.

#### *3.4.4.2 Data Analysis*

Using the SPSS statistical package (version 13), descriptive analysis was run on the data obtained from the questionnaire. This assisted in ranking the frequency of worries.

In order to explore single and joint effect of independent variables of age, sex and caregiver status on worrying, two-way Analysis of variance (ANOVA) was run separately for the entire worry scale and the four subscales.

According to age, participants were divided into two groups; 10-12 and 13-15 year olds. According to caregiver status, respondents were divided into three groups namely; Group 1 (those who live with both parents), Group 2 (live with single parents), Group 3 (live with others, other relatives, guardians, centre for orphans).

### *3.5 Limitations of the Study*

The procedure followed has been instrumental in exploring a methodology which seeks to gain information about children's worries. This was done without resorting to standardized instruments thought-out and constructed by adults. However, the choice of methodology is followed by a number of limitations. One limitation is the list generation which challenged the writing abilities of the participants. This became a source of worry to the researcher as well as the teachers of participants. There is the possibility that the children may have been limited by this challenge and it may have limited the nuances and the quantity of the data gathered in the qualitative part.

Another challenge relates to the fact that some teachers in school B intruded in the process of generating the worry lists even though they earlier on had been excused from the classrooms. This diverted the attention of the children from their own worries and also brought an abrupt end to generating their own lists in the affected class. In addition this data collection technique, as it turned out, hurt the feelings of some of the teachers because they had been asked to go out of their domain of authority, the class room. This was clear from comments received after the exercise.

Looking at the sample size and the rudimentary method of selecting schools as well as the participants of the study, it is not possible to generalize the findings. Depending on how this is viewed, this can be a limitation. On the other hand, the fact that a study does not lead to generalisation does not limit it in anyway should it meet up with the purpose for which it was intended. This study was meant to be explorative, and as such has been instrumental in documenting worries among primary school children in Somanya. The findings can therefore lead to other studies which may lead to generalisation. Another way this can be viewed is that the findings may meaningfully be applied to children who share similar characteristics as those who took part in this study.

### *3.6 Ethical Considerations*

The need for ethical consideration in all research has been emphasised to protect participants and research sites. It is even more urgent in studies involving minors less than 18 years (UNICEF 2000). As such, ethical clearance for the study was obtained from the ethical committee in Norway. Whilst in Ghana, permission was obtained from heads of the schools who took part in the study. The head teachers were asked whether they required further permission from the district education office of which the answer was negative. They explained that since the study was not disrupting class for more than an hour,

the introductory letter and letter from the ethical committee which was provided was enough. More so, a protocol was formed with the teachers assigned to support the study in case any child experienced discomfort during or after the procedure. No such case was brought to the attention of the research team.

Participants were told that they could choose not to take part in the study. Measures were taken to follow principles set up by UNICEF (2000) which guides participation of orphans and other children affected by HIV/AIDS. In this regard, the children were told that they could withdraw from the study at any stage. Every possible means was taken to protect the privacy of the participants in the study which meant that no participants were required to put their names or any personal identification on the questionnaire. During the data analysis, participants were assigned codes. In addition, the data is being used for the academic purpose for which it is intended. As indicated earlier, this study primarily serves an academic purpose. It suffices to say that it has the potential of bringing indirect benefits to respondents as well as to those with similar characteristics. It is hoped that the knowledge gained from this study will be of importance to policy makers, intervention programmes, NGOs and other bodies who may have direct benefit on participants and their communities

# Results and Analysis

## *4.1 Results from Phase 1*

### *4.1.1 Overview of children's worry lists.*

The list generation technique yielded 563 worry items with an average of 7 items per participant, of which the range of worry items was 1-22. This represents a normal range as revealed in the literature and documented in other related studies (Vasey 1994; MacMullin & Odeh 1999). There were both age and gender differences in the number of worry items listed. There were 46 girls and 34 boys. The average number of worry items for girls was 8 and they generated a total of 61% of the worries. The average number of items was 6 for the boys, and they generated a total of 39% of the worries (See Appendix IV). With reference to age, participants between ages 10-12 who numbered 40 generated 55% of the items with an average of 8 items. Those between 13-15years of same number had an average of 6 items, and accounted for 45% of the lists generated. The worries generated by the children have been grouped under six categories according to naturally occurring themes in the sphere of the child's life as indicated below.

- Personal care
- Education
- Breaking norms
- Family relationships
- Safety/environment
- Sickness/death

The content of the worries revealed that the '*Personal care'* and *'Education'* categories were the most dominant; each category had 22% of the 563 worries. These categories were followed by '*Breaking norms'* with 21%. '*Family relationships'* accounted for 17% of the children's worries, then '*Safety/environment'* and '*Sickness/death'* categories followed respectively (See Appendix IV). It is worth mentioning that there were three statements which dealt with the fear of wild animals. This is characteristic of most studies documenting worries among children (Murris, et al. 2000; Snipstad, et al. 2005). However this category had not been included in the questionnaire developed because how they were written depicted fear and not worries.

As was mentioned earlier in the methodology, some teachers in school B had suggested some worries of which some participants wrote. Whilst these items were taken note of and were not included in the questionnaire, a later part of this result section gives a glimpse into what some of these suggestions were and how they differ from what children deem to worry them and what teachers (adults) perceive should worry children.

The worry item that received topmost listing was daily money for school. This is money for buying food in school. There is a practice in Ghana whereby

school children are given money or packed meals for lunch at school. It seems however obvious that the former is much more practiced than the later in this study site. This item also was the most frequently listed item for the girls. For the boys in this study however, it was both the money for school and running of errands which received topmost listing. From the qualitative data, it seemed that younger participants (10-12 year olds) were more likely to indicate worry about diseases and sickness than older participants. Younger girls worries on sickness were both self-referent and about their caregivers whilst that of the younger boys were mainly about persons other than themselves. It was also found that older girls were more likely to express their understanding of parent's inability to meet their current needs because of the parent's financial standing. The following are details of what these categories reveal of the content of the children's worries.

#### *4.1.1.1 Personal care*

The personal care category takes into account all worries relating to provisions required for daily living except for ones dealing directly with schooling which is catered for in the education category. The items in *Personal care* are summed up into four main subcategories namely: basic provisions (Food, clothing and

shelter); participation in household chores and engagement in income generating activities; and discipline.

The basic needs mainly involved food, clothing and shelter. For example, a 15 year old boy relates "*My parents are not here so everyday I have to buy food from the roadside*". There were other such issues in the list such as this short statement by a girl 12 years "*Food to eat*". Primarily, the girls of this study expressed worries about their engagement in income generating activities just before going to school or after school. The background to such an involvement in income generating activities results from what has become part of the norm for making ends meet. Children whose parents or caregivers are market women or engage in petty trading are often asked to go and sell before or after school. The fact that these issues are brought up in this study also emphasis that the study site is a business and marketing centre. These worries could be indicative of poverty and the challenge to meet daily basic needs of the family such that parents will put their children in some form of income generating activity. Here are some of the items indicating this worry by three 14 year old girls; "*when I go home they will send me to go and sell*" "*I have to finish selling before they give me money*". "*After school I have to sell by the roadside till late; when I am tired I cannot say*" This worry was also expressed by some of the boys who

participated in this study. For example, a boy (12) wrote "*if I come back from school my mother send me to the market to sell*".

Going to sell however comes with some consequences which seemed worrying and unpleasant for the participants, like being late for school. Another related issue is expressed here "*When my mother said I should go to sell and the money gets lost, am not happy*". It seemed that engagement in income generating activity could serve as a condition for receiving some form of care, at least the worries of these girls seem to suggest so; "*When I am told to go and sell, I have to finish selling before they give me money*"- girl (14). "*If I go home I go to sell without eating*"- girl (13). Some of these concerns seem to implicate that the worries relates to the consequences to this activity rather than the activity itself.

The running of errands for other domestic purposes also was highly represented in this category. Here are some items relating such worries "*To go and weed the farm*" "*If I have to go to the farm after school it worries me*" – related by two 12 year old boys. This is against the background that this is a farming community. Other participants related, "*Sending me too much worries me; they add my junior brother's things to my things to wash: No chance to play; Washing many things*" –boy (11). "*I do a lot of work before I come to school*",

boy (12). These were related mostly by boys. Girls also related this kind of worry few times as well but with a focus on the fact that running such errands interfere with school activities, "*When my mother sends me a lot so that I am late for school"* girl (12). *"I worry that I want to learn but they send me*", girl (10).

The personal care category also includes statements which related needs that were not very specific. These seemed to relate to emotional wellbeing as seen in the following statements, "*my father does not care for us. So he is not a good father"* boy (14): "*it is not all things that my uncle does for me*" girl (13) and: "*… my father does not look after me well"* girl (15). Other statements under personal care include physical discipline from parent/caregivers. Examples of worry statements on this are "*My parents have been beating me everyday*" girl (11). "*My parents beat me and make me unhappy*"- girl (12). Also, social evaluation was a concern for this 14 years old girl "*My parents like to disgrace me in public*".

#### *4.1.1.2 Education*

The education-related worries focused on issues varying from parent/guardian remittances for school, teacher-to-pupil relationships; pupil-to-pupil relationships; to performance in school.

Remittance for school was one of the paramount issues in this category. This included school items, daily money allowance for school, school fees, and school attendance. These worries were common for all groups of participants whether they lived with parents, single parent, a relative or a guardian to worry about money they received as daily allowance for buying food at school. Whilst some indicated a complete lacking of this kind of support, others indicated that what they received was not enough. It is common practice that children are given money or packed meals for school lunch breaks. It seems however obvious that the former is much more practiced than the later. In the case of being given money for school the children are left with the opportunity to buy food from food sellers in the school. There were worries about school fee, school uniforms, and books, among others. For instance, a girl participant, who is 14 years old and has lost her father in death and being cared for by the mother, indicates her worry concerning school needs among other things as she writes "*when I am sacked for school fees my mother does not give me*". She

returns to the topic later after haven listed some other worries and writes, "*I suffer before I get school fees*".

Teacher-pupil relations largely bothered on discipline in school. Physical disciplining in schools is a legal practice in the Ghanaian school system. However, it is significant to note what these groups of children thought about this practice. Illustrated in the following statements are the children's worries relating to it; "*When the teacher is not teaching but is always canning the class*": "*When the teacher is insulting you alone*" written by two 12 year old girls. School performance was a worry for some of the pupils as illustrated in the following statements "*when learning I don't understand*", "*I become worried when they do test in school and I don't know*". "*I become worried when I cannot answer questions in class*". There were also concerns about time and place to learn as illustrated by these worry statements; "*I don't get a fine place to learn in the home*", "*They don't allow me to learn*", "*When I am learning in the classroom and pupils make noise*".

#### *4.1.1.3 Breaking norms*

The items which are placed in this category take into account behavioural problems which seem to break the moral core of the society and in the end put

the society in danger. Primarily these included fighting, smoking, and stealing. In addition, other behavioural problems such as drinking of alcohol and drunkenness were listed among other things by the participants. The following statements illustrate some of these concerns raised in the worry lists. "*I worry about people breaking laws in the community*" "*I worry about fighting between gangs of boys*"- by two 12 years old girls. Another girl indicated that such fighting brings disturbance in the community. The issue of smoking was highly reported by the participants; to illustrate are the following statements "*I worry about people smoking and becoming crazy*". "*In my community, people smoke wee (Indian hemp)"*.

#### *4.1.1.4 Family relationships*

This category is widely broad in scope. It covered worries on parents' relationship, parent-child relationship, and relationship between siblings, among other relationships within the family. The term family as used in the Ghanaian context often refers to the father, mother and children and extended relatives who may be living in the same household. However, in this category the mention of family is rather in the limited sense of the word, referring to the child, siblings and caregivers (who in this case may refer to the parent(s) or guardian).

The children's worries on parents' relationships primarily concerned conflicts between parents, separation, and loss of parents in death as well as the financial status of parents. Conflicts between parents were indicated to be a great source of worry to the children who participated in this study. Almost every participant reported one or another form of conflict between their parents or caregivers. "*If my parents are fighting it makes me sad… If my father is insulting my mother, it makes me cry*"-related a 13 year old boy. "*I am not happy because my parents have conflicts between themselves*" girl (15). A girl who is 13 years old and lives with her aunt and uncle wrote "*I am not happy when my uncle and aunt are fighting*". Such parental conflicts seem to be related to issues such as money for housekeeping called "chop money" in Ghana and the parents' attitudes towards each other. Illustrated in these statements are such sources of conflicts, "*If my father does not give my mother 'chop' money*" – boy (13). "*My father insults my mother too much when I do something wrong because they are separated*"- by another boy 12 years. "*My father is a drunkard, who makes my mother unhappy; my father is worrying me*" by a girl 13 years old.

Separation of parents is also registered as a great source of worry for most of the children whose parents are separated as well as other groups of children. A 14 year old boy whose parent is separated and lives with the grandmother

relates "*I am not happy when my father and mother are separated*". Another boy 13, who lives with an aunt and indicates that the parents are separated, wrote "*I don't live with my parents; I want to see my parents*", a similar sentiment is expressed here "*I am not with my mother and my father that worries me*"- by a 10 year old boy.

With regards to loss of parent(s) in death, worry statements listed here were mainly by children who had experienced such loss themselves. A few of these participants are quoted here; a girl 12 years old who has lost a father and is living with her grandparent indicates "*my father is dead so it pains me*". Another participant, 14 year old boy who has lost both of his parents and is currently being cared for by his grandparents wrote, "*My father and mother are dead so I am not happy*". It is not easily clear from these statements whether these children are worrying about the state of being orphans and its associated consequences or the pain of being without a parent(s) or both. Issues directly concerned with the state of being an orphan seldom appeared in the list which was collected. There were only two instances of which two participants worried directly about the issue of orphans. It is important to note that in both instances these concerns have been raised by children who lived with both of their parents. One boy, 12 years worried about children who loose their parents when

he wrote I worry about "*an orphan child*". The second instance was by a girl (12) who lamented the situation of children who loose their parents as she wrote "*when your parents are dead*". The quantitative part of this study sought to examine the extent to which other children also worried about this and is discussed later.

Some of the worries in this category related to psychological distress resulting from close family relationships. These were characteristically expressed by female participants. To better understand some of these sentiments, parts of participants' lists are quoted here to give context and meaning. A 14 year old girl who lives with a guardian wrote "*I don't feel the love of my parents; they don't give me what I want; I am sorry about my life on this earth; if I think about my parents I cry*". Another case in context is by a 13 year old girl; "*When I need money my father will not give me; my mothers' work is not going well; my father is a drunkard which makes my mother unhappy; I have no worry with school but my father is worrying me*". Issues bothering on siblings were also recorded in the worries, such as the following: "*All my brothers and sisters are grownup and I don't have anybody to play with*" boy (10), he further related "*My brother was arrested and it is worrying me; one of my brothers does not*

*show respect to my mother*". Another worry statement about siblings was by a girl (12), *"My brother lives with his wife so he does not love me again"*.

#### *4.1.1.5 Safety and environment*

This category takes into account two main issues namely, safety and environmental issues in relation to the community. The greater number of worry statements here were concerned with safety relating to killings and rape in the community. Example of worry statements on safety include "*Bad people… comes into the community*" "*Fighting is bad, it can bring war*"- boy (12); "*I am afraid of gun shot*"- boy (14). Children from school B expressed worry particularly to safety in their school. Some of the participants indicated that the geographical location of their school made them prone to road accident and as such a cause of worry. To illustrate are some of the issues raised: "*Accident because our school is by the roadside*"- girl (14) and "*Careless driving*"-boy (14). The environmental concerns related to pollution, choked gutters in the community as expressed in the following worry statements: "*I become worried when the gutters are full of rubbish; when the community is bushy*". Other concerns included these, "*Throwing rubbish in our community*"; "*Cutting of plants*"; "*Pollution in the community*", "*Erosion in the community*".

#### *4.1.1.6 Sickness and death*

This category basically covers issues concerning sickness and worry about death. Worries concerning death were listed generally as '*when people die'* or merely '*death*'. "*If someone dies in my house; if someone says I will die*" – 11 year old girl. Other issues dealing primarily with the death of parents are discussed as loss under the category of family relationships. Regarding sickness, worries were specified to sickness in the family as well as concerns about the participants own health. An example of sickness in reference to family members is illustrated by the statements of this 12 year old boy. He writes "*the time my mother was sick I was not happy, when my mother is dead I am not happy*". Concerning his young sister he related "*when my sister was sick I was not happy; when my junior sister died I was not happy*".

There were other instances where sickness was not been linked to death as expressed here by two 12 year old girls, "*many people are sick in our home*"; "*when my brother and sister are sick, I am not happy*". A 12 year old boy wrote that he worried "*When people are sick in the family*". Self-referent worry about sickness includes statements as "*When I come to school people think I am sick but I am not*"- girl (13). "*I become worried when I am sick*"- boy (12).

#### *4.1.1.7 Systematic differences between orphaned and non-orphaned children*

This section is a critical review of the worries of the 15 children who had lost either one or both parents. A mere look at the general worry lists reveals typical worries among all groups of children. However, a closer look at the content of these worries reveals a different picture. What is the nature of worries listed by children who have lost one or both parents? This is of particular importance because of its bearing on the research questions being addressed by this study.

In the personal care category, orphans made a repeated mention of basic needs in the direction of shelter and what they normally termed "proper" food, as seen in the following examples by a 15 year old girl who has lost both parents and lives with a guardian, "*I am unhappy because they do not give me proper food; no body providing shelter, provision for education and it always worries me; no proper place to sleep"*. "*There is no body feeding me better*". Another girl, 15 years who has lost her father and lives with an aunt writes "*we don't prepare good food to eat in the house*".

More than the others, children who have lost parents demonstrated worries relating to the well-being of their current caregivers. The importance of which is seen in these statements by 13 year old girl who has lost both parents "*I want my aunt and my uncle to be happy; when my uncle is ill, then I become*

*worried*". The kind of relationship that exists between orphans and the children of their caregivers (in cases of those staying with relatives other than their biological parent) was also a cause of worry. This kind of worry is not the kind of normal sibling rivalry but rather problems of adjustment and a need for inclusion in the 'adopted' family as seen in these statements; "*my father is dead…my mother is not staying with me. My aunt does not give me more money to school …if somebody gives me money; my aunt says I stole it from her. My aunt does not solve my problems for me like how she solves it for her children; I am always separated from my aunt's children"* (boy 13).

Of course, non-orphaned children who lived with caregivers other than their biological parents also expressed such concerns. A boy (15 years) whose parents is separated and lives with a guardian says "*I become worried when my aunt's children insult me everyday*". As if to confirm such conflicts a 10 year old boy who lives with both parents wrote "*There is a girl staying with my mother and she is stealing my mother*". In addition, orphaned children were found naturally to be more worried in connection with loss of parents and relatives than any other group of children as indicated earlier under the family category. Further more, majority of worries about sickness came from children who had lost parents.

#### *4.1.1.8 Suggested worries by teachers*

It should be recalled that teachers had been asked out of the classrooms during the list generation. The children did their own writings without their influence. In school B some teachers came to stand in the window and made remarks which the children put in writing. Whilst one was totally unaware of the process going on, two were among the teachers who were introduced to the purpose of the study and therefore knew that they were not allowed to make any contributions to the lists of the children. In any case they did come back and some participants wrote their suggestions. Most of these remarks concerned the children's education and were kept out of the analysis. Below are a few of the suggestions. It is interesting to note how the children changed the reference point of their worries from "*I"* and "*my"* to "*We" and "Our"* when they wrote the worries suggested by the teachers.

"*We have less text books in our school to study especially mathematics and English but as for English we have not got even one in our school*; *when we come no text book so we need more books in the school, just small Ghanaian language text books, we don't have enough textbooks for learning; in the school we don't have proper roof; we have erosion problem in our school"*. "*Our desk is broken; our school building is not good*; *our school don't have many reading books; our school have no painting"*.

### *4.1.2 Focus group discussion.*

The focus group discussion held was necessary to explore deeper into worries dealing specifically with HIV/AIDS, one of the interest areas of the study. After going through the worry items it was realised that the worries on sicknesses and death were rather limited in general and that on HIV/AIDS in particular had not been mentioned at all. This was particularly puzzling because the study site is one of the towns with highest concentration of HIV/AIDS infected persons, as well as a high number of orphan populations in Ghana (Anarfi & Awusabo 1993; Ghana AIDS Commission 2004; in Ghana News Agency 2005). It is recognized that one of the most serious diseases at present is HIV/AIDS. In the study site and elsewhere children see parents or relatives suffer from ailments and die from this disease. As a result, it was a puzzle not to identify a single direct reference to this disease. The focus group discussion therefore sought to find out the knowledge as well as the children's awareness of the disease in their communities and find out whether or not it was a source of worry.

The focus group discussion (FGD) consisted of five children, two of whom indicated that they stayed with both parents and two with single parents. One indicated that he had lost both parents. The gender composition was three girls and two boys and these were between the age-range of 10-15 years. For purposes of better comprehension and to encourage participation the discussion

was done in the native tongue Adangbe. The main issue dwelt with in this discussion was on HIV/AIDS.

The way HIV/AIDS related media campaigns and other discussions on the matter has often linked HIV/AIDS to sexuality seemed to have impacted on the children. When issues relating to HIV/AIDS were mentioned, it could be seen from their composure that they felt a little uneasy at the beginning. Some of the children were bending their head and covering the face, a sign of shame or embarrassment. As such the cultural sensitivity around sex-related issues and HIV/AIDS made it quite difficult to talk about this initially. However, at the end of the discussion, the children made meaningful contributions, two of which were incorporated into the questionnaire in order to sample a general opinion from the larger sample.

Regarding the knowledge about HIV/AIDS, some related, "*AIDS is killing people"*, "*people are dying from getting AIDS*". "*I know that you get HIV/AIDS if you sleep with someone who has it*". As a way to prevention, they indicated the use of condom as illustrated in this statement "*if you do not use condom you get AIDS*". On the issues of whether they think about HIV/AIDS in the community, one of the boys indicated "*Sometimes I fear that I could also have*

*AIDS*", to this view others indicated affirmation. In response to who talked with them on HIV/AIDS related topics, the entire group indicated that their teachers talk to them on such issues. In addition, some indicated that their parents advice them on such topics.

## *4.2 Results from Phase 2: Frequency of Children's Worries Based on the Worry Scale*

### *4.2.1 Frequency of worry*

Table 2 shows descriptive statistics on the worry scale. The means and standard deviations reveal that the most frequent worries of the children related to '*Care*'. This includes issues on daily care and family relationships which invariably affect the care the children receive.

**Table 2:** Frequencies of children's worry on the worry scale.

| Worry | Category | Mean | SD | Rank |
|---|---|---|---|---|
| I worry that I do not have proper Shelter/home/house | Care | 3.46 | 1.02 | 1 |
| I worry that my parents and guardians do not look after me well | Care | 3.39 | 0.98 | 2 |
| I worry that I am not loved by my parents/guardians | Care | 3. 38 | 0.93 | 3 |
| I worry that my parents/guardians do not give me food and clothing | Care | 3.33 | 0.98 | 4 |
| I am worried to be an orphan | Sickness/death | 3.26 | 1.15 | 5 |
| I worry about going to sell after school | Care | 3.23 | 1.14 | 6 |
| I feel separated from other children | Sickness/death | 3.17 | 1.07 | 7 |
| I worry that my teacher beat me when late for school | Education | 3.12 | 0.96 | 8 |
| I worry that I do not live with my father & mother | sickness/death | 2. 99 | 1.25 | 9 |
| I worry because my parents and guardians do not pay school fees | Education | 2.88 | 1.11 | 10 |
| I become worried when my father and mother are fighting | Care | 2. 81 | 1.26 | 11 |
| I feel lonely | Sickness/death | 2.81 | 1.10 | 12 |
| I worry that I do not have anyone to advice me | Sickness/death | 2.80 | 1.23 | 13 |
| I worry that I could also have HIV/AIDS | Sickness/Death. | 2.66 | 1.32 | 14 |
| I worry that my parents/guardians do not buy me the things I need for school | Education | 2.58 | 0.93 | 15 |
| I worry that I am not given enough money for school | Education | 2.54 | 1.26 | 16 |

**Table 2(cont'd.):**

| Worry | Category | Mean | SD | Rank |
|---|---|---|---|---|
| I worry that I do not get enough time to learn | Education | 2.43 | 1.07 | 17 |
| I worry about people drinking alcohol. | Safety/norms. | 2.39 | 1.07 | 18 |
| I worry about killings in my community | Safety/norms | 2.19 | 1.20 | 19 |
| I worry about people smoking | Safety/norms. | 2.12 | 1.10 | 20 |
| I worry that my parents/guardians insult me | Care | 2.09 | 0.96 | 21 |
| I worry about people dying | Sickness/death | 2.04 | 1.14 | 22 |
| I worry about people stealing | Safety/norms. | 1.96 | 1.06 | 23 |
| I worry about people gossiping | Safety/norms. | 1.84 | 1.10 | 24 |
| I worry that some parents die | Sickness/death | 1.82 | 0.98 | 25 |
| I worry about orphans | Sickness/death | 1.70 | 0.89 | 26 |
| I worry that people get sick | Sickness/death | 1.64 | 0.83 | 27 |
| I worry that HIV/AIDS is killing people. | Sickness/death | 1.58 | 1.02 | 28 |
| I worry when I am sick | Sickness/death | 1.57 | 0.89 | 29 |

* SD: standard deviation.

### *4.2.2 Analysis of variance (ANOVA)*

Table 3 shows ANOVA results based on the entire worry scale. There was neither significant main nor interaction effect.

**Table 3:** Main and interaction effects of all worries, by age, gender and caregiver status

| Effect | ANOVA |
|---|---|
| Age | F (1, 87) = 1.86, p = 0.177 |
| Gender | F (1, 87) = 2.10, p = 0.142 |
| Caregiver status | F (2, 87) = 0.68, p = 0.509 |
| Gender x age | F (2, 87) = 0.02, p = 0.898 |
| Caregiver-status x age | F (2, 87) = 2.50, p = 0.088 |
| Caregiver status x gender | F (2, 87) = 0.43, p = 0.654 |
| Age, gender x caregiver status | F (2, 87) = 0.11, p = 0.899 |

- ***Care scale***

Table 4 shows ANOVA on the Care scale. There was no main effect on the Care scale however, there was a statistical significant interaction for caregiver-status and age [F (2, 99) = 3.11, p = 0.049] with small effect size (partial eta squared = 0.059). This seemed to indicate a difference between children aged 13-15 years who live with 'Both parents (M = 23.92, SD = 3.89), 10-12 year olds who live with 'Others' (M = 23.50, SD = 2.54) and children between 10-12 years who lived with both parents (M = 21.78, SD = 5.65); 10-12 years who

lived with single parents (21.30 SD = 5.65); 13-15 years who live single parents (M = 21.56, SD = 4.16) or 13-15 years who live with Others (M = 19.91, SD = 3.60). However, Post-hoc comparisons using Turkey HSD test did not reach statistical significance.

**Table 4:** Main and interaction effects on the Care scale

| Effect | ANOVA |
|---|---|
| Age | F (1, 99) = 0.11, p = 0.743 |
| Gender | F (1, 99) = 1.03, p = 0.313 |
| Caregiver status | F (2, 99) = 0.81, p = 0.450 |
| Gender x age | F (1, 99) = 0.44, p = 0.510 |
| Caregiver-status x age | F (2, 99) = 3.11, p = 0.049* |
| Caregiver status x gender | F (2, 99) = 0.43, p = 0.653 |
| Age, gender x caregiver status | F (2, 99) = 0.31, p = 0.737 |

*Significant

- ***Education scale***

Table 5 shows the results obtained from the ANOVA on the Education scale. There was statistical significance for gender, as measured on the Education scale [F (1, 104) = 4.35, p = 0.039] of which the effect size was small (partial eta squared = 0.040). This indicated significant difference between boys (M =14.25, SD = 3. 26) and girls (M =13. 06, SD = 2. 84).

**Table 5:** Main and interaction effects on Education scale

| Effect | ANOVA |
|---|---|
| Age | F (1, 104) = 0.10, p = 0.756 |
| Gender | F (1, 104) = 4.35, p = 0.039* |
| Caregiver status | F (2, 104) = 1.00, p = 0.370 |
| Gender x age | F (1, 104) = 0.37, p = 0.545 |
| Caregiver-status x age | F (2, 104) = 1.25, p = 0.290 |
| Caregiver status x gender | F (2, 104) = 2.35, p = 0.101 |
| Age, gender x caregiver status | F (2, 104) = 1.67, p= 0.194 |

- Significant.

- ***Sickness scale***

Table 6 indicates the results obtained from the ANOVA on the sickness scale. From the table its can be seen that no statistical significance was observed on this scale.

**Table 6:** Main and interaction effects on Sickness scale

| Effect | ANOVA |
|---|---|
| Age | F (1, 98) = 3.52, p = 0.064 |
| Gender | F (1, 98) = 0.01, p = 0.924 |
| Caregiver status | F (2, 98) = 0.55, p = 0.581 |
| Gender x age | F (1, 98) = 0.01, p = 0.944 |
| Caregiver-status x age | F (2, 98) = 1.53, p = 0.944 |
| Caregiver status x gender | F (2, 98) = 0.13, p = 0.879 |
| Age, gender x caregiver status | F (2, 98) = 0.09, p = 0.912 |

- ***Safety and Norms scale***

Table 7 shows the results obtained on the safety and norms scale. The ANOVA did not indicate any main or interaction effect on this scale.

**Table 7:** Main and interaction effects on Sickness scale

| Effect | ANOVA |
|---|---|
| Age | F (1,100) = 1.02, p = 0.315 |
| Gender | F (1, 100) = 2.08, p = 0.152 |
| Caregiver status | F (2, 100) = 1.69, p = 0.189 |
| Gender x age | F (1, 100) = 0.02, p = 0.880 |
| Caregiver-status x age | F (2, 100) = 0.90, p = 0.412 |
| Caregiver status x gender | F (2, 100) = 1.50, p = 0.228 |
| Age, gender x caregiver status | F (2,100) = 0.46, p = 0.630 |

### *4.2.3 Do children talk about their worries?*

Table 8 shows who the children talked with about their worries. From the table it can be seen that 39% of the children's responses came from talking to adults namely, parents, teachers, and another adult in the family. However, it seems that the children talked more with their parents/caregivers and this is followed by friends. The table also shows that the children talked more with their parents on worries on education, sickness/death and safety/norms. One of the worry areas they rarely talked about is Care.

**Table 8:** Responses on talk about worries by worry category and person talked to.

| **Type of worry :** | **Education** | **Care** | **Sickness/Death** | **Safety/Norm** | **Total** |
|---|---|---|---|---|---|
| **Talk with:** | | | | | |
| Teacher | 4% | 1% | 1% | 2% | 8% |
| Parent/Guardian | 7% | 4% | 6% | 5% | 22% |
| Another adult | 1% | 3% | 2% | 3% | 9% |
| Brothers & sisters | 5% | 4% | 3% | 4% | 15% |
| Friends | 4% | 5% | 5% | 5% | 19% |
| Nobody | 6% | 8% | 6% | 7% | 27% |
| **Total Response:** | **27%** | **24%** | **23%** | **26%** | **100** |

Table 9 is a breakdown on the children's talk on their worries. The result indicates that children aged 13-15 years talked more with friends where as those aged 10-12 years preferred to talk to their parent about their worries. In addition, girls talked more with their friends than boys.

**Table 9:** Summary table on talk about worries by Worry Category, Person talked to; Age; and Gender of respondents

| | **10-12yrs (n=63)** (%) | **13-15yrs (n=57)** (%) | **Boys (n=53)** (%) | **Girls (n=67)** (%) |
|---|---|---|---|---|
| **Education:** | | | | |
| Teacher | 2 | 1 | 2 | 2 |
| Parent/Guardian | 5 | 3 | 4 | 4 |
| Another adult | 1 | 1 | 1 | 1 |
| Bothers & Sisters | 2 | 2 | 1 | 3 |
| Friends | 2 | 2 | 1 | 3 |
| Nobody | 3 | 3 | 3 | 3 |
| Total: | 15 | 12 | 12 | 15 |
| **Care:** | | | | |
| Teacher | 1 | 1 | 1 | 1 |
| Parent/Guardian | 3 | 1 | 2 | 2 |
| Another adult | 2 | 1 | 1 | 2 |
| Bothers & Sisters | 3 | 1 | 2 | 2 |
| Friends | 2 | 2 | 1 | 3 |
| Nobody | 3 | 5 | 4 | 4 |
| Total: | 13 | 11 | 10 | 13 |
| **Sickness/death:** | | | | |
| Teacher | 1 | 1 | 1 | 1 |
| Parent/Guardian | 4 | 2 | 3 | 3 |
| Another adult | 1 | 1 | 1 | 1 |
| Bothers & Sisters | 2 | 1 | 1 | 2 |
| Friends | 3 | 2 | 1 | 4 |
| Nobody | 2 | 3 | 3 | 2 |
| Total: | 13 | 10 | 10 | 13 |
| **Safety/norms:** | | | | |
| Teacher | 2 | 1 | 1 | 1 |
| Parent/Guardian | 4 | 1 | 2 | 3 |
| Another adult | 2 | 2 | 1 | 2 |
| Bothers & Sisters | 3 | 1 | 2 | 2 |
| Friends | 2 | 3 | 2 | 3 |
| Nobody | 3 | 4 | 3 | 4 |
| Total: | 15 | 12 | 12 | 14 |
| **Total response*** | **56%** | **44%** | **44%** | **56%** |

# Discussion

### *5.1 Summary of Key Findings*

This study explored the worries of primary school children in Somanya, one of the communities in Ghana facing public health concerns on HIV/AIDS among other concerns. It was of particular interest in this study to know the content of the children's worries and to assess how much of the worries relate to issues of HIV/AIDS in the family and community. Additionally, the study aimed at finding out whether there were differences in worries based on age, gender and caregiver status.

The assessment was done using three approaches to collect information from the children namely; list generation, focus group discussion and questionnaire. The list generation and focus group discussion describes the content of the children's worries whilst the questionnaire assessed the frequency of worrying. The approaches used allowed the children to be their own informants on what worries them. The key findings from the worry lists and the focus group discussion indicate that the children's social environment feeds into the content of their worries, reflecting strains and difficulties around them. The most frequent worries of the children related to worries in the '*Care'* subscale. This

entailed worries on basic daily needs such as food, clothing and shelter, and family relationships which invariably affect the care the children receive.

One of the key findings of this study refers to the fact that children as active members of community are highly sensitive to changes affecting their families and communities. Although the children expressed a high level of worries concerning their own well-being, a considerable amount of their worries related to issues affecting their families in the face of death of parents, conflicts and separations. The content of the children's worries also highlighted economic hardship which has compelled some parents to involve their children in income generating activities at tender age. Such an engagement in income generating activities comes at a cost when children have to sacrifice time off their school and play time. The content of worries revealed systematic differences between orphaned and non-orphaned children.

### *5.2 How the Social Environment Colours the Content of Children's Worries*

The content of the children's worries covered issues of "*Personal care"*; "*Education*" which were self-referent; "*Family relationship"*; and "*Sickness and Death*" which largely referred to parents/caregivers*;* "*Safety/Environment"* and; "*Breaking norms"* which were community-referent in nature. Such

arbitrary classification of worry contents has a long tradition. For instance, Pinter and Lev (1940; in Davey & Tallis 1994) assigned headings as “School”, “Family”, “Economic”, “Personal health and well-being”, among others to worries generated by children. Similar classifications abound in the current literature (MacMullin & Odeh 1999; Henker 2004; Snipstad, et al. 2005).

The worries in the ‘*Personal care’* and ‘*Education*’ categories received most statements in the children’s list. These worries were self-referent, which means that the worries deal directly with issues affecting the children’s well-being. The children’s worries on ‘*Personal care’* included worries on basic needs such as food and shelter. In communities where meeting basic needs presents a challenge, it comes as no surprise that children worry about how their daily basic needs will be satisfied. There were indications from the children’s worries that they were made to engage in income generating activities, possibly to support their parents. Though a regular practice in Ghana, such engagement in income generating activities early on in a child’s life have adverse effect on children because it is known that working children attend school less and do less well in school (Chant & Jones 2005). This may constitute a challenge for both parents and children because they make sacrifices in order to secure basic needs.

For many, especially those in deprived communities, education seems to be the only means to break free from the cycle of poverty. Education gives a better chance of securing a job and as such provides hope for the future (Chant & Jones 2005). Therefore, it seems logical that the children worried so much on educational issues. The children's worries about "*Education"* or school also draw attention to the fact that this environment is one of the closest in which children have direct contacts with others. Relationships within this social environment are based on reciprocity (Bronfenbrenner 1979). In situations where these reciprocal relationships are strained, they become a cause of worry. This is demonstrated in the worries of the children in such cases of pupil-teachers relationships as well as relationships among their peers. Besides these relationships, basic supplies such as school uniforms and stationeries make life within the school environment comfortable. When these are lacking they become possible areas of children's worries.

Worries relating to '*Family relationships'*, covered issues of death of parents/caregivers, separation, and conflicts between parents. Drawing on the ecological model of human development (Bronfenbrenner 1979), the family is the closest social environment to the child, and an arena of everyday interaction. The family environment is also the most important source of

physical and emotional support. Therefore, any situation which threatens this secure base of the child is certainly a cause of worry (Osofsky 2004). The context of the current study site, as described earlier is one faced with many problems such as poverty and HIV/AIDS. These problems may be challenging for both caregivers and children. The fact that the children indicated worries on issues affecting their families rightly affirms this. The children also indicated that they are not merely interested in what happens directly to them, they also pay attention to the state of mind of their parents/caregivers. This is because children, relative to age and the issue on hand, rely on caregiver's responses to establish a realistic understanding of life circumstances and the environment around them (Klein 1994; Osofsky 2004). The "*Sickness and Death'* category was predominantly in reference to persons other than the child. These worries were to a large extent by children who have lost their parents.

The caregiver's functioning as a secure base (Osofsky 2004) serves an important role in children's well-being because it helps them to return to a relaxed state and enables exploration in the confidence that they will always have a person of trust to return to. It is therefore necessary that children are made aware of the existence of persons other than their current primary caregiver to whom they can also build a trusting relationship. In such instances

when the primary caregivers are not available any more, the children can still be assured of someone to turn to and thus they may not despair. Formally, the Ghanaian tradition family arrangement allowed for this kind of buffer relationships, however there are good reasons that this functioning weakened because of urbanisation and a shift towards individualism (Nukunya 1999).

The worries in "*Safety/Environment"*; and "*Breaking norms"* referred largely to safety and environmental issues in the community. The various social environments in which an individual spends his/her lives are not to be viewed as discrete layers but nested structures which are interwoven into each other (Bronfenbrenner 1979). This means that incidents in both the immediate and distant environment can affect the individual. The worries in the "*Safety/Environment"*; and "*Breaking norms"* categories demonstrate that children are aware of what happens in the wider community. For instance, in the category of worries in the "*Safety/Environment"*, children were reflective of the possible consequences of issues as killings and fighting among groups of boys. Some of the children suggested that such confrontations may bring war. Such thoughts reflect how seemingly minor occurrences may overwhelm children. This finding gives an insight into the process of worrying. When children get overwhelmed, they may go beyond the observable and begin to

anticipate and even elaborate on catastrophic possibilities (Vasey & Daleiden 1994). Since the individual's perception of his environment is often more important than the 'objective reality' (Bronfenbrenner 1979), the perception of these children is what matters most.

### *5.2.1 Worries in the context of HIV/AIDS.*

Central to the present study is the questions as to whether the content of children's worries reflects issues of HIV/AIDS in families and the community as a whole. In this regard the children's worries revealed a preoccupation with death of parent(s) when this had happened in their own families. It is rather surprising that the HIV/AIDS pandemic in the community did not reflect in the worries of the children. During the FGD, the children had to be prompted to talk about the epidemic. Whilst they mentioned that HIV/AIDS is killing people, the children themselves did not directly link deaths of parents to HIV/AIDS, or any other cause for that matter.

In the present study site, the HIV/AIDS pandemic is visible through the high number of deaths of those in the parenting population and an increase in the orphan population (Ghana News Agency, 2005). The study by Snipstad, et al. (2005) among Tanzanian children reveals a scenario which seems to help

explain the current finding. The site for the Tanzanian study was indicated to have HIV/AIDS prevalence of 20%. The majority of the children who took part in that study readily stated worries about HIV/AIDS and HIV/AIDS-related issues irrespective of whether they had lost parents or not. This is possibly because the epidemic had reached such a height that it could no longer be hidden from children. In Ghana, the sentinel site with the highest prevalence had a rate of 7.4%. Although the pandemic has contributed to death of parents as well as increase in orphan populations (Ghana AIDS commission 2005), it seems to have stabilized. Of importance however is the fact that the children who had lost their parents indicated that they are unhappy about such parental deaths irrespective of the causes.

Another possible reason why the children may not have referred to the HIV/AIDS pandemic directly is that they may not be aware of the cause of death of their parents. The cause of death from the pandemic is secluded in most communities Ghana. Although it is common knowledge that many are afflicted by the diseases in this community, there is a culture of silence about it. This is partly due to the stigmatization that comes with such disclosure. Thus even if the cause of death is known, it remains within a close knit of adult cycles. Additionally, in the Ghanaian context children are rarely given the

benefit of knowing what their parents are sick of, or what caused their death. Such matters are hardly an area of 'child talk'; this is seen in the focus group discussion which was conducted in the current study. The children had to be prompted before they talked about HIV/AIDS.

In the focus group discussion, the children indicated that they were taught about HIV/AIDS in school. This was ascertainable because in school 'A' for instance, there were posters on the epidemic in one of the classrooms where the exercise took place as well as in the headmistress' office. In addition, the school curriculum has an allocation for sex education of which teachers could teach a wide range of topics, among which HIV/AIDS could have been discussed. Moreover, some of the children indicated that their parents/caregivers advised them on HIV/AIDS. The statement phrased "*I worry that HIV/AIDS is killing people*" ranked 28$^{th}$ of 29 items by the children. Such low ranking does not indicate ignorance about HIV/AIDS, rather it seem to imply that the children are not aware that HIV/AIDS may affect their own families. Another reason could be that the children would rather not talk about HIV/AIDS even if they knew that some of their family members were affected, due to the culture of silence surrounding the epidemic.

### *5.2.2 Frequency of worries deepens understanding on worries among children.*

In order to establish which of the worries the children thought about on regular basis, this study assessed a second worry parameter, frequency. The responses of the children indicated that their most frequent worries related mainly to "*Care*" which also took into account family relationships. "*Education*" and "*Sickness/death*" followed, respectively. Similar results have been documented in other studies. For instance Silverman, et al. (1995) found that the three most common areas of worry among children relate to "School", "Health" and "Personal harm". Snipstad, et al. (2005) also documented four major categories of worries among children between the ages of 8-15 in Tanzania, namely; "Education", "Health", "Care/abuse" and "Safety".

The content and frequencies of worries overlap and are not mutually exclusive, so assessing both parameters gives a broader picture of worries among the children studied. The content describes comprehensively the children's worries and the frequency of worry establishes how often the child actually worries about a particular issue. When the content was short-listed and put in the frequency list, the children got exposed to a comprehensive list of worries among the local children. These two parameters therefore play a complementary role when assessed together in a given study (Tallis, et al.

1994). To illustrate, in the content of the children's worries, items such as "*I worry that I am not given enough money for school*" received the highest record in the list generation, however this item was ranked only 16th when the children were asked to indicate how often they worried about this among other worry items. One possible explanation is that money is an issue that confront the children every time they are going to school and as such they could readily list it, before entering into worries which they found more difficult to share.

Additionally, in the content of worries, the item "*I worry about killings in my community*" was one of the items with the highest listing, however, when the children rated how often they worried about this, the item was ranked 19th out of the 29 worry items in the questionnaire. The explanation offered here is that worries are elicited by proximal and distal events (Borkovec, et al. 1986; in Davey & Tallis 1994). At the time of the writing of the lists, there were reported serious fighting between gangs of boys in the study site and a neighbouring town. This had probably left an impression on the children to the extent where it became a common statement on their lists. However, the ranking on the frequency scale took place after ten days. The influence of recent events is also reported in the study by MacMullin and Odeh (1999) in their study in the Gaza Strip. The children in that study indicated a lot of worries

about “thunder, rain and cold” because of an unusually heavy rain storm early in the morning of the survey.

These findings indicate that children’s worries may change in response to changes in their communities (Gottlieb & Bronstein 1996). It follows then; whilst some worries may change in response to current issues, the basic domains of children’s worries may remain the same as depicted in the current literature (Pinter & Lev 1940- ; in Davey & Tallis 1994; Silverman, et al. 1995; MacMullin & Odeh 1999; Henker 2004; Snipstad, et al. 2005). The current data therefore stands to serve as empirical evidence to which one can refer to in assessing such changes in the Ghanaian setting.

### *5.2.3 Relationship between worries and age; gender and; orphan status.*

This study also assessed the relationship between worrying and age, gender and caregiver status. As reported in other studies (Vasey 1994; MacMullin & Odeh 1999; Gordon & Schroeder 2002), the girls in this study provided more worry items than the boys. This seems to suggest that girls are more likely to share their worries than boys. This explanation is based on the fact there was no gender difference on how often boys’ and girls’ worries on the frequency scale. The qualitative part also revealed worries which were gender-role specific. For

instance, some of the content of the boy' worries related to traditionally gender specific roles such as engagement in household chores. In the quantitative analysis, the boys in this study indicated significantly frequent worries on educational issues than the girls. However, the effect size was small.

Consistent with previous findings on children's worries (Silverman, et al.1995; MacMullin & Odeh 1999), age-related differences were found within the age group studied. In MacMullin and Odeh's study for instance, older children (12-14 years) showed a marked reduction in worry. Similar results were found in this study with younger participants (10-12 years) generating higher worries than older ones (13-15 years). In addition, younger children indicated intense worrying related to sickness and death in the qualitative data. This can be attributed to the fact that older children learn to accept certain issues in their life as inevitable (MacMullin & Odeh 1999). This however, does not mean that older children do not worry about such issues any more. For instance, in relation to sickness and death, adolescents may understand the nature of loss but may not directly express their worries. This silence should not be misunderstood as not being worried. Rather this reflects a case of 'selective' reporting. In addition, worries are indicated to reflect developmental changes of the emerging self (Vasey 1993). It stands to reason that as children grow, they

change in their perspectives of themselves and their understanding of what happens around them. Further more, older children have a better cognitive capacity to understand which dangers are realistic and which are not.

The children in this study had in common many worrisome thoughts; however, characteristic differences were seen when they were viewed from the status of having their parents alive or not. Participants who had lost parent(s) had marked concern for the well-being of the current caregivers. This support the current literature which indicates that specific events and life experiences are major factors in children's worries (Gottlieb & Bronstein 1996).

The differences in worries between orphaned and non-orphaned children probably mark differences in their life experiences. For orphans, the loss of their former primary caregivers seems to influence their feelings for the current caregivers' well-being. Naturally, children who had lost parent(s) were more likely to express worries relating to sickness and death. This is appreciable considering that they might have gone through the ordeal of watching their parent(s) fall sick and die. Such occurrences seemed to make them realize how vulnerable they are as children, if the parent/caregiver is gone. Orphaned children also reported worries which reflected problems of grief, and problems

of adjustment into their new families. As demonstrated in the qualitative data, children who had lost either one or both parents demonstrated marked difference in the thematic content of their worries as compared to children who had not lost parents.

This finding is consistent with other studies which have found a link between attachment and worry (Hill 1999, Muris, et al. 2000). As the closest unit of relationships and sources of security, attachment figures are more likely to be sources of children's worries. This is more so when children feel insecure about their attachment (Muris, et al. 2000). There were four main areas orphaned children demonstrated a preoccupation namely, concern about the well-being of the current caregiver; problems of adjustment and the need for inclusion in their new families; a preoccupation with thoughts on sickness and; death of parents(s).

### *5.3 Gap between Worries Reported By the Children's And What Adults Think Should Worry Children*

The findings of this study may not be surprising when analysed from the background of the ecological model of human development and the attachment theory with emphasis on children's sense of security and secure base (Bronfenbrenner 1979; Osofsky 2004). However, the findings contrast what

adults think are children's worries or should be worried about. Although not originally part of the study, the suggestions offered by the teachers in one of the schools gives an idea as to what adults, teachers in this context, think should worry children. These pertained to issues on education namely; text books in schools, the physical structure of their school building, and other issues like these. Although some of the children had earlier written some of these worries, to many of the participants, there were other issues which were of more importance than what the adults suggested.

This finding supports other studies which have indicated that adults may not be fully aware of the nature and depth of children's worries; they may underestimate or even misjudge the degree to which children worry (Gottlieb & Bronstein 1996; Hill 1999).

### *5.4 Who Children Talk with about their Worries*

*"You cannot prevent the birds of worry and care from flying over your head. But you can stop them from building a nest in your head",* says a Chinese proverb (In Davey & Tallis 1994). How do children stop the birds of worries from building nests in their heads? This study assessed how children deal with their worries by examining who they talked with.

The literature reviewed indicated that children have different ways of dealing with their worries. Whilst some may talk about their worries with their parents, friends and or other adults, others seem not to talk about their worries at all (Hill 1999). One of the findings indicates that over two-thirds of the times, the children talked with adults about their worries. Children aged 10-12 were found to talk more with their parents and those aged 13-15 with their friends. This is consistent with the findings by Gordon and Grant (1997) and Hill (1999) about the fact that children more likely to turn to parents and friend in dealing with their worries.

Hill (1999) also indicates that younger children are more likely to turn to parent, relatives or teachers. Additionally, often teenagers deal with their personal worries by sharing with someone of similar age (Gordon & Grant 1997), as this study also found. In such instances that children, especially those in their teen years, do not take the initiative to talk about their worries, parents/caregivers can attend to the child's non-verbal emotional cues and thereby make appropriate attribution about the feelings of the child. Such an empathic behaviour on the part of parents largely depends on parental availability. However the current hardship stands as a threat to parental

empathy (Kilpatrick 2005). This is because parents may be preoccupied with attending to basic needs and their own struggle to cope. It seems therefore that parental sensitivity to children may be numbed by these current hardships. This may limit parental expression of empathy to the child.

This study also found that older children (13-15) hardly talked about worries that dealt with their care and strained family relationships. However if they did, they preferred to talk with their friends. This supports finding by Gordon and Grant (1997) that the most common strategy among teenagers for dealing with a problem was to share it with someone of similar age. And that children talk about different issues with different people. In the Ghanaian context it is rather uncommon for a child to talk to his/her parent about family issues related to the parent's lives. Such behaviour may be considered meddling on the part of the child. This seems to explain why children will talk about such family-related worries with their friends, and leave it at that level. Unfortunately 'friends' who are possibly of the same age as the child are limited in their ability to allay the heightened emotions of the child. Moreover, they may lack the ability to give realistic explanations of the events which have become sources of worries. 'Friends' may also not be in a position to give practical help.

The study also revealed that the girls talked more about their worries than the boys. This finding support the point made earlier and documented in other studies that, girls are more likely to share their worries (Vasey 1994; MacMullin and Odeh 1999). However, this does not mean that girls worry any more than boys.

### *5.5 Implications of the Study*

#### *5.5.1 Limitations and recommendations.*

Before discussing the implications of the study, it is important to indicate some of the limitations of the study as well as make necessary recommendations for future research. The study encountered some difficulties in the list generation because of the use of English language. This difficulty was partly dealt with, when the instructions were translated into Adangbe. However, participants had to write in English. This probably affected how many worries the children wrote as well as the nuances with which they expressed their worries. However, there were no good choices in terms of language. The children were not better equipped to write in their native language nor were it easy for the many to feel comfortable with the English language, as it is the language of instructions in the schools.

In future studies where there is such a dilemma with language, an audio recording may be used to replace the writing. This is more likely to allow the children record their worries in the language in which they feel comfortable with. However, it should be noted that the use of audio recording may be at the expense of privacy and anonymity required of this method. This is because it will require adult help to operate the audio recordings. Moreover, this may not be practical when dealing with larger samples as it may be time consuming both in the recording and the transcription.

Another issue that warrants attention is the statistical analysis conducted in this study. The subscales had not been derived by factor analysis which is often recommended for such studies. This is because the sample was small. It is therefore recommended that future studies with fairly large samples take advantage of this statistical procedure in order to certify the reliability of the measuring instruments. The outcome from this study can be explored in larger studies.

### *5.5.2 Developmental theories.*

The content and frequency of worries among children as indicated in the current literature and supported by this study, follow a developmental pattern of the

emerging self (Vasey 1993; MacMullin & Odeh 1999). This helps in identifying which areas of a child's life that may be a source of worry based on age and gender. Such characteristic differences ensure that each age and gender groupings are given attention in their own right whenever such phenomena are being studied. It also informs researchers and professionals interested in child development about how they may address the needs of each category of children.

### *5.5.3 Research on children's worries.*

This study made use of a research methodology which allowed children to relate their worries without adult influence. This method is able to bring out unanticipated areas of concern for children and enrich a study. The use of the qualitative method in assessing the content of worries helped generate a large body of data. These worries covered a wide scope of the child's life as potential sources to worrying. The quantitative method helped to assess frequency of worries. Despite the limitations of this method, this study has been child-oriented. In addition this method helps in contextualizing the study to the local setting and is therefore appropriate for developing a locally based worry scale for children. The assessment of the content, frequency and distribution of worries in children has also helped in the understanding of the worry process.

Whilst worry content may be broad and elicited by any event in the environment, the frequency of worries helps in identifying issues that are most worrisome to children. Additionally, the distribution of worries assists in assessing the prevalence of the phenomenon among children.

### *5.5.4 Health promotion interventions.*

The current study provides empirical data on worries among children, one of the vulnerable groups in society. The social environment is one of the determinants of health which can either sustain or damage health (Dahlgren & Whitehead 1991). This is because relationships and support in the social environment influence the individual's sense of well-being as well as the kind of support one receives in the community. Through this study an insight is gained into how these relationships and support in the social environment shapes children's worries as well as how children perceive their social environment.

Worries which related issues of personal care gave a graphic picture of standards of living in the study site as well as the challenge faced by parents in order to obtain basic needs for their children. For instance, the worries relating issues of engagement in income generation activities may as well demonstrate a

preoccupation with work such that children may not receive quality time with parents/caregivers to build on their relationship, and as such weaken their secure base (Osofsky 2004). This is a potential area of attention for a community-based intervention. There is an urgent need for a concerted effort to increase attention on promoting a positive social environment, one of the top priorities for health promotion, which is unfortunately given little attention in the Ghanaian context.

In addition, this study revealed a systematic difference between orphaned and non-orphaned children. Within the family environment, children who had lost parents as well as those whose parents are separated demonstrated a high level of worry with the loss or separation, respectively. Since these groups of children were in the minority, there exists the danger for their needs to be overlooked. It is the intention of this study to bring such issues to the attention of interested groups such as NGOs. Interested organizations may focus on the consequences of the epidemic to specific groups of children. One of the roles of health promotion is to mediate between different interests by providing evidence (Naido & Will 2000). This study purports to do so by providing knowledge on this study area.

It was also realised that children in this study seemed not to talk to their primary caregivers about their worries, especially those on care and stained relationships. However, there is the need for children to have someone who can allay their worries. As such there is the necessity to establish ways of communicating with children about important issues in their life. This is a responsibility which could be picked up at both the family and school levels. The traditional buffer relationships which allow other members of the family to talk to children could well be revitalized. At the school levels, teachers can do more than warn children about preventing the spread of HIV/AIDS. They can encourage children to express any worries they may have on HIV/AIDS freely and thus break the culture of silence. Children get relieved when they talk about these worries and their natural tendency to explore is also enhanced. Since exploration enhances learning, this would be beneficial.

# Conclusion

This study has documented that children in Somanya, Ghana do worry over a wide range of issues. The presentation of the children's worries should encourage other such studies in larger samples. This can provide one with the opportunity to know how widespread the worry phenomenon is in the general population and as such encourage stakeholders to consider views given by children.

Additionally, the core content of the children's worries reveals that they are as much concerned with what is happening around them as any other members of the communities. Such an insight can help shape how children are viewed so as to raise the awareness in parents/caregivers and the community as a whole. The present study informs how events may be related to children in a most supportive way, helping them in the process of understanding and coping. This study has emphasised that the social environment does influences children's worries. This calls for a concerted effort to provide a supportive environment for children in both the family and the community.

## References


Afenyadu, D & Goparaju, C. (2003). *Adolescent Sexual and Reproductive Health Behaviour in Dodowa, Ghana.* Washington; Centre for Development and Population Activities

Akumfi, A. C. (2002). Learning to live together in Ghana and West Africa: Problems and Solutions. *Prospects* **32**(1), 75-82

Anarfi, J. K. & Awusabo, K (1993). Experimental research on sexual networking in some selected areas of Ghana. *Health transition review* 3, supplementary issue

Appleyard, K & Osofsky, J. D. (2003). Parenting after trauma: supporting parents and caregivers in the treatment of children impacted by violence. *Infant Mental Health Journal*, **24**(2), 111-125

Awusabo-Asare, K., Abane, A. M. & Kumi-Kyereme, A. (2004). Adolescent Sexual and Reproductive Health in Ghana: A Synthesis of Research Evidence. *Occasional Report,* New York: The Alan Guttmacher Institute.

Berk, L. E. (2002) *Child Development.* (6th Ed). Allyn and Bacon Publications Ltd. Boston

Bloor M, Franland. J., Thomas, M., & Robson, K. (2002). *Focus Groups in Social Research*. London, SAGE Publications.

Borkovec, T. D., Metzger, R. & Pruzinsky, T. (1986). Anxiety, worry and the self. In: Davey, G. & Tallis, F., (Eds.). (1994). *Worrying, Perspectives on Theory, Assessment and Treatment,* Chichester UK, John Wiley & Sons.

Borkovec, T. D., Robinson, E., Pruzinsky, T. & DePee, J. A. (1983). Preliminary exploration on worry: Some characteristics and processes. In: Davey, G. & Tallis, F., (Eds.). (1994). *Worrying, Perspectives on Theory, Assessment and Treatment,* Chichester UK, John Wiley & Sons.

Borkovec, T.D (1993). The nature, functions and origins of worry. In: Davey, G. C. L. & Tallis, F., (Eds.). (1994). *Worrying, Perspectives on Theory, Assessment and Treatment*, Chichester UK, John Wiley & Sons.

Botchway, A. T. (2005). Parent and Adolescent males' communication about Sexuality in the context of HIV/AIDS- A study in the Eastern Region of Ghana. A Masters Thesis, Research Centre for Health Promotion, University of Bergen.

Bowlby, J. (1969) *Attachment and Loss*, Vol. I. Attachment., New York. Basic Books

Bowlby, J. (1973) *Attachment and Loss*, Vol. 2. Separation., New York. Basic Books

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA, Harvard

Chant, S. & Jones, G. A. (2005). Youth, Gender and Livelihoods in West Africa: Perspectives from Ghana and The Gambia. *Children's Geographies*, **3**(2), 185–199.

Chemtob, C. M. & Taylor, T. L. (2002). Treatment of traumatized children. In: Osofsky, J., D, Ed. (2004). *Young People and Trauma. Rainbows of Tears, Souls Full of Hope; Cultural Issues Related to Young Children and Trauma.* New York, The Gilford Press.

Creswell, J. W. (2003). *Research Design, Qualitative, Quantitative and Mixed Methods Approaches.* (2nd Ed), Sage Publications Ltd, London.

Dahlgren, & Whitehead, M (1991). Policies and strategies to promote social equity in health. In Naidoo, J. and J. Wills (2000). *Health Promotion: Foundations for Practice*. Edinburgh, Harcourt Publishers.

Davey, G. & Tallis, F., Ed. (1994). *Worrying, Perspectives on Theory, Assessment and Treatment*, Chichester UK, John Wiley & Sons.

Gardiner, H. W. & Kosmitzki, C (2002). *Lives Across Cultures; Cross-Cultural Human Development*. Boston, Allyn and Bacon.

Ghana AIDS Commission (2005). *HIV Sentinel Survey- 2004 Report*. National AIDS/STI Programme, Ghana Health Service. Ghana, Uneek Magazine Publications.

Ghana News Agency (2005). *200, 000 children turned orphans in 20 districts due to HIV/AIDS*. Retrieved June 2005 from http://www.ghanaweb.com/GhanaHomePage/NewsArchives.

Ghana Statistical Service (2004). *Demographic and Health Survey 2003*. Noguchi Memorial Institute for Medical Research (NMIMR) and ORC Macro. Calverton.

Gladstone, G & Parker, G. (2003). What's the use of worrying? Its function and its dysfunction. *Australian and New Zealand Journal of Psychiatry* **37** (3), 347-354.

Goldberg, S. (2000). *Attachment and Development*. Arnold press, London.

Gordon, J. & Grant, G. (1997) *How We Feel.* Cited in Hill, M. (1999). What's the problem? Who can help? The perspectives of children and young people on their well-being and on helping professionals. *Journal of social work practice*, **13** (2), 135-145.

Gottlieb, D. & Bronstein, P. (1996). Parents' perception of children's worries in a changing world. *The Journal of Genetic Psychology* **157.**

Gullone, E. (1999). The assessment of normal fear in children and adolescents. *Clinical Child and Family Psychology Review* **2**(2), 91-106.

Gullone, E. (2000). The development of normal fear: a century of research. *Clinical Psychology Review* **29**(4), 429-451.

Hammersley, M (1992). What is wrong with ethnography? In: Silverman, D. (2000). *Doing Qualitative Research, a Practical Handbook.* SAGE Publications, London Harcourt Publishers.

Henker, B. (2004). Worldly and workaday worries: contemporary concerns of children and young adolescents. *Journal of Abnormal Child Psychology* (Historical Archive).

Hill, M. (1999). What's the problem? Who can help? The perspectives of children and young people on their well-being and on helping professionals. *Journal of social work practice*, **13** (2), 135-145.

Holland, P., et al. (2000). Life course influences on health in early old age. Lancaster, Economic and Social Research Council, (Research Findings 6).

Kilpatrick, K. L. (2005). The Parental Empathy Measure: A New Approach to Assessing Child Maltreatment Risk. *American Journal of Orthopsychiatry*, **75** (4), 608-620.

Klein, P. (1992). More Intelligent and Sensitive Child (MISC): A New Look at an Old Question. *International Journal of Cognitive Education &Mediated Learning.* **2**. 2.

MacMullin, C. & Odeh, J. (1999). What is worrying Children in the Gaza strip? Child *Psychiatry and Human Development*, **30**, 55-70.

Muris, P., Meesters, C., Merckelbach, H. & Hulsenbeck, P (2000). Worry in children is related to perceived parental rearing and attachment. *Behaviour Research and Therapy* **38,** 487-497.

Muris, P., Meesters, C., Merckelbach, H., Sermon, A., & Zwakhalen, S. (1998a). Worry in normal children. *Journal of the American Academy of Child and Adolescent Psychiatry*, **37**, 703-710.

Muris, P., Merckelbach, H., & Luijten, M (2000). The connection between cognitive development and specific fears and worries in normal children and children with below-average intellectual abilities: a preliminary study. *Behaviour Research and Therapy* **40,** 37-56.

Muris, P., Merckelbach, H., Gadet, B & Moulaert, V (2000a). Fears, Worries, and Scary Dreams in 4-to-12-Year-Old Children: Their Content, Developmental Pattern, and Origins. *Journal of Clinical Child Psychology* **29**, 1, 43-52.

Naidoo, J. & Wills, J. (2000). *Health Promotion: Foundations for Practice*. Edinburgh, University Press.

Nukunya, G. K. (2003). *Transition and Change in Ghana*. Accra. Ghana Universities Press.

Osofsky, J., D, Ed. (2004). *Young People and Trauma. Rainbows of Tears, Souls Full of Hope; Cultural Issues Related to Young Children and Trauma.* New York, The Gilford Press.

Pallant, J. (2005). *SPSS survival manual; a step by step guide to data analysis using SPSS version 12 (2nd Ed).* New York. Open University Press.

Parkhurst, J. T & Asher, S. R. (1985). Gaols and concerns: implications for the study of the study of children's social competence. In: Davey, G. & Tallis, F., Ed. (1994). *Worrying, Perspectives on Theory, Assessment and Treatment.* Chichester, John Wiley & Sons.

Pinter, R. & Lev, J. (1940). Worries of school Children. In: Davey, G. & Tallis, F., (Eds.). (1994). *Worrying, Perspectives on Theory, Assessment and Treatment*, Chichester UK, John Wiley & Sons.

Rogers, A., Pilgrim, D. & Latham, M. (1996) *Understanding and Promoting Mental Health.* Cited in Hill, M. (1999). What's the problem? Who can help? The perspectives of children and young people on their well-being and on helping professionals. *Journal of social work practice*, **13** (2), 135-145.

Romer, L. & Borkovec, T. D. (1993). Worry; unwanted cognitive activity that controls unwanted somatic experience. In: Davey, G. & Tallis, F., Ed. (1994). *Worrying, Perspectives on Theory, Assessment and Treatment.* Chichester, John Wiley & Sons.

Sabaa, S. (2004). Development of a Model Framework for Orphans and Vulnerable Children in their Early Years in Ghana. The School of Child and Youth Care, Faculty of Human and Social Development, University of Victoria.

Schroeder, C. S. & Gordon, B. N. (2002). *Assessment and Treatment of Childhood Problems. A Clinician's Guide* (2ed). New York, National Professional Resources, Inc.

Silverman, D. (2000). *Doing Qualitative Research, A Practical Handbook*. SAGE Publications, London.

Silverman, W.K., La Greca & Wasserstein, S. (1995). What do children worry about? Worries and their relation to anxiety. *Child development* 66, 671-686.

Snipstad, M. B., Lie, G. T., & Winje, D.( 2005). What do Tanzanian children worry about? *African Journal of AIDS Research,* **4**(3), 183-193.

Tallis, F., Davey, G. C. L., & Bond, A. (1994). The Worry Domains Questionnaire. In: Davey, G. & Tallis, F., (Eds.). (1994). *Worrying, Perspectives on Theory, Assessment and Treatment,* Chichester UK, John Wiley & Sons.

Tones, K. & Tilford, S (2001). *Health Promotion: Effectiveness, efficiency and equity*. Cheltenham, UK, Nelson thornes.

UNAIDS (2004). *Report on the Global HIV/AIDS epidemic. 4th Global Report*. Geneva.

UNICEF (No date).Convention on the Rights of the Child. Retrieved May 2005 from http://www.unicef.org/crc/convention.htm

UNICEF, USAID & UNAIDS (2000). *Principles to guide programming for Orphans and other Vulnerable Children.* New York.

UNAIDS & USAID (2004). *Children on the Brink 2004. A Joint Report on Orphans Estimates and Program Strategies.* New York.

Vasey, M. W. (1993). Development and cognition in childhood anxiety. The example of worry. *Advances in Clinical Child Psychology* **15**, 1-39.

Vasey, M. W., Crnic, K. A. & Carter, W. G. (1994). Worry in children: A developmental perspective. *Cognitive Therapy and Research*, **18**, 529-549.

Vasey, M., W. & Daleiden, E., L. (1994). Worry in children. In: Davey, G. & Tallis, F., (Eds.). (1994). *Worrying, Perspectives on Theory, Assessment and Treatment,* Chichester UK, John Wiley & Sons.

# Appendices

***Appendix I: Instruction for list generation***

To pupils in primary schools

Many things happen in our homes, school and community that you may think of a lot. These thoughts may make you feel unhappy, sad or afraid. In this study, we refer to such thoughts as worries. We are interested to know what children at your age worry about. Therefore we ask you to write a list of your worries on this sheet of paper. If you need it, you can have more writing sheets.

PLEASE DO NOT WRITE YOUR NAME ON THIS PAPER, JUST INDICATE YOUR SEX, AGE, AND WHETHER YOU LIVE WITH YOUR PARENTS OR NOT. THANK YOU.

AGE:
SEX:

*Appendix II: Worry Scale*

**TO PUPILS IN PRIMARY SCHOOLS**

Below is a list of worries. These worries are typical for children aged between 10 and 15. Please read each worry carefully, and put an **'X'** showing how often you have worried about these issues lately.

**PLEASE DO NOT WRITE YOUR NAME ON THIS PAPER, JUST INDICATE YOUR AGE AND SEX.**

**AGE:**

**SEX:**

| | All the time | Sometimes | Once a while | Not at all |
|---|---|---|---|---|
| 1. I worry that my parents/ Guardians do not buy the things I need for school. | ☐ | ☐ | ☐ | ☐ |
| 2. I worry that my teacher beat me when I am late for school. | ☐ | ☐ | ☐ | ☐ |
| 3. I worry that I am not given enough money for school. | ☐ | ☐ | ☐ | ☐ |
| 4. I become worried when my parent/guardian does not pay my school fees. | ☐ | ☐ | ☐ | ☐ |
| 5. I worry that I do not get enough time to learn. | ☐ | ☐ | ☐ | ☐ |
| 6. I worry about going to sell after school. | ☐ | ☐ | ☐ | ☐ |

7. Do you talk with anyone about these worries?

a) I talk with my teacher. ☐

b) I talk with my parents/guardians. ☐

c) I talk with my brothers and sisters. ☐

d) I talk with my friends. ☐

e) I talk with another adult in my family. ☐

f) Nobody. ☐

| | All the time | Sometimes | Once a while | Not at all |
|---|---|---|---|---|
| 8. I become worried when my father and mother are fighting. | ☐ | ☐ | ☐ | ☐ |
| 9. I am worried that my parents /guardians do not give me food and clothing. | ☐ | ☐ | ☐ | ☐ |
| 10. I worry that I do not have proper shelter/home/house. | ☐ | ☐ | ☐ | ☐ |
| 11. I worry that my parents/ guardians do not look after me very well. | ☐ | ☐ | ☐ | ☐ |
| 13. I am worried that my parents/ guardians insult me. | ☐ | ☐ | ☐ | ☐ |
| 14. I worry that I am not loved by my parents/guardians. | ☐ | ☐ | ☐ | ☐ |

15. Do you talk with anyone about these worries?

a) I talk with my teacher. ☐

b) I talk with my parents/guardians. ☐

c) I talk with my brothers and sisters. ☐

d) I talk with my friends. ☐

e) I talk with another adult in my family. ☐

f) Nobody ☐

| | All the time | Sometimes | Once a while | Not at all |
|---|---|---|---|---|
| 16. I worry that people get sick. | ☐ | ☐ | ☐ | ☐ |
| 17. I become worried when I am sick. | ☐ | ☐ | ☐ | ☐ |
| 18. I am worried to be an orphan. | ☐ | ☐ | ☐ | ☐ |
| 19. It worries me that HIV/AIDS is killing people, | ☐ | ☐ | ☐ | ☐ |
| 20. I worry that I could also have HIV/AIDS. | ☐ | ☐ | ☐ | ☐ |
| 21. I worry about orphans. | ☐ | ☐ | ☐ | ☐ |
| 22. I worry that some parents die. | ☐ | ☐ | ☐ | ☐ |
| 23. I worry that I do not have anyone to advice me. | ☐ | ☐ | ☐ | ☐ |
| 24. I feel lonely. | ☐ | ☐ | ☐ | ☐ |
| 25. I feel separated from other children. | ☐ | ☐ | ☐ | ☐ |
| 26. I worry about people dying. | ☐ | ☐ | ☐ | ☐ |
| 27. I worry that I do not live with my mother & father. | ☐ | ☐ | ☐ | ☐ |

28. Do you talk with anyone about these worries?

a) I talk with my teacher. ☐

b) I talk with my parents/guardians. ☐

c) I talk with my brothers and sisters. ☐

d) I talk with my friends. ☐

e) I talk with another adult in my family. ☐

f) Nobody. ☐

| | All the time | Sometimes | Once a while | Not at all |
|---|---|---|---|---|
| 29. I worry about people stealing. | ☐ | ☐ | ☐ | ☐ |
| 30. I worry about killings in our community. | ☐ | ☐ | ☐ | ☐ |
| 31. I worry about people smoking and. | ☐ | ☐ | ☐ | ☐ |
| 32. I worry about people drinking alcohol | ☐ | ☐ | ☐ | ☐ |
| 33. I worry about people gossiping. | ☐ | ☐ | ☐ | ☐ |

34. Do you talk with anyone about these worries?

a) I talk with my teacher. ☐

b) I talk with my parents/guardians. ☐

c) I talk with my brothers and sisters. ☐

d) I talk with my friends. ☐

e) I talk with another adult in my family. ☐

f) Nobody. ☐

**Please, put an X for the right alternative.**

I live with my parents. ☐

I live with my mother ☐

I live with my father ☐

I live with my grandparents ☐

I live with my aunt ☐

I live with my uncle ☐

I live with a guardian ☐

I live in a centre for orphans ☐

**Please, put an X for the right alternative.**

My parents live together ☐

My parents are separated ☐

My mother is dead ☐

My father is dead ☐

THANK YOU

## *Appendix III: Raw Data from List Generation*

| Participant | Age | Sex | Caregiver | About Parents* | No. of worries | Page(s) quoted |
|---|---|---|---|---|---|---|
| 001 | 13 | Female | Uncle | Parents dead | 12 | 52,56,62, |
| 002 | 14 | Female | Grandparent | Parents dead | 9 | |
| 003 | 14 | Female | Mother | Father dead | 10 | 53,54, |
| 004 | 12 | Female | Aunt | Separated | 9 | 52,55, |
| 005 | 14 | Male | Grandparent | Live together | 8 | |
| 006 | 11 | Female | Parents | Live together | 12 | |
| 007 | 12 | Female | Parents | Live together | 14 | 54,59, |
| 008 | 13 | Male | Mother | Separated | 8 | 56,59, |
| 009 | 14 | Female | Father | Mother dead | 16 | 55,59, |
| 010 | 12 | Female | Father | Mother dead | 12 | |
| 011 | 15 | Female | Guardian | Parents dead | 9 | 56,61, |
| 012 | 13 | Male | Aunt | Father dead | 8 | 62, |
| 013 | 12 | Male | Grandparent | Parents dead | 14 | 60, |
| 014 | 14 | Male | Grandparent | Separated | 7 | 57,59, |
| 015 | 12 | Male | Father | Separated | 12 | 55, |
| 016 | 12 | Male | Parents | Live together | 9 | 58, |
| 017 | 12 | Female | Parents | Live together | 11 | 60, |
| 018 | 11 | Female | Parents | Live together | 13 | 52, |
| 019 | 13 | Female | Aunt | Live together | 5 | 51,56, |
| 020 | 12 | Female | Grandparent | Separated | 9 | |
| 021 | 12 | Female | Aunt | Live together | 22 | 54,55,56,58, |
| 022 | 12 | Male | Parents | Live together | 18 | 59, |
| 023 | 14 | Female | Parents | Live together | 22 | 59, |
| 024 | 14 | Female | Grandparent | Separated | 12 | 55, |
| 025 | 13 | Female | Father | Separated | 11 | 56,58,60, |
| 026 | 12 | Female | Parents | Live together | 17 | 54,55 |
| 027 | 12 | Female | Parents | Live together | 8 | 50, |
| 028 | 12 | Male | Parents | Live together | 9 | 54,59,60, |
| 029 | 13 | Female | Mother | Separated | 14 | 55,56, |
| 030 | 15 | Male | Parents | Live together | 11 | 54,55,56, |
| 031 | 12 | Male | Parents | Live together | 9 | 60, |
| 032 | 15 | Male | Mother | Live together | 3 | 50,54 |
| 033 | 15 | Female | Guardian | Father dead | 3 | 51,61, |
| 034 | 15 | Female | Aunt | Live together | 3 | 52 |
| 035 | 11 | Female | Parents | Separated | 5 | 60, |
| 036 | 14 | Male | Mother | Live together | 3 | 54, |
| 037 | 14 | Male | Aunt | Separated | 2 | 52, |
| 038 | 10 | Female | Parents | Live together | 1 | |
| 039 | 12 | Female | Mother | Father dead | 4 | |
| 040 | 11 | Female | Parents | Live together | 4 | |

Cont'd: Raw data from List Generation

| Participant | Age | Sex | Caregiver | About Parents | No. of worries | Page(s)cited |
|---|---|---|---|---|---|---|
| 041 | 11 | Female | Parents | Live together | 5 | |
| 042 | 12 | Male | Parents | Live together | 6 | |
| 043 | 15 | Male | Parents | Live together | 2 | |
| 044 | 12 | Male | Mother | Separated | 4 | 51, |
| 045 | 13 | Female | Parents | Live together | 3 | |
| 046 | 12 | Female | Parents | Live together | 2 | |
| 047 | 12 | Female | Parents | Live together | 2 | |
| 048 | 13 | Male | Parents | Live together | 2 | |
| 049 | 13 | Female | Parents | Live together | 3 | |
| 050 | 13 | Female | Parents | Live together | 5 | |
| 051 | 13 | Female | Parents | Live together | 3 | |
| 052 | 12 | Female | Parents | Live together | 3 | |
| 053 | 12 | Female | Parents | Live together | 5 | |
| 054 | 13 | Male | Mother | Father dead | 5 | |
| 055 | 10 | Male | Grandparent | Separated | 5 | |
| 056 | 13 | Female | Parents | Live together | 3 | |
| 057 | 14 | Female | Guardian | Live together | 8 | 58, |
| 058 | 11 | Male | Parents | Live together | 12 | |
| 059 | 12 | Male | Grandparent | Separated | 5 | |
| 060 | 15 | Male | Guardian | Separated | 3 | 62, |
| 061 | 14 | Female | Mother | Separated | 2 | |
| 062 | 10 | Male | Parents | Live together | 7 | 58,62, |
| 063 | 14 | Female | Parents | Live together | 5 | 50,51 |
| 064 | 14 | Male | Grandparent | Parents dead | 5 | 57,59 |
| 065 | 14 | Female | Parents | Live together | 4 | 50, |
| 066 | 10 | Female | Parents | Live together | 4 | 52, |
| 067 | 13 | Male | Aunt | Separated | 4 | 57, |
| 068 | 14 | Female | Guardian | Parents dead | 5 | |
| 069 | 14 | Female | Mother | Together | 4 | |
| 070 | 15 | Male | Parents | Live together | 5 | |
| 071 | 12 | Male | Parents | Live together | 6 | |
| 072 | 11 | Male | Parents | Live together | 8 | |
| 073 | 13 | Male | Parents | Live together | 1 | |
| 074 | 11 | Male | Mother | Separated | 7 | 51, |
| 075 | 14 | Female | Mother | Separated | 6 | 52, |
| 076 | 10 | Female | Grandparent | Parents dead | 3 | |
| 077 | 10 | Male | Grandparent | Separated | 3 | 57, |
| 078 | 12 | Male | Parents | Live together | 5 | 51, |
| 079 | 12 | Female | Grandparent | Father dead | 6 | 57,69 |
| 080 | 12 | Male | Parents | Live together | 2 | 51, |

NB: participants 1-31 from school 'B'; 32-80 from school 'A'

*Appendix IV: Summary on Categorized Worry Statements*

**Table (1):** Table of summaries of children's worry statements by age and gender

| Type Of Worry | Number of Statements | 10-12 yrs N=40 (50%) | 13-15 yrs N=40 (50%) | BOYS N=34 (42.5%) | GIRLS N=46 (57.5%) |
|---|---|---|---|---|---|
| **Animals** | 3 (1%) | 1 (33%) | 2 (67%) | 1 (33%) | 2 (67%) |
| **Breaking norms** | 116 (21%) | 72 (62%) | 44 (38%) | 46 (40%) | 70 (60%) |
| **Care** | 122 (22%) | 53 (43%) | 69 (57%) | 49 (40%) | 73 (60%) |
| **Education** | 126 (22%) | 76 (60%) | 50 (40%) | 41 (33%) | 83 (66%) |
| **Family** | 98 (17%) | 43 (49%) | 55 (51%) | 38 (43%) | 60 (57%) |
| **Sickness/Death** | 23 (4%) | 18 (78%) | 5 (22%) | 8 (35%) | 15 (65%) |
| **Safety** | 39 (7%) | 28 (72%) | 11 (28%) | 23 (59%) | 16 (41%) |
| **Teachers*** | 36 (6%) | 19 (53%) | 17 (42%) | 9 (25%) | 27 (75%) |
| **Total** | 563 (100%) | 310 (55%) | 253 (45%) | 217 (39%) | 346 (61%) |

* Suggestions by teachers

*Appendix V: Letter from Ethics Committee in Norway*

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*Regional komité for medisinsk forskningsetikk Vest-Norge (REK Vest)*

Bergen, 06.06.05

To whom it may concern

**Confirmation (REK Vest no. 116.05)**

We hereby confirm that the research protocol *Worry among primary school children in a district with high prevalence of aids in Ghana*, has been evaluated by The Regional Committee for Medical Research Ethics in Western Norway (REK Vest).

The protocol is now cleared.

Sincerely,

Arne Salbu
Secretary