METHODIST UNIVERSITY COLLEGE GHANA

FACULTY OF SOCIAL STUDIES

(DEPARTMENT OF PSYCHOLOGY)

EXPERIENCES AND COPING STRATEGIES AMONG FAMILIES OF PATIENTS WITH SCHIZOPHRENIA IN ACCRA

BY

REGINALD ARYEEQUAYE

INDEX NUMBER

10513111

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF PHILOSOPHY (MPHIL) IN GUIDANCE AND COUNSELING DEGREE

2016

DECLARATION

Candidates Declaration

I Reginald Aryeequaye , do hereby declare, that that I produce this thesis from original research undertaken as a student of the Department of Psychology –Methodist University College Ghana, and that , this work has never been submitted in whole or in part for award of a degree in this university .

This thesis was written and produced under the supervision of Dr. Daniel Bruce and Mr. Gladstone Agbake, both of the Methodist University College, Ghana . All references to work of other people or organization (s0 have been duly acknowledged.

With the approval of my supervisors, I present this thesis to the University Of Ghana, Legon.

Reginald Aryeequaye

.....

(Candidate)

.....	.....
Dr. Daniel Bruce	Mr. Gladstone Agbake
(Principal Supervisor)	(Second Supervisor)
Date :.....	Date:.....

CERTIFICATION

The undersigned to hereby certify that he has read and recommendation to the University of Ghana, Legon, this Thesis entitled:

Experiences and Coping Strategies among Families of Patients with Schizophrenia in Accra

Written and presented by Reginald Aryeequaye

Principal Supervisor :.....

Signature:.....

Date:.....

DEDICATION

I wish to dedicate this work and its content first and foremost to the Almighty God whose love, mercy and protection has brought me this far.

The next dedication is to my father Emmanuel Linsford Aryeequaye, my late mother Ms Dorothy Addo, my dear wife Elfreda and our loving children Gideon and Ruby Aryeequaye for their moral and spiritual support for my ministry. They have really been a tower of strength behind me.

Ruby Aryeequaye has been called to eternity and prayed that her soul and the souls of the faithful departed rest in the bosom of the Almighty.

ACKNOWLEDGEMENT

I wish to thank my supervisors Dr. Daniel Bruce and Mr. Gladstone F.K. Agbakpe for their guidance, direction, criticisms and encouragement through the period of undertaking this research and for bringing it to a successful end.

My sincere thanks also goes to Rt Rev. Abraham Tagoe, past bishop of Accra Dioceses, and Rt Rev. C. R. A Pappoe, past chairman and General Superintendent of the Accra Diocese of the Methodist Church Ghana for sharing with me their ministerial experience in relation to my course of study.

I am grateful to all my colleagues and other members of the Methodist University College for their inputs and support during my presentations and throughout the period of study in the university college.

I will also like to acknowledge the Management and staff of Accra Psychiatric Hospital and Pantang Hospital especially those who completed questionnaires and those who provided other assistance to me during this period.

Again I will like to thank the leadership and members of the Bethel Methodist Church, Bortianor where I am currently pasturing for their prayer support and encouragement throughout the period of the course.

To my siblings and other members of my external family more especially my wife Elfreda and children Gideon and Ruby Aryeequaye (deceased). I do not know what life would have been without you.

Thanks for your support and encouragement and assistance during the period.

ABSTRACT

A case study research design was used to investigate caregivers burden and coping among families of patients with schizophrenia in Accra. A convenient sampling technique was used to sample one hundred (100) respondents. A set of questionnaires (Zarit Burden Interview scale and COPE Inventory) was used to gather data. The Statistical Package for Social Sciences (SPSS) was used for data analysis. Results indicated that no significant difference exists between the level of burden experienced by older caregivers and younger caregivers of schizophrenia patients. It was further revealed that no significant difference exist between the level of burden experienced by male and female caregivers of schizophrenia patients. Meanwhile, less educated caregivers report higher level of burden than well-educated caregivers. In addition, a significant difference exists between the way less educated and well educated caregivers of schizophrenia patients cope. It was finally revealed that a weak relationship exists between the burden faced by caregivers of schizophrenia patients and the way they cope. It was therefore concluded that demographic factors such as the age and gender had no effect on the level of burden experienced by caregivers of schizophrenia patients. Meanwhile, caregivers' level of education significantly influenced the way they cope with the burden they experience. Generally, the level of burden faced by caregivers had little influence or effect on the ways of coping.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Schizophrenia is a serious mental illness characterised by incoherent or illogical thoughts, bizarre behaviour and speech, and delusions or hallucinations, such as hearing voices. Schizophrenia typically begins in early adulthood (American Psychological Association, 2014).

Similarly, the Diagnostic Statistical Manual IV-Third Revision, (2000) defines schizophrenia as a mental disorder involving a range of cognitive and emotional dysfunctions that include perception, inferential thinking, language and communication, behavioural monitoring, affect, fluency and productivity of thought and speech, hedonic capacity, volition and drive, and attention. The diagnosis involves the recognition of a constellation of signs and symptoms associated with impaired occupational or social functioning: and no one symptom is pathognomonic of the disorder.

According to the Diagnostic Statistical Manual IV-Third Revision, (2000), the symptoms of Schizophrenia can be categorised into positive symptoms and negative symptoms: Positive symptoms of schizophrenia appear to reflect an excess or distortion of normal functions. In addition, the positive symptoms have two distinct dimensions, each related to its own underlying neural mechanism and clinical correlates:

First Psychotic Dimension: The following two positive symptoms form part of the psychotic dimension: Delusions (this has to do with distortions in thought content) and Hallucinations (this has to do with distortions in perception).

Disorganization Dimension: The following two positive symptoms form part of the disorganisation dimension: Disorganised speech (this has to do with a distortions in language and thought processes), and grossly disorganised or catatonic behaviour (this has to do with a deficiency in self-monitoring of behaviour).

On the other hand, negative symptoms of schizophrenia include restrictions in the range and intensity of emotions, and take on the following forms: Affective flattening (this has to do with the restriction in emotional expressions), Alogia (this has to do with a deficit in fluency of thought and productivity of thought and speech), and Avolition (this has to do with a shortfall in initiating goal-directed behaviour).

According to Psychology Today, (2010), schizophrenia is a disabling, chronic, and severe mental illness that affects more than 2 million Americans age 18 and over. Symptoms include hearing internal voices, thinking that other people are reading one's mind, controlling one's thoughts, or plotting harm, which may leave a person feeling fearful and withdrawn. Their disorganized behaviour can be perceived as incomprehensible or frightening by family and friends. Patients may not make sense when they talk, as well as sit for hours without moving or talking. In some cases, schizophrenia patients seem perfectly fine until they talk about what they are really thinking (National Institute of Mental Health, 1990).

According to Chan (2011), in the United States schizophrenia is a severe form of mental illness that affects about 7 per 1,000 of the adult population, most of them between the ages of 15 and 35 years in Ghana. Furthermore, the World Health Organisation (2010) estimated that globally

about 29 million people have schizophrenia. Although its incidence is low (3 per 10,000), its prevalence is high due to the chronicity of this illness (World Health Organisation, 2010).

Studies suggested that about 20% of people with schizophrenia show unremitting symptoms and increasing disability, and around 35% of them show a mixed pattern with varying degrees of remission and exacerbations of different lengths (Chien, Chan & Morrissey, 2007). According to data from the World Health Organisation (WHO), mental health illness account for nearly half of the diseases burden in the world's adolescents and young adults. These disorders include major depression, substance abuse, schizophrenia and bipolar disorder (Dalky, 2012).

One of the major effects of having a friend or relative with schizophrenia is that patients with schizophrenia have difficulty holding a job or taking care of themselves, so they rely on others for help. Both men and women are equally affected by schizophrenia. In addition, schizophrenia occurs at similar rates in all ethnic groups and races across the world. Symptoms such as hallucinations and delusions usually start between ages 16 and 30. Meanwhile, men tend to experience symptoms a little earlier than women. Mostly, people do not get schizophrenia after age 45 (Psychology Today, 2010).

However, schizophrenia rarely occurs in children. Irrespective of this fact, awareness of childhood onset of schizophrenia is increasing getting attention of clinicians and researchers especially in the United States and Europe. Clinicians sometimes encounter serious challenges when diagnosing schizophrenia among teenagers. This is due to the fact that, the initial symptoms which includes frequent change of friends, a drop in grades, sleep problems and

irritability, these are also relatively common behaviours among normal teenagers. However, a combination of factors can predict schizophrenia in up to 80 percent of youth who are at high risk of developing the illness. These factors include isolating oneself and withdrawing from others, an increase in unusual thoughts and suspicions, and a family history of psychosis (Chan 2011).

Regardless of available treatments that can relieve many problems associated with the illness, most people with schizophrenia cope with symptoms throughout life. However, many people with schizophrenia can lead rewarding and meaningful lives in their communities. Researchers are developing more effective medications and using new research tools to understand the causes of schizophrenia. In the years to come, this work may help prevent and better treat the illness (Psychology Today, 2010).

According to Cardno and Gottesman, (2000), schizophrenia does run in families. As such, having a close relative with this disorder increases ones risk for developing it. Furthermore, ten percent of people with a first-degree relative (parent or sibling) who has the illness will develop it. Also, if one identical twin has schizophrenia, there is a 40% to 65% chance that the other twin will have it as well.

According to Chan (2011), the majority of family caregiving is usually provided by parents, spouses, or relatives. Studies found that most family caregivers of adult clients with schizophrenia are their parents, and they are of older age. Just like other mental illnesses, schizophrenia negatively affects the relationships of the entire family system. Internal

relationships and roles have to be adjusted to accommodate the illness. For example, in an instance where the father becomes mentally ill, he becomes dependants on the care of his wife, just as his children. This in turn would compel the wife to devote all her time to the husband at the expense of their children. In a more serious instance if the illness is long-term, the mother may be forced to permanently assume the role of the breadwinner and supporter to the family and as a result her family status. Her relationships with both her husband and children are likely to change as well.

Hence, in general within a family system, a change in members' major social roles such as the assumption of the role patient, always brings about changes in the role relationships of the entire family. These changes, connotes that the previous balance of family relationships is disturbed and a new, changed balance has to be achieved for the continued functioning of the family unit (Miler, 1981:123). This implies that the schizophrenia patient may thus disturb the social functioning of the family sub-systems and the whole family as a system, making a review of the family roles a must (Chan, 2011).

Furthermore, the relationships between the person suffering from schizophrenia and his or her relatives may also be disturbed due to the negative attitudes and disrupted communications patterns. This negative effect could become worse if the communication style and attitudes of the patient's family are negative towards the mentally ill person. By so doing, the patient's recovery process may be seriously affected negatively (Chan, 2011).

According to Chan (2011), living with a relative with severe mental illness is very stressful. Several studies have demonstrated that family caregivers of persons with severe mental illness

experience significant stresses and have a high level of burden (Saunders, 2003). This problem of family burden of caring for persons with schizophrenia is a common challenge in both developed and developing countries. “Different health care and social systems in different countries may influence family's commitment to care. Families may have to take full responsibility in taking care of the clients or assist in taking care of the clients to certain extent depending on the available services, resource, and support to the persons with schizophrenia and their family caregivers. Family care burdens are echoed and encountered in many parts of the world (Chan, 2011).

Chan, (2011) further states that caregivers are more likely to be women in many parts of the world. Similarly, according to the World Federation of Mental Health (2010), globally, about 80% of the caregivers are women. These women may be the mother, wife, or daughter of the patient and are usually with low income. This may be due to the fact that the caregivers spend less time on work of their time. Over the years, researchers have shown that the impact of the women's intensive caregiving can be substantial. Studies showed that middle-aged and older women who provided care for an ill spouse or a spouse with disability were almost six times as likely to have depressive or anxious symptoms as were those who had no caregiving responsibilities (World Federation of Mental Health, 2010). Thus, the other global challenge is the need to have an in-depth understanding of the needs and concerns of female caregivers and to develop ways to support female caregivers (Bos, Kanner, Muris, Janssen & Mayer, 2009).

Caregiver burden refers to the negative feelings and subsequent strain experienced as a result of caring for a chronically sick person (Natalie, Ian, Steve & Paul, 2003). According to Adeosun,

(2013), schizophrenia is a leading contributor to the global burden of disease accounting for about 1% of disability-adjusted life year, 3% of year lived with disability and is the 8th leading cause of disability in people aged 15 to 44 years. The impairment caused by schizophrenia makes patients dependent in various domains of psychosocial functioning. As such sufferers of schizophrenia, therefore, require long-term support and care which may become burdensome to their caregivers.

In many resource-poor countries such as Ghana, community-based mental health services and effective formal support system are non-existent to even cater for the needs of patients with schizophrenia. As such, the trend towards shorter hospital stay and reduction of in-patient beds have shifted the responsibility of the day-to-day care of patients with schizophrenia from formal caregivers in mental health institutions to informal caregivers within the family setting. Hence, the tasks involved in rendering care to a family member with schizophrenia are enormous, and caregivers may become overwhelmed by the demands associated with these roles (Adeosun, 2013).

Stigma associated with mental illness as well plays a key role in the challenges caregivers go through. According to Bos, Kanner, Muris, Janssen and Mayer, (2009), almost all studies conducted on mental illness stigma have focused on people with disabling and persistent disorders, such as schizophrenia. Furthermore, these studies result always indicate that mental health patients belong to one of the most stigmatised groups in our society (Corrigan, 2005).

According to Wahl, (1995), one of the main causes of this negative attitude towards mental illness is because the media often portrays the mentally ill as deviant, dangerous, and less competent (Wahl, 1995). For instance, in a Dutch survey conducted by Boon, Nugter and Dijker, (2004), it was discovered that half of the participants perceived persons with a mental disorder to be dangerous and aggressive, and reported to experience negative emotions like fear, irritation, and uncertainty. Several other factors seem to contribute to the social rejection of persons with mental disorder. For instance, attribution of personal responsibility for the onset of mental illness is related to negative emotions and stigmatising behaviour (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Feld-man & Crandall, 2007).

Bos, Kanner, Muris, Janssen and Mayer, (2009), go further to explain that social stigma has a tremendous impact on the daily lives of people with a mental disorder and their caregivers. For instance, social stigma plays an important role in the low income and unemployment among the mentally ill (Markowitz, 1998). Additionally, people with mental illness often experience a reduction of social contacts and social rejection (Feldman & Crandall, 2007), which may lead to social isolation. Moreover, mental illness stigma also has a huge impact on the life satisfaction of mental health patients (Markowitz, 1998).

In most African countries, the general attitudes towards mental illness are still strongly influenced by traditional beliefs in supernatural causes. This mindset often leads to stigmatisation of the mentally ill which as well affect the provision of mental health care services for the needy. For example, according to Gureje and Alem, (2000) policy-makers are often of the opinion that mental illnesses are incurable or, at any rate, unresponsive to orthodox medical

practices. In Ghana some mental patients are confined in specific institutions such as Pantang hospital, Accra Psychiatric Hospital among others. This and other factors may account for the widespread stigmatisation and discrimination of people with mental illness. As for those who are not confined, it is common to see them in the streets with tattered clothes, dirty, hungry, neglected and isolated. The role of supernatural, religious and magical approaches to mental illness is prevailing as the stigma experienced from family members is pervasive. This is because generally there is the perception that mental illness is mostly caused by a spell, curse, demonic possession, punishment from God or the gods, witchcraft, among others. Hence, helping, having or keeping a mentally ill patient in a household, is highly risky because the evil spirit, punishment or curse could spill over onto anyone close at any given time. For these reasons mentally ill patients and their family members are somehow seen as outcasts (Boampong, 2013).

The above challenges faced by caregivers of mentally ill patients obviously compound their burden. Over the years caregivers have used various ways to cope with the burden that they experience. According to Lazarus and Folkman (1984), coping refers to the constantly changing thoughts and behaviours that people use in order to manage stressful situations. People with schizophrenia often encounter serious challenges when it comes to their friends and family. Often times, families try and cope with their schizophrenia patients for a period of time, but can become frustrated by their seeming lack of progress in treatment or staying in treatment altogether. In addition, a family's emotional support may wane, and some families cut off all contact with their schizophrenic relative. Friends often as well fail to understand a person with schizophrenia's experiences, and quickly lose interest in continuing the friendship when a person with schizophrenia deteriorates or drops out of treatment. However, the most common complaint

amongst friends and family members of a person with schizophrenia is, not understanding how to help them, or give them continued long-term support that help keeps them from becoming homeless or unemployed (Smith, 2006).

According to Gerson, Wong, Davidson, Malaspina, McGlashan and Corcoran, (2011), even though several studies have been conducted on serious mental disorders such as schizophrenia, little is known about the strategies these families use to cope with new caretaking demands of having a schizophrenia sufferer. Desperate coping strategies have been traditionally conceptualised as "adaptive" versus "maladaptive" or as "problem-focused" versus "emotion-oriented". Meanwhile, problem-focused coping (problem-solving, planning, taking action) has been seen as adaptive, but on the contrary, emotion-oriented strategies (venting and denial) have been seen as maladaptive. Some researchers and clinicians have challenged these categorisations, suggesting that the adaptive function of coping strategies may depend on environmental context and individual characteristics.

Stanton and colleagues have thus suggested an alternative rubric for understanding coping, categorising "approach" strategies (including both problem-focused and emotion-oriented coping strategies such as seeking support and expressing emotions) versus "avoidant" strategies (denial, disengagement). "In their conceptualization, approach strategies predict better adjustment over time, though others have suggested that denial and avoidance may be adaptive after an acute stressor such as a new diagnosis". Nevertheless, approach vs. avoidance is a useful and non-judgmental construct for understanding coping (Gerson, Wong, Davidson, Malaspina, McGlashan & Corcoran, 2011).

Normally, families of schizophrenia patients use coping strategies such as seeking social support and education, positive reframing and problem-solving, and reliance on religion, as well as avoidant strategies including denial and disengagement. Furthermore, families of patients experiencing a first episode of psychosis similarly use coping strategies that include emotion-focused and problem-solving coping strategies to manage problematic behaviours, and spiritual coping to deal with stigma (Gerson, Wong, Davidson, Malaspina, McGlashan & Corcoran, 2011).

1.2 Statement of the problem

An estimated 50 to 80% of persons with schizophrenia and related psychotic disorders live with or have regular contact with a family caregiver (Gibbons et a1., 1984; Lehman & Steinwaches, 1998). These caregivers report high levels of burden related to caring for their family members (Gibbons et a1., 1984; Grad & Sainsbury, 1963). Demands of care giving include paying for psychiatric treatment, supervision of a mentally ill family member, dealing with societal stigma associated with mental illness, and emotional distress that may result from symptoms of a family member's illness.

Hence, living with a relative with severe mental illness such as schizophrenia is very stressful. Recognising that caregivers' burden is a global issue, the World Federation of Mental Health (2010) issued a report supporting carers, because caring for those with a chronic condition requires tireless effort, energy, and empathy and indisputably greatly impacts the daily lives of caregivers. In most cases, family caregivers receive little recognition for their tireless and valuable caregiving work, and policies in most countries do not provide financial support for the

care services they provide. Hence, caregivers struggle to balance work, family, and caregiving, whereas their own physical and emotional health is often ignored. In combination with the lack of personal, financial, and emotional resources, many caregivers often experience tremendous stress, depression, and/or anxiety in the year after caregiving begins (World Federation of Mental Health, 2010; Chan, 2011). Due to the high proportion of family members providing care to persons with schizophrenia and the high rates of burden reported by these caregivers, researchers have attempted to identify predictors of family burden and to design family interventions that reduce the negative consequences of caring for persons with schizophrenia.

Interestingly, almost all studies done in this area of study were focused on western countries and on westerners from countries such as the United States of America, United Kingdom and Canada. As these countries have different psychosocial orientations, it is still unknown as to how applicable their results would be to a developing country like Ghana. In other words, as Ghana is an entirely different country in terms of her culture, race, history, economic status, among others, it is difficult to say results obtained in western countries would as well apply to Ghanaian families with schizophrenia patients. As such, this study seeks to explore experiences and coping strategies among families of patients with schizophrenia in Accra.

1.3 Purpose of the study

The purpose of this study is to investigate the various challenges families with patients with schizophrenia go through. The study further explores the coping strategies these families use in dealing with the stigma and stress they experience solely because they have patients with schizophrenia.

1.4 Objectives of the study

This study would generally explore the experiences and coping strategies of families and caregivers of patients with schizophrenia to improve practice of caregiving.

Specifically, the study sought to:

i. To ascertain whether demographic variables (age, gender, and level of education) will significantly predict the level of burden faced by caregivers of patients with schizophrenia.
ii. To determine whether level of education will significantly influence the ways in which caregivers of patients with schizophrenia cope.
iii. To determine the type of relationship that will exist between the burden faced by caregivers of schizophrenia patients and the way they cope.

1.5 Significance of the study

The study's findings will throw more light on the known and unknown burden faced by caregivers of schizophrenia patients in Ghana, and the various ways in which they cope with the stress and challenges they encounter. The findings will, therefore, provide a foundation for designing effective strategies and interventions that will help shape the societies' perceptions and understanding of caregivers, concerns and experiences about schizophrenia patients. Knowledge of these factors will help mental health service providers to improve the standards of mental health care and interventions that are currently applied in caring for in-patients and outpatients with schizophrenia in our setting and the whole country at large. This study has the potential to

help influence health policy makers in improving mental health and reducing the burden of relapse in patients with schizophrenia, their families and community as a whole.

1.6 Scope of the Study

Because of a limited time available for the completion of this study, only patients at the Accra Psychiatric Hospital and the Psychiatric Clinic at the KorleBu Teaching Hospital were targeted.

1.7 Organization of the Study

This study is organised into five main chapters:

Chapter one is an introduction to the study and comprises of the background of the study, statement of the problem, objectives of the study, purpose of the study, significance of the study, scope of the study and the organisation of the study.

Chapter two includes the theoretical framework which has to do with the theoretical basis of the study, review of related studies, followed by the statement hypotheses and operational definitions.

Chapter three outlines the various approaches the researcher used for data collection. This includes the methodology, research design, research population, sampling size and sampling technique, source of data collection instrument used, data collection procedure and analysis.

Chapter four includes the presentation of socio-demographic data and results for the various hypotheses tested.

Chapter five includes summary of findings, a discussion of results, limitations and delimitation of the study, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter comprises of the theoretical framework, literature review, statement of hypothesis and operational definitions.

2.1 Theoretical framework

2.1.1 The Transactional Model of Stress and Coping

The first theoretical basis of this work would be based on the Transactional Model of stress and Coping by Lazarus and Cohen, (1977). The Transactional Model of Stress and Coping theories present a framework for evaluating the processes of coping with stressful events. According to the theory, stressful experiences are construed as person-environment transactions. These transactions depend on the impact of the external stressor. This is mediated by firstly the person's appraisal of the stressor and secondly on the social and cultural resources at his or her disposal (Lazarus & Cohen, 1977; Antonovsky & Kats, 1967; Cohen 1984).

As such, when a person is faced with a stressor, he or she evaluates the potential threat (primary appraisal). Primary appraisal has to do with when a person's judgment about the significance of an event as stressful, positive, controllable, challenging or irrelevant. Facing a stressor, the secondary appraisal follows, which is an assessment of people's coping resources and options (Cohen, 1984). Secondary appraisals address what one can do about the situation. Actual coping efforts aimed at regulation of the problem give rise to outcomes of the coping process (University of Twente, 2014). The Transaction Model of Stress and Coping are summarised in Table 1.1 below.

Table 1.1 Summary of concepts in the Transaction Model of Stress and Coping

Concept	***Definition***
Primary Appraisal	Evaluation of the significance of a stressor or threatening event.
Secondary Appraisal	Evaluation of the controllability of the stressor and a person's coping resources.
Coping efforts	Actual strategies used to mediate primary and secondary appraisals.
Problem management	Strategies directed at changing a stressful situation.
Emotional regulation	Strategies aimed at changing the way one thinks or feels about a stressful situation.
Meaning-based coping	Coping processes that induce positive emotion, which in turn sustains the coping process by allowing reenactment of problem- or emotion focused coping.
Outcomes of coping	Emotional well-being, functional status, health behaviours.
Dispositional coping styles	Generalised ways of behaving that can affect a person's emotional or functional reaction to a stressor; relatively stable across time and situations.
Optimism	Tendency to have generalised positive expectancies for outcomes.
Information Seeking	Attentional styles that are vigilant (monitoring) versus those that involve avoidance (blunting)

Table from Glanz, Rimer and Lewis, (2002), p. 214.

It could therefore be deduced from the above theory that caregivers encounter a lot of stress due to the burden that patients with schizophrenia put on them. This burden includes financial, emotional, physical dependence of patients. As a result, by assessing the stress which results due to this experience of burden they feel, caregivers will decide on the most appropriate ways of

coping with their burden. Some of these ways of coping may include: Positive reinterpretation and growth, disengagement, focus on and venting of emotions, use of instrumental social support, active coping, denial, religious coping, humor, behavioural disengagement, restraint, use of emotional social support, substance use, acceptance, suppression of competing activities and planning (Carver, Scheier & Weintraub, 1989).

2.1.2 General Adaptation Syndrome (GAS)

The general adaptation syndrome (GAS) theory was propounded by Seyle (1936). In simple terms the theory explains how the body copes with stressful situations and adapts so as to survive them (Psychologist World, 2015).

In his work, Selye who is the father of stress research, developed the theory that stress is a major cause of disease because chronic stress causes long-term chemical changes (Essence of Stress Relief, 2015). This is because, the body would respond to any external biological source of stress with a predictable biological pattern in an attempt to restore the body's internal homeostasis.

This initial hormonal reaction is one's fight or flight stress response, and its purpose is for handling stress very quickly comes through a process, where the body's struggle to maintain balance is termed as the General Adaptation Syndrome (Essence of Stress Relief, 2015).

Pressures, tensions, and other stressors can greatly influence the normal metabolism in the body. Here, there is a limited supply of adaptive energy to deal with stress, and this limited amount declines with continuous exposure (Essence of Stress Relief, 2015).

Psychologist World, (2015) further states that the body's collection of responses general adaptation syndrome (GAS), comprises a three-stage set of physiological processes. These which processes prepare, or adapt, the body for danger so that we ready to stand a better chance of surviving it compared to if we remained passively relaxed when faced with a threat.

The three distinct stages of general adaptation syndrome are the initial alarm reaction stage which occurs shortly after the stressful event. This is followed by a resistance stage, during which body's Autonomic Nervous System (ANS) resists the impact of the stressful stimulus. Finally, if the stress continues, the exhaustion stage, when the body fails to cope with the distressing stimulus (Psychologist World, 2015).

Stage 1: Alarm Reaction

The alarm reaction stage is the first sign of general adaptation syndrome and occurred in Selye's rats between 6 and 48 hours following the introduction of the "nocuous agent". During this stage, the sympathetic branch of the ANS is activated — the adrenal gland secretes the stress hormone cortisol, along with adrenaline (Selye, 1926). The alarm reaction stage prepares animals for a fight-or-flight response. This is a term coined by Walter Cannon to describe people's reaction to a stressful event. The body then adapts to be able to react quickly in either fleeing or confronting the threat posed to them (Psychologist World, 2015).

Stress: Fight or Flight Response

Stage 2: Resistance

After the initial reaction to the stressor during the alarm reaction stage, the parasympathetic branch of the ANS counteracts the changes that the stressful stimulus has produced, and attempts

to restore a state of homeostasis, the default state in which the body functions normally. Here the body tries to adapt to the new situation, is referred to as the resistance stage (Psychologist World, 2015). During the resistance stage, the results of the hormonal changes which occurred in the previous stage are still apparent, including increased glucose levels in the blood and higher blood pressure, but stress hormone levels begin to return to normal, enabling the body's focus to shift from alertness to repair (Psychologist World, 2015).

Stage 3: Exhaustion

The final phase of general adaptation syndrome is the exhaustion stage, in which the body has depleted resources following its attempt to repair itself during the preceding resistance stage. If the original threat has passed, it will continue its recovery. However, the body no longer has the energy to cope with continued stress in the long term, and should it continue, it begins to show signs of exhaustion, gradually deteriorating as it persists (Psychologist World, 2015).

In other words, the adaptation process is over and not surprisingly; this stage of the general adaptation syndrome is the most hazardous to your health. (Essence of Stress Relief, 2015). This is because chronic stress can damage nerve cells in tissues and organs. Particularly vulnerable is the hippocampus section of the brain. Thinking and memory are likely to become impaired, with tendency toward anxiety and depression. There can also be adverse function of the autonomic nervous system that contributes to high blood pressure, heart disease, rheumatoid arthritis, and other stress related illness (Essence of Stress Relief, 2015).

Theories of Coping

Basically, coping refers to an individual's attempt to tolerate or minimize the effect of the stress, whether it is the stressor or the experience of stress itself. Coping theories can be classified according to orientation or focus (trait-oriented or state-oriented) and approach (macroanalytic or microanalytic) (Sincero, 2016).

Classification of Coping Theories

Coping theories have been divided into two different parameters:

1. Trait-Oriented Theories versus State-Oriented Theories
2. Microanalytic Approach versus Macroanalytic Approach

The trait-oriented theories focus on the early recognition of a person's resources and tendencies related to coping, while the state-oriented theories emphasizes the actual coping of an individual and the outcome of his application of coping methods or strategies. Meanwhile, the microanalytic approach studies a wide variety of specific and concrete coping strategies, while the macroanalytic approach concentrates on fundamental and abstract coping methodologies (Sincero, 2016).

Macroanalytic, Trait-oriented Coping Theories

A. Repression–sensitization

This theory states that there is a bipolar dimension in which a person copes with the stress in only one of two opposite poles – repression or sensitization. People who tend to be repressers cope with the stress by means of denying or minimizing its existence. They use the avoidance coping mechanism such that they are unable to realize the potential negative outcomes of the

stressful experience. In contrast to this, sensitizers tend to react to stress with rumination, excessive worrying and obsessive search for information on stress-related cues.

B. Monitoring and Blunting

According to Miller, monitoring and blunting is a construct that is based on the repression-sensitization theory due to the similarity in their nature as cognitive informational styles. However, this construct, particularly blunting, tells us that the impact of uncontrollable stressful cues can be reduced by the individual through the use of cognitive avoidance (e.g. denial, reinterpretation, distraction).

Under controllable stress, monitoring is said to be a more effective coping strategy, as it includes seeking information related to the stressor.

C. Model of Coping Modes (mcm)

This model originates from the monitoring-blunting construct, and is also related to the repression-sensitization conception, but expands concepts of vigilance and cognitive avoidance with an underpinning of cognitive motivational approach. It emphasizes that a person is stimulated to avert the situation and perceive the stressor in an ambiguous manner in the presence of the stressor.

Macroanalytic, State-Oriented Theories

The Defense Mechanisms constructs by Sigmund Freud in 1926 is one of the few macroanalytic, state-oriented theories of coping. A number of defense mechanisms were basically related to

intellectualization and repression, the two basic forms that were emphasized by Freud in 1936 (Sincero, 2016).

Richard Lazarus and Susan Folkman proposed yet another theory of coping in a macroanalytic approach, concentrating on the coping strategies that are focused on emotion or on the problem itself, as well as the functions related to them. While the theory of Lazarus and Folkman was macroanalytic in its origin, it was expanded to the microanalytic approach, wherein Lazarus, et.al (1986) was able to specify coping strategies and classify them into eight groups. These include self-controlling, confrontative coping, seeking social support, distancing, escape-avoidance, accepting responsibility, positive reappraisal and plan-ful problem-solving (Sincero, 2016).

2.1.3 Coping strategies theory

The first theory for this study is the coping strategies theory by Lazarus and Folkman (1984). According to the coping strategies theory coping is the way and manner in which people deal threats in a reasonably way despite some difficulty. Basically, coping refers to an individual's attempt to tolerate or minimize the effect of the stress, whether it is the stressor or the experience of stress itself. As such, coping starts with a series of stages which begins with identifying a threat that one cannot cope with. In other words, coping is how people deal with threats that they encounter in their environment. Coping is defined as action-oriented and intrapsychic efforts to manage the demands created by stressful events or experiences (such as suffering from an illness) (Taylor & Stanton, 2007).

Coping strategies can therefore help in a stressful process through relatively stable individual differences in optimism, a sense of mastery, and self-esteem, and in social support. Coping strategies, can as well, affect coping processes, specifically ones marked by approach, such as taking direct action or confronting emotional responses to a stressor, and ones marked by avoidance, such as withdrawal or denial. Coping efforts may be adaptive or maladaptive and the form that coping processes assume affects how successful resolution of a stressor such as pregnancy with hypertension will be (Taylor & Stanton, 2007).

As such, the lack of usage of adaptive coping strategies against clinical disorders in some cases may represent symptoms, in other cases, developmental risk factors, and in other instances, risk factors for poor prognosis or recurrence. Social scientists' have identified stable individual differences in coping resources that both improve the ability to manage stressful experiences and are tied to lesser distress and better health outcomes. Among these are optimism, psychological control or mastery, self-esteem, and social support. In addition to their roles as antecedents of specific coping strategies, coping strategies can also have direct effects on psychological and physical health (Taylor & Stanton, 2007).

According to Taylor and Stanton, (2007), optimism refers to outcome expectancies that good things rather than bad things will happen to the self. Dispositional optimism has been tied to a broad array of mental and physical health benefits, including greater psychological well-being, faster recovery from illness, and a slower course of physical disease (Carver & Scheier, 2002).

On the other hand, personal control or mastery refers to whether a person feels able to control or influence outcomes. Studies have shown a relationship between a sense of control and better psychological health (Haidt & Rodin, 1999), as well as better physical health outcomes, better self-rated health, better functional status, and lower mortality (Seeman & Lewis, 1995). As is true for optimism, situation-specific control expectations, which are often conceptualized as self-efficacy beliefs are potential intervention targets and appear to have similar beneficial effects on managing stressful experiences such a pregnancy induced hypertension (Bandura, 2006; Taylor & Stanton, 2007).

Taylor and Stanton, (2007), further explained that social support, another significant coping resource, is defined as the perception or experience that one is loved and cared for by others, esteemed and valued, and part of a social network of mutual assistance and obligations (Wills, 1991). Research consistently demonstrates that social support reduces psychological distress, such as depression or anxiety, during times of stress and promotes psychological adjustment to a broad array of chronically stressful conditions (Taylor, 2007; Taylor & Stanton, 2007).

Social support also contributes to physical health and survival. For example, Berkman and Syme (1979) found that having a high number of social contacts predicted an average 2.5 increased years of life. However, social isolation and loneliness have been related to high stress reactivity and inadequate and inefficient physiological repair and maintenance processes (Hawkley& Cacioppo, 2003; Taylor & Stanton, 2007).

It could therefore be said that the coping strategies theory above that individuals cope with stressful experiences such as caring for schizophrenic patients in different ways. This is mainly driven by the individuals experience, self-perception, and environmental variables such as supports of individuals close to the patient such as family members (e.g. spouse, parents, children, among others), among others.

2.1.4 Crises Theory

The crisis theory defines and explains the phenomena that occur when a person faces a problem that appears to be unsolvable. The term crisis derives from the Greek word "krisis" which means decision or turning point. A crisis is therefore a temporary state of upset and disorganization, characterized chiefly by an individual's inability to cope with a particular situation using customary methods of problem solving, and by the potential for a radically positive or negative outcome (Slaikeu, 1990).

The main determinant of a crisis state is the idea that coping, or problem solving, has broken down. The assumption is that day in and day out each and every individual develops various methods to deal with life's difficulties. As such, in the onset of crisis, whether the result of a major threatening event, or a series of stressful events resulting in a burden too great to bear, calls into play whatever problem-solving devices are available. Maneuvers that might have worked before, such as redefining the situation, ignoring it, talking to a friend or a spouse, or taking a vacation, are not adequate. As such individuals caught up in crisis may feel strapped, or wholly incapable of dealing with a new unsettling circumstance (Slaikeu, 1990).

The implications of this crises state is its negative effect on the quality of family life of the individual in question. In other words, the more the individual dips down into a crises state, the more the individual's quality of family life is affected negatively. This is because in the case of mothers who have children, performing the role of a mother such as attending to the emotional needs of one's children, making time to cook or give advice would be inconsistent or even nonexistent. In the case of husbands, they would struggle to satisfy their wives emotionally and even sexually due to fatigue, depression, irritability, among others. Hence, leading to dissatisfaction in which in turn leads to impairment in the quality of family life.

It could therefore be deduced from the crises theory that, when health caregivers of schizophrenic patients' experience heightened stress and burnout over a prolonged period of time, it leads to a crises state. This crises state usually leads to major psychological problems (such as insomnia, anxiety, depression, etc.) and physical health problems when the caretaker does not cope well.

2.2 Review of Related Studies

2.2.1 The Nature of Schizophrenia

Schizophrenia is a chronic and severe mental disorder that affects how a person thinks, feels, and behaves. People with schizophrenia may seem like they have lost touch with reality (National Institute of Mental Health, (2016). Similarly, schizophrenia is said to be a brain disorder that

affects the way a person behaves, thinks, and sees the world. People with schizophrenia often have an altered perception of reality. Smith and Segal, (2016) further states that schizophrenia is a challenging disorder that makes it difficult to distinguish between what is real and unreal, think clearly, manage emotions, relate to others, and function normally.

Although schizophrenia is not as common as other mental disorders, the symptoms can be very disabling (National Institute of Mental Health, 2016). this is because schizophrenics may see or hear things that does not exist, speak in strange or confusing ways, believe that others are trying to harm them, or feel like they're being constantly watched. This can make it difficult to negotiate the activities of daily life. Schizophrenics may therefore withdraw from the outside world or act out in confusion and fear.

Smith and Segal, (2016) further states that even though schizophrenia is a chronic disorder, there is help available. With support, medication, therapy, and caregivers a lot of schizophrenics are able to function independently and live fulfilling lives.

As regards its onset, it is said that in some people, schizophrenia appears suddenly and without warning. But for most, it comes on slowly, with subtle warning signs and a gradual decline in functioning long before the first severe episode. Many friends and family members of people with schizophrenia report knowing early on that something was wrong with their loved one, they just do not know what. In this early phase, people with schizophrenia often seem eccentric, unmotivated, emotionless, and reclusive. They isolate themselves, start neglecting their appearance, say peculiar things, and show a general indifference to life. They may abandon

hobbies and activities, and their performance at work or school deteriorates. While these warning signs can result from a number of problems-not just schizophrenia-they are cause for concern. When out-of-the-ordinary behavior is causing problems in your life or the life of a loved one, seek medical advice. If schizophrenia or another mental problem is the cause, treatment will help (Smith & Segal, 2016).

2.2.2 Signs and Symptoms of Schizophrenia

There are five main types of symptoms characteristic of schizophrenia: delusions, hallucinations, disorganized speech, disorganized behavior, and the so-called "negative" symptoms. However, the signs and symptoms of schizophrenia vary dramatically from person to person, both in pattern and severity. Not every person with schizophrenia will have all symptoms, and the symptoms of schizophrenia may also change over time (Smith & Segal, 2016).

Delusions

A delusion is a firmly-held idea that a person has despite clear and obvious evidence that it is not true. Delusions are extremely common in schizophrenia, occurring in more than 90% of those who have the disorder. Often, these delusions involve illogical or bizarre ideas or fantasies. Common schizophrenic delusions include:

Delusions of persecution: Belief that others, often a vague "they," are out to get him or her. These persecutory delusions often involve bizarre ideas and plots (e.g. "dwarfs are trying to kidnap me).

Delusions of reference: A neutral environmental event is believed to have a special and personal meaning. For instance, a person with schizophrenia might believe a billboard or a person on TV is sending a message meant specifically for them.

Delusions of grandeur: Belief that one is a famous or important figure, such as President John Mahama. Alternately, delusions of grandeur may involve the belief that one has unusual powers that no one else has (e.g. the ability to read minds).

Delusions of control: Belief that one's thoughts or actions are being controlled by outside, alien forces. Common delusions of control include thought broadcasting ("My private thoughts are being transmitted to others"), thought insertion ("Someone is planting thoughts in my head"), and thought withdrawal ("The BNI is robbing me of my thoughts").

Hallucinations

Hallucinations are sounds or other sensations experienced as real when they exist only in the person's mind. While hallucinations can involve any of the five senses, auditory hallucinations (e.g. hearing voices or some other sound) are most common in schizophrenia. Visual hallucinations are also relatively common. Research suggests that auditory hallucinations occur when people misinterpret their own inner self-talk as coming from an outside source.

Schizophrenic hallucinations are usually meaningful to the person experiencing them. Many times, the voices are those of someone they know. Most commonly, the voices are critical, vulgar, or abusive. Hallucinations also tend to be worse when the person is alone.

Disorganized speech

Fragmented thinking is characteristic of schizophrenia. Externally, it can be observed in the way a person speaks. People with schizophrenia tend to have trouble concentrating and maintaining a train of thought. They may respond to queries with an unrelated answer, start sentences with one topic and end somewhere completely different, speak incoherently, or say illogical things. Common signs of disorganized speech in schizophrenia include:

Loose associations: Rapidly shifting from topic to topic, with no connection between one thought and the next.

Neologisms: Made-up words or phrases that only have meaning to the patient.

Perseveration: Repetition of words and statements; saying the same thing over and over.

Clang: Meaningless use of rhyming words (“I said the bread and read the shed and fed Ned at the head").

Disorganized behavior

Schizophrenia disrupts goal-directed activity, causing impairments in a person’s ability to take care of him or herself, work, and interact with others. Disorganized behavior appears as: “decline in overall daily functioning”, “unpredictable or inappropriate emotional responses”, “behaviors that appear bizarre and have no purpose” and “lack of inhibition and impulse control”

Negative Symptoms (absence of normal behaviors) of Schizophrenia

The so-called "negative" symptoms of schizophrenia refer to the absence of normal behaviors found in healthy individuals. Common negative symptoms of schizophrenia include:

Lack of emotional expression: Inexpressive face, including a flat voice, lack of eye contact, and blank or restricted facial expressions.

Lack of interest or enthusiasm: Problems with motivation; lack of self-care.

Seeming lack of interest in the world: Apparent unawareness of the environment; social withdrawal.

Speech difficulties and abnormalities: Inability to carry a conversation; short and sometimes disconnected replies to questions; speaking in monotone (National Institute of Mental Health, 2016).

2.2.3 Causes of Schizophrenia

According to Smith and Segal, (2016) the causes of schizophrenia are not fully known. However, it appears that schizophrenia usually results from a complex interaction between genetic and environmental factors. Meanwhile, Bouthner, (2015) states that irrespective of the innumerable studies done over the years to find out the causes of the illness, scientists still have not pinpointed the precise cause of schizophrenia. However, research has led some scientist to believe that people with schizophrenia are born with a predisposition for developing the illness, which they acquired during the early development of their brains (Bouthner, 2015). This predisposition in the brain when accompanied by various other factors, then triggers the onset of schizophrenia. The most common factors and triggers responsible for the development of

schizophrenia, include:

Brain Chemical Imbalance or Brain Structure

The brains of people with schizophrenia have abnormal production or reaction to the important chemical neurotransmitter dopamine and maybe others. Dopamine is responsible in sending messages through the brain and affects how the brain perceives things (Bouthner, 2015).

In addition to abnormal brain chemistry, abnormalities in brain structure may also play a role in schizophrenia. Enlarged brain ventricles are seen in some schizophrenics, indicating a deficit in the volume of brain tissue. There is also evidence of abnormally low activity in the frontal lobe, the area of the brain responsible for planning, reasoning, and decision-making (Smith & Segal, 2016). For instance, some studies also suggest that abnormalities in the temporal lobes, hippocampus, and amygdala are connected to schizophrenia's positive symptoms. But despite the evidence of brain abnormalities, it is highly unlikely that schizophrenia is the result of any one problem in any one region of the brain (Smith & Segal, 2016).

Environmental Causes of Schizophrenia

Stress inducing environmental factors such as social pressure, physical or sexual abuse, loss of loved ones, hormones, malnutrition, and early exposure to viruses. The major brain changes that occur during puberty has also been identified as a possible contributing factor. Stressors can have profound effects on the amount of activity that's going on in the inflammatory immune system and the immune system impacts brain function. Evidence suggests that inflammation plays a role in the origin of schizophrenia (Bouthner, 2015).

Similarly, Smith and Segal, (2016) states that twin and adoption studies suggest that inherited genes make a person vulnerable to schizophrenia and then environmental factors act on this vulnerability to trigger the disorder. As for the environmental factors involved, more and more research is pointing to stress, either during pregnancy or at a later stage of development. High levels of stress are believed to trigger schizophrenia by increasing the body's production of the hormone cortisol. Research by the National Institute of Mental Health in the US and others over the years, points to several stress-inducing environmental factors that may be involved in schizophrenia, including "prenatal exposure to a viral infection" "low oxygen levels during birth (from prolonged labor or premature birth)", "exposure to a virus during infancy", "early parental loss or separation", and "physical or sexual abuse in childhood" (Smith & Segal, 2016).

Hereditary Causes of Schizophrenia

People who have a family history of schizophrenia have a higher probability for developing it. If one's mother, father, brother or sister has the illness, statistics show a 10 percent chance of developing it. If ones twin, or both father and mother have the disorder then the probability of developing it rises to 40 percent. Whereas the general population only has an overall 1 percent risk of developing schizophrenia (Bouthner, 2015).

Smith and Segal, (2016) reinforces Bouthner, (2015) explanation by stating that schizophrenia has a strong hereditary component. Individuals with a first-degree relative (parent or sibling) who has schizophrenia have a 10 percent chance of developing the disorder, as opposed to the

one percent chance of the general population. However, schizophrenia is only influenced by genetics, not determined by it. While schizophrenia runs in families, about 60 percent of schizophrenics have no family members with the disorder. Furthermore, individuals who are genetically predisposed to schizophrenia don't always develop the disease, which shows that biology is not destiny (Smith & Segal, 2016).

2.2.4 Effects of Schizophrenia on Patients

Smith and Segal, (2016) further states that when the signs and symptoms of schizophrenia are ignored or improperly treated, the effects can be devastating, both to the individual with the disorder and those around him or her. Some of the possible effects of schizophrenia are:

Relationship problems: Relationships suffer because people with schizophrenia often withdraw and isolate themselves. Paranoia can also cause a person with schizophrenia to be suspicious of friends and family.

Disruption to normal daily activities: Schizophrenia causes significant disruptions to daily functioning, both because of social difficulties and because everyday tasks become hard, if not impossible to do. A schizophrenic person's delusions, hallucinations, and disorganized thoughts typically prevent him or her from doing normal things like bathing, eating, or running errands.

Alcohol and drug abuse: People with schizophrenia frequently develop problems with alcohol or drugs, which are often used in an attempt to self-medicate, or relieve symptoms. In addition,

they may also be heavy smokers, a complicating situation as cigarette smoke can interfere with the effectiveness of medications prescribed for the disorder.

Increased suicide risk: People with schizophrenia have a high risk of attempting suicide. Any suicidal talk, threats, or gestures should be taken very seriously. People with schizophrenia are especially likely to commit suicide during psychotic episodes, during periods of depression, and in the first six months after they've started treatment (Smith & Segal, 2016).

According to Bouthner, (2015) anyone can get schizophrenia; irrespective of race, culture, background, and socioeconomic group. Treatment results reported by The National Alliance on Mental Illness (NAMI) is encouraging. Specifically, it is reported that with treatment about 80 percent of people with schizophrenia are able to lead productive and relatively independent lives. In 50 percent of the cases recovery is significant or even complete. About 20% of sufferers will experience relapse and will require a longer-term more structured treatment program (Bouthner, 2015)

So recovery is achievable in half of all cases for people who seek treatment for their schizophrenia. Recovery is defined by NAMI as not showing any symptoms and living in the community engaging in positive social interactions with their family and friends. In situations where a full recovery is not achieved, treatment often greatly reduces the severity of symptoms and still improves one's quality of life (Bouthner, 2015)

2.2.5 Challenges that comes with Caring for Schizophrenic Patients

Caregiving for someone with schizophrenia is a huge job which is tiring and frustrating at times. The first challenge is the fact that some patients often refuse treatment. Untreated schizophrenia can make people behave erratically. As a result caregivers usually find themselves subject to verbal abuse, emotional neglect, and delusional accusations (Brichford, 2009). The above, affects caregivers psychologically. Caregivers tend to suffer from depression.

Similarly, the Schizophrenia Research Institute, (2013) further states that the impact of schizophrenia on families is often distressing and disruptive. The first signs in a family member appear as confusing changes in behaviour. Usually, parents or partners often assume that early signs are merely normal but distressing aspects of adolescence, but then experience increasing stress and confusion as the condition worsens. After diagnosis, coping with the continuing symptoms of schizophrenia can be especially difficult for family members who remember what the person was like before they became ill, and how much they have since changed.

The Schizophrenia Research Institute, (2013) further states that the impact upon families is compounded by the common tendency of people with schizophrenia to deny that they are ill, and to interpret the family's efforts to get help as unnecessary interference. This interpretation is often supported in the patient's mind by delusions of persecution, or grandiose ideas about personal destiny. Unless the person gains some insight into his/her condition, these symptoms can contribute to non-compliance with medication, and long-term disability. Unemployment,

drug and alcohol abuse, homelessness, physical deterioration, and crime and imprisonment are some of the outcomes of untreated schizophrenia.

Family disruption is often exacerbated by the tendency of parents or siblings to look for a reason why the illness has happened. This intuitive reaction sometimes leads to the 'shame and blame' syndrome, causing rifts between family members. It is difficult for such families to accept that the illness is nobody's fault (Schizophrenia Research Institute, 2013).

Smith, (2015) further states that people with schizophrenia often encounter challenges when it comes to their friends and family. Family often try and cope with someone who has schizophrenia for a period of time, but can become frustrated by their seeming lack of progress in treatment or staying in treatment altogether. A family's emotional support may wane, and some families cut off all contact with their schizophrenic son, daughter or sibling.

In addition, friends can also not understand a person with schizophrenia's experiences, and quickly lose interest in continuing the friendship when a person with schizophrenia deteriorates or drops out of treatment. The most common complaint amongst friends and family members of a person with schizophrenia is not understanding how to help them, or give them continued, long-term support that help keeps them from becoming homeless or unemployed (Smith, 2015).

2.2.6 Experiences among families of patients with schizophrenia

According to Brady and McCain, (2004), the lifetime emotional, social and financial consequences experienced by individuals with schizophrenia have significant effects on their families, and this ranges from stigmatization to financial cost. Due to this, family responses to having a family member with schizophrenia include: care burden, fear and embarrassment about illness signs and symptoms, uncertainty about course of the disease, lack of social support, and stigma. Brady and McCain, (2004) study's result showed that families, in which parents are hostile and critical, contributed to the patient relapse.

Stigma is also a major contributing factor for the intense burden that families with schizophrenia experience. According to Dalky, (2012), even though family stigma is well documented in the research literature; it has only been recently that efforts have been undertaken to discuss the perception of stigma. At the end, results showed that families perceived the experience of caring for a family member with a mental illness such as schizophrenia with fear, loss, embarrassment, and disgrace to family reputations (Dalky, 2012).

Brady and McCain, (2004), and Dalky, (2012), have therefore outlined some of the most pervasive effects of having a family member with a serious mental disorder like schizophrenia has on family members and the various coping strategies. Meanwhile Dalky, (2012), has gone further and has been able to bring out the socio-cultural dynamics of the challenges caregivers face in caring for mentally ill relatives and the various ways of coping.

Similarly, a cross sectional study done by Sreeja, Sandhya, Rakesh and Singh (2008) to assess the burden between family caregivers of patients having schizophrenia and epilepsy. Data was collected on sixty respondents. After data analysis Sreeja, et al, (2008)'s findings revealed that the caregivers of both long term physical illness like intractable epilepsy and mental illness like schizophrenia experience high level of burden in the areas of; patient care, finance, physical and emotional burden, family relations and occupation. However, no significant difference was found in both groups of caregivers and also no significant difference was found in total burden score between male and female caregivers of both the groups.

However, Hanzawa, Tanaka, Inadomi, Urata, and Ohta, (2008) sought to identify factors contributing to burden of care in 57 mothers caring for patients with schizophrenia. As their methodology, the researchers used members of the Federation of Families of People with Mental Illness in Nagasaki Prefecture. Respondents thereafter collected data using well-validated scales to evaluate burden of care (eight-item short version of the Japanese version of the Zarit Caregiver Burden Interview), the general health status (General Health Questionnaire 12-item version) which tested for respondents' difficulty in life, coping strategies, emotional support, and understanding of mental illness and disorders.

Results indicated that burden of care was significantly associated with general health status and difficulty in life. Hence, 'social interests' and 'resignation', both of which are the subscales of coping strategies, exerted significant and independent effects with respect to burden of care (Hanzawa, Tanaka & Goto, 2008).

However, according to Zanetti and Galera, (2007), the impact of schizophrenia on the family has been compared to the trauma experienced by victims of catastrophes. Considering the social repercussion on the health system and the emotional repercussion on the schizophrenic individual, with consequences to the family group, an ethnographic case study was developed aimed at describing the impact of schizophrenia on the family. One family consisted of father, mother, and five children, four of whom were schizophrenic, participated in the study, and have had a follow-up in a public psychiatric service. It was discovered that schizophrenia impacts family members by increasing their suffering, isolation, and overload (Zanetti & Galera, (2007).

According to Caqueo-Urízar, Gutiérrez-Maldonado, Ferrer-García, Peñaloza-Salazar, Richards-Araya and Cuadra-Peralta, (2011), most studies of family attitudes and burden have been conducted in developed countries. Thus it is important to test the generalizability of this research in other contexts where social conditions and extended family involvement may be different. Hence, the aim of this study was to assess the relationship between the attitudes of caregivers and the burden they experience in Africa, a town located in the northernmost region of Chile, close to the border with Peru and Bolivia. The researchers then assessed attitudes towards schizophrenia (including affective, cognitive and behavioural components) and burden (including subjective distress, rejection and competence) in 41 main caregivers of patients with schizophrenia, all of whom were users of Public Mental Health Services in Arica.

After data analysis, results showed that attitude measures differed significantly according to socio-demographic variables, with parents (mainly mothers) exhibiting a more negative attitude towards others than the rest of the family. This was also the case for caregivers with a low

educational level, for the oldest caregivers and for those who had spent more time with the patient. Although attitudes had significant association with burden, their explanatory power was modest. This finding implies that there is a positive and significant relationship between the attitudes of caregivers and their burden. Hence there is the need to support the families of patients with schizophrenia in this social context (Caqueo-Urízar, et al., 2011).

Hanzawa, et al, (2010), reinforces the findings of Brady and McCain, (2004), and Dalky, (2012), in that they all outlined some of the most pervasive effects of having a family member with a serious mental disorder like schizophrenia, and the effect this has on family members and the various coping strategies used. Meanwhile Dalky, (2012), went further to explore the socio-cultural dynamics of the challenges caregivers face in caring for mentally ill relatives and the various ways of coping.

According to Adeosun, (2013), family members of patients with schizophrenia have enormous roles in the care of their patients, which could negatively impact their well-being. Development of interventions targeted at alleviating the burden of informal care giving is hinged on the recognition of the factors associated with the various dimensions of burden. This study determined the correlates of caregiver burden among family members of patients with schizophrenia in Lagos, Nigeria. The study instruments included the Zarit burden interview (ZBI) and the positive and negative syndrome scale for schizophrenia (PANSS).

At the end, exploratory factor analysis of the ZBI produced a five-factor structure with “financial/physical strain”, “time/dependence strain”, “emotional strain”, “uncertainty”, and

"self-criticism" domains. On multiple regression analyses, total PANSS scores, poor social support, and lower educational levels of caregivers were predictive of higher burden scores on the "financial/physical strain", "time/dependence", and "emotional strain" domains. Longer duration of illness, shorter patient-caregiver contact time, and being a female caregiver were predictive of higher burden scores on the "uncertainty", "self-criticism", and "emotional strain" domains, respectively. There is need for interventions to alleviate the burden on caregivers of patients with schizophrenia in Nigeria. These strategies must include comprehensive social support and improved access to services for patients and their caregivers (Adeosun, 2013).

2.2.7 Family Burden

Extensive evidence supports the importance of the involvement of families in the mental health care of patients with schizophrenia and other serious mental illnesses (Hackman & Dixon, 2008). Up to 75% of people with schizophrenia are in regular contact with their families, (Lehman & Steinwachs, 1998) and more than one third of individuals with schizophrenia live with family members, often aging parents (Lefly, 1984). Families provide emotional and financial support, as well as advocacy and facilitation of treatment for their mentally ill relatives (Solomon & Draine 1995). Understanding the burden experienced by families of patients with schizophrenia, as well as the evidence-based practice for working with families, can help the practicing psychiatrist meet the needs of individuals with schizophrenia and their families (Hackman & Dixon, 2008).

Hackman and Dixon, (2008) further states that families of patients with schizophrenia face many challenges. The concept of family burden illustrates the impact of mental illness on families. Objective burden includes the practical, day-to-day problems and issues related to having a

family member with a mental illness, such as loss of income and disruption of household routines. Subjective burden includes the psychological and emotional impact of mental illness on family members, including feelings of grief and worry (Webb, Pfeiffer & Mueser, 1998). The stresses of illness exacerbations coupled with limited social and coping capabilities contribute to subjective burden (Solomon & Draine 1995). The recent Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study found that most family members reported strains associated with supporting their ill relative (Perlick, Rosenheck & Kaczynski, 2006). The CATIE analyses revealed 4 burden factors:

- Perception of patient problem behavior.
- Perception of patient impairment in activities of daily living.
- Perceptions of lack of patient helpfulness.
- Resource demands and disruptions in caregiver routine.

Notably, even when more florid symptoms have been controlled, caregivers continue to worry about the patient's ability to experience normal pleasures of occupational, leisure, and social activities (Hackman & Dixon, 2008).

According to Jungbauer, Wittmund, Dietrich and Angermeyer, (2004) 20% to 30% of patients with schizophrenia are married or are in relationships, and some have children. Similarly, Ståhlberg, Ekerwald and Hultman, (2004) has also found that the unique role and relationship of siblings of people with schizophrenia also requires attention.

According to Hackman and Dixon, (2008) parents of mentally ill adult children often grieve the loss of the child they knew before the onset of the illness and who that child might have become had the illness not occurred. Such grief and embarrassment often lead to profound isolation. These parents may also be providing their mentally ill child with emotional as well as financial support and housing (Davis & Schulz, 1998). Aging parents who are caregivers for mentally ill children worry about what will happen to their child when they are dead or infirm and can no longer care for him or her. They report significant unmet needs for information on future planning (Cook, Cohler & Pickett, 1997; Smith, 2003).

In their article, Jungbauer, et al., (2004) report on the burden of spouses of persons with schizophrenia. The spouses and partners of patients with schizophrenia experience illness burden that overlaps and extends beyond the experience of parents. Not only are there practical considerations, such as loss of income, there may also be the loss of the benefits of a partnership when the spouse assumes the role of the caregiver for the mentally ill partner. A diagnosis of schizophrenia can be particularly devastating for the healthy partner when the onset of the illness occurs after the marriage or after the start of the relationship, or when the partner who is ill becomes threatening or assaultive during illness exacerbations (Hackman & Dixon, 2008).

Siblings also may have specific needs (Landeen, Whelton & Dermer, 1992; Ståhlberg, et al., 2004; Schmid, Neuner, Cording & Spiessl, 2006). Sisters are more likely than brothers to assume a primary role. By necessity, siblings become more involved with the mentally ill relative when parents are unavailable or aging. Schizophrenia creates issues with the sibling bond that evoke

feelings of guilt in the healthy sibling; this dynamic may create a variety of coping patterns in the healthy sibling including avoidance, normalizing, caregiving, and grieving. Furthermore, healthy siblings often have a fear of becoming mentally ill or passing on "bad genes." This is particularly true if there also is a parent with a mental illness (Hackman & Dixon, 2008).

A particularly at-risk group includes the children of patients with schizophrenia. One recent study of more than 400 patients with schizophrenia found that more than one third had children (Caton, Cournos & Dominguez, 1999). Adult children of patients with schizophrenia have been found to have had residential instability as children and to have experienced feelings of embarrassment or fear related to their parents' symptoms. These adult children reported great variation in knowledge regarding their parents' illness, with some having had no information at all (Caton, Cournos, Felix & Wyatt, 1998).

The family experience of schizophrenia is not restricted to burden; it may also be rewarding (Dixon, Stewart & Burland, 2001), particularly as the mentally ill relative makes progress in his or her recovery. Furthermore, siblings have reported personal qualities and strengths gained from having a mentally ill brother or sister (Ståhlberg, et al., 2004; Hackman & Dixon, 2008).

2.2.8 Coping strategies among families of patients with schizophrenia

According to Scazufca and Kuipers, (1999), most researchers on expressed emotion (EE) has used an empirical approach to describe relatives' ways of coping with people with schizophrenia. The aim of this study was to use the stress and coping model proposed by Lazarus and Folkman

to examine how relatives coped with their schizophrenia patients. Patients with DSM-Ill-R schizophrenia and their relatives were assessed just after hospitalization of the patients and nine months after discharge. Both assessments included the symptoms of the patients and the coping strategies, burden, and levels of distress of relatives.

After analysis of data, results showed that coping strategies were used more frequently at inclusion than at follow-up. Specifically, problem-focused coping was the strategy used more often at both assessments. Meanwhile, avoidance coping was strongly associated with burden, and distress at both assessments. It was therefore concluded that ways of coping are influenced by relatives' perceptions of the situation with patients. Avoidance strategies seem to be less effective in regulating the distress of care-givers than problem-focused strategies (Scazufca & Kuipers, 1999).

However, in another related study with a different objective, Knudson and Coyle, (2002) used a coping framework (Lazarus & Folkman, 1984) to explore experiences of caring for a son or daughter with schizophrenia. Eight parents of people with schizophrenia were interviewed about their experiences and the transcripts of these interviews were subjected to thematic content analysis.

Knudson and Coyle, (2002)'s results indicated that negative symptoms of schizophrenia sufferers, represented the most burdensome stressor for parents and that coping strategies shifted from problem-focused to more emotion focused forms (such as acceptance). For example, genuinely accepting patients for what they have become helped both the patient and caregiver in

managing the burden of the illness. Meanwhile, when it came to the resources which were available to parents, the results indicated that support from social networks and mental health services was generally perceived to have been lacking. But on the contrary, both informational and emotional support were available from self-help groups for relatives/caregivers.

Knudson and Coyle, (2002)'s findings was similar to that of Gerson, Wong, Davidson, Malaspina, McGlashan and Corcoran, (2011). This is due to the fact that social support played an important role in caregivers coping mechanism against the burden, stress and stigma related to having a family member who is a schizophrenia sufferer.

The aim of Gerson, Wong, Davidson, Malaspina, McGlashan and Corcoran, (2011)'s study was explore the coping by families of patients with schizophrenia. Coping styles considered to be adaptive (e.g. reinterpretation) and potentially maladaptive coping styles such as "avoidant" coping (denial/disengagement, use of alcohol and drugs) were as well assessed. Little is known about coping strategies used by families of individuals with incipient or emergent psychosis. Self-reported coping styles were assessed in family members of 11 ultra-high risk and 12 recent-onset psychosis patients, using a modified version of Carver's Coping Orientations to Problems Experienced questionnaire.

At the end of the study it was discovered that families reported moderate use of "approach" coping (e.g. planning, seeking social support, positive reinterpretation, acceptance, and turning to religion) and rare use of "avoidant" coping strategies (denial/disengagement and use of alcohol and drugs). It was thereafter concluded that the greater endorsement of "approach" coping by

these families is consistent with findings for families of first episode psychosis patients, and is in contrast to more prevalent "avoidant" coping by families of patients with more chronic psychotic illness. Early intervention could plausibly help families maintain the use of potentially more adaptive "approach" coping strategies over time (Gerson, et al., 2011).

Knudson and Coyle, (2002) and Gerson, Wong, Davidson, Malaspina, McGlashan and Corcoran, (2011)'s findings is reinforced by another related study conducted by Magliano, Fadden, Economou, Held, Xavier, Guarneri, Malangone, Marasco and Maj, (2000). According to Magliano, et al., (2000), up till now, only few data are available on how family burden in schizophrenia changes over time. Magliano, et al, (2000)'s result showed that in general, the burden on caregivers was stable among respondents. Meanwhile, a reduction of family burden over time was found among relatives who adopted less emotion-focused coping strategies and received more practical support from their social network. Furthermore, family burden decreased in relation to the improvement of patient's social functioning. It was therefore concluded that when relatives of patients with schizophrenia are able to improve their coping strategies, it is possible for the burden to be reduced even after several years. This points to the necessity to provide families of chronic psychotic patients with psychoeducational interventions emphasizing the adoption of an effective coping style.

Furthermore, Magliano, Fadden, Madianos, Almeida, Held, Guarneri, Marasco, Tosini and Maj, (1998) conducted another study. This was on the burden, the coping strategies and the social networks among caregivers of schizophrenia patients. A sample of 236 relatives of

patients with schizophrenia, living in five European countries, were explored by well-validated assessment instruments.

It was discovered at the end that in all centres used for the study, relatives experienced higher levels of burden when they had poor coping resources and reduced social support. On the contrary, relatives in Mediterranean centres, who reported lower levels of social support, were more resigned, and more often used spiritual help as a coping strategy. These data indicate that family burden and coping strategies can be influenced by cultural factors, and suggest that family interventions should have also a social focus, aiming to increase the family social network and to reduce stigma **(**Magliano, et al., 1998).

In a similar study, Mueser, Valentiner and Agresta, (1997) explored the strategies that schizophrenia patients and their relatives employ to cope with negative symptoms. Coping strategies and their perceived efficacy were elicited in semi-structured interviews conducted separately with patients and relatives. Coping responses were coded according to the following dimensions: behavioural-cognitive, social-nonsocial, and problem focused-emotion focused.

Results revealed that overall; the number of coping strategies was related to perceived coping efficacy for both patients and relatives, regardless of the type of strategy. Furthermore, perceived coping efficacy tended to be highest for apathy; intermediate for alogia, anhedonia, and inattention; and lowest for blunting. Relatives with more knowledge about schizophrenia used more coping strategies and reported higher levels of coping efficacy. Meanwhile, patient rejection by relatives and distress (either patient or relative) tend to not be related to coping

strategies. Hence, these findings suggest that patients and relatives use a wide variety of strategies to cope with negative symptoms of schizophrenia (Mueser, Valentiner & Agresta, 1997).

2.2.8 Ways of Managing Schizophrenic Patients within the Family

First and foremost, the closest family member or friend should speak-up and be an advocate for the person with schizophrenia: Sometimes only the family or others close to the person with schizophrenia will be aware of strange behavior or ideas that the person has expressed. Since patients may not volunteer such information during an examination, family members or friends should ask to speak with the person evaluating the patient so that all relevant information can be taken into account (Smith, 2015).

Secondly, caregivers should ensure ongoing compliance with treatment, especially when released from inpatient care: Ensuring that a person with schizophrenia continues to get treatment after hospitalization is also important. A patient may discontinue medications or stop going for follow-up treatment, often leading to a return of psychotic symptoms.

Thirdly, caregivers should offer strong emotional encouragement and support for continuing treatment: Encouraging the person to continue treatment and assisting him or her in the treatment process can positively influence recovery. Without treatment, some people with schizophrenia become so psychotic and disorganized that they cannot care for their basic needs, such as food, clothing and shelter. All too often, people with severe mental illnesses such as schizophrenia end

up on the streets or in jails, where they rarely receive the kinds of treatment they need (Smith, 2015).

Fourthly, caregivers should know how to respond to bizarre statements or beliefs: Those close to people with schizophrenia are often unsure of how to respond when patients make statements that seem strange or are clearly false. For the individual with schizophrenia, the bizarre beliefs or hallucinations seem quite real - they are not just "imaginary fantasies." Instead of "going along with" a person's delusions, family members or friends can tell the person that they do not see things the same way or do not agree with his or her conclusions, while acknowledging that things may appear otherwise to the patient. It is very important not to challenge the person's beliefs or delusions. They are very "real" to the person who experiences them, and there's little point in arguing with them about the delusions or false beliefs. Instead, move the conversation along to areas or topics where you both agree upon (Smith, 2015).

Fifthly, caregivers should keep a record: It may also be useful for those who know the person with schizophrenia well to keep a record of what types of symptoms have appeared, what medications (including dosage) have been taken, and what effects various treatments have had. By knowing what symptoms have been present before, family members may know better what to look for in the future. Families may even be able to identify some "early warning signs" of potential relapses, such as increased withdrawal or changes in sleep patterns, even better and earlier than the patients themselves. Thus, return of psychosis may be detected early and treatment may prevent a full-blown relapse. Also, by knowing which medications have helped and which have caused troublesome side effects in the past, the family can help those treating the patient to find the best treatment more quickly (Smith, 2015).

Last but not the least caregivers should help the person set attainable, simple goals in his or her life: family, friends and peer groups should provide support and encourage the person with schizophrenia to regain his or her abilities. It is important that goals be attainable, since a patient who feels pressured or repeatedly criticized by others will probably experience stress that may lead to a worsening of symptoms. Like anyone else, people with schizophrenia need to know when they are doing things right. A positive approach may be helpful and perhaps more effective in the long run than criticism. This advice applies to everyone who interacts with the person (Smith, 2015).

2.3 Conclusion

It could be deduced from the literature review that, the main challenges that families that had sufferers of schizophrenia encountered included stigmatization of the mental illness by the public, the financial strain of caregiving and cognitive and psychosocial dependency of sufferers on caregivers. These constraints existed regardless of race, gender, culture, country or continent. Furthermore, having a schizophrenia family member had a massive financial strain on families. Hence, as a coping strategy, families relied on social network and support, religion, etc.

2.4 Statement of hypotheses

The following hypotheses were tested in the study:

1. Age differences will significantly influence the level of burden caregivers of schizophrenia patients will experience.

2. Male caregivers will face high level of burden than their female counterparts.

3. Differences in level of education will significantly influence the level of burden caregivers of schizophrenia patients will experience.

4. Differences in level of education will significantly influence the level with caregivers of schizophrenia patients cope.

5. A strong relationship exists between the burden faced by caregivers of schizophrenia patients and the way they cope.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter captures methodology used in this study. This includes the research design, target population, sample size and sampling technique, material, procedure, scoring, ethical consideration and data analysis.

3.1 Research Design

The research design employed in this study is a case study. Basically, a case study is an in depth study of a particular situation phenomenon or subjects rather than a sweeping statistical survey (Explorable Psychology Experiments, 2014). It is a method used to narrow down a very broad field of research into one easily researchable subject area. A case study is used to look at individuals, a small group of participants, or a group as a whole (Explorable Psychology Experiments, 2014). A case study was chosen because the researcher did an in-depth study into the burden and methods of coping among caregivers' of schizophrenia patients in Accra.

A case study was used because this study was an in-depth one. In other words this was an in-depth study into experiences and coping strategies of families of patients with schizophrenia.

3.2 Target Population

The target population for this study was families who have relatives at the Accra Psychiatric Hospital and the Pantang Hospital in Accra.

3.3 Sample Size and Sampling Technique

A convenient sampling technique was applied in sampling respondents. The reason behind using convenient sampling is because when compared to other sampling techniques, convenient sampling of respondents is very simple, flexible and faster: in that here, respondents are selected based on their availability and willingness to participate in this study.

The sample size for this study was one hundred (N=100). Out of the total number of respondents' 50 were sampled from the Accra Psychiatric Hospital whiles the remaining 50 were from the Pantang Hospital.

3.4 Background of Respondents

Table 1. Respondents' Sex, Age Range, Marital Status and Religion

	(n=100)	
Sex	**N**	**%**
Male	59	59.0
Female	41	41.0
Age range		
Below – 25yrs	21	21.0
25 – 29yrs	44	44.0
30 – 39yrs	23	23.0
40 – 49yrs	8	8.0
50yrs & above	4	4.0
Marital status		
Single	54	54.0
Married	30	30.0
Divorced	6	6.0
Widowed	10	10.0
Religion		
Christian	48	48.0
Muslim	52	52.0
Total	**100**	**100.0**

According to Table 1 above, 59% of respondents' were males, whiles the remaining 41% were females. Meanwhile, 21% of respondents' were below 25 years, 44% were between 25 to 29 years, whereas 23% were in the 30 to 39 years age range. Meanwhile, 8% of respondents' were between 40 to 49 years old, whiles the remaining 4% were 50 years old and over. It is further shown that 54% of respondents' were single, 30% were married, 6% were divorced whereas the remaining 10% were widowed. With regard to respondents' religion it is shown that 48% were Christians whiles the remaining 52% were Muslims.

Table 2. Respondents' Employment Status, Level of Education and Duration of Relatives' Illness

	(n=100)	
Employment status	**n**	**%**
Employed	51	51.0
Unemployed	49	49.0
Level of education		
No formal education	38	38.0
Middle school/JSS	43	43.0
SSS, O & A Level	15	15.0
Tertiary	4	4.0
Duration of relatives illness		
Below – 1year	42	42.0
1-3 years	28	28.0
3 – 5years	18	18.0
6 – 9 years	5	5.0
10 – 15years	7	7.0
Total	**100**	**100.0**

According to Table 2 above 51% of respondents were employed whiles the remaining 49% were unemployed. It is further shown that 38% of respondents' had no formal education, whiles 43% of respondents' had Middle School/JSS education. Similarly, 15% had Senior Secondly School or 'O' and 'A' level. The remaining 4% were tertiary students'. Table 2 further shows that 42% of respondents had family members who have been suffering from schizophrenia for less than a year, whiles 28% and 18%'s relatives had been mentally ill for 1 to 3 years, and 3 to 5 years respectively. Similarly, 5%'s relatives had been ill for about 6 to 9 years. The remaining 7% had relatives who had been mentally ill for 10 years and over.

3.5 Material

A standardised questionnaire was used to gather data from respondents in this study. The questionnaire consists three sections: Section A, Section B and Section C.

Section A elicited information on age range, gender, marital status, religion, employment status, highest level of education, how long has respondents' relative been ill, and respondents description of mental illness. There was a total of 8-items in this section.

Meanwhile, the **Section B** of the questionnaire contained Zarit Burden Interview scale. This scale was used to test for caregivers' burden. The Burden Interview has been specially designed to reflect the stresses experienced by caregivers of dementia patients. It can be completed by caregivers themselves or as part of an interview. Caregivers are asked to respond to a series of 22 questions about the impact of the patient's disabilities on their life. For each item, caregivers are

to indicate how often they felt that way (never, rarely, sometimes, quite frequently, or nearly always).

The **Section C** of the questionnaire was made up of the COPE Inventory by Carver, (1997). The COPE Inventory was developed to assess a broad range of coping responses, several of which had an explicit basis in theory. The inventory includes some responses that are expected to be dysfunctional, as well as some that are expected to be functional. It also includes at least 2 pairs of polar-opposite tendencies. These were included because each scale is unipolar (the absence of a response does not imply the presence of its opposite), and because people engage in a wide range of coping during a given period. The items have been used in at least 3 formats. One is a "dispositional" or trait-like version in which respondents' report the extent to which they usually do the things listed, when they are stressed. A second is a time-limited version in which respondents indicate the degree to which they actually did have each response during a particular period in the past. The third is a time-limited version in which respondents indicate the degree to which they have been having each response during a period up to the present (Carver, 1997).

Scales are computed as follows (with no reversals of coding): The subscales of the COPE Inventory were Self-distraction (items 1 and 19), Active coping (items 2 and 7), Denial (items 3 and 8) Substance use (items 4 and 11), Use of emotional support (items 5 and 15), Use of instrumental support (items 10 and 23), Behavioral disengagement (items 6 and 16), Venting (items 9 and 21) Positive reframing (items 12 and 17), Planning (items 14 and 25), Humor (items

18 and 28), Acceptance (items 20 and 24), Religion (items 22 and 27) and Self-blame (items 13 and 26).

3.6 Reliability and validity

Regarding the reliability and validity of the Zarit Burden Interview scale, its internal consistency has been reported to be high (alpha 0.91), as has its test retest reliability (0.86). In addition, the convergent validity which was 0.63 is averagely good.

Meanwhile, the reliability of the COPE Inventory's sub scales indicates high Cronbach's alpha values for some domains such as Religion (α=0.82) and Substance use (α=0.90). Other domains indicated acceptable values of Cronbach's alpha. They are Active coping (α=0.68), Planning (α=0.73), Positive Reframing (α=0.64), Acceptance (α=0.57), Humor (α=0.73), Using Emotional Support (α=0.71), Using Instrumental Support (α=0.64), Self-distraction (α=0.71), Denial (α=0.54), Venting (α=0.50), Behavioral disengagement (α=0.65) and Self-blame (α=0.69) (Yusoff, Low &Yip, 2010).

3.7 Procedure

On the day of data collection, the researcher informed respondents about the purpose of the study, and the benefits the study hoped to give caregivers and patients'. Thereafter, respondents who wanted to be part of the study came forward to participate voluntarily.

After answering all questions asked, copies of the questionnaire were then given out to respondents. Meanwhile, uneducated respondents were assisted to fill the questionnaires. Copies

off all filled questionnaires' were retrieved on the same day with a high response rate. Data collection lasted for two weeks.

3. 8 Scoring

The Burden Interview is scored by adding the numbered responses of the individual items. Higher scores indicate greater caregiver distress (Zarit, Reever & Bach-Peterson, 1980).

As regards the COPE Inventory scoring is done by summing up the overall score. A higher score is indicative of the use of a specific type of coping.

1 = I usually don't do this at all

2 = I usually do this a little bit

3 = I usually do this a medium amount

4 = I usually do this a lot

3.9 Ethical consideration

The researcher took a letter to the targeted mental health institutions to get approval to collect data from patients' and other health workers used in this study. Furthermore, the researcher made sure that the consent of respondents was sought after they had been informed of the aims and purpose of the study. By so doing people who agreed to be part of the study gave an informed consent.

During the data collection period, respondents had the right to ask questions, and even withdraw from giving out any information. Meanwhile, any information provided by respondents is used

only for academic purposes. No respondent was deceived, abused or made to do anything against his or her free will before, during and after data collection.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents results generated on the stated hypotheses followed by their interpretations.

4.2 Testing of Hypotheses

This study investigated the experiences and coping strategies among families of patients with schizophrenia in Accra. Four hypotheses were stated and tested. Results obtained are presented below:

4.2.1. Hypothesis one stated that "Older caregivers (30 years and above) will report lower level of burden than younger (29 years and below) caregivers." Relevant information on this is presented in Table 3 below.

Table 3. One-Way Analysis of Variance Test Result on the Effect of Age on the Level of Burden Faced by Caregivers of Schizophrenic patients.

Age range	M	SD	df	F	Sig.
Below – 25yrs	43.62	7.32			
25 – 29yrs	41.63	6.46			
30 – 39yrs	45.74	6.90			
40 – 49yrs	44.88	3.87			
50yrs & above	43.33	3.21			
Total	**43.34**	**6.64**	**4, 93**	**1.62**	**.18**

Table 3 above reveals that no significant difference (F=1.62, df=4, 93, Sig. = .18) exist between the level burden experienced by older caregivers (30 years and above) and younger (29 years and below) caregivers of schizophrenia patients. This implies that caregivers of schizophrenia patients across the various ages experience similar levels of burden. Hence hypothesis one is rejected.

4.2.2. Hypothesis two states that "male caregivers will face high level of burden than their female counterparts." Relevant information on this is presented in Table 4 below.

Table 4. Independent t test Result on how Gender differences in the Level of Burden faced by Caregivers of Schizophrenia Patients.

Gender	M	SD	df	t	Sig.
Male	43.86	6.86			
Female	42.61	6.32			
Total	**43.34**	**6.64**	**96**	**.92**	**.75**

From Table 4 above, it can be observed that no significant difference (t = .92, df = 96, Sig. =.75) exists between the level of burden experienced by male and female caregivers of schizophrenia patients. This implies that, both male and female caregivers of schizophrenic patients experience similar levels of burden. Hypothesis two is rejected.

4.2.3. Hypothesis three states that "less educated (Middle school/JSS and below) caregivers will report higher level of burden than well educated (SSS, O & A Level and higher) caregivers." Relevant information on this is presented in Table 5 below.

Table 5. One-Way Analysis of Variance Test Result on the Effect of Level of Education on the Level of Burden Faced by Caregivers of Schizophrenia patients.

Level of Education	M	SD	Df	F	Sig.
No formal education	45.86	5.34			
Middle school/JSS	42.23	7.41			
SSS, O & A Level	41.67	5.84			
Tertiary	38.75	5.38			
Total	**43.34**	**6.64**	**3, 94**	**3.307**	**.02**

Table 5 above reveals that a significant difference (F=3.31, df=3, 94, Sig. = .02) exists between the level of burden experienced by caregivers with various levels of education. Specifically, less educated (i.e. those who have middle school/JSS and below levels of education) caregivers report higher level of burden than well educated (i.e. SSS, O & A Level, and Tertiary educated) caregivers. This shows that less-educated caregivers of schizophrenia patients face higher levels of burden (because of their high means/average scores) than well-educated caregivers (because of their high means/average scores). As such, differences in level of education significantly influence the level of burden caregivers of schizophrenia patients' experience. Hence hypothesis three is accepted.

4.2.4. Hypothesis four stated that "less educated (Middle school/JSS and below) caregivers will cope better than well educated (SSS, O & A Level and higher) caregivers." Relevant information on this is presented in Table 6 below.

Table 6. One-Way Analysis of Variance Test Result on how Level of Education Influences the way Caregivers of Schizophrenia Patients Cope.

Level of Education	M	SD	Df	F	Sig.
No formal education	54.75	7.75			
Middle school/JSS	58.48	8.22			
SSS, O & A Level	51.07	5.70			
Tertiary	48.75	2.99			
Total	**55.48**	**8.04**	**3, 91**	**4.95**	**.00**

From Table 6 above, it can be observed that a significant difference (F = 5.00, df = 3, 91, Sig. =.00) exist between Middle school/JSS and below educated caregivers, and SSS, O & A Level and higher educated caregivers of schizophrenia patients cope. This implies that, less educated caregivers of schizophrenia patients cope well (because of their high means/average scores) than well-educated caregivers of schizophrenia patients (because of their high means/average scores). Hence, hypothesis four is accepted.

4.2.5. Hypothesis five stated that "a strong relationship will exist between the caregivers' burden and the level of coping." Relevant information on this is presented in Table 7 below.

Table 7. Pearson Moment Correlation Coefficient Test Results on the Relationship between Caregivers burden and their Level of Coping.

Level of education	M	SD	df	R	Sig.
Caregivers Burden	43.33	6.64			
Cope Inventory	55.48	8.04			
Total			**92**	**-.06**	**.27**

Table 7 above reveals that the mean for caregivers burden (M=43.33, SD=6.64) and coping (M=55.48, SD= .27) were subjected to the Pearson Moment Correlation Coefficient to determine whether a strong relationship exists between the burden faced by caregivers of schizophrenia patients and the way they cope. Results (r= -.06, Sig. = .27) reveals that there is no relationship. This implies that, there is significantly no relationship between the burden faced by caregivers of schizophrenia patients and the way they cope. Hence hypothesis five is rejected.

4.3 Summary of Findings

After testing the five stated hypotheses, results indicated that no significant difference exists between the level of burden experienced by older caregivers (30 years and above) and younger (29 years and below) caregivers of schizophrenic patients. Hence, caregivers of schizophrenia patients across the various age groups experience similar levels of burden. It was further revealed that no significant difference exist between the level of burden experienced by male and female caregivers of schizophrenic patients. This implies that, both male and female caregivers of schizophrenic patients experience similar levels of burden. Results further showed that less the higher the level of education of caregivers the higher they report their level of burden. Additionally, it was revealed that a significant difference exist between Middle school/JSS and

below educated caregivers, and SSS, O and A Level and higher educated caregivers of schizophrenic patients cope. It was finally revealed that a significantly no relationship exists between the burden faced by caregivers of schizophrenic patients and the way they cope.

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter contains the discussion of main findings of the study.

5.1 Discussion

5.1.1 Introduction

The stress and burden of people of care for those with chronic psychological disorders is well documented (Chan, 2011). Studies which have delved into this subject area have revealed the tremendous amount of stress and burden these caregivers go through (Zanetti & Galera, 2007). According to Lehman and Steinwaches, (1998), most schizophrenia sufferers live with or have regular contact with a family caregiver (Gibbons et a1., 1984). These caregivers report high levels of burden related to caring for their family members (Grad & Sainsbury, 1963).

Demands of care giving include paying for psychiatric treatment, supervision of a mentally ill family member, dealing with societal stigma associated with mental illness, and emotional distress that may result from symptoms of a family member's illness. The sad thing about this burden is the fact that they subject caregivers to life threatening stress-related physical and psychological sicknesses whose end result is not always good (Bos, et al., 2009; Natalie et al., 2003; Adeosun, 2013). As such, this study investigated the experiences and coping strategies among families of patients with schizophrenia in Accra.

5.2.1. Hypothesis one stated that older caregivers (30 years and above) will report lower level of burden than younger (29 years and below) caregivers. Results indicated that no significant difference exists between the level of burden experienced by older caregivers (30 years and above) and younger (29 years and below) caregivers of schizophrenia patients. This implies that caregivers of schizophrenia patients across the various age groups experience similar levels of burden. This means that irrespective of the age of caregivers of schizophrenia patients, they all experience similar levels of burden.

This finding is contradictory to that of other researchers, one of which is that of Feldman and Crandall, (2007). In his related study, Feldman and Crandall, (2007) discovered that younger caregivers experience more stress and burden than their older counterparts.

This disparity in the level of burden was caused by the relatively lack of experience of younger caregivers, and the difficulty they face when they are compelled to let go of the ambitions and focus on caring for the sick (Markowitz, 1998).

5.2.2. Hypothesis two stated that male caregivers will face high level of burden than their female counterparts. Results indicated that no significant difference exist between the level of burden experienced by male and female caregivers of schizophrenia patients. This implies that, both male and female caregivers of schizophrenia patients experience similar levels of burden.

According to Chan, (2011) women encounter more burden than their male counterparts. The researcher explained finding by stating that this may be as a result of the large number of women

caregivers of mentally ill patients when compared to their male counterparts. In other words, more caregivers are females so when the level of caregivers between males and females is measured it may seem females face more burden than their male counterparts. Similarly, the World Federation of Mental Health (2010), globally, about 80% of the caregivers are women and they encounter a lot of burden. This is because these women may be the mothers, wives, or daughter of the patient and are usually with low income. This may be due to the fact that the caregivers spend less time on work of their time. Over the years, researchers have shown that the impact of the women's intensive caregiving can be substantial. Studies such as Adeosun, (2013) showed that middle-aged and older women who provided care for an ill spouse or a spouse with disability were almost six times as likely to have depressive or anxious symptoms as were those who had no caregiving responsibilities (World Federation of Mental Health, 2010; Bos, et al, 2009).

5.2.3. Hypothesis three stated that less educated (Middle school/JSS and below) caregivers will report higher level of burden than well educated (SSS, O & A Level and higher) caregivers. Results revealed that a significant difference exist between the level of burden experienced by less educated and well educated caregivers. Specifically, Middle school/JSS and lesser educated caregivers report higher level of burden, than SSS, O/A Level and higher educated caregivers. This shows that less-educated caregivers of schizophrenia patients face higher levels of burden than well-educated caregivers. As such, differences in level of education significantly influence the level of burden caregivers of schizophrenia patients' experience. This finding is similar to that of Caqueo-Urízar, et al., (2011), who claims that due to their level of education, well-

educated caregivers of schizophrenia patients have more know how on managing stressors that could lead to burden. Due to this they face less burden than their less-educated counterparts. This is the reason why less educated caregivers of schizophrenia patients' face higher caregivers' burden than well-educated caregivers of schizophrenia patients'.

5.2.4. Hypothesis four stated that less educated (Middle school/JSS and below) caregivers will cope better than well educated (SSS, O & A Level and higher) caregivers. Results showed that a significant difference exist between the way less educated (Middle school/JSS and below) and well SSS, O/A Level and higher educated caregivers of schizophrenia patients cope. This implies that, less educated caregivers of schizophrenia patients cope well than well-educated caregivers of schizophrenia patients.

This argument is unique because all-things-being equal it is believed that due to the broader insight well-educated people have about life and how to deal and solve problems, they are good in coping with day to day challenges. By way of explaining the above findings, one can say that because less educated people are relatively less engaged with work and other activities, they are able to make ample time to reset themselves psychologically after each episode of caregiving. This is why less educated people cope better than well-educated caregivers of schizophrenic patients.

The above finding is contradictory to that of Knudson and Coyle, (2002) whose study discovered that caregivers educational background does not influence their ways of coping. Unlike the

finding above which stated that less educated caregivers of schizophrenic patients cope well than their well- educated counterparts. in addition, educated people have the ability to easily learn new coping strategies, because they can easily have access to different sources of coping options.

5.2.5. Hypothesis five stated that a strong relationship will exist between the caregivers' burden and the level of coping. Results indicated that the relationship is significantly zero. This implies that, no relationship exists between the burden faced by caregivers of schizophrenia patients and the way they cope. This implies that the level of burden faced by caregivers does not have any connection or link with the way in which they cope. This finding contradicts that of Gureje and Alem, (2000) who explained that because of the generally negative attitudes people have towards mental illness and the stigmatization that comes with it, caregivers often struggle to cope with the burden that they experience. This shows a strong relationship between caregivers' burden and the ways of coping. This negative perception does not only exist in the society. For instance, Gureje and Alem, (2000) have revealed that policy-makers are often of the opinion that mental illnesses are incurable or, at any rate, unresponsive to orthodox medical practices. Hence, there is little hope for the mentally ill to fully recover and reintegrate into society. The above challenges faced by caregivers of mentally ill patients obviously compounds their burden which significantly influences the way they cope in a negative way (Boampong, 2013).

Similarly, Lazarus and Folkman (1984), have revealed that the stress, strain or burden faced by people significantly affects the way they cope. Often times, families try and cope with their schizophrenia patients for a period of time, but can become frustrated by their seeming lack of

progress in treatment or staying in treatment altogether. This frustration usually affects caregivers more than other family members (Smith, 2006).

5.2.6 Summary of Findings

After testing the five stated hypothesis, results indicated that no significant difference exists between the level of burden experienced by older caregivers (30 years and above) and younger (29 years and below) caregivers of schizophrenic patients. Hence, caregivers of schizophrenia patients across the various age groups experience similar levels of burden. It was further revealed that no significant difference exist between the level of burden experienced by male and female caregivers of schizophrenic patients. This implies that, both male and female caregivers of schizophrenic patients experience similar levels of burden. Results further showed that less the higher the level of education of caregivers the higher they report their level of burden. Additionally, it was revealed that a significant difference exist between Middle school/JSS and below educated caregivers, and SSS, O and A Level and higher educated caregivers of schizophrenic patients cope. It was finally revealed that a significantly no relationship exists between the burden faced by caregivers of schizophrenic patients and the way they cope.

5.2 .7 Conclusion

This study investigated the caregivers burden and coping among families of patients with schizophrenia in Accra. In order to ascertain this, five hypotheses were tested. Results indicated that no significant difference exists between the level of burden experienced by older caregivers (30 years and above) and younger (29 years and below) caregivers of schizophrenia patients. Hence, caregivers of schizophrenia patients across the various age groups experience similar levels of burden. It was further revealed that no significant difference exist between the level of burden experienced by male and female caregivers of schizophrenia patients. This implies that,

both male and female caregivers of schizophrenia patients experience similar levels of burden. Results further showed that less educated (Middle school/JSS and below) caregivers report higher level of burden than well educated (SSS, O & A Level and higher) caregivers. This shows that less-educated caregivers of schizophrenia patients face higher levels of burden than well-educated caregivers.

Additionally, it was revealed that a significant difference exist between the way less educated (Middle school/JSS and below) and well educated (SSS, O & A Level and higher) caregivers of schizophrenia patients cope. This implies that, less educated caregivers of schizophrenia patients cope well than well-educated caregivers of schizophrenia patients. It was finally revealed that no relationship exists between the burden faced by caregivers of schizophrenia patients and the way they cope. It is therefore concluded that demographic factors such as the age and gender had no effect on the level of burden experienced by caregivers of schizophrenia patients. Meanwhile, caregivers' level of education significantly influenced the way they cope with the burden they experience. Generally, the level of burden faced by caregivers had little influence or effect on the ways of coping.

5.2.8 Limitations of the study

The first limitation of this study was the small sample size used. The sample size for this study was one hundred (n=100) respondents. This sample size is relatively small. Another limitation of this study was the limited time the researcher had to use in conducting this study. The researcher had barely a year to conduct this study. An extension of the time frame for this study may have enhanced the outcome of this study. For instance an extension of the time frame would have

given room for the researcher to use a bigger sample size which would have suited the research design (survey).

5.2.9 Recommendations of the study

It is recommended that other researchers should consider using a bigger sample size that fits their target population. When this is done their target population would be duly represented. Future studies should be conducted over a longer period of time so as to give the author the flexibility to build up the study to a more desirable depth. The findings of this particular study have as well provided information on caregivers burden and coping among families of patients with schizophrenia in Accra. This has helped in gaining an in-depth understanding of the research area. This is useful in helping mental health professionals in designing intervention programmes to resolve the adverse effects caregivers' burden and ways of effectively coping with this burden.

REFERENCES

Abdullai (2012). *Ghana: Mental Health.* Accra: Mental Health Aid Ghana

Adeosun, I. I. (2013). Correlates of Caregiver Burden among Family Members of Patients with Schizophrenia in Lagos, Nigeria. *Schizophrenia Research and Treatment*. Retrieved from http://dx.doi.org/1 0.11 55/2013/353809

American Psychological Association, (2014). *Schizophrenia*. Retrieved fromwww.apa.org

American Psychiatric Association, (2006). *Practice Guidelines for the Treatment of Psychiatric Disorders. Compendium 2006*. Arlington, Va: American Psychiatric Press

Antonovsky, A. (1979). *Health, Stress, and Coping*. San Fransisco: Jossey-Bass.

Antonovsky, A. & Kats, R. (1967). The Life Crisis History as a Tool in Epidemiologic Research. *Journal of Health and Social Behavior, 8,* 15-20.

Boon, S., Nugter, A. & en Dijker, A. (2004). Stigmatisering in de wijk. Cognitieve en emotionele determinanten van stigmatisering van psychiatrische patiënten. *Maandblad van Geestelijke Volksgezondheid, 59*, 12, 1006-1017

Bouthner, G. (2015). *What Causes Schizophrenia?* Retrieved fromhttp://www.thechallengesof mentalillness.com/p/what-is-schizophrenia.html

Brichford, C. (2009). *Schizophrenia and Relationships*. Retrieved from http://www.everyday health.com/schizophrenia/schizophrenia-and-relationships.aspx

Broadbent, E., Kydd, R., Sanders, D. & Vanderpyl, J. (2008). Unmet needs and treatment seeking in high users of mental health services: Role of illness perceptions. *Australian and New Zealand Journal of Psychiatry*, *42*, 147-153

Brady, N., McCain, G. (2004). "Living with Schizophrenia: A Family Perspective". *The Online*

Journal of Issues in Nursing, 10, 1. Retrieved from www.nursingworld.org

Bos, E. R. A., Kanner, D., Muris, P., Janssen, B. & Mayer, B. (2009). Mental Illness Stigma and Disclosure: Consequences of Coming out of the Closet. *Issues in Mental Health Nursing*, *30*, 509-513

Boampong, S. M. (2013). *Advocacy and education of mental health in Ghana*. Retrieved from www.forallafrica foundation.com

Byrne, P. (1997*) Psychiatric Stigma*, Past, Passing and to come. *Journal of Royal Society Medicine*, *90*, 618-621.

Cardno, A. G. & Gottesman, I. I. (2000). Twin studies of schizophrenia: from bow-and-arrow concordances to star wars Mx and functional genomics. *American Journal of Medical Genecology, 97*, 12-17

Caqueo-Urízar, A., Gutiérrez-Maldonado, J., Ferrer-García, M., PenalozaSalazar, C., Richards-Araya, D., & Cuadra-Peralta, A. (2011). Attitudes and burden in relatives of patients with schizophrenia in a middle income country. *BMC Family Practice, 12*, 1, 101.

Canavan M., Sipsma H. L., Adhvaryu, A., Ofori-Atta, A., Jack, H., Udry, C., Osei-Akoto, I. and Bradley, E. (2013) Psychological distress in Ghana: associations with employment and lost productivity. *International Journal of Mental Health Systems*. Retrieved from http://www.ijmhs .com/content/7/1/9

Carver, C. S., Scheier, M. F. & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, *56*, 267-283.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, *4*, 92-100.

Carver, C. S. & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology, 66,* 1, 184-195

Caton, C. L., Cournos. F. & Dominguez, B. (1999). Parenting and adjustment in schizophrenia. *Psychiatric Services, 50*, 239-243.

Caton, C. L., Cournos, F., Felix, A. & Wyatt, R. J. (1998). Childhood experiences and current adjustment of offspring of indigent patients with schizophrenia. *Psychiatric Serv*ice, *49*, 86-90.

Chan, W. S. (2011). Global Perspective of Burden of Family Caregivers for Persons with Schizophrenia. *Archives of Psychiatric Nursing*, *25*, 5, 339-349.

Chien, W. T., Chan, S. & Thompson, D. (2006). Effects of mutual support group for Chinese families of people with schizophrenia: 18-Month follow-up. *British Journal of Psychiatry, 189*, 41-49.

Corrigan, P. W., Green, A., Lundin, R., Kubiak, M. A. & Penn, D. L. (2001). Familiarity with and social distance from people who have serious mental illness. Psychiatric Services (Washington, D.C.). *Psychiatric Services*, *52,* 7, 953-8

Corrigan, P. W., Watson, A. C. & Ottati, V. (2003). From whence comes mental illness stigma? *The International Journal of Social Psychiatry*, *49,* 2, 142-57

Corrigan, P. W., Green, A., Lundin, R., Kubiak, M. A. & Penn, D. L. (2001). Familiarity with and social distance from people who have serious mental illness. *Psychiatric Services*, *52*, 7, 953-8

Corrigan, P. W., Watson, A. C. & Ottati, V. (2003). From whence comes mental illness stigma? *The International Journal of Social Psychiatry*, *49,* 2, 142-57

Corrigan, P.W. (2005) Changing Stigma through Contact. *Advances in Schizophrenia and Clinical Psychiatry, 1*, 614-625.

Corrigan, P.W., Kerr, A. & Knudsen, L. (2005). On the stigma of mental illness: Explanatory models and methods for change. *Applied and Preventive Psychology, 11*, 179-190.

Corrigan, P.W., Lurie, B., Goldman, H., Slopen, N., Medasani, K. & Phelan, S. (2005). How adolescents perceive the stigma of mental illness and alcohol abuse. *Psychiatric Services, 56*, 544-550.

Corrigan, P.W. & Watson, A.C. (2005). Findings from the National Comorbidity Survey on the frequency of dangerous behavior in individuals with psychiatric disorders. *Psychiatry Research, 136*, 2-3, 153-162.

Corrigan, P.W., Watson, A.C., Heyrman, M., Warpinski, A., Gracia, G., Slopen, N. & Hall, L.L. (2005). Structural stigma in state legislation. *Psychiatric Services, 56,* 557-563.

Corrigan, P.W., Watson, A.C., Byrne, P., & Davis, K. (2005). Mental illness stigma: Problem of public health or social justice? *Social Work, 50*, 363-368.

Common Wealth Human Rights Initiative Africa (2008). *Human Rights Violations in Prayer Camps and Acces to Mental Health in Ghana*. London: Futprintz Imaging.

Cohen, F. (1984). "Coping" In J.D. Matarazzo, S.M. Weiss, J.A. Herd, N.E. Miller & S.M. Weiss (eds.), *Behavioral Health: A Handbook of Health Enhancement and Disease Prevention*. New York: Wiley,

Cohen, S. Janicki-Deverts, D. Miller, G. E. (2007). Psychological stress and disease. *JAMA, 298,* 14, 1685-1687

Cohen, S., Kamarck, T. and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*, 386-396.

Cook, J. A., Cohler, B. J. & Pickett, S. A. (1997). Lifecourse and severe mental illness: implications for caregiving within the family of later life. *Family Relationships, 46*, 427-436.

Dalky, F. H., (2012). Perception and Coping with Stigma of Mental Illness: Arab Families' Perspectives. *Issues in Mental Health Nursing*, *33*, 486-491

Davis, D. J. & Schulz, C. L. (1998). Grief, parenting, and schizophrenia. *Social Science Medicine*, *46*, 369-379.

Dixon, L., Stewart, B. & Burland, J. (2001). Pilot study of the effectiveness of the family-to-family education program. *Psychiatric Services, 52*, 965-967.

Dixon, L., Adams, C. & Hucksted, A. (2000). Update on Family Psychoeducation for Schizophrenia. *Schizophrenia Bulletin, 26*, l, 5-20.

Essence of Stress Relief, (2015). *Hans Selye's General Adaptation Syndrome.* Retrieved from http://www.essenceofstressrelief.com/general-adaptation-syndrome.html

Explorable Psychology Experiments, (2014). *Case Study Research Design*. Retrieved from https://explorable.com/case-study-research-design

Faydi, E., Funk, M., Kleintjes, S., Ofori-Atta, A., Ssbunnya, J., Mwanza, J., Kim, C. & Flisher, A. (2011). An assessment of mental health policy in Ghana, South Africa, Uganda and Zambia. *Health Research Policy and Systems*, *9* (17). Retrieved from http://www.health-policy-systems.co m /content/9/1/17

Falloon I. R. H. (2002). Cognitive-behavioral family and educational interventions for

schizophrenic disorders. In: Hofmann SG, Tompson MG, eds. *Treating Chronic and Severe Mental Disorders.* New York: Guilford Press, 3-17.

Falloon, I. R. H., Boyd, J. L. & McGill, C. W. (1984). *Family Care of Schizophrenia*. New York: Guilford Press .

Feldman, B. D. & Crandall, S. C. (2007). *Dimensions of Mental Illness Stigma: What about Mental Illness Causes Social Rejection?* Retrieved from http://guilford journals.com /doi/abs/10.1521/jscp.2007.26.2.137

Fournier, O. A. (2011). The Status of Mental Health Care in Ghana, West Africa and Signs of Progress in the Greater Accra Region. *Berkeley Undergraduate Journal*, *24,* 3. Retrieved from http://escholarship.org/uc/item/0gp004t3

Gerson, R., Wong, C., Davidson, L., Malaspina, D., McGlashan, T. & Corcoran, C. (2011). Self-reported coping strategies in families of patients in early stages of psychotic disorder: An exploratory study. *Early Intervention Psychiatry*, *5*, 1, 76–80.

Grad, J. & Sainsbury, P. (1963). Mental illness and the family. *Lancet*, *1*, 544-547

Glanz, K., Rimer, B. K. & Lewis, F. M. (2002). *Health Behavior and Health Education. Theory, Research and Practice.* San Fransisco: Wiley & Sons.

Gureje, O. & Alem, A. (2000). Mental health policy development in Africa. *Bulletin of the World Health Organization*, *78*, 4, 475-482

Ghana News Agency, (2012). *About 90% of mental illness in Ghana attributed to drug abuse*. Retrieved from www.ghanabusinessnews.com

Hanzawa, S., Tanaka, G., Inadomi, H., Urata, M. & Ohta, Y. (2008). Burden and coping strategies in mothers of patients with schizophrenia in Japan. *Psychiatry and Clinical Neurosciences*, *62*, 256-263

Hanzawa, S., Bae J. K., Tanaka, H., Bae, Y. J., Tanaka, G., Inadomi, H., Nakane, Y., Ohta, Y. (2010). Caregiver burden and coping strategies for patients with schizophrenia: comparison between Japan and Korea. *Psychiatry and Clinical Neurosciences*, *64*, 4, 377-86.

Hanzawa, S., Bae, J. K. & Tanaka, H. (2009). Family stigma and care burden of schizophrenia patients: Comparison between Japan and Korea. *Asia-Pacific Psychiatry*, *1*, 120- 129.

Health Promotion Agency, (2006). Public Attitude, Perception and Understanding of Mental Health in Northern Ireland. Ireland. Jorm, A. F. and Wright, A. M. (2008). Influences on young people's stigmatizing attitudes towards peers with mental disorders: National survey of young Australians and their parents. *The British Journal of Psychiatry, 192*, 144-149.

Hackman, A. & Dixon, L. (2008). *Issues in Family Services for Persons with Schizophrenia*. Retrieved from http://www.psychiatrictimes.com/schizophrenia/issues-family-services-persons-schizophrenia

Jack, H., Canavan, M, Ofori-Atta, A., Taylor L., Bradley E. (2013). Recruitment and Retention of Mental Health Workers in Ghana. *PLOS one*. Retrieved from http://www.plo sone.org/ar icle/info%3Adoi %2F10.1371%2Fjournal.pone.0057940

Jenkins, H. J. & Carpenter-Song, A. E. (2009). Awareness of Stigma among Persons with Schizophrenia Marking the Contexts of Lived Experience. *The Journal of Nervous and Mental Disease*, *197*, 7, 520-5209.

Jorm, A. F., Jacobsn, P. A., and Chrisztensen, H. (1999). Attitude towards people with mental disorder: A survey of the Australian Public and health professionals. *Australian New Zealand Journal of Psychiatry*, *33*, 7-83

Jungbauer, J., Wittmund, B., Dietrich, S. & Angermeyer, M. C. (2004). The disregarded

caregivers: subjective burden in spouses of schizophrenia patients. *Schizophrenia Bulletin, 30*, 665-675.

Knudson, B., & Coyle, A. (2002). Parents' experiences of caring for sons and daughters with schizophrenia: a qualitative analysis of coping. *European Journal of Psychotherapy, Counselling & Health*, *5*, 2, 169-183.

Landeen, J., Whelton, C. & Dermer S. (1992). Needs of well siblings of persons with schizophrenia. *Hospital and Community Psychiatry, 43*, 266-269.

Lazarus, R. S. (1966). *Psychological Stress and the Coping Process.* New York: McGraw-Hill

Lazarus, R. S. (1966). *Psychological Stress and the Coping Process.* New York: McGraw-Hill

Lazarus, R. S. & Cohen, J. B. (1977). "Environmental Stress". In I. Altman and J.F. Wohlwill (eds.), *Human Behavior and Environment.* (Vol 2) New York: Plenum.

Lehman, A. F., & Steinwachs, D. M. (1998). Patterns of usual care for schizophrenia: Initial results from the schizophrenia patient outcomes research team (PORT) client survey. *Schizophrenia Bulletin*, *24*, 1, 11-20.

Lehman, A. F., & Steinwachs, D. M. (1998). At issue: Translating research into practice: The schizophrenia patient outcomes research team (PORT) treatment recommendations. *Schizophrenia Bulletin, 24*, 1, 1-10.

Lehman, A. F. & Steinwachs, D. M. (1998). Translating research into practice: the Schizophrenia Patient Outcomes Research Team (PORT) treatment recommendations. *Schizophrenia Bull*etin, 24, 1-10.

Lefly, H. P. (1984). Behavior manifestations of mental illnessss. In: Hatfield AB, Lefley HP, eds. *Families of the Mentally Ill: Coping and Adaptation.* New York: Guilford Press

Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Lobban, F., Barrowclough, C. and Jones, S. (2005). Assessing cognitive representations of mental health problems. II. The illness perception questionnaire for schizophrenia: Relatives' version. *British Journal of Clinical Psychology*, *44*, 163-179. Retrieved from www.bpsjournals.co.uk

Markowitz F. E. (1998). The effects of stigma on the psychological well-being and life satisfaction of persons with mental illness. *Journal of Health and Social Behaviour*, *39*, 4, 335-47.

Magliano, L., Fadden, G., Madianos, M., Almeida, C. M. J., Held, T., Guarneri, M., Marasco, C., Tosini, P. & Maj, M. (1998). Burden on the families of patients with schizophrenia: results of the BIOMED I study. *Social Psychiatry and Psychiatric Epidemiology*, *33*, 9, 405-412.

MaGPIe Research Group. (2005). General practitioners' perceptions of barriers to their provision of mental healthcare: a report on Mental Health and General Practice Investigation (MaGPIe). *The New Zealand Medical Journal*, *16,* 118, 1222-1654

McCarth, L. (2013). *Depression is the leading mental problem in Ghana and not madness***.** Retrieved from www.kintampo-hrc.org

Mcdonell, G. M., Short, A. R., Berry, M. C., Dyck, G. D. (2003). Burden in Schizophrenia Caregivers: Impact of Family Psychoeducation and Awareness of Patient Suicidality. *Family Process, 42, 1,* 91-103

McFarlane, W. R. (2002). Empirical studies of outcome in multifamily groups. In: McFarlane

WR. *Multifamily Groups in the Treatment of Severe Psychiatric Disorders*. New York: Guilford Press. 49-70.

Menil, D. V., Douptcheva, N. O. A, Hill, A. G., Yaro, P. & Aikins, D. A., (2012). Symptoms of Common Mental Disorders and Their Correlates among Women in Accra, Ghana: A Population Based Survey. *Ghana Medical Journal, 46,* 2.

Mental Health Commission, (2008). Achieving the Promise: Transforming Mental Health Care in America. Retrieved from http://www.mentalhealthcommission.gov/reports/Final Report/toc. html.

Michie, S., (2002). Causes and Management of Stress at Work**.** *Occupational Environmental Medicine, 59*, 1, 67-72. Retrieved from http://oem.bmj.com/content/59/1/67.long

Moomal, H., Jackson, B. P., Stein, J. D., Herman, A., Myer, L., Seedat, S., Madela-Mntla, E. & Williams, D. R. (2009). Perceived discrimination and mental health disorders, *The South African Stress and Health study, 99,* 5, 383-389

Mueser, T. K., Valentiner, P. D. & Agresta, J. (1997). Coping With Negative Symptoms of Schizophrenia: Patient and Family Perspectives. *Schizophrenia Bulletin, 23*, 2, 329-339

National Survey of Science and Mathematics, (2000). *Survey Research*. Retrieved from http://2000survey.horizonresearch.com/

National Institute of Mental Health, (1990). *Clinical training in serious mental illness*. Washington, DC: U.S. Government Printing Office.

Natalie, C.; Ian, M.D.; Steve, H. & Paul, H. (2003). Measuring chronic patients' feelings of being a burden to their caregivers: Development and preliminary validation of a scale. *Official Journal of Medical Care Section*, *41,* 1, 110-118.

The National Institute of Mental Health (NIMH), (2016). *Schizophrenia*. Retrieved fromhttps://w

ww.nimh.nih.gov/health/topics/schizophrenia/index.shtml

Ofori-Atta, A., Read, U.M., Lund, C., and the MHaPP Research Programme Consortium (2010). A situation analysis of mental health services and legislation in Ghana: challenges for transformation. *African Journal of Psychiatry*, *13*, 99-108

Ofori-Atta, A., Read, U. M. & Lund, C. (2010). A situation analysis of mental health services and legislation in Ghana: challenges for Transformation. *Africa Journal of Psychiatry*, *13*, 99-108

Panayiotopoulos, C., Pavlakis, A. & Apostolou, M. (2013). Family burden of schizophrenic patients and the welfare system; the case of Cyprus. *International Journal of Mental Health Systems*, *7*, 13. Retrieved from http://www.ijmhs.com/content/7/1/13

Perlick, D. A., Rosenheck, R. A. & Kaczynski, R. (2006). Components and correlates of family burden in schizophrenia. *Psychiatric Service,* 57, 1117-1125.

Potokar, D. N., Stein, C. H., Darrah, O. A., Taylor, B. C. andSponheim, S. R., (2012). Knowledge and attitudes about personalized mental health genomics: narratives from individuals coping with serious mental illness. *Community Mental Health Journal, 48*, 5, 584-91

Psychology Today, (2010). *Diagnostic dictionary*. Retrieved from www.psychologytoday.com

Psychologist World, (2015). *General Adaptation Syndrome*. Retrieved from https://www.psychologistworld.com/stress/general-adaptation-syndrome.php

Quinn, N., (2007). Beliefs and community responses to mental illness in Ghana: The experiences of family carers. *International Journal of Social Psychiatry*, *53,* 2, 175-188. Retrieved from www.psychiatryisp.sagepub.com

Roberts, J. S. and Connell, C. M, (2000). Illness representations among first-degree relatives of people with Alzheimer disease. *Alzheimer Disease and Associated Disorders*, *14,* 3, 129-136

Ryan, K. A. (1993). Mothers of adult children with schizophrenia: an ethnographic study. *Schizophrenia Research, 11*, 21-31.

Sanders, D., Kydd, R., Morunga, E. & Broadbent, E. (2011). Differences in patients' perceptions of Schizophrenia between Maori and New Zealand Europeans. *Australian and New Zealand Journal of Psychiatry*, *45*, 483-488

Saunders, C. J. (2003). Families living with severe mental illness: A Literature Review. *Issues in Mental Health Nursing*, *24*, 175-198

Senah, K. (2004). In the mighty name of Jesus: Faith healing and help seeking behavior in Ghana, Legon. *Journal of Psychology, 1*, 59-70

Schizophrenia.com (2004). *The First Signs of Schizophrenia (Personal Stories from the Support Group Discussions)*. Retrieved from www.schizophrenia.com

Scazufca, M. & Kuipers, E. (1999). Coping strategies in relatives of people with schizophrenia before and after psychiatric admission. *British Journal of Psychiatry*, *174*, 154-158.

Schene, H. A., Wijngaarden, B. & Koeter, W. J. M. (1998). Family Caregiving in Schizophrenia: Domains and Distress. *Schizophrenia Bulletin, 24*, 4.

Schulze, B. & Angermeyer, C. M. (2003). Subjective experiences of stigma. A focus group study of schizophrenic patients, their relatives and mental health professionals. *Social Science & Medicine, 56*, 299-312

Schizophrenia Research Institute, (2013). *The Effect on Families*. Retrieved from http://www. schizophreniaresearch.org.au/schizophrenia/the-effect-on-families/

Schmid, R., Neuner, T., Cording, C. & Spiessl, H. (2006). Schizophrenic patient's quality of life: association with coping, locus of control, subjective well-being, satisfaction and patient-judged caregiver burden. *Psychiatric Prax*. *33*, 337-343.

Sipsma H., Ofori-Atta A. Canavan M., Osei-Akoto I., Udry C. & Bradley E., (2013). Poor mental health in Ghana: who is at risk? *BMC Public Health,* 13-288. Retrieved from http://www.biomedcentral.com/1471-2458/13/288

Sincero, M. S. (2016). *Theories of Coping.* Retrieved from https://explorable.com/theories-of-coping

Slaikeu, A. K. (1990). *Material taken from: Crisis Intervention: A Handbook for Practice and Research*. Boston, Massachusetts: Pearson Education Company

Stern S., Doolan, M., Staples E., Szmukler, G. L. &Eisler, I. (1999). Disruption and reconstruction: narrative insights into the experience of family members caring for a relative diagnosed with serious mental illness. *Family Process*, *38,* 3, 353-69

Shibre, T., Negash, A., Kullgren, G., Kebede, D., Alem, A., Fekadu, A., Fekadu, D., Medhin, G. & Jacobsson, L. (2001). Perception of stigma among family members of individuals with schizophrenia and major affective disorders in rural Ethiopia. *Society of Psychiatry Psychiatric Epidemiology*, *36*, 299-303

Ståhlberg, G., Ekerwald, H. & Hultman, C. M. (2004). At issue: siblings of patients with schizophrenia: sibling bond, coping patterns, and fear of possible schizophrenia heredity. *Schizophrenia Bull*etin, *30*, 445-458.

Smith, G. C. (2003). Patterns and predictors of service use and unmet needs among aging families of adults with severe mental illness. *Psychiatric Services, 54*, 871-877.

Ssebunnya, J., Kigozi, F., Lund, C., Kizza, D. & Okello, E. (2009). Stakeholder perceptions of

mental health stigma and poverty in Uganda. *BMC International Health and Human Rights*, *9,* 5. Retrieved from http://www.biomedcentral.com/1472-698X/9/5

Sreeja, I. Sandhya, G. Rakesh, I. & Singh. M. (2008). Comparison of Burden between Family Caregivers of Patients Having Schizophrenia and Epilepsy. *The Internet Journal of Epidemiology*, *6*, 2.

Smith, B. (2006). *Helpful Hints about Schizophrenia for Family Members and Others*. *Psych Central*. Retrieved on April 13, 2014, from http://psychcentral.com/lib/helpful-hints-about-schizophrenia-for-family-members-and-others/000706

Smith, T. W. (2006). Blood, Sweat and Tears: Exercise in the Management of Mental and Physical Health Problems. *Clinical Psychology: Science and Practice*, *13*, 2, 198–202.

Smith, M. & Segal, J. (2016). *Understanding Schizophrenia*. Retrieved fromhttp://www.helpguide.org/articles/schizophrenia/schizophrenia-signs-types-and-causes.htm

Smith, B. (2015). Helpful Hints about Schizophrenia for Family Members & Others. Retrieved from http://psychcentral.com/lib/helpful-hints-about-schizophrenia-for-family-members-and-others/

Solomon P. & Draine J. (1995). Subjective burden among family members of mentally ill adults: relation to stress, coping, and adaptation. *American Journal of Orthopsychiatry, 65*, 419-427.

Solomon, P. (1997). Moving from psychoeducation to family education for families of adults with serious mental illness. *Psychiatric Service, 47*, 1364-1370.

Taylor, V., Fuggle, P. and Charman, T. (2001).Well Sibling Psychological Adjustment to Chronic Physical Disorder in a Sibling: How Important is Maternal Awareness of Their

Illness Attitudes and Perceptions? *Journal of Child Psychol*. *Psychiatry, 42*, 7, 953-962

The Kintampo Project (2013).*The Mental Health System in Ghana2011 / 2012; a situational Analysis based on an assessment using the World Health Organization – Assessment Instrument for Mental Health Systems (WHO-AIMS).* Accra: The Ministry of Health

Turkson, S. N. A. (2000). Schizophrenia - The Spirit Possessed 23 Year Old Male from Rural Kpando Dzoanti, Volta Region in Ghana: Case Report. *East African Medical Journal*, *77* 11, 629-630.

Unite For Sight, (2013). *Module 7: Cultural Perspectives on Mental Health. Stigma, Discrimination and Mental Health*. Retrieved from www.uniteforsight.org/mental-health /module7

University of Twente, (2014). *Transactional model of stress and coping*. Retrieved from https:// www.utwente.nl/cw/theorieenoverzicht/Theory%20Clusters/Health%20Communication/transactional_model_of_stress_and_coping/

Wahl, O. (1995*). Media madness: Public images of mental illness*. New Jersey: Rutgers University Press.

Webb, C., Pfeiffer, M. & Mueser, K. T. (1998). Burden and well-being of caregivers for the severely mentally ill: the role of coping style and social support. *Schizophrenia Research, 34*, 169-180.

World Health Organization, (2010). *The World Health Report 2011. Mental Health: New Understanding, New Hope.* Geneva: World Health Organization

World Health Organization, (2013). *Mental health: a state of well-being*. Retrieved from www.who.int/en

Zanetti, A. C. & Galera, S. A. (2007). The impact of schizophrenia on the family. *Review de Gaucha Enferm*, *28*, 3, 385-92

APPENDIX A

METHODIST UNIVERSITY COLLEGE GHANA

QUESTIONNAIRE

Dear Participant,

I am a second degree student at the Methodist University College Ghana conducting a study on the EXPERIENCES AND COPING STRATEGIES AMONG FAMILIES OF PATIENTS WITH SCHIZOPHRENIA. I will be grateful if you could assist me by responding to the questions in the questionnaire below. Information provided would be treated with strict confidentiality, and would be used only for academic purposes. Your responses will not identify you in any manner. Your participation is voluntary. Please do not write your name. Thank you for participating.

SECTION A (Demographic data)

*Please respond to the questions below by **ticking** or **indicating** the answers as might be applicable to you.*

1. Age range: Below – 25yrs [ ] 25 – 29yrs [ ] 30 – 39yrs [ ] 40 – 49yrs [ ]
50yrs & above [ ]

2. Gender: Male [ ] Female [ ]

3. Marital status: Single [ ] Married [ ] Divorced [ ] Widowed [ ].

4. What is your religion? Christian [ ] Muslim [ ] Other *(please state)* _____

5. Employment status: Employed [ ] Unemployed [ ] Other *(please state)* _____

6. What is your highest level of education? No formal education [ ], Middle school/JSS [ ]
SSS, O & A Level [ ] Tertiary [ ] Postgraduate [ ] Other _____

7. How long has your relative been ill? Below – 1year [ ] 1 – 3yrs [ ] 3 – 5yrs [ ]
6 – 9yrs [ ] 10 – 15yrs [ ] 16yrs & over [ ]

8. How would you describe mental illness?

_____

_____

_____

SECTION B (Zarit Burden Interview)

Please ***tick*** the response the best describes how you feel by using the scale below

Never = **0** Rarely = **1** Sometimes = **2** Quite Frequently = **3** Nearly Always = **4**

#	ITEMS	0	1	2	3	4
1	Do you feel that your relative asks for more help than he/she needs?	0	1	2	3	4
2	Do you feel that because of the time you spend with your relative that you don't have enough time for yourself?	0	1	2	3	4
3	Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?	0	1	2	3	4
4	Do you feel embarrassed over your relative's behaviour?	0	1	2	3	4
5	Do you feel angry when you are around your relative	0	1	2	3	4
6	Do you feel that your relative currently affects our relationships with other family members or friends in a negative way?	0	1	2	3	4
7	Are you afraid what the future holds for your relative?	0	1	2	3	4
8	Do you feel your relative is dependent on you?	0	1	2	3	4
9	Do you feel strained when you are around your relative?	0	1	2	3	4
10	Do you feel your health has suffered because of your involvement with your relative?	0	1	2	3	4
11	Do you feel that you don't have as much privacy as you would like because of your relative?	0	1	2	3	4
12	Do you feel that your social life has suffered because you are caring for your relative?	0	1	2	3	4
13	Do you feel uncomfortable about having friends over because of your relative?	0	1	2	3	4
14	Do you feel that your relative seems to expect you to take care of him/her as if you were the only one he/she could depend on?	0	1	2	3	4
15	Do you feel that you don't have enough money to take care of your relative in addition to the rest of your expenses?	0	1	2	3	4
16	Do you feel that you will be unable to take care of your relative much longer?	0	1	2	3	4
17	Do you feel you have lost control of your life since your relative's illness?	0	1	2	3	4
18	Do you wish you could leave the care of your relative to someone else?	0	1	2	3	4
19	Do you feel uncertain about what to do about your relative?	0	1	2	3	4
20	Do you feel you should be doing more for your relative?	0	1	2	3	4
21	Do you feel you could do a better job in caring for your relative?	0	1	2	3	4
22	Overall, how burdened do you feel in caring for your relative?	0	1	2	3	4

SECTION C (Cope Inventory)

Please read each item below and think about how you generally have coped with stressful encounters that you have experienced. Using the following rating scale, to what extent did you generally use the strategies listed below.

1 = I haven't been doing this at all, **2** = I've been doing this a little bit,

3 = I've been doing this a medium amount, **4** = I've been doing this a lot

#	ITEMS	0	1	2	3	4
1	I've been turning to work or other activities to take my mind off things.	0	1	2	3	4
2	I've been concentrating my efforts on doing something about the situation I'm in.	0	1	2	3	4
3	I've been saying to myself "this isn't real".	0	1	2	3	4
4	I've been using alcohol or other drugs to make myself feel better.	0	1	2	3	4
5	I've been getting emotional support from others.	0	1	2	3	4
6	I've been giving up trying to deal with it.	0	1	2	3	4
7	I've been taking action to try to make the situation better.	0	1	2	3	4
8	I've been refusing to believe that it has happened.	0	1	2	3	4
9	I've been saying things to let my unpleasant feelings escape.	0	1	2	3	4
10	I've been getting help and advice from other people.	0	1	2	3	4
11	I've been using alcohol or other drugs to help me get through it.	0	1	2	3	4
12	I've been trying to see it in a different light, to make it seem more positive.	0	1	2	3	4
13	I've been criticizing myself.	0	1	2	3	4
14	I've been trying to come up with a strategy about what to do.	0	1	2	3	4
15	I've been getting comfort and understanding from someone.	0	1	2	3	4
16	I've been giving up the attempt to cope.	0	1	2	3	4
17	I've been looking for something good in what is happening.	0	1	2	3	4
18	I've been making jokes about it.	0	1	2	3	4
19	I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	0	1	2	3	4
20	I've been accepting the reality of the fact that it has happened.	0	1	2	3	4
21	I've been expressing my negative feelings.	0	1	2	3	4

22	I've been trying to find comfort in my religion or spiritual beliefs.	0	1	2	3	4
23	I've been trying to get advice or help from other people about what to do.	0	1	2	3	4
24	I've been learning to live with it.	0	1	2	3	4
25	I've been thinking hard about what steps to take.	0	1	2	3	4
26	I've been blaming myself for things that happened.	0	1	2	3	4
27	I've been praying or meditating.	0	1	2	3	4
28	I've been making fun of the situation	0	1	2	3	4

1 = I haven't been doing this at all, **2** = I've been doing this a little bit,

3 = I've been doing this a medium amount, **4** = I've been doing this a lot

APPENDIX B

SPSS OUTPUT

Frequency Table

Agerange

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below – 25yrs	21	21.0	21.0	21.0
	25 – 29yrs	44	44.0	44.0	65.0
	30 – 39yrs	23	23.0	23.0	88.0
	40 – 49yrs	8	8.0	8.0	96.0
	50yrs & above	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	59	59.0	59.0	59.0
	Female	41	41.0	41.0	100.0
	Total	100	100.0	100.0	

Marialstatus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	54	54.0	54.0	54.0
	Married	30	30.0	30.0	84.0
	Divorced	6	6.0	6.0	90.0
	Widowed	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Whatisyourreligion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christian	48	48.0	48.0	48.0
	Muslim	52	52.0	52.0	100.0
	Total	100	100.0	100.0	

Employmentstatus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employes	51	51.0	51.0	51.0
	Unemployed	49	49.0	49.0	100.0
	Total	100	100.0	100.0	

Highestlevelofeducation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	38	38.0	38.0	38.0
	Middle school/JSS	43	43.0	43.0	81.0
	SSS, O & A Level	15	15.0	15.0	96.0
	Tertiary	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Educatesanduneducated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Uneducated	42	42.0	42.0	42.0
	Educated	58	58.0	58.0	100.0
	Total	100	100.0	100.0	

Durationofrelativesillness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below – 1year	42	42.0	42.0	42.0
	1-3 years	28	28.0	28.0	70.0
	3 – 5years	18	18.0	18.0	88.0
	6-9 years	5	5.0	5.0	93.0
	10 – 15years	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

Oneway

Descriptives

ZaritBurdenInterviewTotal

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Below – 25yrs	21	43.6190	7.31762	1.59684	40.2881	46.9500
25 – 29yrs	43	41.6279	6.45506	.98439	39.6413	43.6145
30 – 39yrs	23	45.7391	6.89675	1.43807	42.7568	48.7215
40 – 49yrs	8	44.8750	3.87068	1.36849	41.6390	48.1110
50yrs & above	3	43.3333	3.21455	1.85592	35.3479	51.3187
Total	98	43.3367	6.63627	.67036	42.0062	44.6672

Descriptives

ZaritBurdenInterviewTotal

	Minimum	Maximum
Below – 25yrs	33.00	57.00
25 – 29yrs	30.00	55.00
30 – 39yrs	35.00	56.00
40 – 49yrs	40.00	51.00
50yrs & above	41.00	47.00
Total	30.00	57.00

ANOVA

ZaritBurdenInterviewTotal

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	278.912	4	69.728	1.624	.175
Within Groups	3992.975	93	42.935		
Total	4271.888	97			

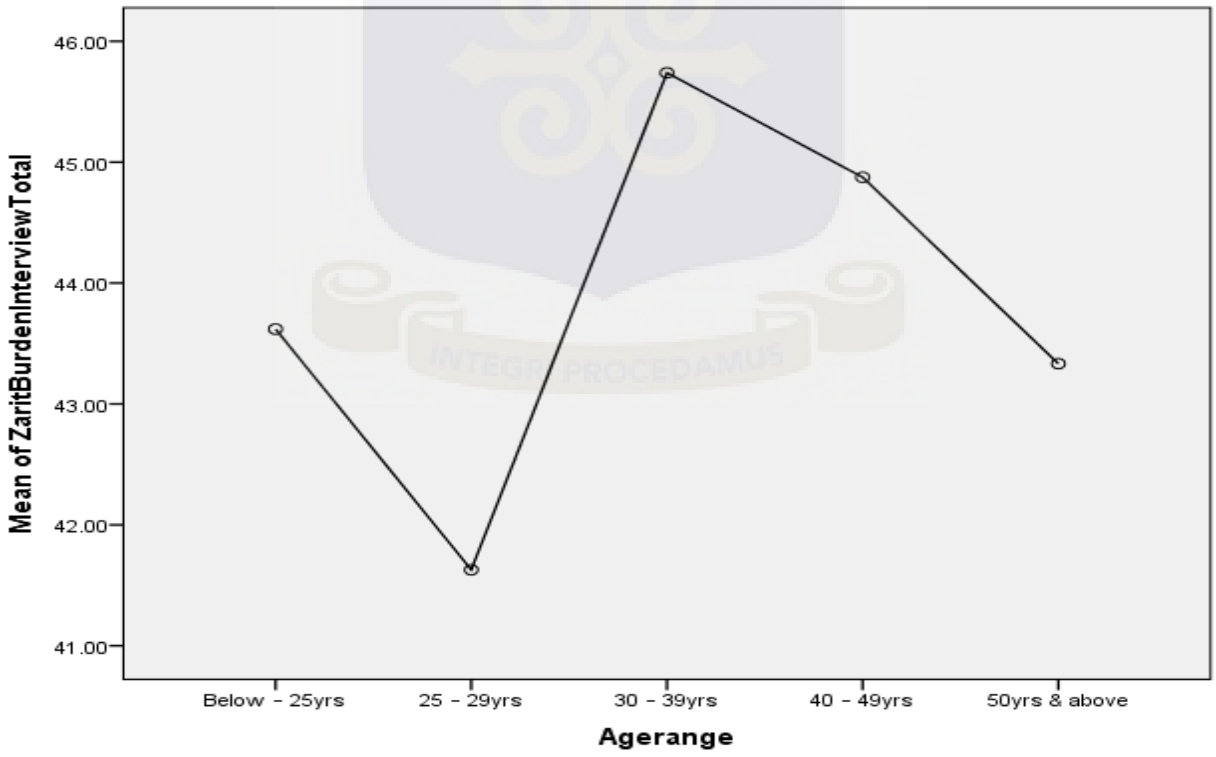
Robust Tests of Equality of Means

ZaritBurdenInterviewTotal

	Statistic[a]	df1	df2	Sig.
Welch	1.545	4	14.071	.243

a. Asymptotically F distributed.

Means Plots



T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
ZaritBurdenInterviewTotal	Male	57	43.8596	6.86461	.90924
	Female	41	42.6098	6.31616	.98642

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
ZaritBurdenInterviewTotal	Equal variances assumed	.105	.747	.919
	Equal variances not assumed			.932

Independent Samples Test

		t-test for Equality of Means		
		df	Sig. (2-tailed)	Mean Difference
ZaritBurdenInterviewTotal	Equal variances assumed	96	.360	1.24989
	Equal variances not assumed	90.290	.354	1.24989

Independent Samples Test

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
ZaritBurdenInterviewTotal	Equal variances assumed	1.36005	-1.44979	3.94958
	Equal variances not assumed	1.34154	-1.41520	3.91499

Oneway

Descriptives

ZaritBurdenInterviewTotal

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
No formal education	36	45.8611	5.33534	.88922	44.0559	47.6663
Middle school/JSS	43	42.2326	7.40604	1.12941	39.9533	44.5118
SSS, O & A Level	15	41.6667	5.83911	1.50765	38.4331	44.9003
Tertiary	4	38.7500	5.37742	2.68871	30.1933	47.3067
Total	98	43.3367	6.63627	.67036	42.0062	44.6672

Descriptives

ZaritBurdenInterviewTotal

	Minimum	Maximum
No formal education	37.00	56.00
Middle school/JSS	30.00	57.00
SSS, O & A Level	32.00	51.00
Tertiary	33.00	46.00
Total	30.00	57.00

ANOVA

ZaritBurdenInterviewTotal

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	407.824	3	135.941	3.307	.024
Within Groups	3864.063	94	41.107		
Total	4271.888	97			

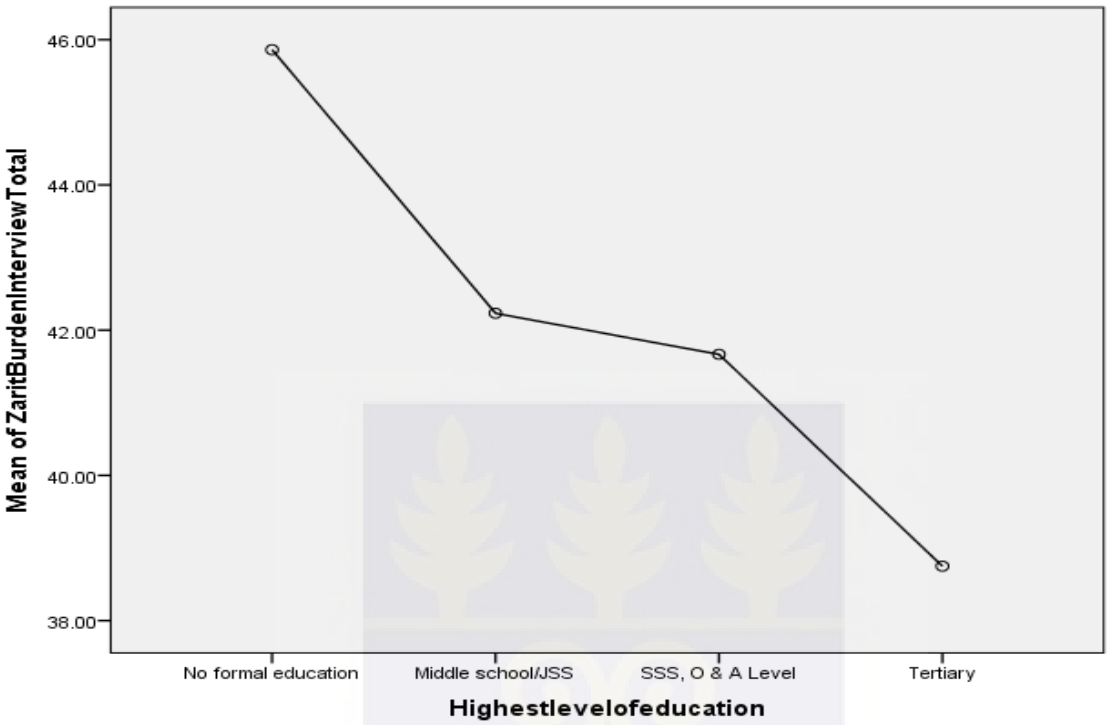
Robust Tests of Equality of Means

ZaritBurdenInterviewTotal

	Statistic[a]	df1	df2	Sig.
Welch	3.886	3	13.585	.034

a. Asymptotically F distributed.

Means Plots



Oneway

Descriptives

CopeInventoryTotal

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
No formal education	36	54.7500	7.75104	1.29184	52.1274	57.3726
Middle school/JSS	40	58.4750	8.21814	1.29940	55.8467	61.1033
SSS, O & A Level	15	51.0667	5.70046	1.47185	47.9099	54.2235
Tertiary	4	48.7500	2.98608	1.49304	43.9985	53.5015
Total	95	55.4842	8.03564	.82444	53.8473	57.1212

Descriptives

CopeInventoryTotal

	Minimum	Maximum
No formal education	40.00	74.00
Middle school/JSS	41.00	79.00
SSS, O & A Level	41.00	60.00
Tertiary	45.00	52.00
Total	40.00	79.00

ANOVA

CopeInventoryTotal

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	851.318	3	283.773	4.949	.003
Within Groups	5218.408	91	57.345		
Total	6069.726	94			

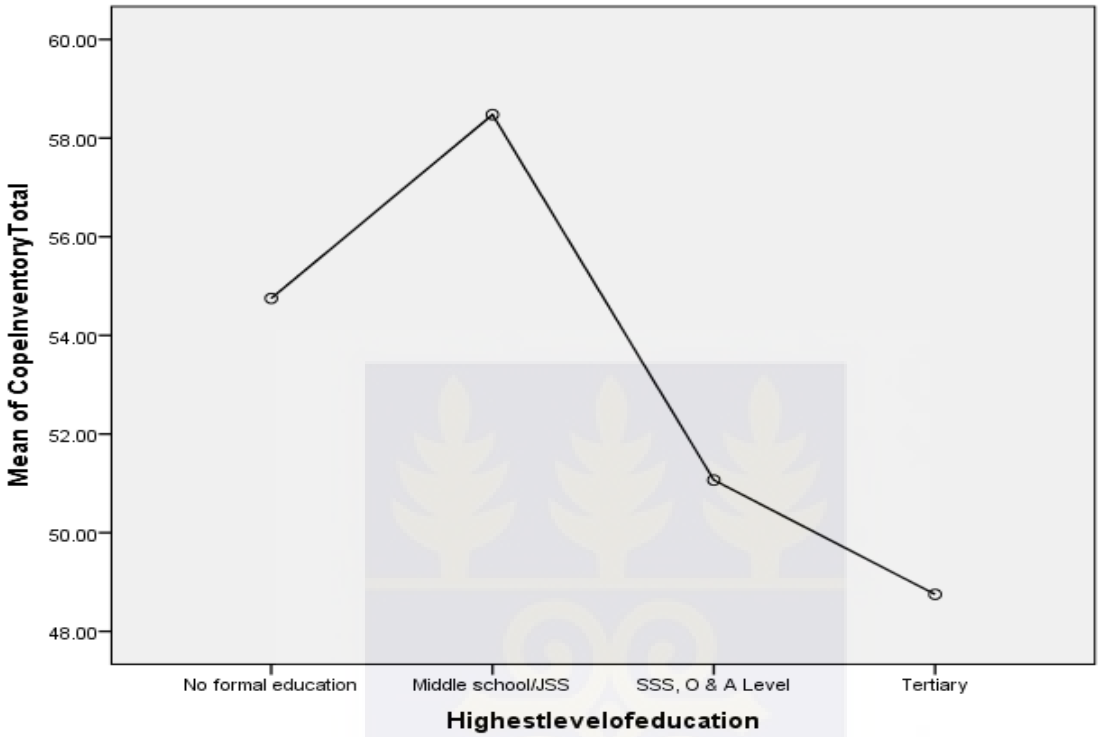
Robust Tests of Equality of Means

CopeInventoryTotal

	Statistic[a]	df1	df2	Sig.
Welch	8.801	3	18.015	.001

a. Asymptotically F distributed.

Means Plots



Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
ZaritBurdenInterviewTotal	43.3367	6.63627	98
CopeInventoryTotal	55.4842	8.03564	95

Correlations

		ZaritBurdenInterviewTotal	CopeInventoryTotal
ZaritBurdenInterviewTotal	Pearson Correlation	1	-.063
	Sig. (1-tailed)		.274
	Sum of Squares and Cross-products	4271.888	-310.161
	Covariance	44.040	-3.371
	N	98	93
CopeInventoryTotal	Pearson Correlation	-.063	1
	Sig. (1-tailed)	.274	
	Sum of Squares and Cross-products	-310.161	6069.726
	Covariance	-3.371	64.572
	N	93	95