UNIVERSITY OF CAPE COAST

INFLUENCE OF EMOTIONAL INTELLIGENCE ON THE QUALITY OF LIFE OF MENOPAUSAL WOMEN IN THE KUMASI METROPOLIS

ESTHER ADDAE

2020

Digitized by Sam Jonah Library

© Esther Addae

University of Cape Coast

UNIVERSITY OF CAPE COAST

INFLUENCE OF EMOTIONAL INTELLIGENCE ON THE QUALITY OF LIFE OF MENOPAUSAL WOMEN IN THE KUMASI METROPOLIS

BY

ESTHER ADDAE

Thesis submitted to the Department of Education and Psychology in the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfillment of requirements for the award of Master of Philosophy degree in Clinical Health Psychology

MAY 2020

Digitized by Sam Jonah Library

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Name:

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:	Date:
Name:	
Co-Supervisor's Signature:	Date:
Name:	

ABSTRACT

The study sought to determine the relationship between emotional intelligence and quality of life, and the moderating role of marital status, educational level and age among menopausal women in the Kumasi Metropolis. The Descriptive survey design with a sample size of 260 respondents were selected through the multistage sampling procedure. Questionnaires were used and data was generally analyzed using Frequencies and Percentages, Mean and Standard Deviation and Multivariate Regression. Also Process approach for testing moderation was employed. Analyses of results revealed that, hot flushes, accomplishing less, decrease in stamina for rigorous activity and insufficient vaginal secretion during intercourse were the most common menopausal symptom of vasomotor, psychosocial, physical and sexual respectively. Again, menopausal women experienced a high severity of symptoms indicating a low quality of life. In addition, majority of middle aged women had a low emotional intelligence level. Further, no relationship was found between emotional intelligence and quality of life. Also, marital status and educational level did not moderate the relationship between emotional intelligence and quality of life. The study however, found age to moderate the relationship between emotional intelligence and quality of life. Based on the findings it is recommended that, policy makers should endeavor to put in measures help improve emotional intelligence of women and to educate women on menopause and its associated symptoms and also provide opportunities for support to help women cope better with the menopause transition.

KEY WORDS

Quality of Life (QOL)

Emotional Intelligence (EI)

Menopause

Women

ACKNOWLEDGEMENTS

This thesis would not have been possible without the assistance and encouragement of many people. Firstly, my profound appreciation goes to my supervisors Mr. Joseph Kwarteng Ofosuhene-Mensah and Dr. Kenneth Asamoah Gyimah both of the Department of Education and Psychology, for their guidance, immense support, useful suggestions, criticisms and encouragement. I am very grateful.

I am also thankful to the Department of Education and Psychology for facilitating the thesis process, Francis Ankomah, Frank Opoku Boahen, Euodia Yaa Ocran, Rev Mrs. Angelina Ogyire and Sarah Frempong, for their unwavering support. I am thankful to the leaders of the various groups and individuals who helped to facilitate the field work. Finally, my heartfelt appreciation goes to Daniel Tetteh Kumatey, The Addai family and Mr. Gideon Kwesi Obosu and all those who contributed immensely throughout the writing of this thesis. I am really very grateful to you all.

v

DEDICATION

To my Parent Mr. Isaac Addai & Mrs. Alice Oppong Addai

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENT	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
CHAPTER ONE: INTRODUCTION	1
Background to the Study	1
Statement of the Problem	7
Purpose of the Study	10
Research Objectives	10

Research Questions	11
Research Hypothesis	11
Significance of the Study	12
Delimitations	13
Limitations	13
Definition of Terms	14
Organisation of the Study	14
CHAPTER TWO: LITERATURE REVIEW	16
Introduction	16
Theoretical Framework	16
Schlosberg's Transition Theory	16
Cognitive Behaviour Model/Self-regulatory Model	20
Trait Model of Emotional Intelligence	21
Concept of Menopause	26
Overview of Menopause	26

Physiology of Menopause	26
Stages of Menopause	27
Symptoms of Menopause	29
Empirical Review	31
Menopause Symptoms and Prevalence	31
Menopause and Quality of Life	37
Emotional Intelligence and Middle aged Women	39
Quality of Life and Emotional Intelligence	41
Marital Status and Emotional Intelligence	44
Educational Level and Emotional Intelligence	46
Age and Emotional Intelligence	48
Conceptual Framework	51
Chapter Summary	52
CHAPTER THREE: RESEARCH METHODS	55
Introduction	55

Research Design	55
Study Area	56
Population	58
Inclusion Criteria	58
Exclusion Criteria	58
Sample and Sampling Procedure	59
Data Collection Instrument	60
Menopause-specific Quality of Life Questionnaire	61
Trait Emotional Intelligence Questionnaire	62
Pilot-testing of the Instrument	63
Validity of the Instrument	64
Reliability of the Instrument	64
Ethical Consideration	66
Data Collection Procedures	67
Data Processing and Analysis	68

Chapter Summary	72
CHAPTER FOUR: RESULTS AND DISCUSSION	73
Introduction	73
Background Characteristics of Respondents	74
Research Question One	76
Research Question Two	79
Research Question Three	82
Hypothesis One	85
Hypothesis Two	89
Hypothesis Three	93
Hypothesis Four	98
Discussion of Research Findings	105
Explaining of Findings in Light Theoretical Framework	117
CHAPTER FIVE: SUMMARY, CONCLUSION AND	
RECOMMENDATION	121
Summary	121

xi

Overview of the Study	121
Key Findings	122
Conclusion	123
Recommendations for Policy and Practice	124
Suggestion for Future Research	125
REFERENCES	126
APPENDICES	
Appendix A: Questionnaire	146
Appendix B: Introductory Letter	151
Appendix C: Ethical Clearance	152
Appendix D: Reliability Estimates	153

LIST OF TABLES

Table		Page
1	Domains of trait Emotional Intelligence	24
2	Reliability Analysis of Constructs	65
3	Age range of respondents	74
4	Marital Status of Respondents	75
5	Educational Level of Respondents	76
6	Distribution of the Common Menopausal Symptom Experienced	
	by Middle Aged Menopausal Women	77
7	Mean and Standard Deviation of Quality of Life of Menopausal	
	Women	80
8	Means and Standard Deviation of Emotional Intelligence of	
	Menopausal Women	83
9	Multivariate Regression of the Relationship between Emotional	
	Intelligence and Quality of Life of Menopausal Women.	86
10	Tests of Between-Subjects Effects	87
11	Parameter Estimates	88
12	Moderation Effect of Marital Status on Emotional Intelligence and	
	Vasomotor Dimension of Quality of Life	89
13	Moderation Effect of Marital Status on Emotional Intelligence and	ł
	Psychosocial Dimension of Quality of Life	90
14	Moderation Effect of Marital Status on Emotional Intelligence and	ł
	Physical Dimension of Quality of Life	91
15	Moderation Effect of Marital Status on Emotional Intelligence and	ł
	Sexual Dimension of Quality of Life	92

16	Moderation Effect of Educational Level on Emotional Intelligence	
	and Vasomotor Dimension of Quality of Life	94
17	Moderation Effect of Educational Level on Emotional Intelligence	e
	and Psychosocial Dimension of Quality of Life	95
18	Moderation Effect of Educational Level on Emotional Intelligence	
	and Physical Dimension of Quality of Life	96
19	Moderation Effect of Educational Level on Emotional Intelligence	
	and Sexual Dimension of Quality of Life	97
20	Moderation Effect of Age on Emotional Intelligence and	
	Vasomotor Dimension of Quality of Life	98
21	Moderation Effect of Age on Emotional Intelligence and	
	Psychosocial Dimension of Quality of Life	99
22	Moderation Effect of Age on Emotional Intelligence and Physical	
	Dimension of Quality of Life	102
23	Moderation Effect of Age on Emotional Intelligence and Sexual	
	Dimension of Quality of Life	103
24	Summary of Main Findings	104

xiv

LIST OF FIGURES

Figur	e	Page
1	Conceptual Framework	51
2	Kumasi Map	57
3	Moderation Graph for the Relationship between Emotional	
	Intelligence and Quality of Life	101

CHAPTER ONE

INTRODUCTION

All over the world, humans appear to undergo a natural change in anatomy and function that occur with the passage of time. This process of change can be termed as aging. Aging comes with developmental transitions, changes and growth; such as observed among adolescents, young adult, middle adults (menopause) and the aged. Most of these transitions and changes, especially menopause usually appear not to be only physiological in nature but also involve some changes in psychological and social functioning (Hunter & Rendall, 2007). The individual involved in the transition, usually have to find ways of managing the changes that come with the transition in order to have an improved quality of life. This study sought to examine whether emotional intelligence influences the quality of life of middle aged women during the menopause stage of transition.

Background to the Study

Aging of the feminine reproductive system results mainly from changes in hormonal levels in relation to cyst abnormalcy which marks the start of climacteric/menopause (Miro, Parker, Aspinall, Coley, Perry & Ellis, 2005). According to Padubidri and Daftary (2018), menopause is generally the end of menstruation for a period of 12 months or a stop in the functions of ovaries resulting in lasting amenorrhea. The World Health Organization (1996) also defined menopause as the cessation of menstrual period resulting from loss of

ovarian follicular function, usually due to aging. Menopause occur naturally (spontaneously) or be evoked through a medical intervention (disease, surgery, chemotherapy, or pelvic radiation therapy) (Soules, Sherman, Parrott, Rebar, Santoro, & Utian, 2001; Manson & Bassuk, 2012). Based on the World Health Organization's classification, premenopausal women usually experience regular menstrual bleeding within the last year, perimenopausal women have irregular menstrual period within the last year or the absence of menstrual bleeding for over 3 months but less than 12 months, and postmenopausal women also experience no menstrual bleeding for 12 months or more (WHO Scientific Group, 1996). The time of last period, when hormonal levels are falling, is also termed as peri-menopause which can last from a few months to several years (National Institute for Health and Care Excellence, 2015).

Menopause affects every woman since it is a natural process. In the United States there are over 6,000 women who each day enter the stage of menopause (American College of Obstetricians and Gynecologists, 2017). It may occur before the age of 40 years which is known as premature menopause or premature ovarian insufficiency. In the Western world, the average age for natural menopause is 51 years. (Kato et al., 1998) and 50-52 years for developing countries (Rotem, Kushnir, Levine, & Ehrenfeld, 2005).

During menopause, women experience many physical changes, most of which are normal consequences of cessation of menstruation, fluctuation in the hormone levels and aging. Other social changes and challenges such as financial, relationship, and caregiving burdens are also common (Speroff & Fritz, 2005).

Psychosocial condition such as loss, family and couple separation, independence and children moving out, professional career and stability, aging in a society which values beauty and youth, as well as manifestation of chronic diseases may equally appear, demanding emotional adjustments (Barth Olofsson & Collins, 2000; Dennerstein, Lehert, & Guthrie, 2002). Common symptoms women experience during menopausal transition includes changes in periods, hot flushes, night sweats, problems with vagina and bladder, changes in sexual desire, sleep problems, mood changes/swings, changes in the body, etc. These symptoms have been reported to have an average duration of five years (Speroff & Fritz, 2005).

These menopausal symptoms and changes sometimes become severe to interfere with the daily life of menopausal women and negatively affect their quality of life (Yazdkhasti, Simbar, & Abdi, 2015). The transition also trigger certain psychological vulnerabilities (Elavsky & McAuley, 2009) which frequently lead to depression, anxiety, stress, low self-esteem, low self-image which eventually decreases quality of life (Khademi & Cooke, 2003). Some psychosocial factors such as beliefs, negative attitudes, low self-esteem, family dysfunction, social support and some stressful life experience have being found to influence the experience of the transition (Taffe, Garamszegi, Dudley, & Dennerstein, 1997). In some cases, menopausal women's inability to adapt to the prevailing symptoms of menopause is the reason for them to attend health care centers for support (Tetteh, 2008). It is however clear that, this stage of life brings with it many undesired healthcare challenges that adversely impact women's well-being and consequently their quality of life.

There are considerable similarities in coverage of menopausal symptoms by women everywhere around the world as reported in several studies. Vasomotor symptoms (hot flushes and night sweat) have been reported the common menopausal symptoms across various countries including America (Chedraui, San Miguel, and Avila, 2009), Australia (Berecki-Giosolf, Begum and Dobson, 2009), among Norwegian female cohort (Gjelsvik, Rosvold, Straand, Dalen and Hunskaar, 2011), in India (Dutta, Dcruze, Anuradha, Rao and Rashmi, 2012), among Iranian women (Abedzadeh-Kalahroudi, Taebi, Sadat, Saberi and Karimian, 2012), in some rural areas of Africa (Pal, Hande and Khatri, 2013), in Egypt (Mohamed, Lamadah and Zamil, 2017) and in Ghana by a study conducted in Accra Metropolis by (Setorglo, Keddey, Agbemafle, Kumordzie, & Steiner-Asiedu, 2012). However, symptom severity differs based on the stage of transition (Moilanen, Aalto, Hemminki, Aro, Raitanen, & Luoto 2010; Gjelsvik, Rosvold, Straand, Dalen, & Hunskaar 2011). From the review, it is clear that, menopausal symptom severity differs among premenopause, menopausal and postmenopausal women, with the common symptoms from vasomotor domain.

Quality of Life (QOL)

Quality of life is an individual's perceptions of their position in life within the context of culture and values in which they live and as it relates to their goals, concerns and anticipations (WHO, 1994). The health-related quality of life dimension includes the social, physical, and mental functioning of life. (Cheng, Lee, Wang, Wang and FuhL, 2007) whilst menopause-specific quality of life refers to the health related quality of life for the period of menstrual cessation

(Hilditch et, 1996). Several studies have reported a negative impact of menopausal symptoms on the quality of life of women during menopause stage (Sharma, Tandon, & Mahajan, 2007; Williams, Levine, Kalilani, Lewis, & Clark, 2009; Mohamed, Lamadah, & Zamil, 2017). Satoh and Ohashi, (2005) and Cheng, Lee, Wang, Wang and Fuh, (2007) however, reported no significant changes in quality of life among menopausal women. Joint and muscular symptoms (Sagdeo and Arora, 2011) as well as physical and psychosocial symptoms (Madhukumar, Gaikwad and Sudeepa, 2012) have been shown to affect quality of life the most whilst vasomotor symptoms have been reported to have a little impact on quality of life of menopausal women (Tang, 1994). In addition to menopausal symptoms experienced during menopause transition, some socio-demographic factors such as age (Nayak, Kamath, Kumar & Rao, 2014), marital status, educational level, social and economic level and marriage satisfaction have been found to influence the quality of life of women during menopause (Abedzadeh-Kalarhoudi et al., 2012; Cohen, Soares, & Joffe, 2005).

Some interventions such as non-hormonal pharmacological agents and hormone replacement therapy have been efficacious in managing menopausal symptoms but the risk outweighs the benefit (Schover, 2008). Psychological interventions such as cognitive behavioral therapy (CBT) have been helpful in problems related to psychosocial and sexual functioning (Duijts et al., 2012). Other alternative interventions like acupuncture have also been shown to be effective in reducing hot flashes and depressive symptoms thereby improving quality of life (Walker, Rodriguez, Kohn, & Levine 2010). Some cognitive

5

dispositions such as emotional intelligence have also been assessed and shown to improve quality of life of menopausal women (Extremera & Fernández-Berrocals, 2002; Bauld & Brown, 2009).

Emotional Intelligence (EI)

Emotional intelligence refers to aspects of intelligence that relate to the management of one's own emotions and that of others (Salovey & Mayer, 1990). Goleman, (2008) expanded the concept of emotional intelligence to include the ability to observe one's emotions and others, to differentiate between dissimilar emotions and tag them properly and use the emotional information to control actions and thoughts. Mayer, Salovey and Caruso (2008) in a study observed that, people who are good at recognising, understanding, using and managing their emotions and that of others exhibit higher adjustment levels. Emotional Intelligence have also been found to be associated with lover level of stress (Pau and Croucher, 2003), help people to cope better with problems of daily living (Taylor, 2001; Atkinson and Hornby, 2002) and presumably confer a benefit to themselves and others in different spheres of life (Salovey & Grewal, 2005).

Emotional intelligence have been established as a significant concept in mental and physical health, academic and workplace performance (O'Boyle, Humphrey, Pollack, Hawyer, and Story, 2010), as well been established to impact positively in some developmental transitions, such as adolescent (Salguero, Palomera, and Fernanadez-Berrocal, 2012) and menopause (Extremera & Fernández-Berrocals, 2002; Bauld & Brown, 2009). Some studies have also analysed differences in emotional abilities with some socio-demographic

variables such as gender, ethnicity, age and educational level (Day & Carroll, 2004; Mayer, Caruso, & Salovey, 1999; Palmer, Gignac, Monocha, & Stough, 2005). Cabello, Navarro, Latorre, and Fernández-Berrocal, (2014) found that educational level mediated the relationship of age with emotional intelligence and level of Education was found to moderate the relationship of age and emotional Intelligence which is consistent with a previous study showing that educational level improves ability EI in older adults (Goldenberg, Matheson, & Mantler, 2006).

Despite copious studies relating emotional intelligence to various psychosocial criteria, it has not been thoroughly explored in relation to quality of life during menopause. The current study therefore seeks to enlighten the general populace about the commonest menopausal symptoms, how emotional intelligence influence their quality of life and the moderating role of marital status, age and educational level

Statement of the Problem

In middle age, menopause phase comprises about a half or a third of a woman's life (Perez-Lopez, 2004). This stage in women's life is characterised by decreased bone mass, increased risk of cardiovascular disease, sleep disturbance, reduced concentration and sexual desire (Rotem et al., 2005). These symptoms become severe to interfere with the daily life of menopausal women and affect their quality of life negatively (Yazkhasti et al, 2015; Chiu et al, 2008; Williams et al., 2009) compared to men at the same age (Squizzatto, Garcez-Leme and Casimiro, 2006) and elderly women (Nappi & lachowsky, 2009). Aside the

menopausal symptoms, socio-demographic factors such as age, marital status and educational level also influence the quality of life of women during menopause (Abedzadeh-Kalarhoudi et al., 2012; Cohen, et al., 2005; Duijts et al., 2012).

Many research works have been done to establish the role of hormone replacement therapy (Schover, 2008; Donati et al, 2013), psycho-educational interventions (Taylor, 2001), Cognitive behavioral therapy (CBT) (Duijts et al, 2012) and emotional intelligence in improving quality of life of menopausal women (Extremera & Fernández-Berrocal, 2002; Bauld & Brown, 2009). In relation to emotional intelligence, several research have established its effectiveness on several domains and on other life transitions (O'Boyle et al, 2010; Salguero et al, 2012) but this have not been well established in menopausal women.

Even though, it appears that, relatively few studies have attempted to assess or evaluate emotional intelligence in relation to quality of life of middle aged women, they failed to examine the influence of emotional intelligence on menopause specific quality of life as well as the moderating role of sociodemographic factors such as marital status, age and educational level which also influence QOL (Bauld and Brown, 2009; Extremera & Fernández-Berrocal, 2002). Bauld and Brown, (2009), for example, evaluated stress, psychological distress, psychosocial factors, menopause symptoms and physical health in women. Their study did not examine the menopause specific quality of life and also did not determine the moderating role of socio-demographic factors but

revealed that low emotional intelligence was related to worse menopausal symptoms and physical health and these association were partly mediated by high stress, anxiety and depression and a negative attitude to menopause.

Similarly, Extremera and Fernández-Berrocal, (2002) assessed the relation of perceived emotional intelligence and health-related quality of life of middle aged women in Spain. Yet they equally did not inform their readers whether socio-demographic factors could moderate the relationship between emotional intelligence and quality of life. It was however revealed that aspect of perceived emotional intelligence may account for the health related quality of life in midlife including social, physical and psychological symptoms. Their study only assessed quality of life from social, physical and psychological perspective but not on vasomotor, psychosocial and sexual aspects which are more particular to menopausal women. It therefore appears, there has been no or little literature on the influence of emotional intelligence on vasomotor, physical, psychosocial and sexual domains of quality of life of menopausal women as well as the moderating role of socio-demographic factors (marital status, age and educational level).

In addition, most of the research works on emotional intelligence and quality of life in middle aged women appears to have been limited to the western world (Bauld and Brown, 2009; Extremera and Fernández-Berrocal, 2002) with none conducted in Ghana. After extensive search, it appears that, even studies on prevalence of menopause symptoms in Ghana were conducted in only Accra Metropolis (Ansah, 2016; Setorglo et al., 2012), with none of such studies conducted in other regions including Kumasi Metropolis, which is the second

9

largest metropolis by population. It is therefore clear that a study that effectively examines the influence of emotional intelligence on vasomotor, physical, psychosocial and sexual aspect of quality of life of menopausal women and the moderating role of socio-demographic factors (marital status, age and educational level) is needed. This study therefore attempts to examine the influence of emotional intelligence on the quality of life of menopausal women in the Kumasi Metropolis.

Purpose of the Study

The purpose of the study is to assess the influence of emotional intelligence on the quality of life of middle aged menopausal women in the Kumasi Metropolis.

Research Objectives

Specifically, the objectives for the current study sought to identify:

- 1. The common menopausal symptoms among middle aged women
- 2. The levels of quality of life of middle aged menopausal women.
- 3. The emotional intelligence levels of middle aged menopausal women.
- Relationship between emotional intelligence and quality of life (vasomotor, physical, psychosocial and sexual) among middle aged menopausal women.
- 5. The moderating role of marital status between emotional intelligence and quality of life.
- 6. The moderating role of educational level between emotional intelligence and quality of life.

 The moderating role of age between emotional intelligence and quality of life.

Research Questions

The current study will be guided by the subsequent analysis questions:

- 1. What are the common menopausal symptoms among middle aged women?
- 2. What are the quality of life levels among menopausal women?
- 3. What are the emotional intelligence levels among menopausal women?

Research Hypotheses

The following hypothesis will be tested to establish the relationship between emotional intelligence and quality of life of menopausal women.

- 1. H_0 : There is no statistically significant relationship between emotional intelligence and quality of life of menopausal women.
 - H₁: There is a significant relationship between emotional intelligence and quality of life of menopausal women
- 2. H_o: Marital status did not moderate the relationship between emotional intelligence and quality of life among menopausal women.
 - H₁: Marital status moderates the relationship between emotional intelligence and quality of life among menopausal women.
- H_o: Educational level did not moderate the relationship between emotional intelligence and quality of life among menopausal women.

- H₁: Educational level moderates the relationship between emotional intelligence and quality of life among menopausal women.
- 4. H_o: Age did not moderate the relationship between emotional intelligence and quality of life among menopausal women.
 H₁: Age moderates the relationship between emotional intelligence

and quality of life among menopausal women.

Significance of the Study

The current study will provide information on menopausal symptoms and offer a road map to improving quality of life by understanding and appreciating the role of emotional intelligence and the impact of some socio-demographic factors during the menopausal stage of life.

The results of the study will also help counsellors, clinical health psychologist, physicians and other health care professions to have a better understanding of the factors that can improve the positive functioning of women during menopausal stage of their life.

Findings of the study will also guide Policy Makers (the Ministry of Health and Ghana Health Service), Non-Governmental Institutions, Religious groups and other women advocacy and empowerment groups in developing mechanism to help improve the emotional intelligence level of women and to plan suitable interventions to reduce the symptom burden and thereby improve their quality of life. Lastly, the study would be relevant by contributing to existing literature on women's health, menopause and emotional intelligence. Thus, findings from this study will serve as a basis for other researchers to build on.

Delimitation of the Study

The focus of the study is to determine menopause symptoms and the role of emotional intelligence in the quality of life during menopause. Such a study is of great importance and could have covered a wide range of middle aged women in the country, however the researcher limited the study to the Kumasi Metropolis and seeks to find out menopause symptoms, the quality of life among middle aged menopausal women, the emotional intelligence among middle aged menopausal women, the relationship between emotional intelligence and quality of life among middle aged menopausal women and the moderating role of marital status, educational level and age between emotional intelligence and quality of life. The study did not include the medical and environmental factors that may influence menopause.

Limitations of the study

The use of questionnaire did not give the individual the opportunity to express their thoughts freely since it required an objective response. Again the scope of the study focused on the five communities in the Kumasi Metropolis. The experiences of menopausal women in other regions may be different therefore, making the generalisation of the findings difficult.

Again, the instrument used for the study that is, Menopause-specific quality of life and Trait emotional intelligence questionnaire have not been validated in the Ghanaian context, which may influence the results derived from them.

Definition of Terms

The terms in the current study have been operationally defined as follows;

Middle aged women: It is defined as a woman within the age range of 40 years to 60 years.

Menopause: It refers to the period of cessation of periods for 12 months.

- **Emotional Intelligence**: It refers to the ability to recognize ones emotions and that of others to guide behaviour and thinking.
- **Quality of Life:** It refers to the health related quality of life for the period of menstrual cessation.
- **Vasomotor:** It refers a form of temperature dysfunction that occurs due to changes in gonadal hormones (hot flushes, night sweat and sweating)
- **Psychosocial:** It refers to mood and behaviour challenges that occur as a result of changes in hormones.
- **Physical:** It refers to the physiological changes resulting in changes in physical appearance.

Sexual: It refers changes in sexual experiences due to hormonal changes.

Organization of the study

The study was organized into five chapters. The first chapter comprises of the background to the study, the statement of the problem, purpose of the study, research question and hypothesis, significance of the study, delimitation as well as the limitations of the study. The Chapter two (2) of the study focuses on the

review of literature relevant to the study. It seeks to examine some theoretical and empirical evidence to its effect as well as the graphical presentation of how the variables relate to each other. Chapter three (3) will entail the methodology aspect of the study. It will deal with the study design, population and sampling, tools and data collection procedures and how the data will be analyzed after its collection. The chapter four (4) will contain the analysis of the data and examine the results in detail. Chapter five (5) comprises summary, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Under this section, relevant literature related to the study variables was reviewed. Specifically, theoretical review on Schlossberg transition theory, cognitive behavioral model/self-regulatory model and the trait model of emotional intelligence was reviewed. The concepts menopause was discussed and empirical literature in relation to the objectives and hypothesis stated were reviewed (menopause symptoms, menopause symptoms and quality of life, menopause symptoms and emotional intelligence, quality of life and emotional intelligence, influence of marital status on emotional intelligence and quality of life, influence of age on emotional intelligence and quality of life, influence on emotional intelligence and quality of life).

Theoretical Review

Schlossberg's Transition Theory

The present study employed Schlossberg's (1981) theory to explain menopause transition and quality in transition. Schlossberg outlined a transition as any event, or non-event that results in changed relationships, routines, assumptions, and roles. Schlossberg indicated that perception plays a key role in transitions as an event, or non-event, and this meets the definition of a transition

only if it is so defined by the individual experiencing it. In order to grasp the meaning that a transition has for a particular individual, the type, context, and impact of the transition must be considered. The type of transition is whether the transition is anticipated (natural menopause) or unanticipated (premature or induced menopause). Context refers to one's relationship with the (menstrual cycle and menopause) transition and to the setting in which the (menopause) transition takes place. Impact is determined by the degree to which a (menopause) transition alters the middle aged woman's daily life. Schlossberg identified four major sets of factors that influence a person's reactions to a transition: situation, self, support, and strategies, which are also known as the 4 S's.

Situation

Situation indicates how an individual views the transition which is the menopause transition. It emphasizes on whether the middle aged menopausal woman perceive the (menopause) transition as positive, negative, expected, unexpected, desired or dreaded. According to Schlossberg, the middle aged women perception of the timing of the incident is of importance. With this, the woman determines whether the (menopause) transition is premature, too early, too late, the "best time" for the transition, the "worst time," "on time," or "off schedule?" Another factor to consider is whether the middle aged woman perceives the (menopause) transition as voluntary (being ready for the menopause transition due to their age; within the ages of 40 to 61 years and her achievements during the reproductive years of the woman's life) or imposed (that is whether the menopause transition is induced due to some medical complications, surgical

procedures as well as medication induced menopause (Chickering & Schlossberg, 1998; Schlossberg, 1995).

Self

Self pertains to the type of strengths such as the middle aged woman's ability, to have given birth to the expected number of children she and the partner planned for, the absence of any known chronic or medical condition which may enable her to go through the transition with much comfort. The middle aged woman's positive perception about herself, her high self-esteem, a positive body image perception, others positive experience of the menopause transition as well as the educational resources available to the middle aged woman about the menopause transition to enable her to go through the transition smoothly. According to Schlossberg, the weakness middle aged woman brings to the transition is also of importance. These weaknesses may include the low selfesteem, negative body image perception, insufficient and wrong information about the menopause transition and its symptoms as well as the negative experience of other woman concerning the menopause transition. "Self" takes into consideration the previous experience the middle aged woman has, in relation to her menstrual cycle and child bearing among others. It includes her belief regarding options, the middle aged woman sense of control, her optimism and resilience (Chickering & Schlossberg, 1998; Schlossberg, 1995).

Support

Support shows sources of support available to the middle aged woman during the transition. Support may be from a mate or partner, family member(s), friend(s), co-worker(s), neighbor(s), organisation(s), or institution(s). Sources of support can be both positive and negative, such as, the middle aged woman getting what she "needs" from the source of support, or the source of support is more of a "hindrance" to the middle aged woman during the transition (Chickering & Schlossberg, 1998; Schlossberg, 1995).

Strategies

Strategies determines the types of coping strategies the middle aged woman uses, whether there are more than one coping strategy, finding out the middle aged woman ability to creatively cope by changing the way she views the situation, her ability to manage her emotions/reactions to the stresses of the menopause transition and her flexibility to the situation. According to theory, women move through the transition process through a series of phases, termed "moving in," "moving through," and "moving out" (Chickering & Schlossberg, 1998). Moving in is associated with the woman being confronted with the transition; moving through follows the moving in process, and this is where the day-to-day management of the symptoms of the transition begins; and moving out can be associated with the passing or ending the menopause transition (Postmenopause) (Chickering & Schlossberg, 1998; Schlossberg, 1995).

In conclusion, Schlossberg transition theory views transition to be a perception of the person going through. As a result, the situation, self, the sources
of support available to them and the strategies employed by the middle aged menopausal woman to cope determines how the transition experience would be, either a positive experience or a negative experience which impair their daily functioning and quality of life.

Cognitive behavioral model/self –regulatory model

The cognitive behavioural model is based on the belief that emotions arises as a result of the way events are interpreted (Beck, 1976). This implies that cognition (thoughts, beliefs and attitude) mediate environmental events, subjective reactions and behavioral responses. This assumption formed the basis for self-regulatory model proposed by Leventhal, et al., (1984). According to them, individuals construct their own representation of health problems as a way of making sense of them, and these cognitive representations determine an individual's emotional and behavioural responses to the health problem. These responses also determine the way they react to the health problem and as well determine its impact on the quality of life of the person.

Applying this to understanding menopause, it can be postulated that thoughts, beliefs and attitudes about menopause and its challenges will determine the outcome of the transition, thus whether an individual going through menopause phase will experience distress or not as well as the severity of the symptoms which may intend affect their quality of life will depend on their thoughts, beliefs and attitudes. This also implies that the experiences of menopausal symptoms as well as the quality of life may differ from person to

20

person depending on the kind of cognitive representations the individual forms about the menopause transition and its symptoms.

For instance, Hunter and O'Dea (2001) in their study found that women had developed clear cognitive representations, even in the early stages of menopause; these cognitive representations according to the cognitive behavioural model will determine the outcome of the transition. Even though some women experienced the menopause transition as a positive event, others express concern over having little control over the menopause symptoms and for some women, it's a debilitating experience of their life (Hunter & Rendall, 2007).

Perceived personal control can also affect the experience of symptoms of menopause (Chedraui et al., 2010). Women with lower perceived personal control of symptoms have been reported to have more negative experiences and more coping difficulties, especially among women who do not receive hormone treatment during the menopausal stage hence, impacting negatively on their wellbeing (Hanisch, Hantsoo, Freeman, Sullivan & Coyne, 2008; Reynolds, 2002) which can significantly affect their quality of life.

The trait model of Emotional Intelligence

The study employs trait emotional intelligence theory developed by Pertrides and Furnham (2001) to explain the emotional reactions to menopausal symptom. Researchers argue that the construct of emotional intelligence is unclear and achieving a definition for it is very challenging as a result of different researchers focus on different skills. According to Mayer and Salovey (1997), emotional intelligence can be described as having four branches: the ability to

accurately perceive and express emotion, assimilate emotion into thought, understand emotion, and regulate emotions in the self and others). These four branches are organised so as to move from more basic psychological processes to more advanced psychological processes. Petrides and Furnham (2001) claimed that there is an elementary distinction within the measurement of emotional intelligence.

Consequently, Petrides and Furnham (2001) proposed a differentiation between ability emotional intelligence and trait emotional intelligence. Ability emotional intelligence involves actual abilities or skills and is measured with maximum performance which is directly applicable to cognitive ability (Petrides & Furnham, 2001). Trait emotional intelligence is comprised of behavioural inclinations and self-perceived abilities which are measured through self-report questionnaires, and is related to the study of personality (Petrides & Furnham, 2001). From the difference between ability emotional intelligence and trait emotional intelligence the theory of trait intelligence surfaced. According to Petrides and Furnham (2001), trait emotional intelligence is a constellation of emotion-related dispositions and self-perceptions located at the lower levels of personality or temperament hierarchies. Trait emotional intelligence is the sole operational definition within the field that acknowledges the inherent subjectivity of emotional experience. Trait emotional intelligence are personality traits, as opposed to competencies or mental abilities and is also corroborated by research revealing that the same genes that are implicated within the development of individual variations within the personality traits are also implicated in the

development of individual variations in trait EI (Vernon, Villani, Schermer, & Petrides, 2008). The theory of trait emotional intelligence demonstrates how the various models, mainly relates to established personality traits (Petrides, Pita and Kokkinaki, 2007) and further indicate that, certain emotion profiles will be advantageous in some contexts but not in others. For example, being reserved and non-supportive are not marks of emotional dimness, but some personality traits happen to be more adaptive than sociability and being emotional (Rushton, Murray & Paunonen, 1983).

Trait emotional intelligence theory has several advantages relative to other approaches. First, it acknowledges the subjective nature of emotional experience (Robinson and Clore, 2007), thus circumventing a series of problems plaguing other models. Second, it integrates the construct into mainstream theories in psychology rather than treating it as a novel entity detached from accumulated scientific knowledge. Third, it is not tied to precise exclusive tests, but rather it is general and provides a platform for the interpretation of data from any questionnaire of emotional intelligence or related constructs. Fourth, it is readily extendible into cognate areas (for example, social intelligence) rather than restricted to a single distinctive model. To the authors, trait emotional intelligence (trait EI or trait emotional self-efficacy) is the constellation of emotion-related self-perceptions located at the lower levels of personality hierarchies (Petrides et al., 2007). Consequently, it is not distinct from personality constructs, but part of them. The conceptualisation of emotional intelligence as a personality trait is in accordance with the subjective nature of emotional experience (Carroll, 1993).

Facets	High scorers view themselves as
Adaptability	flexible and willing to adapt to new
	conditions
Assertiveness	forthright, frank, and willing to stand
	up for their rights
Emotion expression	capable of communicating their
	feelings to others
Emotion management (others)	capable of influencing other people's
	feelings
Emotional perception (self and others)	clear about their own and other
	people's feelings
Emotion regulation	capable of controlling their emotions
Impulsiveness (low)	reflective and less likely to give in to
	their urges
Relationships	capable of maintaining fulfilling
	personal relationships
Self-esteem	successful and self-confident
Self- motivation	Driven and unlikely to give up in the
	face of adversity

 Table 1 - The Domain of Trait Emotional Intelligence

Facets	High scorer views themselves as
Social awareness	accomplished networkers with superior social skills
Trait empathy	capable of taking someone else's perspective
Trait happiness	cheerful and satisfied with their lives
Trait optimism	confident and likely to "look on the
	bright side" of life

Continuation of Domains

In conclusion, the theory of trait emotional intelligence promises to predict and improve the life skills of individuals through personality factors. In effect, menopausal women personality dispositions indicates their emotional intelligence and the benefit that their emotional intelligence can confer to them during the menopause stage of transition. The proponents of the theory believe that, in the personality trait of an individual lies the key to an improved quality of life and well-being as a result, menopausal women personalities are the main determinants of their quality of life during menopause.

The Concept of Menopause

Overview of Menopause

Menopause is a traditional, natural event, defined as the final menstrual period (FMP). It represents the permanent stop of flow of menstruation resulting from loss of ovarian follicular function, usually due to aging (WHO, 1996). Menopause occurs naturally or be induced through a medical intervention like surgery, chemotherapy, or pelvic radiation therapy (Manson & Bassuk, 2012). Menopause (that is, spontaneous or natural menopause) is recognized to have occurred after 12 months with no obvious pathologic cause. It reflects a near-complete however natural diminution of ovarian hormone secretion. (Soules et al., 2001).

Physiology of Menopause

Menopause is the permanent cessation of menstruation due to loss of ovarian follicular activity. According to Henry et al., (2014) follicular granulosa cells produce estradiol and inhibins. An accelerated decline in follicular numbers occurs from age 38 years, and the major initial change underlying the menopause is the gradual decline in inhibin B, the major regulator of follicular phase folliclestimulating hormone (Burger, 2006). It is produced by the granulosa cells of antral follicles during the early follicular phase. The inhibin B decline leads to increased follicle-stimulating hormone, which can maintain and even increase estradiol production for some years (Burger, 2006). Onset of menstrual irregularity after previously regular cycles marks the onset of the menopausal transition, when there is a substantial decline in inhibin B, with maintenance of

estradiol. Estradiol levels decline and follicle-stimulating hormone is raised, but their concentration vary considerably; measurements are of limited diagnostic value. At the time of the final menses, estradiol levels on average are 50% of those at mid-reproductive age; follicle-stimulating hormone is about 50% of the elevated concentrations finally reached postmenopausal (Burger, 2006). There is thus a profound decline (about 90%) in estradiol in the 3-4 years surrounding final menses, and these results in menopausal symptoms and bone loss. Testosterone levels decline by about 50% during mid-reproductive life, but show no significant change during the menopausal transition and in the early postmenopausal years (Burger, 2006).

Stages of Menopause

Menopause transition is divided into seven stages: five precede and two follow the Final Menstrual Period. It is however important to note that, not all healthy women will follow this pattern; some will alternate between stages or skip a stage altogether (Soules, et al, 2001).

Premenopause: The term premenopause is used, usually to mean reaching menopause. The literal meaning of the word implies the time leading to menopause, that is, the time before the Final Menstrual Period, being the time when levels of follicle-stimulating hormone increases (Soules, et al, 2001).

Menopause transition: The term menopause transition refers to the span of time when menstrual cycle and endocrine changes occur, and is divided into stage -2 (early) through stage -1 (late). The menopause transition begins with variation in the length of the menstrual cycle caused by a rise in levels of monotropic follicle

stimulating hormone and ends with final menstrual period (which is recognized only after 12 consecutive months of amenorrhea). Women experiencing induced menopause do not experience this menopause transition (Soules, et al, 2001).

Perimenopause: According to Soules et al, (2001), perimenopause is defined as about or around menopause, beginning with stage –2 (early transition) and ending 12 months after the final menstrual period. North American Menopause Society NAMS (2010) prefers to use the term interchangeably with menopause transition, although there is a difference. It is a convenient way to refer to the highly symptomatic years of the transition (Soules et al, 2001).

Early menopause: Early menopause is a term often used to describe natural or induced menopause that occurs well before the average age of natural menopause (before age 41). Early menopause encompasses premature menopause (Soules, et al, 2001).

Primary ovarian insufficiency: The term premature ovarian failure has been used to describe ovarian insufficiency leading to amenorrhea in women younger than age 40, some authorities prefer the term primary ovarian insufficiency (POI) since the biological condition is not always complete or permanent ovarian failure. It may be transient when caused by autoimmune disease or chemotherapy; however, permanent loss of ovarian function is often the eventual outcome (Progetto Menopausa Italia Study Group, 2003).

Induced menopause: The term induced menopause is defined as the cessation of menstruation that follows either surgical removal of both ovaries (bilateral oophorectomy, with or without hysterectomy) or iatrogenic ablation of ovarian

function (by chemotherapy or pelvic radiation therapy). Bilateral oophorectomy is the common cause of induced menopause (Center for Disease Control and Prevention, 2011).

Postmenopause: Postmenopause refers to the years after the Final Menstrual Period resulting from natural (spontaneous) or premature menopause. According to Johnston et al., (2006), an estimated 75% of women ages 50 to 55 are believed to be postmenopausal. These estimates may include women who may have had induced or premature natural menopause earlier in life. Among women ages 40 to 45, an estimated 5% have experienced natural menopause. For natural postmenopausal women in the oldest category (ages 45-55), a rough estimate is 25%.

Symptoms of Menopause

While climacteric is not a malady or disorder, it may trigger some profound changes in a female's body. A diagnosis of menopause climacteric is confirmed once a woman has not had a menstrual period for one year. However, the symptoms of menopause typically appear before the end of that one-year period.

Vasomotor symptoms: It includes hot flashes, sweating and night sweat. A hot flash symptom may be an abrupt sensation of warmth in the upper body. It may begin within the face, neck, or chest, and progress upward or downward. The skin might become red and uneven, and a woman may usually begin to sweat. Heart rate might suddenly increase, strengthen, or become irregular. Hot flashes typically occur throughout the first year after a woman's final period. With night

sweats, hot flashes that occur throughout the sleep cycle are called night sweats. Most women report that, their hot flashes do not last over a couple of minutes. However, some studies have confirmed that moderate-to-severe night sweats and hot flashes may pose a problem in later years for the middle aged woman (AIDughaither, AIMutairy, & AIAteeq, 2015)

Physical symptoms: such as irregular periods where changes to the menstrual pattern are the primary noticeable symptoms of menopause. Some women might experience a period every 2 to 3 weeks. Others will not menstruate for months at a time. Lower fertility due to significant drop in estrogen levels. This reduces her chances of becoming pregnant. Disturbance in sleep where it is often tough or difficult for women to fall asleep and stay asleep as they progress through menopause. In some cases, night sweats can lead to discomfort during the night and difficulty sleeping. Sleep disturbance might also be caused by sleep disorder or anxiety. A buildup of fat in the abdomen occurs, sometimes leading to overweight and obesity, hair loss and thinning hair and breast shrinkage.

Sexual symptom: Vaginal atrophy including dryness, itching, and discomfort of the vagina tend to occur during perimenopause. As a result, some women may experience dyspareunia, or pain during sex. Women experience this pain due to lowering estrogen levels. This lower level causes vaginal atrophy. Vaginal atrophy is associated with an inflammation of the vagina that happens as a result of the dilution and shrinking of the tissues, as well as decreased lubrication. Urinary problems also disrupt a woman's urinary cycle. Women tend to be additionally vulnerable or susceptible to urinary tract infections (UTIs)

throughout menopause, such as cystitis. They may also find that they have to visit the toilet more often.

Psychosocial symptoms: Emotional changes may cause women to experience depression and low mood during climacteric period. Hormonal changes may often trigger depressed feelings and mood swings. Problems focusing and learning; menopause can affect higher cognitive functions, like concentration difficulties. Some women might also experience memory issues and difficulty focusing for long periods.

Empirical Review

The review of related studies is further divided into several sub-themes that reflect the objectives of the study. These include;

Menopause Symptoms and Prevalence

A number of studies have investigated and reported the prevalence of menopause symptoms among different populations. Moilanen et al., (2010) assessed the severity of menopausal symptoms and its relation to some lifestyle activities including alcohol use, smoking their physical activity levels and their body mass among menopausal women, a sample of 1427 women between the ages of 45 to 64. Moilanen et al., (2010) found that, majority of the participants had gone through one symptom of menopause. Moreover, one-third of the perimenopause and premenopause reported to have experienced a more severe symptom (such as headaches, dizziness, back pain, swollen feet, sleep disturbances, hot flushes, and numbness among others). Among postmenopausal women, the proportions who experienced bothersome symptoms was more than

50% of the group. However, symptoms experience was low for premenopausal women with regard to hot flushes, bodily pain and numbness compared to the other groups of women even when age was controlled. Between Pre-menopausal and perimenopausal women was the largely reported difference in back pain and hot flushes. This indicates that the prevalence of symptoms vary with every stage of the menopause transition.

Similarly, Gjelsvik et al., (2011) undertook a research to assess the age at which women reach menopause and menopausal symptom among female Norwegian population over a decade. Results showed that, the severity and frequency of hot flushes increased from age 54 years and decreased among 55 to 57 years old women. The frequency of sweats showed a related pattern as hot flushes among the various age groups whilst vaginal dryness was lower considerable during the span of the research. The bothersome nature of the symptoms showed a gradual rise, with hot flushes being more bothersome and increased during the span of time of the study. This study also affirms that menopausal symptoms vary with age as women rise through the premenopause to menopause and decline in post menopause. The bothersome nature of the symptoms according to the study also lies on the stages of the menopause transition. This corroborates with findings from Iranian women which also reported vasomotor (night sweat) to be the most common symptom.

In a related study, Dutta et al., (2012) sought to determine menopausal symptom frequency in a rural based population in India. The study was delimited to only naturally occurring menopausal women with a year absence of

menstruation as at the time data was collected. In all 780 postmenopausal women were sampled, 44.49 years was the mean and 44 years being the median age at menopause. In all 88.1% was the prevalence rate for most symptoms. Vasomotor motor symptoms such as hot flushes and sweating were the most prevalent in Postmenopause followed by anxiety and sleep challenges. Only few of the postmenopausal women had their symptoms managed by health professionals. The reported reason for not seeking support in management of symptoms was limitation in finance and family challenges; indicating that majority of the women would have to look for alternative ways to cope with symptoms. However, the researchers did not ascertain factors necessary to impact symptom severity of women, their quality of life as well as some factor that could improve their functioning in the face of the symptom. The study agrees with Sussman et al (2015), which found hot flushes and night sweat to the common symptom.

Additionally, Poomalar and Arounassalame (2013) conducted a study to know the influence of hormonal changes among perimenopausal and postmenopausal women. The study also sought to determine the symptom prevalence and its correlation with symptom duration. Five hundred women aged 40 to 65 years were used for the study. One hundred and thirty five of the participants were in menopause Stransition; with 133 and 232 women in early stage of post menopause and late post menopause respectively were used in a cross-sectional study. It was found out that the most common symptoms was back ache and joint pain with the least symptom being increase in facial hair and feeling of vaginal dryness. Vasomotor scores were higher in menopause group

whilst physical scores were higher among late postmenopausal women. Symptom breakdown included vasomotor, psychosocial, physical and sexual symptoms representing 80%, 93.2%, 99% and 82% respectively. This study purported that, the most common menopausal symptoms was low back pain. However, each domain was experienced differently during the progressing from menopause transition to the post menopause transition. This also corroborates with the age inferences in relation to the severity of symptoms experienced during menopause. This study however did not ascertain how marital status, educational level could influence the severity of the symptoms aside controlling for age.

In a related study conducted in Ghana by Setorglo et al., (2012), the researchers ascertained the knowledge, perceptions and the frequency of menopausal symptoms among a total of 280 women from the age of above 45 years in the Accra Metropolis, Ghana. Data on demographic characteristics, perception and experience of symptoms together with their height, weight percentage of fat among others were examined. Results from the data analyses revealed that around 48 years was the mean age of menopause with the knowledge of menopausal symptoms among 98.2% of the participants. Further analysis showed the most reported symptoms to be night sweats, hot flashes, mood swings and vaginal dryness of vagina respectively. Logistics regression analysis showed that starting age of menopausal symptoms as reported by the study respondents. The results also revealed that, the increase in age resulted in a

concomitant decrease in experience of mood swings, night sweat and vaginal dryness. The study outcomes shed light on the common menopausal symptoms experienced by Ghanaian women. However, the study failed to examine how some personal demographics of the respondents such as age, marital status and educational level could affect their experience of menopausal symptoms among the respondents, even though it reflect the global experience of the menopausal symptoms, with might sweat and hot flushes being among the first two reported severity in different populations.

Relatedly, Shakila, Sridharan, and Thiyagarajan (2014) in their study among Sri Lankan academic women between the ages of 25 and 60 years examined the symptoms and awareness associated with menopause. The researchers employed the modified MRS (Menopause Rating Scale) questionnaire and a total of 50 Sri Lankan women were interviewed. Results from the analysis showed that the women in the study had a mean age of menopause of 52 years. Further examination regarding the symptoms presentation revealed the extensive menopausal symptom among the population to be bodily pains, mental and physical exhaustion, concentration and sleeping problems followed by hot flushes, night sweat, vaginal itching, depressive mood and anxiety. This study has identified the common physical and psychosocial factors that are associated with menopause. The findings from this study agree with previous findings by Poomalar and Arounassalame (2013) which found similar symptoms to be more prevalent in women. However, the mean menopausal age differed slightly with the Ghanaian sample reporting menopausal symptoms at a younger age than the

Sri Lankan counterparts. The study appears to be limiting due to the relatively small sample size of 50 participants which limits its validity. The study also differs slightly from the study by Setorglo, et al., (2012) which found hot flushes and night sweat more frequent among women in the Ghanaian context. This could be the characteristic differences in the population used. The study did not touch on the influence of age and marital status.

Makara-Studzińśka, Kryś-Noszczyk, and Jakiel (2014) compared the rate of menopausal symptoms among women living in continents of Americans, Africa, Australia and Eurasia. They carried out a meta-analysis obtained in 2014 on the basis of the data from a review of the 64 most important studies using the PubMed database. Research published in the period 2000-2014, from Africa, both Americas, Australia and Eurasia, were taken into account. It was revealed that the prevalence of menopausal symptoms in African women is disconcertingly high. Women from South America complain about occurrence of depressive, sexual dysfunctions and discomfort associated with muscle pain and joint aches. Symptoms most reported by women in the United States are pains associated with muscles and joints. Women in Australia suffer mainly due to vasomotor symptoms and sexual dysfunction, while in the group of women surveyed in Asia there is observed an alarming increase in in the proportion of women reporting depressive disorders. In Europe there was a much greater incidence of sleep disorders and depressive disorders. From the review, vasomotor symptoms appear to be reported more by the Africa continent of which Ghana is inclusive compared to the other continents. These differences could be due to weather changes since

Africa is hotter than the other continents and may experience hot flushes and sweating whilst the others experience muscle-joint pain, depressive symptoms and others.

From the above reviewed literature, it can be concluded that, there is a disparity on the prevalence/severity of menopausal symptoms women experience based on geographical settings. However, some populations agree with others after controlling for age. It was indicated that, the stages of transition or age at transition is a factor to determine severity or prevalence. Vasomotor symptoms were also reported to be the most common symptom in most of the study populations. The above studies however, failed to ascertain the influence of other factors such as marital status and education on the prevalence and severity of menopause symptoms.

Menopause and Quality of Life

A number of studies have been conducted to assess the impact of menopausal symptoms on the quality of life of middle aged women. These studies appear to present similar results indicating that, the severity of menopausal symptoms affects the quality of life of middle aged women negatively.

For instance, Moustafa, Ali and Taha (2015) conducted a study to assess the impact of menopausal symptoms on quality of life among women in Qena City. The study results revealed that more than three-fourth of the women had poor quality of life with sever menopausal rating syndrome. It was found that the majority of women had physical effect & social effect on Quality of life respectively. There was a strong positive correlation between Menopausal

symptoms and quality of life indicating a statistical significance difference. It was concluded that menopause causes decrease in quality of life and a positive correlation between menopausal symptoms & quality of life exist. This result is similar to, Mohamed, Lamadah and Zamil, (2014) which suggested that menopausal symptoms were associated with decrease in women quality of life.

Relatedly, Amirabadizadeh, Sharifzadeh & Moodi (2016) also conducted a study to determine middle aged women's quality of life. The finding's revealed that, middle aged women's quality of life was significantly correlated with their age so that women who aged 30 - 39 and 50 - 59 acquired the highest and the lowest quality of life scores, respectively. This study indicates that, the severity of menopause symptoms affect quality of life of menopausal women and age had a significant influence on the quality of life of the menopausal women. Marital status and educational level were however not accounted for. Similarly, Karmakar, Majumdar, Dasgupta and Das (2017) in Dearah village of West Bengal, supported that menopause causes both physical and psychiatric problems. Interventions to improve their QOL are important which should be imparted to menopausal women at both individual and community level.

Nisar and Sohoo (2009) also investigated the severity of menopausal symptoms associated with menopausal status and also determined the quality of life of menopausal women from rural Sindh. The mean scores of all the domains of Menopause rating scale were significantly high in Peri and postmenopausal women from rural Sindh. The severity of menopausal symptoms decreased the quality of life in everyday life of these rural women.

However, AlDughaither et al., (2015) conducted a study to determine the prevalence and severity of menopausal symptoms and their impact on the quality of life among Saudi women visiting primary care centers in Riyadh, Saudi Arabia. The prevalence of menopausal symptoms was comparable to previous studies in Asian women; however, the prevalence of classic symptoms of hot flushes and night sweats was lower than reported in western studies. The findings showed that Saudi women reported a score indicating milder severity of menopausal symptoms, reflecting better quality of life and ability to cope with menopausal symptoms.

It can be concluded that, the severity of menopause symptoms is the major determinants of quality of life during the menopause transition. Women who reported milder symptom severity had a better quality of life than those reporting with severe symptoms. These studies however, did not look at certain factors which could moderate the relationship between the menopausal symptom severity and quality of life such as marital status, educational level, age as well as the influence of emotional intelligence which have been reported in other diverse populations to have improved various domains of quality of life.

Emotional Intelligence and Middle aged women

In relation to the emotional reaction of middle aged women, few studies have been done to explore relationships and impacts of emotional intelligence on middle aged women (menopause stage of transition).

Several studies have shown a positive relation between emotional intelligence and age. Emotional intelligence develops or increases with age and

experience (Mayer & Salovey, 1990). In certain studies, it has been reported that Emotional Intelligence increases with age at least up to (40 - 50 years) in life (Stein, 2009; Singh, 2006; Bar-On & Parker, 2000). A research conducted for Bar-On model using Emotional Quotient Inventory among a sample of 3891 within the age range of 20 to 50 years also showed that, older people scored higher than younger people. Similarly, a study conducted by Fariselli, Chini and Freedman (2006), to find the relationship between age and Emotional Intelligence among 405 American males and females between the ages of 31 to 60. Using the six seconds' emotional intelligence assessment (SEI-2), it was reported that, Emotional Intelligence increases slightly with age. The study also found that some parts of Emotional Intelligence do increase with age, though the effect is slight; in addition, there are elements of Emotional Intelligence that do not increase with age indicating that, some competencies must be developed through training. The research showed that older people are slightly more likely to be higher in emotional intelligence. The findings suggest that Emotional Intelligence is a developing ability and is likely that, accumulated life experiences contribute to Emotional Intelligence.

Relatedly, a study was conducted by Sharma (2017) to assess the impact of age on emotional intelligence. The analysis of emotional intelligence was done for different age-groups ranging from 17 - 60 years. The age was clustered as young adulthood (17-23 years), middle-age (24 – 34 years) and mature-age (35-60 years) for analysis among 186 respondents. The results indicated a significant impact of age on emotional intelligence and its components. Total Emotional

Intelligence increased with age. Other studies have also found different results for instance, a study by Sharma (2017) indicated that, emotional intelligence becomes low or decrease from adulthood to middle adult and increased again for matured adults. Another study indicates that younger adult shows higher scores for emotional intelligence than older group of the same sample size (Bar-On & Parker, 2000).

Even though, emotional intelligence appears to increase with age, it also has the ability to increase the quality of life of middle aged women (Shahbazi, Hazrati, Moattari & Heidari, 2012). Lower emotional intelligence scores have also been associated with worse menopause symptoms (Bauld & Brown, 2009). However, only few studies have been conducted on middle aged women specifically, with none of these assertions and results been validated in the Ghanaian context specifically the middle aged group (Ansah, 2016; Setorglo et al., 2012).

Quality of Life and Emotional Intelligence

Studies have been conducted to examine the relationship between of emotional intelligence and the quality of life of middle aged menopausal women. The presentation below is the summary of some of the studies conducted and their findings.

A study conducted by Extremera and Fernández-Berrocal, (2002), examined the relationship between perceived emotional intelligence and healthrelated quality of life in middle-aged women. Ninety nine middle-aged Spanish women, who studied in two adult schools, volunteered to participate. Forty nine

were premenopausal and 45 were postmenopausal. These women completed the Trait Meta-Mood Scale and Health Survey SF-36. Scores were analysed according to social, physical, and mental health, menopausal status, and scores on perceived emotional intelligence. Then, the data regarding the mental and physical health of the premenopausal and postmenopausal women were compared after controlling for age. No associations between menopausal status and healthrelated quality of life were found. Perceived skill at mood repair was significantly associated with scores on health-related quality of life in these middle-aged women. These findings provide empirical evidence that aspects of perceived emotional intelligence may account for the health-related quality of life in midlife including social, physical, and psychological symptoms. However, the study did not assess the vasomotor, physical, sexual and psychosocial symptoms that are more peculiar to menopausal women and have the capacity to influence their quality of life negatively.

In addition, Bauld and Brown, (2009) conducted a study with one hundred and sixteen women aged 45-55 years who were recruited through women's health centers and community organizations. In this study, direct and indirect relationships were evaluated between stress, psychological distress, psychosocial factors (for example social support, coping, EI), menopause symptom severity and physical health in middle-aged women. It was revealed that, low emotional intelligence was found to be related to worse menopause symptoms and physical health, which affected the quality of life of middle aged women negatively. The associations were partly mediated by high stress, anxiety and depression, a

negative attitude to menopause and low proactive coping. These studies however, did not assess the moderating role of age, marital status, educational level and physical activity levels which influenced quality of life and emotional intelligence but showed a positive relationship between emotional intelligence and quality of life.

Dunn, Aknin and Norton (2008) agreed in terms of the goal, where they studied the relationship between emotional intelligence and health, but Elizabeth added personality and happiness as additional variables and tried to search its relationship with emotional intelligence as they also are considered predictors of the quality of life. They found a relationship between emotional intelligence and health. Previous studies explored and found that a relationship exists between emotional intelligence and life satisfaction which contribute to quality of life (Palmer, Donaldson, & Stough 2002). In a study by Al-Huwailah, (2017) to describe the nature of the relationship between quality of Life and Emotional Intelligence, the findings reveal that the presence of correlated relationship has a positive statistically significance between the dimensions of emotional intelligence and the dimensions of quality of life. It turns out that there are statistical significance differences between males and females in the quality of life and emotional intelligence in favor of the female. This also confirms that a relationship exists between emotional intelligence and some quality of life domains in middle aged women.

Pereira, Monteiro, Esgalhado, Afonso and Loureiro (2017) also assessed the levels of emotional intelligence and sexual aspect of quality of life in a large

sample of Portuguese adults. Overall results identified high levels of emotional intelligence and sexual functioning and subjective sexual well-being which form the sexual domain of quality of life. There were significant, but mild, levels of association between emotional intelligence and sexual aspect of life. This result also confirms that there is a relation between emotional intelligence and sexual functioning which is an aspect of quality of life. The findings of the above studies revealed that emotional intelligence influences quality of life. Higher emotional intelligence influences a better quality of life and vice versa. It was also revealed that, not all aspects of quality of life are been influenced by emotional intelligence. These studies, however failed to moderate the relationship with some socio-demographic factors which have been implicated in other studies to have positive and negative influence on emotional intelligence among different population.

Marital Status and Emotional Intelligence

Impact of the marital status on emotional intelligence has been a critical issue to be addressed by researchers. However marital status has been investigated in relation to emotional intelligence which has reported mixed results.

In a study conducted by Sharma and Siddiqui, (2018) to explore the difference of certain demographics on emotional intelligence, the research was carried out on a sample of 109 participants. Data was collected through the standardised scale and further it was analysed by using parametric test as data was found to be normally distributed. On the demographic variable marital status findings showed no significant difference between married and others, and

unmarried and others, while there exist a significant difference in emotional intelligence of married and unmarried participants, as married participants were more emotionally intelligent than the unmarried participants. The result is in consonance with Khodarahimi (2015) study, which examined the role of marital status in emotional intelligence, happiness, optimism and hope among 500 individuals who were voluntary selected from Shiraz City, Iran. Findings reviewed that, higher levels of emotional intelligence were found among the Married individuals and the other category that is widowed, divorced, single and remarried individuals showed a lower level of emotional intelligence.

Kalyoncu, Guney, Arslan and Ayranci (2012) also asserted that emotional intelligence of married individuals were higher than the individuals with the single status. Relatedly, Madahi, Javidi & Samadzadeh (2012) aimed to determine the relationship between emotional intelligence and marital status of students. The results showed a significant different between single individuals and married individuals in emotional intelligence, so that married individuals score's in emotional intelligence were further than single individuals. It can be concluded that marital status is an important factor that impact the levels of emotional intelligence; as married people tends to be more emotionally intelligent than others (unmarried, widowed, divorced). This study established that married individual's emotional intelligence level is higher than the single status people. In other words, married people are more emotional intelligent as compared to single status people. This may be due to the fact that in Ghanaian social environment, married people are more experienced of understanding others emotions and are

also able to handle challenging situations compared to single status (Shukla & Srivastava, 2016).

Adilogullari (2011) also studied level of emotional intelligence of some of the demographic variables in the province of Gaziantep. The findings however showed no significant relationship between marital status and emotional intelligence. Nagar (2017) also found no relationship between marital status and emotional intelligence. Additionally, Rahim and Malik, (2010) found negative relationship between marital status and emotional intelligence. It is however, not clear, the exact relationship or affects the marital status have on emotional intelligence since different researchers with varied population have given contradictory results; some showing a positive relationship, some also showed a negative relationship and other studies found no relationship between emotional intelligence and marital status.

Educational level and Emotional Intelligence

Evidence from few research works has shown that, educational level influences emotional intelligence. In relation to emotional intelligence, Lankashini, Lakmali, Lenagala, Liyanage and Arambepola (2017) sought to describe the level of EI and to determine its relationship with demographic and socio-economic characteristics found no correlation between emotional intelligence and educational level as part of the socio-demographic variables. Based on the mean score, participants were categorized as having good or poor level of emotional intelligence. The associations of emotional intelligence with socio-economic characteristics were assessed for significance using t and Chi-

square tests. Nearly 50% of students demonstrated a good level of emotional intelligence. No other socio-economic characteristic was associated with good EI. In a study by Shukla and Srivastava, (2016), education was not found having any significant relationship with emotional intelligence. This may be because participants of the study were less educated.

Another finding from Yogun and Miman (2016) was that, education level was found to be significant on their social skills and self-regulation levels emotional intelligence. Participants with a university graduation degree have the highest mean social skills scores while participants with a high school graduation degree have the highest mean self-regulation scores. Education helps to better understand the situation and to cope up with the changing situations, so it has got the positive relationship with the level of emotional intelligence. Highly educated people might be able to express their feelings, communicate openly and to understand other better than less educated. This finding is very parallel to existed findings (Rahim & Malik, 2010). Researchers have also establish a relationship between educational level and emotional intelligence indicating that, as educational level increase, their emotional level also increase (Fannin, 2002; Faroorq, 2003). The above studies have mixed results. However, an individual's educational level appears to have some relationships with their emotional intelligence level. Since educational level have an impact on emotional intelligence, it is possible that, it will have an impact on the relationship between emotional intelligence and quality of life since the moderator (educational level) interact with emotional intelligence to impact on their quality of life. However, a

study has not been conducted to ascertain the influence of educational level on the relationship between emotional and quality of life, which the current study sought to address.

Age and Emotional Intelligence

Given the relevance of critiques about examining age effects in emotional Intelligence, some studies sought to expand on previous work in this area. Some work examines how age influences the relation between gender and emotional intelligence, since previous research has identified age as one of the sociodemographic variables most relevant to emotional intelligence, as well as to the evolution of other types of intelligence (Mayer et al., 1999). The theoretical model of emotional intelligence as an ability by Mayer and Salovey, (1997) argues that it is a genuine intelligence, based in part on the observation that it increases with age and experience (Extremera & Fernández-Berrocal, 2006). As a result, some studies have found older individuals to perform significantly better on all branches of emotional intelligence (Extremera & Fernández-Berrocal, 2006; Mayer et al., 1999). In addition, other studies found the level of emotional intelligence is high among those above 40 years (Kumar & Muniandy, 2012). Lankashini, Lakmali, Lenagala, Liyanage and Arambepola (2017) also reported the level of emotional intelligence of older students to be higher than younger students.

Further studies expanded upon the relationship between emotional intelligence and age. One such study that took into account a broad range of ages found an interesting relationship between emotional intelligence and age

(Derksen, Kramer & Katzko, 2002). The authors examined the relationship between emotional intelligence and age using a sample of 873 subjects ranging in age from 19 to 84 years old, with a mean age of 50 to74 years old. The study found that emotional intelligence peaked in the 35-44 age intervals, and then decreased in older age. Another study by Shipley, Jackson & Segrest (2010), affirms Derksen, Kramer and Katzko, (2002) relationship between emotional intelligence and age, which reported that, emotional intelligence increases to middle age and decline from middle age.

Other studies, in contrast, found no significant relations between age and dimensions of emotional intelligence (Farrelly & Austin, 2007). Other studies have found a negative correlation between age and emotional perception (Day & Carroll, 2004; Palmer et al., 2005), which is consistent with a meta-analysis reporting that older people have problems at recognising emotions (Ruffman, Henry, Livingstone, & Phillips, 2008). It was also found that age does not increase other relationships such as emotional intelligence and spiritual intelligence (Rahim & Malik, 2010; Birks, McKendree, & Watt, 2009). Some researchers also reported that, when age increases the level of emotional intelligence does not increase. In addition, researchers have shown a relationship between age and satisfaction, indicating that, older people are more satisfied with their life than younger people and an increase in years brings about an increase in life satisfaction (Nestor &Leary, 2000). Gaining additional insight into this relationship may identify certain age intervals in which individuals' peak in their emotional intelligence abilities. Since age have an impact on emotional

intelligence, it is possible that, it will have an impact on the relationship between emotional intelligence and quality of life since the moderator (age) interact with emotional intelligence to impact on their quality of life. However, a study has not been conducted to ascertain this influence of which the current study sought to address.

Although these results are conflicting, together they indicate the relevance of age for the development of emotional intelligence and not only as a factor associated with emotional intelligence, but also as a potential moderator of the relation between emotional intelligence and other variables such as quality of life.

Conceptual framework

The conceptual framework depicts the connections between perceived emotional intelligence and quality of life of middle aged menopause women. These are the main relationships to be tested in the study.



Figure 1- A conceptual framework for the influence of emotional intelligence on the quality of life; moderating marital status, educational level and age.

The above diagram represents the interaction of the variables in the study. The researcher wants to establish a relationship between emotional intelligence and quality of life among menopausal women. Marital status, educational level and age were analysed to determine its moderating effect on the relationship between emotional intelligence and quality of life. Since age, marital status and educational level improves emotional intelligence, it is assumed that, age, marital status and educational level will interact to influence the relationship between emotional intelligence and quality of life.

Chapter Summary

Menopause is the natural cessation of menstruation. Menopause comes with some symptoms grouped as vasomotor, physical, sexual and psychosocial. These symptoms are caused by the natural decline of the reproductive hormones as women age. These symptoms can be severe and be complicated to pose middle aged women to some challenging health problems as they move through premenopause, menopause and post menopause stage of life. The symptom severity tends to compromise greatly on the quality of life of women during the menopause transition, which needs to be managed to better the quality of life of women.

Schlossberg transition theory asserts that the transition results in changed roles and relationships among others and its depended on the middle aged woman perception of the menopause transition. To the theorist, the situation of the menopause, the self-factors available during the transition, the support an individual acquires from people and the strategies the middle aged woman uses to cope, determines how the transition affects the woman's daily functioning and their quality in life. The cognitive behavioural model and the self-regulatory model opines that thought patterns and the cognitive representations formed for the transition will determine how severe and discomforting the transition is to the middle aged woman. As such, women need to develop positive representations of the transition. A perceive personal control of the factors associated with the transition can also impact positively on their quality of life. Certain personal resources like emotional intelligence have been proven to influence and improve

quality of life and other variables on different populations. As a result a higher emotional intelligence is an indication that middle aged women will sail through the menopause transition with some ease. Since the trait emotional theory focus on more personality, it is assume that, people's individual personality characteristics are necessary to determine how they cope and move through situations surrounding them.

The empirical review which was based on the objectives of the study indicates that, menopausal symptoms and severity /prevalence differ slightly based on the characteristics on the population used. However vasomotor symptoms (hot flushes), physical symptoms (muscle/joint pains) appear to be severe in most populations which are influenced by the age of the menopausal women. The severity of the menopausal symptoms also affects the quality of life which could be moderated by other socio-demographic factors. It was also asserted that, people with high emotional intelligence tend to have less symptoms severity which in turn influences their quality of life positively. Quality of life been shown to be influenced by age, as quality of life becomes impaired during menopause transition but becomes better during post menopause transition. Emotional intelligence also increases with age and experience to a point and decline. Marital status also affects emotional intelligence. Educated women also have a higher emotional intelligence.

It is on the basis of the above findings that the hypotheses and research questions of the study have been justified; stating that there will be a significant relationship between emotional intelligence and quality of life of middle aged menopausal women and this relationship will be moderated by marital status, educational level and age.

CHAPTER THREE

RESEARCH METHODS

Introduction

The aim of this study was to determine the influence of emotional intelligence on the quality of life and the moderating role of marital status, educational level and age among menopausal women in Kumasi Metropolis. This chapter consists of systematic methods that were followed in carrying out this study. It covers areas such as research design, research population, sampling procedure, Study Area, Data Collection instruments, data collection procedures, and data processing and analysis.

Research Design

Descriptive survey design was used for the study. According to Trochim and Donnelly, (2005) a research design provides the glue that holds the research together. He explains that the design is used to structure the research, thereby showing how all the major parts of the research work together to address the central research question. The study adopted the quantitative approach because using standardised measures, quantitative method allows for testing of several hypotheses (Bhattacherjee, 2012). According to the views of Cohen, Manion and Morrison, (2007) the choice of research design for a particular study is dependent on the purpose of the study. Since the purpose of the study is to assess the influence of emotional intelligence on the quality of life menopause women,
descriptive survey research design will be used. I also employed the descriptive research design because it allows for collecting original data, at one point in time where findings would be generalised from a smaller selected group to a larger group (Devetak, Glažar & Vogrinc, 2010). The choice of this study design was due to the fact that it enables the researcher make generalizations about the entire population.

Study Area

The study area refers to the place where the data were collected. In this study, data was collected from middle aged menopausal women in Kumasi Metropolis it is the second greatest region by population. Kumasi is the capital of the Kumasi Metropolitan Assembly and is located 300 km north-west of Accra, the national capital and has been the crossroads between the northern and southern sections of Ghana. Kumasi is often regarded as one of the biggest commercial area of Ghana; with Kejetia market as the largest open market in the Metropolis. Trading is the main economic activity. This is followed by industry and agriculture. The city is easily accessible by road or air and has a large transient and immigrant population from all parts of the country, as well as from neighboring West African countries. The estimated population of Kumasi is about 2.5 million with an annual growth rate of 5.47% (Regional Statistical Office, Kumasi). The city has a number of educational and health facilities owned by both public and private sectors. Distinguished among them is the Komfo Anokye Teaching Hospital (KATH). The Kumasi Metropolis encompasses 10 submetropolitan areas - Manhyia, Tafo, Suame, Asokwa, Oforikrom, Asawase,

Bantama, Kwadaso, Nhyiaeso and Subin (Kumasi Metropolis, *Wikipedia edited*, 2018).





Source: Kumasi Maps, Millennium Cities

Population

Burn and Grove (2010), describe population as all the elements that meet the criteria for inclusion in the study. It includes all elements, individuals or units that meet the criteria for the group of study. The population comprises all menopausal women in Ghana. The target population was all middle aged menopausal women in the Kumasi Metropolis. The accessible population was 260 middle aged menopausal women from 5 communities crafted from the 10 submetros. Namely; Santasi, Old-Tafo, Daban, Amakom and Maakro.

Inclusion criteria

The study included all menopause women with good physical and mental abilities in the selected communities in the Kumasi metropolis for the study. Women at menopausal stages were recruited in the study according to the following criteria:

- 1. Women between the ages of 40 to 60
- 2. Have naturally occurring menopause.
- 3. Mentally oriented.
- 4. Do not use hormonal replacement therapy.
- 5. Able to read and write.
- 6. Free from medical conditions like diabetes, hypertension, cardiac disease and all kinds of cancers.

Exclusion criteria: Surgical, premature and disease induced menopausal women as well as menopausal women with known chronic physical and mental health disorder or disease were excluded from the study.

Sample and Sampling Procedure

Orodho (2014) asserts that in any education and social sciences study, the sample should be selected in such a way that one is assured that such sub-groups in the population will be represented in the sample in proportion to the numbers of the population itself. A research sample is expected to mirror the population from which it comes (Trochim & Donnelly 2005). A sample size of 260 was used for the study. Since the estimated population of the middle aged menopausal women is unknown, the study, employed Cohen Table for determining sample size when the estimated population is unknown was used in this study (Cohen, 1988). The effective sample size needed to detect a medium effect size (Cohen's r = .20) with 90% (Power = .90) statistical power with a significant level (Alpha = .05) was found to consist of 259 subjects (Cohen, 1988). The sample size was increased to 260 respondents to round it up

A multi stage sampling procedure was used for the study. A combination of cluster, simple random sampling and convenient sampling techniques were employed for the selection of respondents. With the cluster sampling, the researcher grouped the sub-metros in the Kumasi metro into clusters; the sub metros within the Kumasi Metropolis are Manhyia, Tafo, Suame, Asokwa, Oforikrom, Asawase, Bantama, Kwadaso, Nhyiaeso and Subin. The ten (10) submetros were put into 5 clusters based on closeness, (Oforikrom and Asawase), (Asokwa and Nhyiaeso), (Manhyia and Tafo) (Bantama and Suame) and (Subin and Kwadaso). After putting the communities into clusters, a simple random sampling technique using the lottery method was employed to select five (5)

communities, one from each of the 5 clusters within the metropolis. All the communities within the 5 clusters were numbered and put into five separate containers, each bearing the names of the five clustered sub-metros. A number each was picked from each container randomly and the selected numbers bearing the name of the communities represented the five clusters. The five (5) selected communities were Santasi, Old-Tafo, Daban, Amakom and Maakro. A Convenient sampling was used to select the respondents for the study from the five (5) randomly selected communities, to represent the Kumasi Metropolis. The sample frame was shared evenly among the communities to ensure a fair distribution of the sample across the clustered sub-metros.

Data Collection Instruments

I employed questionnaire as the research instrument. Questionnaire is a well-established tool within social science research for acquiring information on participants' social characteristics, present and past behaviour, standards of behaviour or attitude and their belief or reason for action with respect to a topic under investigation (Bulmer, 2004). It is also used in measuring attitudes and intended behaviour in a larger population when direct observation of behaviors is not possible (Dillman, 2000). However, questionnaires could be construed contrarily by respondents. The questionnaires were analysed using descriptive (section A) and inferential statistics (section B and C).

Section A constituted the demographics and section B constituted of the adapted Menopause-Specific Quality of Life Questionnaire (MENQOL) by Hilditch et al., (1996) with 29 items. The items were put into Yes and No, after

which the Yes respondent's rated on a six likert scale from 1 not bothered to 6 extremely bothered and the third part (section C) constituted the adapted Trait Emotional Intelligence Questionnaire Short-form (TEIQue-SF) by Petrides & Furnham (2006) which was rated on a likert scale from 1 completely disagree to 7 completely agree.

Menopause-Specific Quality of Life Questionnaire (MENQOL)

For the purpose of measuring the menopause symptom and quality of life, the study adapted the 29 items Menopause-Specific Quality of Life Questionnaire (MENQOL) proposed by Hilditch et al., (1996) to assess the health-related quality of life in the menopause period. The MENQOL consists of a total of 29 items. Each item assesses the impact of one of four domains of menopausal symptoms, as experienced over the last month: Vasomotor (items 1-3), psychosocial (items 4-10), physical (items 11-26), and sexual (items 27-29). The vasomotor domain assesses hot flushes, night sweats, and sweating. The psychosocial domain evaluates the psychological well-being of the individual by including items regarding anxiousness, memory, and feeling "blue". The physical domain assesses items such as flatulence, bloating, pain, tiredness, sleeping, energy and weight gain. The sexual domain includes items related to changes in sexual desire, vaginal dryness, and intimacy. Items relating to a particular symptom are rated as present or not present, and if present, how bothersome from one (not bothersome) to six (extremely bothersome) Likert-type scale (Hilditch et al., 1996). A score is generated by dividing the summed scores for the subscale by the total number of items in that domain (subscale). For each subscale, Cronbach's α was ≥ 0.70

(Radtke, Terhorst & Cohen, 2012). The reliability for the current study was .85 for the composite and > .50 for each subscale.

Trait Emotional Intelligence Questionnaire

To measure emotional intelligence among participants, a 30 item scale developed by Petrides and Furnham, (2006) was adapted. The trait emotional intelligence questionnaire was used because, personality traits lies the key to the constructs as discussed in the literature review (see. 21-25) and since personality traits are existent in all individuals, it was necessary that an instrument that measures universal components such as personality trait be adapted even though it has not be validated in the Ghanaian context (see. Pg. 14). The scale measures the extent to which individuals are able to recognise their mood and that of others and their ability to use it to guide thinking and behaviour. The Trait Emotional Intelligence Questionnaire short-form (TEIQue-SF) consists of 30 items (for example, I usually find it difficult to regulate my emotions and I'm usually able to influence the way other people feel) (Petrides & Furnham, 2006). The TEIQue-SF is derived from the full form of the TEIQue, which covers 15 distinct facets. The items are rated on a 7 Likert-style which ranges from 1 (Completely Disagree) to 7 (Completely Agree). A global trait emotional intelligence score is calculated by summing up the item scores and dividing by the total number of items. Questions 1-30 provide scores for four factors: Wellbeing, self-control, emotionality, and sociability. Well-being is comprised of questions 5, 20, 9, 24, 12, and 27. Selfcontrol is comprised of questions 4, 19, 7, 22, 15, and 30. Emotionality is comprised of questions 1, 16, 2, 17, 8, 23, 13, and 28. Sociability is comprised of

6, 21, 10, 25, 11, and 26. Questions 2, 4, 5, 7, 8, 10, 12, 13, 14, 16, 18, 22, 25, 26, and 28 are reverse-coded. The scale has been found to have a reliability of .86 (Denz, Ozer & Isik, 2013). The reliability for the current study was .73 with the scores ranging from 1 completely disagree to 7 completely agree.

Pilot Testing of the Instrument

To assess the clarity, reliability and applicability of the study tools used in the study for data collection, a pre-testing was conducted with a representative sample of 20 women. The results of the pre-test study helped in the necessary modifications and to ascertain any need for revisions of the tools. Pre-testing of the instrument was carried out at the Cape Coast Metro. Cape Coast metropolis was chosen because, it was assumed that, they have the similar characteristics with the target population such as weather and diet among others The participants (middle aged women) of the pre-test were asked to complete the questionnaire and to provide comments or suggestions for revising any ambiguous items. They were also told to discuss openly with me any ambiguity, incoherence or incomprehension that they experienced about any aspect of the draft questionnaire. The final instrument for the study was produced after subsequent revisions in the wording of a few items. With the Menopause Specific Quality of Life (MENQOL), for example, items 6, 25 and 29 which read "experiencing poor memory", "Frequent Urinating" and "vaginal dryness during intercourse" were reworded as "difficulty in remembering things, "urinating more than I used to" and "insufficient vagina secretion during intercourse". The Trait Emotional Intelligence Questionnaire (TEIQue) was maintained without any modification.

The necessary corrections were effected after the pre-testing.

Validity of the Instrument

Joppe (2000) explained that validity determines whether the research truly measures that which it is intended to measure or how truthful the research results are. The focus of validity is not on the instrument itself but on the interpretation and meaning of the scores obtained from the instrument (Ary, Jacob & Razavieh, 2002). Validity is achieved through panel judgements or evaluation (Piesie-Anto, 2012). Experts (supervisors) in the field helped to confirm the validity of the study.

Reliability of the Instrument

Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study. Reliability indicates the consistency and exactness with which some traits are measured. It was necessary to pre-test research instruments to ensure reliability. Pallant & Manual (2007) asserted that, a pre-test is required in advance of the main survey because it ensures that instructions, questions and scale items are clear and that potential respondents will be able to understand the questions and respond appropriately, it also help the researcher to identify and eliminate any question that may offend potential respondents. Before the pre-test, the questions were given to the supervisors to be cross-checked for consistency, relevance, clarity, ambiguity and suggestions to ascertain validity and reliability of the instruments based on the research objectives. Based on the supervisors' comments and constructive criticisms refinements were made where necessary. Results for

the pretest showed that respondents understood most of the questions and had little or no challenge completing the questionnaire. The questions were answered satisfactorily and were found to be suitable for the study.

According to Bland and Altman (1997) an alpha score closer to 1 indicates more correlation between items and 0.7 or 0.8 is sufficient for most social science applications. Studies have found a reliability coefficient of .70 or more to be a good reliability (Fraenkel & Wallen, 2000). However, for the purpose of this study, the cut off value adopted was 0.5 as suggested by Nunally (as cited in Blankson & Ming-Sung Cheng, 2005; Djan, 2018). This therefore suggests that all the constructs in the study had good reliability and this is presented in Table 2.

Item Sections	Coefficient	No. of
		Items
	(r)	
MENQOL (composite)	0.85	29
Vasomotor	0.65	3
Physical	0.53	15
Psychosocial	0.74	7
Sexual	0.61	3
TEIQue	0.73	30

Table 2- Reliability Analysis of Construct

Source: Field data: Addae, (2019)

From the Table 2, the overall reliability indexes of the two questionnaires are 0.85 and 0.73 for Menopause Specific Quality Of Life Questionnaire (MENQOL) and the Trait Emotional Intelligence Questionnaire (TEIQue)

respectively, with all the subscales above .50. Therefore, the reliability obtained for the constructs are reliable and justifiable for the study.

Ethical Consideration

Ethical clearance form was taken from Institutional Review Board in the University of Cape Coast. The form spelt out the purpose of the study, the need for individual participation, anonymity as well as confidentiality of respondents' responses. Informed consent was sought from participants by explaining the purpose of the study to them.

Informed Consent

Participants' informed consent was sought for the study. This was done by indicating the purpose of the research and voluntarily seeking participants' participation. In addition, the research instrument and mode of data collection was explained, benefits, anticipated risks and discomfort likely to arise in the course of obtaining participants data was also explained to enable them choose to participate in the study.

Anonymity

Participants were assured that questionnaires had no part that can link participants' identity to information provided. Names and personal identification information was not taken.

Confidentiality

Research participants were assured of the confidentiality of the information provided. The information provided was not disclosed to third parties and for use other than stated in the research.

Data Storage

Data collected during this research was be kept by the researcher under lock. The data was not made available to other third parties to make use of. The data were destroyed after its use.

Data Collection Procedures

An ethical clearance was given by the ethical review board of the College of Education, University of Cape Coast, after the proposal was submitted (see Appendix C). An introductory letter was taken from the Department of Education and Psychology and copies were sent to the various places (women groups in churches, market women associations and women fun clubs/groups) which were conveniently selected. (See. Appendix B). A follow up was done to arrange for time and date which were convenient for the data to be collected and as well take the opportunity to explain to the leaders what the study sought to achieve and the need for the study. The date and time were arranged to commence data collection. The data was collected in their meeting venue.

The researcher administered the questionnaire to all the 260 menopausal women who attended the meetings of the selected 'women groups in churches', 'market women associations' and 'women fun clubs/groups' which were conveniently selected with the help of two (2) research assistants in the selected

communities in the Kumasi Metropolis. The two research assistance were given thorough education/training about the purpose of the study, the use of the research instrument and the meanings derived from the instrument and the ethical considerations of the study. After the training, the assistants were made to collect data from five (5) different women to check for necessary mistakes using face validity after which they were retrain to correct all the lapses in their understanding before the researcher together with the assistants finally moved to the selected communities and sampled participants to collect the data for the study. The team used three days per week (Fridays, Saturdays and Sundays) from 9.00 a.m. to 5.00 p.m. The study was conducted from the beginning of March to Mid- April 2019. The researcher together with the assistants introduced themselves and briefly explained the purpose of the study as well as the need to conduct the study (Creswell, 2012) to the gathered women who met the criteria for inclusion in the study. A total of 260 questionnaires were retrieved which represented 100% of the total of 260 questionnaires distributed.

Data Processing and Analysis

Data analysis is a critical examination of material in order to understand its parts and its relationship and to discover its trends (Twumasi, 2001). The data gathered was checked one after the other to ensure it completeness. According to Martin and Bridgmon (2012), respondents who did not respond to more than 10% of the items of the questionnaire should be eliminated. None of the questionnaires were eliminated since all the respondent answered more than 10% of the

questionnaire. The questionnaires were then numbered from one (1) to the last number (260).

With the Menopause Specific Quality of Life (MENQOL), the systematic scoring for each of the four MENQOL domains was identical. The six-point Likert scale used during the administration of the MENQOL was converted for scoring and data analysis. For each of the 29 items, the seven-point Likert scale was converted to an eight point scale, ranging from 1 to 8. A "1" is equivalent to a woman responding "no", indicating she has not experienced this symptom in the past month. A "2" indicates that the woman experienced the symptom. Scores "3" through "8" indicate increasing levels of bother experienced from the symptom, and correspond to the "1" though "6". The score by domain is the mean of the converted item scores forming that domain and ranges from 1-8. In relation to the Emotional Intelligence Questionnaire (TEIQue), a composite score was calculated by finding the mean for each participant who was used to determine their emotional intelligence level on a continuum of 1 to 7. Numbers were also assigned to the demographics of the respondent. The data was coded and entered into the Statistical Product for Service Solution (SPSS version 23) computer software. The data was screened for entry errors and outliers. Inferential statistics were done using a confidence interval of 95% and an alpha level of .05. For inferential analysis, the researcher checked for normality assumptions together with other significant assumptions depending on the type of statistical analysis. Q-Q plot was used to test for normality of the data. After testing for statistical

significance, the practical significance (effect size) was also computed to find out the magnitude of the differences.

Demographics

The demographic data of the respondents were analysed using frequencies and percentages. The demographics were marital status, age range, and educational level.

To find out the commonest of the menopausal symptom experienced by middle aged women, which was research question 1 (see. Pg.11) frequencies and percentages were used to analyse the data collected. Based on the dichotomous items used (NO = 1, YES = 2), the researcher used the number of responses for YES=2 to ascertain the commonest of the symptoms experienced.

To examine the quality of life levels among middle aged women, which was research question 2 (see. Pg.11) means and standard deviation were used to analyse the data collected. Based on the scale used (1 not at all bothered to 6 extremely bothered), a mid-point of 3.5 was used as a baseline for comparison. That is, mean values above 3.5 indicated that most of the respondents were in agreement to the statement and experienced a high severity of symptoms. Conversely, a mean value less than 2.5 showed that most of the respondents experienced the symptoms in low severity. A mean of 3.5 depicted that the greater proportion of the respondent experienced an average severity of symptoms.

To investigate the emotional intelligence levels among middle aged women, which was research question 3 (see. Pg. 11) means and standard deviation were used to analyse the data collected. Based on the scale used (1

completely disagree to 7 completely agree) a mid-point of 4 was used as a baseline for comparison. That is, mean values above 4 indicated that, most of the respondents were in agreement to the statement and experienced a high level of emotional intelligence. Conversely, a mean value less than 4 showed that most of the respondents were experienced a low level of emotional intelligence. A mean of 4 depicted that the greater proportion of the respondent experienced had an average emotional intelligence level.

Multivariate regression test was used to analyse the data to test hypothesis one (see. Pg.11). Multivariate regression was used because, the researcher sought to find a relationship between one independent variable that is emotional intelligence and 4 dependent variables that is vasomotor, physical, psychosocial and sexual aspects of quality of life. The normality assumption was tested using the Q-Q plot. The quality of life has 4 sub scales and the emotional intelligence is on continuous measure with a composite score. Partial eta squared was used to determine for the effect size or magnitude of the relationship.

To investigate whether age, marital status and educational level can significantly moderate the relationship between quality of life and emotional intelligence which was the focus of hypotheses 2 to 4 (see. Pg. 12). The normality assumption was tested using the Q-Q plot. The quality of life has 4 sub scales and the emotional intelligence is on continuous measure with a composite score. Moderation analysis was done using PROCESS by Hayes, (2018). This is a regression based approach. PROCESS was chosen for this study because it is one of the contemporary ways of doing moderation. It uses the bootstrap which helps

to boost the estimate of results since it will reduce the errors to help get a significant interaction if it exists in the data.

Chapter Summary

The study employed a descriptive survey design with a quantitative approach in the conduct of the study. The study was targeted to middle aged menopausal women in the Kumasi Metropolis who were 260 in total. The study adapted a standardised scale called Menopause-Specific quality of life (MENQOL) and the Trait Emotional Intelligence Questionnaire- SF (TEIQue SF) with 29 and 30 items respectively. Through a multi-stage sampling technique, the questionnaire was administered to 260 women. Efforts were made to ensure validity and reliability of the results throughout the conduct of the study. Percentages and frequencies as well as Mean and Standard Deviation were used to analyse the data to answer the research question. For the hypothesis, multivariate regression and moderation analysis was used in testing them.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter deals with the presentation and analysis of data. The purpose of the study was to assess the influence of emotional intelligence on the quality of life of middle aged menopausal women. Specifically, to ascertain (a) the Menopausal symptoms among middle aged women (b) the quality of life of middle aged menopausal women (c) the emotional intelligence levels of middle aged menopausal women (d) Relationship between emotional intelligence and quality of life (vasomotor, physical, psychosocial and sexual) among middle aged menopausal women (e) the moderating role of marital status between emotional intelligence and quality of life (f) the moderating role of educational level between emotional intelligence and quality of life (g) the moderating role of age between emotional intelligence and quality of life (h) the moderating role of physical activity levels between emotional intelligence and quality of life.

This chapter presents the background data of the respondents as well as the results and discussion of the study.

Background Characteristics of Respondents

This section covers the socio-demographics of the respondents namely: marital status, age, and level of educational. The background information of the respondents is captured in Table 3, 4 and 5.

The researcher ascertained the age range of the respondents of the study, using frequencies and percentages. Table 3 presents the information pertaining to age range of the respondents.

Table 3 - Age range of Respondents $(n = 260)$						
Age (years)	Frequencies	Percentages				
40 - 45	34	13.1				
	128	49.2				
46 – 54						
	08	27.7				
55 61	98	37.7				
55 - 01						
Total	260	100.00				
1.00001	200	100.00				

Source: Field survey, Addae (2019)

The data in Table 3 presents the distribution of the age range of middle aged menopausal women employed for the study. The age range were group into 3 different categories (40 - 45), (46 - 54) and (55 - 61). Two hundred and sixty (260) representing 100% of respondents participated in the study. It was revealed that among the respondents, 49.2% were between the ages of 46 and 54 years, 37.7% were between the range of 55 and 61 years and 13.1% were between 40 and 45 years. The study therefore revealed that, majority of the respondent was between the ages of 46 and 54. It can be infer that, the Ghanaian women falls

within the globally reported age range for menopause experience. (Kato et al., 1998; Rotem et al., 2005).

The researcher further ascertained the marital status of the respondents of the study using frequencies and percentages. Table 4 presents the information pertaining to marital status of respondents.

Marital Status	Frequencies	Percentages
Single	13	5.0
Married	100	38.5
Divorced	63	24.2
Widowed	84	32.3
Total	260	100.00

Table 4-Marital Status of Respondents (n = 260)

Source: Field survey, Addae (2019)

The data in Table 4 presents the distribution of the marital status of middle aged menopausal women employed for the study. The marital status were categorized into 4 different groups that is, 'single', 'married', 'divorced' and 'deceased'. Two hundred and sixty (260) representing 100% of respondents participated in the study. The results revealed that, 38.5% of the respondents were married, 32.3% were widowed, 24.2% were divorced and 5.0% were single. The studies therefore revealed that majority of the menopausal women were married.

The researcher ascertained the educational level of the respondents of the study using frequencies and percentages. Table 5 presents the information pertaining to educational level of respondent.

Educational Level	Frequencies	Percentages
Read and Write	39	15.0
Basic/Intermediate	132	50.8
Secondary	74	28.5
Tertiary	15	5.8
Total	260	100.00

Table 5- *Educational Level of Respondents* (n = 260)

Source: Field survey, Addae (2019)

The data in Table 5 presents the distribution of the educational level of middle aged menopausal women employed for the study. The educational level were categorized into 4 different groups that is; read and write, basic/intermediate, secondary and tertiary. It was shown that 50.8% of the respondents had Basic/Intermediate level of education, 28.5% had secondary level education, 15% could only read and write and 5.8% had tertiary. The study therefore revealed that, majority of the women had Basic/Intermediate level of education. This may be attributed to the fact that, about 40years ago, girl-child education was not encouraged in Ghana.

Research Question One: What are the common menopausal symptoms among middle aged women?

Research question one sought to find out the most common menopausal symptoms, as experienced by middle aged menopausal women. The question was answered using responses from the dichotomous section items 1 - 29. To determine the adequacy and accuracy from the responses, codes were assigned to

the responses with 1 representing NO and 2 representing YES. Frequencies and percentages were the statistical tools used in answering this research question. The results are presented in Table 6.

Table 6- Distribution of the Common Menopausal Symptom Experienced byMiddle Aged Menopausal Women

Symptoms	NO		YES	
	F	%	F	%
VASOMOTOR				
Hot flushes	103	39.6	156	60.4
Night Sweat	113	43.5	147	56.5
Sweating	110	42.3	150	57.7
PSYCHOSOCIAL				
Being dissatisfied with personal life	134	51.5	126	48.5
Feeling anxious or nervous	98	37.7	162	62.3
Difficulty remembering things	5	1.9	255	98.1
Accomplishing less than I used to	0	0	260	100.0
Feeling depressed	68	26.2	192	73.8
Being impatient with other people	67	25.8	193	74.2
Feelings of wanting to be alone	102	39.2	158	60.8
PHYSICAL				
More flatulence	29	11.2	231	88.8
Feeling of aches in muscle and joint	1	0.4	259	99.6

Table 6 cont'd

I often feel tired or worn out	5	1.9	255	98.1
I have difficulty sleeping	97	37.5	163	62.5
I have aches in back of head and	104	40.0	156	60.0
neck				
Decrease in physical strength	1	0.4	259	99.6
Decrease in stamina for rigorous	0	0	260	100.0
activity				
I feel a lack of energy	16	6.2	243	92.0
I have dry skin	42	16.2	218	83.8
I have gained more weight	69	26.5	191	73.5
Increased hair growth in my face	124	47.7	136	52.3
My appearance, texture or tone of	5	1.9	255	98.1
skin				
I feel bloated than I used to	67	25.8	193	74.2
I experience low backache	10	3.9	249	96.1
I urinate more than I used to	17	6.5	242	93.1
I involuntary urinate while laughing	154	59.2	106	40.8
or coughing				
SEXUAL				
My sexual desire have changed	39	15.0	221	85.0
I try avoid intimacy than I used to	61	23.5	199	76.5
I experience insufficient vaginal	26	10.1	232	87.9
secretion				

Source: Field survey, Addae (2019)

Table 6 illustrates the commonest of the menopausal symptoms among the studied subjects. It can be observed that, the most commonest symptoms of vasomotor, psychosocial, physical and sexual domains were, hot flushes (60.4%),

accomplishing less (100.0%), decrease in stamina for rigorous activity (100.0%) and experience of insufficient vaginal secretion (87.9%) respectively, while the least common symptoms in these domains were, night sweat (56.5), being dissatisfied with personal life (48.5%) involuntary urinating while laughing or coughing (40.8%) and avoiding intimacy (76.5) respectively.

Judging from the results, the most common/prevalent menopausal symptom experienced by menopausal women are hot flushes, accomplishing less, decrease in stamina for rigorous activity and insufficient vaginal secretion during intercourse.

Research Question Two: What are the levels of quality of life among middle aged women?

Research question two sought to find out the quality of life of middle aged menopausal women. In order to achieve this objectives, respondents were provided with some statement from the Menopause-Specific Quality of Life (MENQOL) instrument (symptoms) to which they had to respond by ticking from 1 not at all bothered to 6 extremely bothered from the scale section of the research questionnaire. The scored responses ranged from 1 to 6 for each domain. Mean and Standard deviation was the statistical tool for the analysis. The results are presented in Table 7.

QUALITY OF LIFE	Mean	Std.
		Deviation
VASOMOTOR		
Hot flushes	3.83	1.21
Night sweat	3.84	0.97
Sweating	3.60	0.89
Overall mean	3.60	0.87
PSYCHOSOCIAL		
Being dissatisfied with personal life	4.45	1.28
Feeling anxious or nervous	4.51	1.29
Difficulty in remembering things than I used to	3.18	1.05
Accomplishing less than I used to	3.50	0.88
Feeling depressed or moody than I used to	4.33	1.39
Being impatient with other people	4.52	1.26
Feelings of wanting to be alone than I used to	4.16	1.25
Overall mean	4.05	0.71
PHYSICAL		
More Flatulence than I used to	3.57	1.01
Feeling of Aches in muscle and joints than I used to	3.30	0.98
I often Feel tired or worn out than previously	3.98	0.89
experienced		,
I have Difficulty sleeping	3.68	1.40
I experience Aches in back of head and neck	3.74	1.77
Decrease in physical strength	3.79	0.82
Decrease in stamina for rigorous activity	3.75	0.83
I Feel a lack of energy	4.22	1.02
I have dry skin	3.93	1.23

 Table 7- Mean and Standard Deviation of the quality of life of menopausal women

Table 7 cont'd

I have gained more Weight	3.93	1.26
Increased hair growth in my face	3.55	1.04
My appearance, texture or tone of skin have changed	4.02	0.87
I Feel bloated than I used to	4.20	1.11
I experience Low backache than I used to	3.56	0.87
I Urinate more than I used to	3.67	1.07
I Involuntary urinate when laughing or coughing	4.38	1.31
Overall mean	3.96	0.41
SEXUAL		
My sexual desire have changed	3.32	1.01
I try to Avoid intimacy	3.34	1.02
Vaginal dryness during intercourse	3.64	0.81
Overall mean	3.38	0.73

Source: Field survey, Addae (2019) Maximum = 4.51, Minimum = 3.18

From Table 7, it is indicated that the highest mean scores (above midpoint) of symptoms severity in vasomotor, psychosocial, physical and sexual domains, Night sweat (×= 3. 84, SD = 0.97), Being impatient with other people (×= 4.52, SD = 1.26), Involuntary Urination (×= 4.38, SD = 1.31) Vaginal dryness during intercourse (×= 3.64, SD = 0.81) respectively representing a low quality of life. The table also indicate that, the lowest Mean score (below md-point) of symptom severity in psychosocial, physical and sexual domains, "difficulty remembering" (×=3.18, SD=1.05), "Feelings of aches in muscle" (×= 3.30, SD= 0.98), "Avoiding intimacy" (×=3.34, SD= 1.02), "Changes in sexual desire" (×= 3.32, SD= 1.01) indicating a high quality of life. "Accomplishing less" which is a psychosocial domain had an average level of symptom severity (×= 3.50, SD=

0.88). All the other mean scores for the proxies of each domain are above average indication of a low quality of life. The overall mean for the vasomotor (\times = 3.60, SD= 0.87), was above the average of 3.5, indicating a low quality of life in vasomotor aspect of quality of life. For psychosocial aspect of quality of life, the overall mean was (\times = 4.05, SD= 0.71), which was above the average point of 3.5 indicating a low quality of life in the psychosocial domain. For physical domain, the overall mean (\times = 3.96, SD= 0.41) which is above the average point of 3.5, indicating a low quality of life in the physical domain. For sexual aspect, the overall mean was (\times = 3.38, SD= 0.73) which was below the average point of 3.5, indicating a better quality of life in the sexual domain of quality of life.

It can be concluded from the results that, menopausal women had a severe experience of menopausal symptoms thereby decreasing/lowering their level of quality of life in the vasomotor, psychosocial and physical. However, there was a moderate experience of the sexual symptoms indicating average quality of life of sexual domains.

Research Question Three: What are the emotional intelligence levels of middle aged menopausal women?

Research question three sought to find out the emotional intelligence of middle aged menopausal women. In order to achieve these objectives, respondents were provided with some statement from the Trait Emotional Intelligence Questionnaire short form (TEIQue-SF). There are seven possible responses to each statement ranging from 'Completely Disagree' (number 1) to 'Completely Agree' (number 7) from the section C scale items from 1 - 30 of the

research questionnaire. Mean and Standard deviation was the statistical tool for the analysis. The results are presented in Table 8.

Table 8 – Means and Standard Deviation of the Emotional Intelligence of menopausal women

Items	Mean	Std.
		Deviation
Expressing my amotions with words is not a problem for ma	2 71	0.02
Expressing my emotions with words is not a problem for me	5.71	0.92
I often find it difficult to see things from another person's	3.77	1.19
viewpoint		
On the whole, I'm a highly motivated person	3.30	0.81
I usually find it difficult to regulate my emotions	3.96	0.84
I generally don't find life enjoyable	3.69	0.89
I can deal effectively with people	3.62	0.84
I tend to change my mind frequently	4.26	1.06
Many times, I can't figure out what emotion I'm feeling	3.61	0.71
I feel that I have a number of good qualities	3.32	0.64
I often find it difficult to stand up for my rights	3.85	0.93
I'm usually able to influence the way other people feel	3.68	0.62
On the whole, I have a sad or negative perspective on most	4.19	1.05
things		
Those close to me often complain that I don't treat them right	4.16	1.09
I often find it difficult to adjust my life according to the	4.05	0.76
circumstances		
On the whole, I'm able to deal with stress	3.65	0.64
I often find it difficult to show my affection to those close to	3.88	0.83
me		
I'm normally able to "get into someone's shoes" and	3.70	0.72
experience their emotions		

I normally find it difficult to keep myself motivated	4.07	0.85
I'm usually able to find ways to control my emotions when I	3.71	0.68
want		
On the whole, I'm pleased with my life	3.70	0.79
I would describe myself as a good negotiator	4.11	0.93
I tend to get involved in things I later wish I could get out of	3.82	0.90
I often pause and think about my feelings	3.83	0.89
I believe I'm full of personal strengths.	3.58	0.66
I tend to "back down" or give up even if I know I'm right	3.60	0.92
I don't seem to have any power at all over other people's	3.59	0.65
feelings.		
I find it difficult to bond well even with those close to me	3.91	0.83
Generally, I'm able to adapt to new environments	3.46	0.79
Others admire me for being relaxed	3.59	0.84
Overall mean	3.77	0.41

Source: Field survey, Addae (2019) Maximum = 4.26, Minimum = 3.30

From Table 8, the highest mean score (above the mid-point of 4) for emotional intelligence level was "I tend to change my mind frequently" (\times = 4.26, SD = 1.06), "On the whole, I have a bad perspective on most things" (\times = 4.19, SD = 1.05), "Those close to me often complain" (\times = 4.16, SD = 1.09), "I would describe myself as a good negotiator" (\times = 4.11, SD = 0.93), "I normally find it difficult to keep myself motivated" (\times = 4.07, SD = 0.85), "I often find it difficult to adjust my life according to the circumstances" (\times = 4.05, SD = 0.16) indicating a higher emotional intelligence level. Mean scores below the average indicate a low emotional intelligence. From the table the overall mean was (\times = 3.77, SD = 0.41) which was below the average mid-point of 4.0 indicating a low emotional intelligence level of menopausal women.

Judging from the results, it can be concluded that, menopausal women had a low emotional intelligence level.

Hypothesis One: There is a statistically significant relationship between emotional intelligence and quality of life of menopausal women.

Hypothesis one sought to ascertain the relationship that exist between emotional intelligence and quality of life of the middle aged menopausal women. In order to achieve this objective, the composite score for the Trait Emotional Intelligence Questionnaire (TEIQue-SF) and the composite score for each domain of the Menopause-Specific quality of life (MENQOL) were used. Multivariate regression was the statistical tool for the analysis. No missing data was found by scanning through the data entry of the variables. There was no data entry error identified and there were no outliers as checked with the Z-scores. The data met the normality assumptions based on the researcher discretion by observing the Q-Q plot with the lines been closer to the plot. This was an indication that, the normality assumption was not violated so the use of parametric tool was applicable. The results are presented in Table 9.

		Hypothesis				
Effect		Value	F	df	Error df	Sig.
Intercept	Pillai's Trace	.264	22.3	4.0	249	.000
	Wilks' Lambda	.737	22.3	4.0	249	.000
	Hotelling's	.358	22.3	4.0	249	.000
	Trace					
	Roy's Largest	.358	22.3	4.0	249	.000
	Root					
CSTEIQue	Pillai's Trace	.034	2.19	4.0	249	.071
	Wilks' Lambda	.97	2.19	4.0	249	.071
	Hotelling's	.035	2.19	4.0	249	.071
	Trace					
	Roy's Largest	.035	2.19	4.0	249	.071
	Root					

Table 9- Multivariate Regression of the Relationship between EmotionalIntelligence and Quality of Life of Menopausal Women.Multivariate Tests

Source: Field survey, Addae (2019)

NB: CSTEIQue = Composite score for trait emotional intelligence questionnaire

The results in Table 9, shows the relationship between emotional intelligence and quality of life. Wilks' Lambda = .97, F(4, 249) = 2.19, p = .071 partial eta squared = .03. According to the multivariate model, there was no significant statistical relationship between emotional intelligence and quality of life.

	Dependent	00	Mean			Partial Eta
Source	Variable	df	Square	F	Sig.	Squared
Corrected	VASOMOTOR	1	11.6	5.9	.02	.023
Model	PSYCHOSOCIAL	1	3.87	3.9	.05	.015
	PHYSICAL	1	9.52	.00	.99	.000
	SEXUAL	1	9.57	.78	.38	.003
Intercept	VASOMOTOR	1	.170	.09	.77	.000
	PSYCHOSOCIAL	1	10.1	10.1	.002	.038
	PHYSICAL	1	29.3	87.6	.000	.258
	SEXUAL	1	139	11.4	.001	.043
CSTEIQue	VASOMOTOR	1	11.6	5.9	0.16	.023
	PSYCHOSOCIAL	1	3.87	3.9	.05	.015
	PHYSICAL	1	9.52	.00	.99	.000
	SEXUAL	1	9.57	.78	.38	.003
Error	VASOMOTOR	252	1.96			
	PSYCHOSOCIAL	252	1.00			
	PHYSICAL	252	.334			
	SEXUAL	252	12.2			

Table 10 - Tests of Between-Subjects Effects

Source: Field survey, Addae (2019)

NB: CSTEIQue = Composite score for trait emotional intelligence questionnaire

With the univariate model assessing the model of each variable, in terms of vasomotor = .11.6 F(1, 252) = 5.9 p = .16 partial eta squared .023. According to the vasomotor equation, the model is hot statistically significant. In terms of psychosocial, = 3.87 F(1, 252) = 3.9 p = .05 partial eta squared .015. According to the psychosocial equation, the model is statistically significant. In terms of physical, = 9.52 F(1, 252) = .00 p = .99 partial eta squared .00. According to the physical equation, the model is not statistically significant. In terms of sexual, = 9.57 F(1, 252) = .78 p = .38 partial a squared .003. According to the sexual equation, the model is not statistically significant.

Dependent Variable	Parameter	В	Std. Error	Т	Sig.
VASOMOTOR	Intercept	.241	.818	.295	.768
	CSTEIQue	.525	.216	2.44	.016
PSYCHOSOCIAL	Intercept	1.86	.585	3.17	.002
	CSTEIQue	.303	.154	1.97	.050
PHYSICAL	Intercept	3.16	.338	9.36	.000
	CSTEIQue	002	.089	017	.987
SEXUAL	Intercept	6.89	2.05	3.37	.001
	CSTEIQue	.477	.539	0.89	.377
0 11	A 1 1 (2010)				

Table 11 - Parameter Estimates

Source: Field survey, Addae (2019)

NB: CSTEIQue = Composite score for trait emotional intelligence questionnaire

From the parameter estimate, psychosocial, b = .30, t = 1.9, sig .05. Since b is positive, it means the relationship between emotional intelligence and psychosocial aspect of quality of life is a positive relationship. This means that, when emotional intelligence is increased by 1unit, psychosocial aspect of quality of life will increase by .30.

It can be inferred that, there was no significant statistical relationship between emotional intelligence and quality of life in general among middle aged women. However, the study found a significant relationship with the vasomotor and psychosocial domain of quality of life and emotional intelligence.

Hypothesis Two: Marital status will significantly moderate the relationship between emotional intelligence and quality of life of menopausal women.

Hypothesis two sought to ascertain the moderating role of marital status on the relationship between emotional intelligence and quality of life of the middle aged menopausal women. The purpose of this hypothesis was to determine whether marital status is a determinant for the relationship between emotional intelligence and the quality of life of menopausal women.

Table 12 - Moderation Effect of Marital Status on the Relationship betweenEmotional Intelligence and Vasomotor Dimension of Quality of Life

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	-1.09	6.18	0.18	-16.91	9.39
X on Y	0.78	1.63	0.48	-2.16	4.79
W1 on Y	-1.21	6.33	-0.19	-12.04	14.79
W2 on Y	2.87	6.48	0.44	-8.27	18.78
W3 on Y	2.77	6.30	0.44	-7.82	18.71
X*W1 on Y	0.44	1.68	0.26	-3.63	3.48
X*W2 on Y	-0.63	1.71	-0.37	-4.65	2.48
X*W3 on Y	-0.63	1.67	-0.38	-4.65	2.33

Model summary- R^2 change = 0.21; F = 1.78; df1 = 3.00; df2 = 246, p = 0.15

X- Vasomotor; Y- Emotional Intelligence; W – Marital Status; W1 – Married; W2 – Divorced; W3 – Widowed; Comparison group – Single

*Significant at .05 level.

From Table 12, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 1.78, p =

0.15, $R^2 = .21$. Interaction between the married (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = 0.44, .95CI (-3.63, 3.48). Interaction between the divorced (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = -0.63, .95CI (-4.65, 2.48). Again, interaction between the widowed (moderator) and emotional intelligence (predictor of vasomotor, b = -0.63, .95CI (-4.65, 2.48). Again, interaction between the significant predictor of vasomotor, b = -0.63, .95CI (-4.65, 2.33).

Table 13 - Moderation Effect of Marital Status on the Relationship betweenEmotional Intelligence and Psychosocial Dimension of Quality of Life

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	1.19	2.81	0.42	-3.83	8.07
X on Y	0.47	0.73	0.64	-1.26	1.84
W1 on Y	-1.69	3.03	-0.56	-8.49	3.75
W2 on Y	3.75	3.11	1.21	-3.16	9.13
W3 on Y	0.41	2.96	0.14	-6.44	5.91
X*W1 on Y	0.49	0.79	0.62	-0.97	2.22
X*W2 on Y	-0.96	0.81	-1.18	-2.43	0.81
X*W3 on Y	-0.15	0.77	-0.19	-1.59	1.59

Model summary- R^2 change = 0.05; F = 4.18; df1 = 3.00; df2 = 246, p = < 0.00

X- Psychosocial; Y- Emotional Intelligence; W – Marital Status; W1 – Married; W2 – Divorced; W3 – Widowed; Comparison group – Single

*Significant at .05 level.

From Table 13, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 4.18, p <

0.00, $R^2 = .05$. Interaction between the married (moderator) and emotional intelligence (predictor variable) was not a significant predictor of psychosocial, b = 0.49, .95CI (-0.97, 2.22). Interaction between the divorced (moderator) and emotional intelligence (predictor variable) was not a significant predictor of psychosocial, b = -0.96, .95CI (-2.43, 0.81). Again, interaction between the widowed (moderator) and emotional intelligence (predictor of psychosocial, b = -0.96, .95CI (-2.43, 0.81). Again, interaction between the significant predictor of psychosocial, b = -0.15, .95CI (-1.59, 1.59).

Variables *b*-value *t*-value 95% CI **BLLCI BULCI** BSE Constant 4.12 3.98 0.42 -5.79 10.01 X on Y -0.29 1.08 0.64 2.39 -1.85 W1 on Y -2.66 4.02 -0.56 -8.65 7.37 W2 on Y 0.14 4.01 1.21 -5.81 10.00 W3 on Y -0.28 4.03 0.14 -6.35 9.70 X*W1 on Y 0.76 1.09 0.62 -1.93 2.36 X*W2 on Y -0.01 1.09 -1.18 -2.641.61 X*W3 on Y 0.10 1.09 -0.19 -2.581.73

Table 14- Moderation Effect of Marital Status on the Relationship betweenEmotional Intelligence and Physical Dimension of Quality of Life

Model summary- R^2 change = 0.05; F = 4.66; df1 = 3.00; df2 = 246, p = < 0.00

X- Physical; Y- Emotional Intelligence; W – Marital Status; W1 – Married; W2 Divorced; W3 – Widowed; Comparison group – Single

*Significant at .05 level.

From Table 14, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 4.66, p < 0.00, $R^2 = .05$. Interaction between the married (moderator) and emotional
intelligence (predictor variable) was not a significant predictor of physical, b = 0.76, .95CI (-1.93, 2.36). Interaction between the divorced (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = -0.01, .95CI (-2.64, 1.61). Again, interaction between the widowed (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical dimension of quality of life, b = -0.10, .95CI (-2.58, 1.73).

<i>b</i> -value		<i>t</i> -value	95% CI	
		-	BLLCI	BULCI
	BSE			
30.51	19.76	1.54	-20.24	54.81
-6.45	5.29	-1.22	-13.47	6.75
-29.00	20.03	-1.45	-54.39	22.59
-19.83	20.43	-0.97	-46.27	31.76
-21.69	19.91	-1.09	-46.69	29.65
8.44	5.37	1.57	-4.98	15.68
5.78	5.48	1.05	-7.68	13.23
6.56	5.34	1.23	-6.75	13.73
	<i>b</i> -value 30.51 -6.45 -29.00 -19.83 -21.69 8.44 5.78 6.56	b-value BSE 30.51 19.76 -6.45 5.29 -29.00 20.03 -19.83 20.43 -21.69 19.91 8.44 5.37 5.78 5.48 6.56 5.34	b-value t-value BSE 30.51 19.76 1.54 -6.45 5.29 -1.22 -29.00 20.03 -1.45 -19.83 20.43 -0.97 -21.69 19.91 -1.09 8.44 5.37 1.57 5.78 5.48 1.05 6.56 5.34 1.23	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 15 - Moderation Effect of Marital Status on the Relationship betweenEmotional Intelligence and Sexual Dimension of Quality of Life

Model summary- R^2 change = 0.03; F = 2.84; df1 = 3.00; df2 = 246, p = 0.04

X- Sexual; Y- Emotional Intelligence; W – Marital Status; W1 – Married; W2 – Divorced; W3 – Widowed; Comparison group – Single

*Significant at .05 level.

From Table 15, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 2.84, p = 0.04, $R^2 = .03$. Interaction between the married (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual aspect of

quality of life, b = 8.43, .95*CI* (-4.98, 15.68). Interaction between the divorced (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual aspect of quality of life, b = 5.78, .95*CI* (-7.68, 13.22). Again, interaction between the widowed (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual aspect of quality of life, b = 6.56, .95*CI* (-6.75, 13.73).

Based on the analyses and interpretations from the four tables above, the moderation was not significant which means that, marital status is not a significant moderator of the relationship between Emotional Intelligence and Quality of Life.

Hypothesis Three: Educational Level will significantly moderate the relationship between emotional intelligence and quality of life of menopausal women.

Hypothesis three sought to ascertain the moderating role of educational level on the relationship between emotional intelligence and quality of life of the middle aged menopausal women. The purpose of this hypothesis was to determine whether educational level was a moderator for the relationship between emotional intelligence and the quality of life of menopausal women.

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	-2.38	2.31	1.03	-7.06	2.09
X on Y	1.22	0.62	1.98	0.02	2.46
W1 on Y	2.89	2.56	1.13	-2.14	8.05
W2 on Y	4.69	2.89	1.62	-0.89	10.62
W3 on Y	0.67	3.59	0.19	-6.58	7.64
X*W1 on Y	-0.76	0.68	-1.11	-2.12	0.58
X*W2 on Y	-1.23	0.77	-1.59	-2.83	0.25
X*W3 on Y	-0.23	1.00	-0.22	-2.13	1.79

Table 16 - Moderation Effect of Educational Level on the Relationship betweenEmotional intelligence and vasomotor dimension of Quality of Life

Model summary- R^2 change = 0.01; F = 0.89; df1 = 3.00; df2 = 246, p = 0.45

X- Vasomotor; Y- Emotional Intelligence; W – Educational Level; W1 – Primary; W2 – Secondary; W3 – Tertiary; Comparison group – Read and write

*Significant at .05 level.

From Table 16, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 0.89, p = 0.45, $R^2 = .01$. Interaction between the primary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = -0.76, .95CI (-2.12, 0.58). Interaction between the secondary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = -1.23, .95CI (-2.83, 0.25). Again, interaction between the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = -1.23, .95CI (-2.83, 0.25). Again, interaction between the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = -0.23, .95CI (-2.13, 1.79).

variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	-1.29	1.95	-0.67	-5.15	2.69
X on Y	1.19	0.53	3.75	0.12	2.27
W1 on Y	3.31	2.14	1.55	-0.91	7.47
W2 on Y	4.04	2.44	1.65	-0.84	8.95
W3 on Y	2.35	3.28	0.72	-3.57	8.14
X*W1 on Y	-0.96	0.58	-1.65	-2.08	0.18
X*W2 on Y	-1.11	0.66	-1.69	-2.44	0.19
X*W3 on Y	-0.67	0.92	-0.73	-2.31	1.04

Table 17 - Moderation Effect of Educational Level on the Relationship betweenEmotional intelligence and psychosocial dimension of Quality of Life

Model summary- R^2 change = 0.02; F = 1.34; df1 = 3.00; df2 = 246, p = 0.26

X- Psychosocial; Y- Emotional Intelligence; W – Educational Level; W1 – Primary; W2 – Secondary; W3 – Tertiary; Comparison group – 'Read and write'

*Significant at .05 level.

From Table 17, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 1.34, p = 0.26, $R^2 = .02$. Interaction between the primary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of psychosocial, b = -0.96, .95CI (-2.08, 0.18) Interaction between the secondary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of psychosocial, b = -1.11, .95CI (-2.44, 0.19). Again, interaction between the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor of psychosocial, b = -0.67, .95CI (-2.31, 1.04).

Variables	<i>b</i> -value		<i>t</i> -value	95% CI		
				BLLCI	BULCI	
		BSE				
Constant	1.73	1.10	1.57	-0.25	4.11	
X on Y	0.39	0.29	1.33	-0.25	0.93	
W1 on Y	1.94	1.19	1.62	-0.56	4.16	
W2 on Y	1.64	1.28	1.28	-1.01	4.06	
W3 on Y	-0.42	2.32	0.18	-5.19	3.97	
X*W1 on Y	-0.52	0.31	-1.63	-1.11	0.15	
X*W2 on Y	-0.46	0.34	-1.32	-1.10	0.26	
X*W3 on Y	0.11	0.66	0.17	-1.11	1.48	

 Table 18- Moderation Effect of Educational Level on the Relationship between

 Emotional intelligence and physical dimension of Quality of Life

Model summary- R^2 change = 0.02; F = 1.71; df1 = 3.00; df2 = 246, p = 0.17

X- Physical; Y- Emotional Intelligence; W – Educational Level; W1 – Primary; W2 – Secondary; W3 – Tertiary; Comparison group – 'Read and write'

*Significant at .05 level.

From Table 18, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 1.71, p = 0.17, $R^2 = .02$. Interaction between the primary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = -0.52, .95CI (-1.11, 0.15). Interaction between the secondary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = -0.46, .95CI (-1.10, 0.26). Again, interaction between the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = -0.46, .95CI (-1.10, 0.26). Again, interaction between the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = 0.11, .95CI (-1.11, 1.48).

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	8.59	6.09	-1.41	-2.38	21.47
X on Y	-0.05	1.68	-0.02	-3.71	2.92
W1 on Y	-0.55	1.19	-0.08	-14.09	11.51
W2 on Y	-3.72	1.28	-0.94	-18.88	11.13
W3 on Y	-6.61	2.32	<.00	-25.34	9.86
X*W1 on Y	0.31	0.31	0.17	-2.91	4.10
X*W2 on Y	0.91	0.34	0.43	-3.10	5.14
X*W3 on Y	2.15	0.66	0.84	-2.49	7.64

 Table 19 - Moderation Effect of Educational Level on the Relationship between

 Emotional intelligence and sexual dimension of Quality of Life

Model summary- R^2 change = < .00; F = 0.28; df1 = 3.00; df2 = 246, p = 0.84

X- Sexual; Y- Emotional Intelligence; W – Educational Level; W1 – Primary; W2 – Secondary; W3 – Tertiary; Comparison group – 'Read and write'

*Significant at .05 level.

Table 19, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(3, 246) = 1.28, p = 0.84, $R^2 = <.00$. Interaction between the primary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual, b = 0.31, .95*CI* (-2.91, 4.10). Interaction between the secondary level (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual, b = 0.91, .95*CI* (-3.10, 5.14). Again, interaction between the tertiary (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual, b = 0.91, .95*CI* (-2.49, 7.64).

Based on the analyses and interpretations from the four tables above, the moderation was not significant which means that, educational level is not a significant moderator of the relationship between Emotional Intelligence and Quality of Life.

Hypothesis Four: Age will significantly moderate the relationship between emotional intelligence and quality of life of menopausal women.

Hypothesis four sought to ascertain the moderating role of age on the relationship between emotional intelligence and quality of life of the middle aged menopausal women. The purpose of this hypothesis was to determine whether age is a moderator for the relationship between emotional intelligence and the quality of life of menopausal women.

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	2.11	2.61	0.80	-3.21	7.16
X on Y	0.01	0.71	0.01	-1.38	1.44
W1 on Y	-2.51	2.95	-0.84	-8.20	3.37
W2 on Y	-1.60	2.83	-0.57	-7.10	4.26
X*W1 on Y	0.67	0.79	0.84	-0.90	2.24
X*W2 on Y	0.46	0.76	0.60	-1.07	1.96

Table 20 - Moderation Effect of Age on the Relationship between Emotionalintelligence and vasomotor dimension of Quality of Life

Model summary- R^2 change = < 0.00; F = 0.43; df1 = 2.00; df2 = 248, p = 0.65

X- Vasomotor; Y- Emotional Intelligence; W – Age; W1 – 46-54 years; W2 – 55-61; Comparison group – 40-45 years

*Significant at .05 level.

From Table 20, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(2, 248) = 0.43, p = 0.65, $R^2 = <.00$. Interaction between the 46 – 54 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = 0.67, .95CI (-0.90, 2.24). Interaction between the 55 - 61 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = 0.67, .95CI (-0.90, 2.24). Interaction between the 55 - 61 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of vasomotor, b = 0.46, .95CI (-1.07, 1.96).

Table 21- Moderation Effect of Age on the Relationship between Emotionalintelligence and psychosocial dimension of Quality of Life

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	4.14	1.49	2.79	1.23	6.99
X on Y	-0.33	0.38	-0.86	-1.04	0.44
W1 on Y	-2.32	1.83	-1.28	-5.92	1.33
W2 on Y	-3.64	1.76	-2.07	-6.95	-0.21
X*W1 on Y	0.69	0.48	1.44	-0.27	1.63
X*W2 on Y	0.92	0.45	2.03	0.02	1.78

Model summary- R^2 change = 0.01; F = 1.74; df1 = 2.00; df2 = 248, p = 0.18X- Psychosocial; Y- Emotional Intelligence; W – Age; W1 – 46-54 years; W2 – 55-61; Comparison group – 40-45 years

*Significant at .05 level.

From Table 21, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(2, 248) = 0.43, p = 0.65, $R^2 = <.01$. Interaction between the 46 – 54 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of psychosocial, b = 0.69, .95CI (-0.27, 1.63). Interaction between the 55 - 61 years (moderator) and

emotional intelligence (predictor variable) was a significant predictor of psychosocial, b = 0.92, .95CI (0.02, 1.78). This means that, when 40- 45years is compared to 55 - 61years, any additional increase in emotional intelligence will lead to 0.92 more of psychosocial Quality of life for women between 55- 61years than for women between 40- 45years. As Emotional intelligence increases, the psychosocial dimension of quality of life increases but more than comparison group.

From the graph below, there is a positive relationship between emotional intelligence and psychosocial dimension of quality of life among participants from 55 - 61years. This implies that, for women aged 55 - 61years, as their emotional intelligence increases, their level of psychosocial dimension of quality of quality of life increases. However, women aged 40 - 45years shows a negative relationship between emotional intelligence and psychosocial dimension of quality of life. As their emotional intelligence increases, their level of psychosocial dimension of quality of life. As their emotional intelligence increases, their psychosocial quality of life decreases.



Figure 3- Moderation Graph for the relationship between emotional intelligence and psychosocial dimension of quality of life

Variables	<i>b</i> -value		<i>t</i> -value	95% CI	
			-	BLLCI	BULCI
		BSE			
Constant	2.25	0.91	2.46	0.57	4.16
X on Y	0.14	0.25	0.58	-0.37	0.59
W1 on Y	0.61	1.08	0.57	-1.59	2.64
W2 on Y	1.25	1.06	1.18	-0.89	3.26
X*W1 on Y	0.03	0.29	-0.09	-0.57	0.56
X*W2 on Y	0.25	0.28	-0.88	-0.78	0.33

Table 22- Moderation Effect of Age on the Relationship between Emotionalintelligence and physical dimension of Quality of Life

Model summary- R^2 change = < 0.00; F = 0.81; df1 = 2.00; df2 = 248, p = 0.45

X- Physical; Y- Emotional Intelligence; W – Age; W1 – 46-54 years; W2 – 55-61; Comparison group – 40-45 years

*Significant at .05 level.

From the Table 22, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(2, 248) = 0.81, p = 0.45, $R^2 = <.00$. Interaction between the 46 – 54 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = -0.03, .95CI (-0.58, 0.56). Interaction between the 55 - 61 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of physical, b = -0.25, .95CI (-0.78, 0.33).

Variables	<i>b</i> -value		<i>t</i> -value	95% CI		
			-	BLLCI	BULCI	_
		BSE				
Constant	9.52	7.68	1.24	-5.53	24.82	
X on Y	1.43	2.10	-0.68	-5.58	2.71	
W1 on Y	-6.06	8.19	-0.74	-22.35	9.61	
W2 on Y	1.89	7.85	0.24	-13.55	17.01	
X*W1 on Y	3.00	2.24	1.34	-1.35	7.44	
X*W2 on Y	0.91	2.14	0.43	-3.19	5.07	

 Table 23 - Moderation Effect of Age on the Relationship between Emotional intelligence and sexual dimension of Quality of Life

Model summary- R^2 change = 0.02; F = 2.81; df1 = 2.00; df2 = 248, p = 0.06

X- Sexual; Y- Emotional Intelligence; W – Age; W1 – 46-54 years; W2 – 55-61; Comparison group – 40-45 years

*Significant at .05 level.

From Table 23, the overall Bootstrap model with the dependent variable, interaction variable, and the moderator was not significant, F(2, 248) = 2.81, p = 0.06, $R^2 = .02$. Interaction between the 46 – 54 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual, b = 3.00, .95CI (-1.35, 2.71). Interaction between the 55 - 61 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual, b = 3.00, .95CI (-1.35, 2.71). Interaction between the 55 - 61 years (moderator) and emotional intelligence (predictor variable) was not a significant predictor of sexual, b = 0.91, .95CI (-3.19, 5.07).

Based on the analyses and interpretations from the four tables above, the moderation was not significant for emotional intelligence and vasomotor, physical and sexual dimension of quality of life. Indicating that, age is not a significant moderator of the relationship between Emotional Intelligence and vasomotor, physical and sexual dimensions of Quality of Life. However, the moderation was

significant for psychosocial dimension of quality of life, which means that, age is a significant moderator of the relationship between emotional intelligence and psychosocial dimension of quality of life. As emotional intelligence increases, psychosocial quality of life also increases.

 Table 24 - Summary of main findings

Research Questions

- 1: Most prevalent menopausal symptoms experienced by middle aged women are hot flushes, accomplishing less, decrease in stamina for rigorous activity and insufficient vaginal secretion during intercourse.
- Menopausal women experienced a low level of quality of life in the vasomotor domain, psychosocial, physical and sexual domains of quality of life.
- 3: Majority of middle aged menopausal women in the Kumasi Metropolis had
- a low emotional intelligence level.

Hypotheses

- H1: There was no significant statistical relationship between emotional intelligence and quality of life of middle aged women.
- H2: Marital status was not a significant moderator of the relationship between Emotional Intelligence and Quality of Life.
- H3: Educational level was not a significant moderator of the relationship between Emotional Intelligence and Quality of Life.
- H4: Age was a significant moderator of the relationship between emotional intelligence and aspects of quality of life (psychosocial dimension).

Discussion of Research Findings

Menopause is a transitional period that every woman experience beyond the age of 40 years. Menopause brings about some symptoms which result from estrogen deficiency and wear and tear due to growth. Symptom experience however, varies considerably due to biological make-up, diet, socio-demographic factors and culture. These symptoms brings with it some challenges middle aged women needs to overcome to obtain optimal Quality Of Life (QOL) during this stage of life transition. The study evaluated the influence of emotional intelligence on menopausal women's quality of life. The research findings of the current study are presented and discussed in this section. They are presented in accordance with the various research questions and the hypotheses.

Prevalence of Menopausal Symptoms

Generally, the most prevalent/common menopausal symptom experienced by menopausal women was found to be hot flushes, accomplishing less, decrease in stamina for rigorous activity and insufficient vaginal secretion during intercourse. It was also found that, almost all women reported to have experienced more than one symptom. These results are in accordance with the results of many studies reporting hot flashes to be the most common symptoms in menopausal women (Sussman et al, 2015; Poomalar & Arounassalame, 2013).

For instance, the findings is in support of a study conducted by Setorglo et al., (2012), who evaluated the perception, knowledge and beliefs about menopause and the prevalence of climacteric symptoms among a total 280 menopausal women aged 45 years and older in the Accra Metropolis of the

Greater Accra Region in Ghana. Their study revealed that, hot flushes and vaginal dryness or insufficient secretion was among the most common symptoms experienced by menopausal women. Moilanen et al, (2010) also found that almost all women experienced at least one menopausal symptom. Their results further revealed that, hot flushes among others were experienced most of all the vasomotor symptoms for menopausal women. Gjelsvik et al., (2011) in a study among Norwegian female cohort also indicated hot flushes was most prevalent but showed a gradual increase both in terms of frequency and symptom severity which the current study failed to explore. Gharaibeh, Obeisat and Hattab (2010) among Jordanian women also found the highest scores to be hot flushes.

This finding contradicts the findings of Abedzadeh-Kalahroudi et al, (2012) who aimed to determine the prevalence and severity of menopausal symptoms among Iranian women. Abedzadeh-Kalahroudi et al, (2012) found that, the most prevalent symptoms of vasomotor, psychosocial, physical and sexual domains to be night sweat, reduced accomplishment, feeling a lack of energy and changes in sexual desire respectively. Their study was conducted using crosssectional survey among a larger sample size while the current study used descriptive survey among smaller sample size. These methodologies and samples are different and could account for, or explain the difference in the results. Similarly, results of Chim et al., (2002) in a Singaporean cohort are also in contradiction to the results of the current study as they reported hot flashes to be low in prevalence. It is worth noting that, vasomotor symptoms are usually related to hormonal changes during menopause periods. This difference may have

been due to genetic and differences in diet, especially the consumption of phytoestrogen foods. In addition, Jahanfar and Molae-Nezhad (2006) contradicted the results of the present study as they reported joint and muscle discomfort, to be the most common and severe symptoms. The differences in occurrence of symptoms may be associated to differences of race, weather and life style factors.

The most prevalent psychosocial symptom in the present study was; "accomplishing less". This results contradicts with results of previous study, which indicated that the most common and severe symptom that was reported by women was poor memory (Chedraui, Aguirre, Hidalgo and Fayad, 2007) and feeling anxious or nervous (Abedzadeh-Kalahroudi et al., 2012).

Regarding the physical domain, the present study showed that most of the women had a complaint of "decrease in stamina for rigorous activity" which is in line with other studies which found "feeling a lack of energy" to be the most commonly experienced physical symptom (Abedzadeh-Kalahroudi et al., 2012; Cheng et al, 2007).

Concerning sexual domains, the current study results showed "insufficient vaginal secretion during intercourse" was more prevalent. A study done by Rostami, Ghofrani, RamazanZadeh and Kazamnejad (2003) contradicted the result and reported that the majority of women mentioned avoiding intimacy. Also in Korean women the most common symptom was a "change in sexual desire" (Lee et al., 2010) which also contradicts the result of our study. A meta-analysis obtained by Makara-Studzińśka et al., (2014), compared the rate of menopausal symptoms among women living in continents of Americans, Africa, Australia and

Eurasia. From the review, vasomotor symptoms (hot flushes) appear to be reported more by the Africa continent compared to the other continents. These differences could be due to weather changes since Africa is hotter than the other continents.

Quality of life among Middle Aged menopausal women

Considering the findings for research question two, it was concluded that, menopausal women experienced a low level of quality of life in the vasomotor, psychosocial and physical and an average quality of life of sexual domains. These results are in accordance with the results of many studies which indicate that, the severe nature of menopausal symptoms affects the quality of life of middle aged women either positively or negatively.

This finding contradicts the findings of AlDughaither et al., (2015) who aimed at determining the prevalence and severity of menopausal symptoms and their impact on the quality of life among Saudi women visiting primary care centers in Riyadh, Saudi Arabia. AlDughaither et al., (2015) found that, Saudi women reported a score indicating milder severity of menopausal symptoms, reflecting better quality of life and ability to cope with menopausal symptoms. The difference in the findings may have resulted from the setting of the research since Saudi may have a better health system to support menopausal women to go through the menopausal transition smoothly.

The results of this study corroborate a study conducted by Mohammed et al, (2017) with 90 women who were between 40-60 years. The mean scores of each domain suggested that menopausal symptoms were associated with decrease

in women quality of life. Relatedly, Moustafa et al., (2015) in a study to assess the impact of menopausal symptoms on quality of life among women in Qena City, also affirms the results of the current study by revealing that, more than three-fourth of women had poor quality of life. It was concluded that menopause causes decrease in quality of life and that, a positive correlation between menopausal symptoms & quality of life exist. Nisar and Sohoo (2009) also investigated the severity of menopausal symptoms associated with menopausal status and also determined the quality of life of menopausal women from rural Sindh. The mean scores of all the domains of Menopause scale were significantly high indicating a decrease quality of life. Even though, Nisar and Sohoo (2009)'s study was conducted in a rural area compared to this study which was conducted in an urban area. They also found similar results indicating that the severity of menopausal symptoms decreased the quality of life in everyday life of these women.

The results of the current study support that menopause causes a decrease quality of life in vasomotor, psychosocial, physical and sexual domains. Interventions to improve their quality of life are important, which should be implemented to menopausal women at both individual and community level.

Emotional Intelligence among Middle Aged Menopausal Women

The findings from this study also found a low emotional intelligence level among middle aged menopausal women. In relation to the emotional reaction of menopause women, few studies have been done to explore the level of emotional intelligence of middle aged women in the menopause stage of transition. However, Sharma (2017) findings support the current study by indicating that,

emotional intelligence becomes low or decrease from adulthood to middle adult and increased again for matured adults. Another study indicates that younger people shows higher scores for emotional intelligence than older group of the same sample size (Bar-On & Parker, 2000). It is also possible that, the educational level which is low in the current study could have affected their emotional intelligence which is consistent with a previous study showing that educational level improves some aspect of emotional intelligence in older adults (Goldenberg et al., 2006).

The current study is in contradiction to the findings of several studies which have shown a positive relation between emotional intelligence and age. In certain studies, it has been reported that Emotional Intelligence increases with age at least up to (40 - 50 years) in life (Stein, 2009; Singh, 2006). Bar-On and Parker, (2000) in a study among a sample of 3891 within the age range of 20 to 50 years also showed that, older people scored higher than younger people. Similarly, a study conducted by Fariselli et al., (2006), using the six seconds' emotional intelligence assessment reported that, Emotional Intelligence increases slightly with age. The study also found that some parts of Emotional Intelligence do increase with age, though the effect is slight; in addition, there are elements of Emotional Intelligence that do not increase with age indicating that, some competencies must be developed through training. The research showed that older people are slightly more likely to be higher in emotional intelligence. The findings suggest that Emotional Intelligence is a developing ability and is likely that, accumulated life experiences contribute to Emotional Intelligence.

The differences between the results of previous studies and that of the current study might be due to the geographical setting of the research studies. It can be asserted that, the experience of emotional intelligence might have differed culturally resulting to the lower scores for the middle aged group in the current study. Secondly, the emotional intelligence of the middle aged women might have been affected by the demands of the menopausal transition resulting in a lower score. It is important to also know that, the current study adopted an instrument which was different from the other studies in measuring the Emotional Intelligence of the women. The use of different instrument for measuring emotional intelligence might have also resulted in the different findings since each instrument have its own unique content, components, method for administration, scoring and interpretation.

Relationship between Emotional Intelligence and Quality of Life

In hypothesis one, it was proposed that, there is a significant relationship between emotional intelligence and the quality of life of menopausal women. This hypothesis was not supported. This means therefore that, regardless of the emotional intelligence level of middle aged women, it does not have any relationship with the quality of life of menopausal women in general. However, in terms of psychosocial aspect of quality of life, the model was statistically significant. Indicating that, when emotional intelligence is increased, psychosocial aspects of quality of life also increases.

This finding is in contradiction with other studies which found a statistically significant relationship between emotional intelligence and quality of

life. For instance, in a study by Bauld and Brown, (2009), with one hundred and sixteen women aged 45-55 years who were recruited through women's health centers and community organisations. It was revealed that, there was a positive relationship between emotional intelligence and quality of life. Similarly, Al-Huwailah, (2017) conducted a study among 400 university students, which aimed to describe the nature of the relationship between quality of Life and Emotional Intelligence revealed that, there was a positive relationship between dimensions of emotional intelligence and dimensions of quality of life. The difference in the current study's results from these studies might have been caused by the instrument used in measuring the emotional intelligence, since the current study measured emotional intelligence as one variable and not on subscales or dimensions. Also, university education might have influenced their emotional intelligence due to the experiences from the universal setting.

Some previous study in agreement with the current studies also explored and found that there is no relationship between emotional intelligence and quality of life in general but a relationship exist between emotional intelligence and some contributors to quality of life. (Palmer et al., 2002). Al-Huwailah, (2017) also confirms that no relationship exist between emotional intelligence and quality of life in general but a relationship exits on some domains of quality of life in middle aged women, which in the current study is the psychosocial domain of quality of life. In addition, a study conducted by Extremera & Fernández-Berrocal, (2002), examined the relationship between perceived emotional intelligence and healthrelated quality of life in middle-aged women.

Ninety-nine middle-aged Spanish women, who studied in two adult schools, volunteered to participate. 49 were premenopausal and 45 were postmenopausal. These women completed the Trait Meta-Mood Scale and Health Survey SF-36. It was revealed that, perceived skill at mood repair was significantly associated with scores on health-related quality of life in middle-aged women. These findings provide empirical evidence that aspects of perceived emotional intelligence may account for the health-related quality of life in midlife including social, physical, and psychological symptoms. However, the study did not assess the vasomotor, sexual and psychosocial symptoms that are more peculiar to menopausal women and have the capacity to influence their quality of life negatively.

Moderating role of Marital Status in the relationship between Emotional Intelligence and Quality of Life

Research hypothesis 2 sought to find out if marital status moderates the influence of emotional intelligence and quality of life. The results revealed that, marital status does not play a significant role in the interaction effect of emotional intelligence on quality of life of middle aged women. This may be owing to the fact that, emotional intelligence of an individual may not be influenced by their marital status since emotional intelligence is an in-built trait and improved through experiences and training.

The findings however, are in agreement with that of Adilogullari (2011) who studied the level of emotional intelligence of some of the demographic variables in the province of Gaziantep. The findings however showed no significant relationship between marital status and emotional intelligence. Nagar

(2017) also found no relationship between marital status and emotional intelligence. Relatedly, Sharma and Siddiqui, (2018) reported no significant difference between married and unmarried people.

The findings however, are inconsistent with Madahi et al., (2012) who aimed to determine the relationship between emotional intelligence and marital status of students. The results showed a significant different between single individuals and married individuals in emotional intelligence, so that married individuals score's in emotional intelligence were further than single individuals. It can be concluded that marital status is an important factor to determine the levels of emotional intelligence as married people tend to be more emotionally intelligent than others (unmarried, widowed, divorced). Similarly, the result is contradicts that of Khodarahimi, (2015) which examined the role of marital status in emotional intelligence, happiness, optimism and hope among 500 individuals who were voluntary selected from Shiraz City, Iran. Findings revealed that, married individuals had higher levels of emotional intelligence compared with other categories that is, widowed, divorced, single and remarried individuals showed a lower level of emotional intelligence. Relatedly, Kalyoncu et al., (2012) also revealed that emotional intelligence of married individuals was higher than the individuals with the single status. The differences in results may be attributed to the population used and the setting of the study, since most of the study was conducted in the western world.

Moderating role of Educational Level in the relationship between Emotional Intelligence and Quality of Life

Research hypothesis 3 sought to find out if educational level could moderate the influence of emotional intelligence and quality of life. The results revealed further that, educational level does not play a significant role in the interaction effect of emotional intelligence on quality of life of middle aged women. This may be owing to the fact that, the educational level of the participants was low.

The current study agrees with the study conducted by Lankashini et al, (2017) who sought to describe the level of emotional intelligence and to determine its relationship with demographic and socio-economic. They found no correlation between emotional intelligence and educational level as part of the socio-demographic variables. In a study by Shukla and Srivastava (2016), education was found not to have any significant relationship with emotional intelligence. This may be because participants of the study were less educated.

In contradiction, another finding from Yogum and Miman (2016), education level was found to be significant on their social skills, self-regulation and levels of emotional intelligence. Participants with a university graduation degree was found to have the highest mean social skills scores and emotional intelligence while participants with a high school graduation degree have the highest mean self-regulation scores. Education helps to better understand the situation and to cope up with the changing situations, so it has got the positive relationship with the level of emotional intelligence. Highly educated people

might be able to express their feelings, communicate openly and to understand other better than less educated.

Moderating role of Age in the relationship between Emotional Intelligence and Quality of Life

Research hypothesis 4 sought to find out if age moderates the influence of emotional intelligence and quality of life. The results revealed that, age play a significant role in the interaction effect of emotional intelligence on quality of life of middle aged women. This means that, the age of the middle aged women had an impact on the emotional intelligence.

The findings of the current study is in accordance with the study by Extremera and Fernández-Berrocal, (2006) who revealed that, age significantly influences all branches of emotional intelligence. Previous research also identified age as one of the socio-demographic variables most relevant to emotional intelligence, as well as other types of intelligence (Mayer et al., 1999). Mayer and Salovey, (1997) asserts that emotional intelligence increases with age and experience (Extremera & Fernández-Berrocal, 2006). As a result, some studies have found older individuals to perform significantly better on all branches of emotional intelligence (Extremera & Fernández-Berrocal, 2006). In addition, other studies found the level of emotional intelligence to be higher among those above 40 years (Kumar and Muniandy, 2012) indicating that, age influences emotional intelligence. Lankashini et al., (2017) also reported the level of emotional intelligence of older students to be higher than younger students.

In contradiction, some researchers also found that age does not increase other relationships such as emotional intelligence and spiritual intelligence (Rahim & Malik, 2010; Birks et al., 2009). Other studies have found a negative correlation between age and emotional perception (Day and Carroll, 2004; Palmer et al., 2005), which is consistent with a meta-analysis reporting that older people have problems at recognising emotions (Ruffman et al., 2008). Other studies, in contrast, have failed to find any significant relations between age and dimensions of emotional intelligence (Farrelly & Austin, 2007). The difference may be due to the setting of the study since most of the studies on emotional intelligence were conducted in the western world.

Explaining the Findings in light of the Theoretical Frameworks underlying the Study.

The theoretical frameworks underlying this study were based on Schlosberg's transition theory, cognitive behavioral model/self-regulatory model and the trait model of emotional intelligence. These frameworks served as a blue print and provided a clear explanation and structure for the study.

To recap, Schlossberg's transition theory identified four major sets of factors that influence a person's reactions to a transition: situation, self, support, and strategies, which are also known as the 4 S's (Schlossberg, 1981). Situation emphasized on how the individual perceives the transition that is; positive, negative, expected, unexpected, desired or dreaded. Self pertains to the strength the individual have towards the transition. Whereas the support looks at the sources of support available during the transition. The strategies determine the

type of coping strategies the individual uses during the transition. In essence, an individual experience of the 4's determines how well the transition would be. The framework explained that menopausal women who perceived the transition to be negative and dreaded are more likely to have a negative outcome of the transition. The women might have also not identified any personal strength to deal with the transition. Since the transition is a natural occurrence with the passage of time, menopausal women might have exhibited hopelessness to the transition thereby experiencing psychological distress which affected their quality of life. The support system of the women also enables them to live through the transition with ease and comfort or otherwise whereas the coping strategies adopted by the women if not maladaptive will also yield a good and positive experience. Judging from the results of the study, with the quality of life of menopausal women being low or decreased, it can be deduced from the framework that, menopausal women had a negative perception about the menopause transition, had no strength to handle the challenges that resulted from the transition, had a malfunctioning support system and probable adopted a dysfunctional coping strategy which affected their experience of the menopause transition negatively.

In addition, the cognitive behavioral model emphasized that, emotional reactions occur as a result of the way events are interpreted (Beck, 1976), whereas the self-regulatory model emphasis the construct representation of health problems as a way of making sense of the condition (Leventhal et al., 1984). These perceived personal control; representation and interpretations determine an individual emotional and behavioural response to the health condition. In view of

the results of the current study, menopausal women had a decreased or low quality of life due to their dysfunctional thoughts, beliefs and attitude towards the transition. It is also possible that, the menopausal women formed negative cognitive representations and had a lower perceived personal control about the menopause transition and its symptoms resulting in a poor quality of life.

Lastly, the trait emotional intelligence framework emphasized the actual abilities and skills which is directly applicable to cognitive ability (Petrides & Furnham, 2001). This framework comprised of behavioural inclination and selfperceived abilities located at the lower levels of personality or temperamental hierarchies. These personality traits might have been established early in life in the absence of challenges during the childhood stage, making some profiles of trait emotional intelligence advantageous in some context and not in others since they are part of an individual's personality and not distinct. Analysis of the results of the current study in light of the model can be concluded that, menopausal women's emotional intelligence might have been formed during the personality formation at a time where life transitions were not noticeable compared to the current stage where the transition with its challenges are obvious to them. It is important to know that probable, the intelligence was formed with the absence of challenges as a result, did not integrate negative experience and how to deal with them as well as cultural influences in their emotional intelligence and personality formation. This might have resulted in the low emotional intelligence level as indicated by most women who also led to the poor quality of life even though the study failed to establish any relationship between emotional intelligence and quality of life of menopausal women.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter gives a summary of the study, the conclusions drawn, suggestion and recommendation for further studies based on the findings.

Summary

Overview of the Study

The purpose of the study was to ascertain the influence of emotional intelligence on the quality of life of menopausal women in the Kumasi Metropolis. In more specific terms, the study sought to: (a) explore menopausal symptoms, quality of life and emotional intelligence levels among middle aged women (b), determine the relationship between emotional intelligence and quality of life (vasomotor, physical, psychosocial and sexual) among middle aged menopausal women and (c) the moderating role of demographic factors (marital status, educational level, age) between emotional intelligence and quality of life. These objectives were transformed into three research questions and five hypotheses which guided the study (see Pg. 11, 12).

The study employed descriptive survey design with a quantitative approach. The study was targeted at the middle aged menopausal women in the Kumasi Metropolis between the ages of 40 to 60. The study adapted a standardised scale called Menopause-Specific quality of life (MENQOL) which had four dimensions or subscale with 29-items and Trait Emotional Intelligence Questionnaire Short form (TEIQue-SF) which had 30-items. Through a multistage sampling technique, the questionnaire was administered to 260 middle aged menopausal women. 'Frequencies and percentages' and 'mean and standard deviations' were used to analyse the data to answer the research questions. For the hypotheses, multivariate regression and moderation analysis by Hayes were used.

Key Findings

The following were the findings of the study:

- Middle aged menopausal women in the Kumasi Metropolis, on the whole, had experienced more than one menopausal symptom. The most common/prevalent symptom experienced by menopausal women were hot flushes, accomplishing less, decrease in stamina for rigorous activity and insufficient vaginal secretion during intercourse for vasomotor, psychosocial, physical and sexual domains respectively.
- 2. Middle aged menopausal women had a severe experience of menopausal symptoms thereby decreasing/lowering their level of quality of life in the vasomotor, psychosocial and physical domain. There was however, a moderate experience in severity of the sexual symptoms indicating a better quality of life of sexual domains of the quality of life.
- 3. The study found that, majority of the women had a low emotional intelligence level.
- 4. The study also found that, there was no significant statistical relationship between emotional intelligence and quality of life in general among

122

middle aged women. However, the study found a significant relationship with the psychosocial domain of quality of life and emotional intelligence.

- 5. Marital status did not moderate emotional intelligence and quality of life.
- 6. Educational level did not also moderate the relationship between emotional intelligence and quality of life.
- 7. Age was found to moderate the relationship between emotional intelligence and quality of life.

Conclusion

It can be concluded that middle aged menopausal women in the Kumasi Metropolis experienced a wide range of symptoms during the menopausal transition which is congruent with the other women's experience elsewhere. It can be inferred that, women will experience at least one menopausal symptom during the menopause transition. The severity of the symptom indicated the quality of life of menopausal women. This suggests that, women in the Kumasi Metropolis' experience of the menopausal symptoms were severe which resulted in their decreased quality of life.

The middle aged menopausal women in the Kumasi Metropolis had a low emotional intelligence level. The implication is that, emotional intelligence might have been exhibited in different ways in different cultures and different age groups. This indicates that, women go through menopause stage of life with a poor emotional awareness, control/regulation and management which can have a negative impact of the menopause experience. This probably explains why the middle aged women had a severe experience of menopause symptoms.

Although majority of middle aged menopausal women had a decreased quality of life and a low level of emotional intelligence, it can be concluded that, no relationship exist between the two. This implies that, no matter the emotional intelligence level of women, it does not have any impact or influence on the nature of the severity of menopausal symptoms as experienced by middle aged menopausal women thereby causing a decreased in quality of life. This suggests that other factors might influence quality of life of menopausal women other than emotional intelligence.

In addition, since marital status and educational level did not moderate the relationship between emotional intelligence and quality of life, it can be concluded that emotional intelligence is a natural trait that develops on its own and nurture through training coupled with life experiences. This assertion may be true since age which is a natural phenomenon moderated the relationship between emotional intelligence and quality of life. Middle aged women should therefore be given the necessary conditions to nurture their inbuilt intelligence (emotional).

Recommendations for Policy and Practice

Based on the findings of the study and the conclusions drawn, the following recommendations were made to guide the development of policy and practice.

 Health professionals including Clinical Health Psychologist should put in measures to help menopausal women go through the menopause transition with ease for an improved quality of life.

124

2. Policy makers need to initiate menopausal awareness programs at the community level to create awareness on menopause and symptom severity for a better quality of life.

Suggestion for Future Research

The following are the suggestion for further studies:

- 1. Further studies should be conducted to explore other alternative mechanisms that can help improve the quality of life of middle aged women during the menopausal stages of life.
- 2. There is the need to replicate the study in other middle aged populations.
- It is also been suggested that, menopausal women should be studied not in social groups.

References

- Abedzadeh-Kalahroudi, M., Taebi, M., Sadat, Z., Sab eri, F., & Karimian, Z. (2012). Prevalence and severity of menopausal symptoms and related factors among women 40-60 years in Kashan, Iran. *Nurs Midwifery Stud*, 1(2), 88-93.
- Adilogullari, I. (2011). The teachers level of emotional intelligence some of the demographic variables for investigation. *Educational Research and Reviews*, 6(13), 786-792.
- AlDughaither, A., AlMutairy, H., AlAteeq, M. (2015). Menopausal symptoms and quality of life among Saudi women visiting primary care clinics in Riyadh, Saudi Arabia. *International Journal of Women's Health*, 7, 645
- Al-Huwailah, A. (2017). Quality of Life and Emotional Intelligence in a Sample of Kuwait University Students. *Journal of Education and Practice*, 8(3), 180-185.
- American College of Obstetricians and Gynecologists. (2017). American Congress of Obstetricians and Gynecologists. Statement of policy: global women's health and rights.
- Amirabadizadeh, Z., Sharifzadeh, G., Moodi, M., (2016) Middle-Aged Women's Quality of Life and Health-Promoting Lifestyle, *Mod Care J*. 2016; 13:e11597. Doi: 10.5812/modern.11597.
- Ansah, C. (2016). Incidence of Menopausal symptoms among women in ST. Andrew Anglican Church, Abossey Okai and their coping Strategies (Doctoral dissertation, University of Ghana).

- Ary, D., Jacobs, L. C., & Razavieh, A. (2002). Introduction to research in education. Orlando, Florida: Harcourt Brace College Publishers.
- Atkinson, M., & Hornby, G. (2002). Mental health handbook for schools. Routledge.
- Bar-On, R., & Parker, J. D. (2000). The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace.
- Barth-Olofsson, A. S., & Collins, A. (2000). Psychosocial factors, attitude to menopause and symptoms in Swedish perimenopausal women. *Climacteric*, 3(1), 33-42.
- Bauld, R., & Brown, R. F. (2009). Stress, psychological distress, psychosocial factors, menopause symptoms and physical health in women. *Maturitas*, 62(2), 160-165.
- Beck, A. T. (1976).*Cognitive Therapy and the Emotional Disorders*. New York: International Universities Press.
- Berecki-Giosolf, J., Begum, N., & Dobson, A. J. (2009). Symptoms reported by women in midlife: menopausal transition or aging? *Menopause*, 16(5), 1021-1029.
- Bhattacherjee, A. (2012). Social science research: Principles, methods, and practices. Global project, 2012
- Birks, Y., McKendree, J., & Watt, I. (2009). Emotional intelligence and perceived stress in healthcare students: a multi-institutional, multi-professional survey. *BMC medical education*, 9(1), 61.
- Bland, J. M., & Altman, D. G. (1997). Statistics notes: Cronbach's alpha. *Business Management Journal*, 314(7080), 572.
- Blankson, C., & Ming-Sung Cheng, J. (2005). Have small businesses adopted the market orientation concept? The case of small business in Michigan: *Journal of Business & Industrial Marketing*. 20(6), 317-330

Bulmer, M. (2004). Questionnaires. London: SAGE, 2004

- Burger, H. G. (2006). Physiology and endocrinology of the menopause. *Medicine*, *34*(1), 27-30.
- Burns, N., & Grove, S. K. (2010). Understanding Nursing Research-eBook:
 Building an Evidence-Based Practice. *Elsevier Health Sciences*. 56(3), 33-40.
- Cabello, R., Navarro, B., Latorre, J. M., & Fernández-Berrocal, P. (2014). Ability of university- level education to prevent age-related decline in emotional intelligence. *Frontiers in Aging Neuroscience*, *6*, 37.
- Carroll J. B. (1993), *Human cognitive abilities: A survey of factor-analytic studies*, Cambridge University Press, New York, NY, USA.
- Centers for Disease Control and Prevention. (2011). Women's reproductive health: hysterectomy fact sheet. Hysterectomy in the United States, 2000-2004. Retrieved on March 15, 2016, from http://www.cdc.gov/hai/progress-report/index.html.pdf
- Chedraui, P., Aguirre, W., Hidalgo, L., & Fayad, L. (2007). Assessing menopausal symptoms among healthy middle aged women with the Menopause Rating Scale. *Maturitas*, *57*(3), 271-278.

- Chedraui, P., San Miguel, G., & Avila, C. (2009). Quality of life impairment during the female menopausal transition is related to personal and partner factors. *Gynecological Endocrinology*, *25*(2), 130-135.
- Cheng, M. H., Lee, S. J., Wang, S. J., Wang, P. H., & Fuh, J. L. (2007). Does menopausal transition affect the quality of life? A longitudinal study of middle-aged women in Kinmen. *Menopause*, 14(5), 885-890.
- Chickering, A. W., & Schlossberg, N. K. (1998). Moving on: Seniors as people in transition. The senior year experience: Facilitating integration, reflection, closure, and transition. *Non-Journal Publication* 37-50.
- Chim, H., Tan, B. H. I., Ang, C. C., Chew, E. M. D., Chong, Y. S., & Saw, S. M. (2002). the prevalence of menopausal symptoms in a community in Singapore. *Maturitas*, 41(4), 275-282.
- Chiu, Y. W., Moore, R. W., Hsu, C. E., Huang, C. T., Liu, H. W., & Chuang, H.Y. (2008). Factors influencing women's quality of life in the latter half of life. *Climacteric*, 11(3), 201-211.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Second Edition. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Cohen, L. M., Manion, L. & Morrison, K. (2007). Research methods in education, British Journal of Educational Studies 55(4), 469-470.
- Cohen, L. S., Soares, C. N., & Joffe, H. (2005). Diagnosis and management of mood disorders during the menopausal transition. *The American Journal* of Medicine, 118(12), 93-97.

- Day, A. L., & Carroll, S. A. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviors. *Personality and Individual differences*, 36(6), 1443-1458.
- Deniz, M. E., Özer, E., & Isik, E. (2013). Trait emotional intelligence questionnaire-short form: Validity and reliability studies. *Egitim ve Bilim*, 38(169).
- Dennerstein, L., Lehert, P., & Guthrie, J. (2002). The effects of the menopausal transition and biopsychosocial factors on well-being. *Archives of women's mental health*, 5(1), 15-22.
- Derksen, J., Kramer, I., & Katzko, M. (2002). Does a self-report measure for emotional intelligence assess something different than general intelligence?. *Personality and individual differences*, *32*(1), 37-48.
- Devetak, I., Glažar, S. A., & Vogrinc, J. (2010). The Role of Qualitative Research in Science Education. *Eurasia Journal of Mathematics, Science & Technology Education*, 6(1).
- Dillman, D. A. (2000). Procedures for conducting government-sponsored establishment surveys: Comparisons of the total design method (TDM), a traditional cost-compensation model, and tailored design. In *Proceedings* of American Statistical Association, Second International Conference on Establishment Surveys (pp. 343-352).

- Donati, S., Satolli, R., Colombo, C., Senatore, S., Cotichini, R., Da Cas, R., & Mosconi, P. (2013). Informing women on menopause and hormone therapy: Know the Menopause a multidisciplinary project involving local healthcare system. *PloS one*, 8(12), 85121.
- Dunn, E. W., Aknin, B. L. & Norton (2008) Prosocial Spending and Happiness: Using Money to Benefit Others Pays Off." Current Directions in Psychological Science. *Science Journals 319* (5870), 1687-1688
- Duijts, S. F., van Beurden, M., Oldenburg, H. S., Hunter, M. S., Kieffer, J. M., Stuiver, M. M., & Lopes Cardozo, A. M. (2012). Efficacy of cognitive behavioral therapy and physical exercise in alleviating treatmentinduced menopausal symptoms in patients with breast cancer: results of a randomized, controlled, multicenter trial. *Journal of Clinical*

Oncology, 30(33), 4124-4133.

- Dutta, R., Dcruze, L., Anuradha, R., Rao, S., Rashmi, M. R., (2012) A population based study on the menopausal symptoms in a rural area of Tamil Nadu, India. J Clin Diagn Res. 6(4):597-601.
- Elavsky, S., & McAuley, E. (2009). Personality, menopausal symptoms, and physical activity outcomes in middle-aged women. *Personality and Individual Differences*, 46(2), 123-128.
- Extremera, N., & Fernández-Berrocal, P. (2002). Relation of perceived emotional intelligence and health-related quality of life of middle-aged women. *Psychological Reports*, *91*(1), 47-59.

- Extremera, N., & Fernández-Berrocal, P. (2006). Emotional intelligence as predictor of mental, social, and physical health in university students. *The Spanish Journal of Psychology*, 9(1), 45-51.
- Fariselli, L., Ghini, M., & Freedman, J. (2006). Emotional intelligence and age. *Retrieved February*, 1(2), 15-25.
- Farrelly, D., & Austin, E. J. (2007). Ability EI as an intelligence? Associations of the MSCEIT with performance on emotion processing and social tasks and with cognitive ability. *Cognition and Emotion*, 21(5), 1043-1063.
- Frankael, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in Education*. New York: Mc Grawhill.
- Gharaibeh, M., Al-Obeisat, S., & Hattab, J. (2010). Severity of menopausal symptoms of Jordanian women. *Climacteric*, *13*(4), 385-394.
- Gjelsvik, B., Rosvold, E. O., Straand, J., Dalen, I., & Hunskaar, S. (2011). Symptom prevalence during menopause and factors associated with symptoms and menopausal age. Results from the Norwegian Hordaland Women's Cohort study. *Maturitas*, 70(4), 383-390.
- Goldenberg, I., Matheson, K., & Mantler, J. (2006). The assessment of emotional intelligence: A comparison of performance-based and self-report methodologies. *Journal of personality assessment*, 86(1), 33-45.

Goleman, D. (2008). The secret to success. *The Education Digest*, 74(4), 8.

Hanisch L.J, Hantsoo L, Freeman E.W, Sullivan G.M, Coyne J.C. (2008). Hot flashes and panic attacks: a comparison of symptomatology, neurobiology, treatment, and a role for cognition. *Psychological Bulletin*, *134*, 247–269

- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis second edition: A regression-based approach. *Multivariate Behavioural Research*, 50(1), 1-22.
- Henry, N. Y., Richardson, T. E., Nataraja, S., Fischer, D. J., Sriraman, V., Jiang, X. & Jenks, M. (2014). Discovery of substituted benzamides as follicle stimulating hormone receptor allosteric modulators. *Bioorganic & medicinal chemistry letters*, 24(9), 2168-2172.
- Hilditch, J. R., Lewis, J., Peter, A., van Maris, B., Ross, A., Franssen, E., & Dunn,
 E. (1996). A menopause-specific quality of life questionnaire: development and psychometric properties. *Maturitas*, 24(6), 161-175.
- Hunter, M. & O'Dea, I. (2001). Cognitive appraisal of the menopause: The menopause representations questionnaire (MRQ). *Psychology, Health & Medicine*, 6(1), 65-76.
- Hunter, M., & Rendall, M. (2007). Bio-psycho-socio-cultural perspectives on menopause. Best Practice & Research Clinical Obstetrics & Gynecology, 21(2), 261-274.
- Jahanfar, S., & Molae Nezhad, M. (2006). Sexual problems. *Bezheh & Salemi Inc,* 2nd Edi, 51.
- Fannin, B. E. (2002). The contributions of emotional intelligence to academic achievement and production Doctoral dissertation, ProQuest Information & learning).

Faroorq, M. A. (2003). Effects of emotional intelligence on academic performance (Doctoral dissertation, University of Karachi).

Johnston, J. M., Colvin, A., Johnson, B. D., Santoro, N., Harlow, S. D., Merz, C. N. B., & Sutton-Tyrrell, K. (2006). Comparison of SWAN and WISE menopausal status classification algorithms. Journal of women's health, 15(10), 1184-1194.

Joppe, M. (2000). The Research Process. Retrieved February 25, 1998.

- Kalyoncu, Z., Güney, S., Arslan, M., & Ayranci, E. (2012). Analysis of the relationship between Emotional Intelligence and Stress caused by the organization: A Study of Nurses. *Journal of Nursing* 8(3) 55-60.
- Karmakar, N., Majumdar, S., Dasgupta, A., & Das, S. (2017). Quality of life among menopausal women: A community-based study in a rural area of West Bengal. *Journal of mid-life health*, 8(1), 21.
- Kato, I., Toniolo, P., Akhmedkhanov, A., Koenig, K. L., Shore, R., & Zeleniuch-Jacquotte, A. (1998). Prospective study of factors influencing the onset of natural menopause. *Journal of clinical epidemiology*, 51(12), 1271-1276.
- Khademi, S., & Cooke, M. S. (2003). Comparing the attitudes of urban and rural Iranian women toward menopause. *Maturitas*, 46(2), 113-121.
- Khodarahimi, S. (2015). The Role of Marital Status in Emotional Intelligence, Happiness, Optimism and Hope. *Journal of Comparative Family Studies*, 351-371.
- Kumar, J. A., & Muniandy, B. (2012). The Influence of Demographic Profiles onEmotional Intelligence: A Study on Polytechnic Lecturers inMalaysia. *International online journal of educational sciences*, 4(1).

Kumasi Metropolis *Wikipedia.* org "n.p". Retrieved from http://en.wikipedia.org/wiki/kumasi_MEtropolitan_Assembly. "Accessed 12 December 2018".

- Lankashini, M. S., Lakmali, V. G. D., Lenagala, S. A. K., Liyanage, A. L. R. P.,
 & Arambepola, C. (2017). Level of Emotional Intelligence and its association with person-related characteristics among grade 8 students in a suburban setting. *Ceylon Journal of Medical Science*, 54(1), 27-34.
- Lee, M. S., Kim, J. H., Park, M. S., Yang, J., Ko, Y. H., Ko, S. D., & Joe, S. H. (2010). Factors influencing the severity of menopause symptoms in Korean post-menopausal women. *Journal of Korean medical science*, 25(5), 758-765.
- Leventhal, H., Nerenz, D. & Steel, D. J. (1984). Illness representations and coping with health threats. In Baum, A., Taylor, S. E. & Singer, J. E. (eds.). *Handbook of Psychology and Health* (pp. 219-252). Hillsdale, NJ: Lawrence Erlbaum.
- Madahi, M., Javidi, N & Samadzadeh, M. (2012). The relationship between emotional intelligence and Marital Status in sample of college students.Procedia - Social and Behavioral Sciences.
- Madhukumar, S., Gaikwad, V., & Sudeepa, D. (2012). A community based study on perceptions about menopausal symptoms and quality of life of postmenopausal women in Bangalore rural. *Int J Health Sci Res*, 2(3), 49-56.

- Makara-Studzińśka, M. T., Kryś-Noszczyk, K. M., & Jakiel, G. (2014). Epidemiology of the symptoms of menopause–an intercontinental review. *Przeglad menopauzalny= Menopause review*, *13*(3), 203.
- Manson, J. E., & Bassuk, S. S. (2012). Chapter 348. The Menopause Transition and Postmenopausal Hormone Therapy. *Harrison's Principles of Internal Medicine. 18th ed. New York: McGraw-Hill.*
- Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statistical research methods: From hypothesis to results* (Vol. 42). John Wiley & Sons.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey& D. J. Sluyter (Eds.), Emotional development and emotional intelligence:Educational implications (pp. 3-34). New York: Harper Collins.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, *27*(4), 267-298.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits?. *American psychologist*, *63*(6), 503.
- Millennium cities initiatives "n.p" *Kumasi Maps*. Retrieved from http://mci.ei.columbia.edu/millennium-cities/kumasi-ghana/kumasi-maps and-population-data/ Accessed 3 Jan 2019.
- Miro, F., Parker, S.W., Aspinall, L. J., Coley, J., Perry, P. W. & Ellis, J. E.(2005) Sequential classification of endocrine stages during reproductive aging in women. *The FREEDOM study*, 12 (3), 281-90.

- Mohamed, H. A., Lamadah, S. M., & Zamil, L. G. A. (2014). Quality of life among menopausal women. *International Journal of Reproduction*, *Contraception, Obstetrics and Gynecology*, 3(3), 552-61.
- Mohamed, H. A., Lamadah, S. M., & Zamil, L. G. A. (2017). Quality of life among menopausal women. *International Journal of Reproduction*, *Contraception, Obstetrics and Gynecology*, 3(3), 552-561.
- Moilanen, J., Aalto, A. M., Hemminki, E., Aro, A. R., Raitanen, J., & Luoto, R.(2010). Prevalence of menopause symptoms and their association with lifestyle among Finnish middle-aged women. *Maturitas*, 67(4), 368-374.
- Moustafa, M., Ali, R., & Taha, S. M. (2015). Impact of menopausal symptoms on quality of life among women's in Qena City. *Egyptian Journal of Nursing*, *10*(1).
- Nagar, M. (2017). Role of Demographic Factors in Emotional Intelligence: An Empirical Study of Bank Managers. Indian Journal of Commerce and Management Studies, 8(3), 26.
- Nappi, R. E., & Lachowsky, M. (2009). Menopause and sexuality: prevalence of symptoms and impact on quality of life. *Maturitas*, *63*(2), 138-141.
- National Institute for Health and Care Excellence. (2015). Menopause: diagnosis and management. *NICE guidline NG23*.
- Nayak, G., Kamath, A., Kumar, P., & Rao, A. (2012). A study of quality of life among perimenopausal women in selected coastal areas of Karnataka, India. *Journal of mid-life health*, 3 (2), 71.

- Nestor, P. I & Leary, P. (2000) The relationship between tenure and non-tenure track. *Journal of Technical Education* 3(99), 127-139
- Nisar, N., & Sohoo, N. A. (2009). Frequency of menopausal symptoms and their impact on the quality of life of women: a hospital based survey. *JPMA*, *59* (11), 752-56.
- North American Menopause Society. (2010). Estrogen and progestogen use in postmenopausal women: 2010 position statement of The North American Menopause Society. *Menopause (New York, NY)*, 17(2), 242.
- O'Boyle, E. H., Humphrey, R., Pollack, J., Hawyer, T., & Story, P. (2010). The Relation between Emotional Intelligence and Job Performance. *Journal of Organizational Behavior, Wiley Interscience*.
- Orodho, J. A. (2004). Techniques of writing research proposals and reports in education and social sciences. *Nairobi: Masola Publishers*.
- Padubidri, V. G., & Daftary, S. N. (Eds.). (2018). Shaw's Textbook of Gynecology EBOOK. Elsevier Health Sciences.
- Pal A, Hande D, & Khatri S. Element of menopausal and perimenopausal symptoms in women above 40 years in rural area. Int J Healthc Biomed Res, (1) 166-74
- Pallant, J., & Manual, S. S. (2010). A step by step guide to data analysis using SPSS. *Berkshire UK: McGraw-Hill Education*.
- Palmer, B. R., Gignac, G., Manocha, R., & Stough, C. (2005). A psychometric evaluation of the Mayer–Salovey–Caruso emotional intelligence test version 2.0. *Intelligence*, 33(3), 285- 305.

- Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and individual differences*, 33(7), 1091-1100.
- Pau, A. K., & Croucher, R. (2003). Emotional intelligence and perceived stress in dental undergraduates. *Journal of dental education*, 67(9), 1023-1028.
- Pereira, H., Monteiro, S., Esgalhado, G., Afonso, R. M., & Loureiro, M. (2017).
 Psychosocial Determinants of Sexual Functioning and Subjective Sexual
 Well-being in Portuguese Adult Men. *REVISTA INTERNACIONAL DE ANDROLOGIA*, 15(3), 90-98.
- Perez-Lopez, F. R. (2004). An evaluation of the contents and quality of menopause information on the World Wide Web. *Maturitas*, 49(4), 276-282.
- Petrides, K. V. & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology*, 36, 552-569.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European journal of personality*, 15(6), 425-448.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British journal of psychology*, 98(2), 273-289.
- Piesie-Anto, O. (2012). *Solving the African problem:* Understanding basic research methods. Accra: AUCC Publishers.

- Poomalar, G. K., & Arounassalame, B. (2013). The quality of life during and after menopause among rural women. *Journal of clinical and diagnostic research: JCDR*, 7(1), 135.
- Progetto Menopausa Italia Study Group. (2003). Determinants of body mass index in women around menopause attending menopause clinics in Italy. *Journal of the International Menopause Society*, 6(1), 67.
- Rahim, S. H., & Malik, M. I. (2010). Emotional intelligence & organizational performance: (A case study of banking sector in Pakistan). *International Journal of Business and Management*, 5(10), 191.
- Reynolds, F. (2002). Relationships between catastrophic thoughts, perceived control and distress during menopausal hot flashes: Exploring the correlates of a questionnaire measure. *Maturitas*, *36*, 113-120
- Robinson, M. D., & Clore, G. L. (2007). Traits, States, and Encoding Speed: Support for a Top-Down View of Neuroticism/State Relations. *Journal of personality*, 75(1), 95-120.
- Rostami A, Ghofrani Pour F, RamazanZadeh F, Kazamnejad A. Effect of health educationon knowledge, attitude and quality of life in post-menopausal women. Daneshvar. 2003; 11 (49):19–23.Persian. [Google Scholar].
- Rotem, M., Kushnir, T., Levine, R., & Ehrenfeld, M. (2005). A Psycho-Educational Program for improving women's attitudes and coping with menopause symptoms. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 34*(2), 233-240.

- Ruffman, T., Henry, J. D., Livingstone, V., & Phillips, L. H. (2008). A metaanalytic review of emotion recognition and aging: Implications for neuropsychological models of aging. *Neuroscience & Biobehavioral Reviews*, 32(4), 863-881.
- Sagdeo, M. M., & Arora, D. (2011). Menopausal symptoms: A comparative study in rural and urban women. *JK Science*, *13*(1), 23.
- Salguero, J. M., Palomera, R., & Fernández-Berrocal, P. (2012). Perceived emotional intelligence as predictor of psychological adjustment in adolescents: a 1-year prospective study. *European journal of psychology* of education, 27(1), 21-34.
- Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current directions in psychological science*, *14*(6), 281-285.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9 (3), 185-211.
- Satoh, T., & Ohashi, K. (2005). Quality-of-life assessment in community dwelling, middle-aged, healthy women in Japan. *Climacteric*, 8(2), 146-153.
- Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The counseling psychologist*, 9(2), 2-18.
- Schlossberg, N. K. (1995). *Counseling adults in transition: Linking practice with theory*. Springer Publishing Company.

- Schover, L. R. (2008). Premature ovarian failure and its consequences: vasomotor symptoms, sexuality, and fertility. *Journal of Clinical Oncology*, 26(5), 753-758.
- Setorglo, J., Keddey, R. S., Agbemafle, I., Kumordzie, S., & Steiner-Asiedu, M.
 (2012). Determinants of menopausal symptoms among Ghanaian women. *Current Research Journal of Biological Sciences*, 4(4), 507-512.
- Sguizzatto, G. T., Garcez-Leme, L. E., & Casimiro, L. (2006). Evaluation of the quality of life among elderly female athletes. São Paulo Medical Journal, 124(5), 304-305.
- Shahbazi S, Hazrati M, Moattari M, Heidari M. (2012) Training problem solving skills and its effect on emotional intelligence of nursing students of Shiraz. Iran J Med Educ 2012; 12: 67-76. 27.
- Shakila, P., Sridharan, P., & Thiyagarajan, S. (2014). An Assessment of Women's Awareness and Symptoms in Menopause (A Study with Reference to Academic Women's at Sri Lanka). Journal of Business & Economic Policy, 1(2), 115-124.
- Sharma, D. (2017) Impact of Age on Emotional Intelligence and Its Components. International Journal of Research and Innovation in Social Science (IJRISS) Volume I, ISSN 2454-6186.
- Sharma, D., & Siddiqui, M. H. (2018). Effect of certain demographic variables on emotional intelligence: An empirical study of university teachers. *International Journal of Advanced Educational Research*, 3(2), 475-480.

- Sharma, S., Tandon, V. R., & Mahajan, A. (2007) Menopausal Symptoms in Urban women. Alcohol, 4, 3-41.
- Shipley, N. L., Jackson, M. J., & Segrest, S. (2010). The effects of emotional intelligence, age, work experience, and academic performance. Research in *Higher Education Journal* 1(1) 95-104.
- Shukla, A., & Srivastava, R. (2016). Examining the effect of emotional intelligence on socio-demographic variable and job stress among retail employees. *Cogent Business & Management*, *3*(1), 120-145.
- Singh, D. (2006). *Emotional intelligence at work: A professional guide*. Sage.
- Soules, M. R., Sherman, S., Parrott, E., Rebar, R., Santoro, N., Utian, W., & Woods, N. (2001). Executive summary: stages of reproductive aging workshop (STRAW) Park City, Utah, July, 2001. *Menopause*, 8(6), 402-407.
- Speroff, L., & Fritz, M. A. (Eds.). (2005). *Clinical gynecologic endocrinology and infertility*. lippincott Williams & wilkins.

Stein, S. J. (2009). *Emotional intelligence for dummies*. John Wiley & Sons.

- Sussman, M., Trocio, J., Best, C., Mirkin, S., Bushmakin, A. G., Yood, R. & Louie, M. (2015). Prevalence of menopausal symptoms among mid-life women: findings from electronic medical records. *BMC women's health*, 15(1), 58.
- Taffe, J., Garamszegi, C., Dudley, E., & Dennerstein, L. (1997). Determinants of self-rated menopause status. *Maturitas*, 27(3), 223-229.

- Tang, G. (1994). The Climateric of Chinese factory workers. Maturitas, 19, 177-182.
- Taylor, G. J. (2001). Low emotional intelligence and mental illness.
- Tetteh, A. (2008). Untitled. Menopause-The Journal of the North American Menopause Society, 15(5), 1029-1029.
- Trochim, W. M., & Donnelly, J. P. (2005). *Research methods: The concise knowledge base*. Cincinnati, OH: Atomic Dog Publishing.
- Twumasi P.A. (2001), Social research in rural communities. Illustrated edition: English, Book.
- Vernon, P. A., Villani, V. C., Schermer, J. A., & Petrides, K. V. (2008). Phenotypic and genetic associations between the Big Five and trait emotional intelligence. *Twin Research and Human Genetics*, 11(5), 524-530.
- Walker, E. M., Rodriguez, A. I., Kohn, B., J. R. & Levine, R. A. (2010). Acupuncture versus venlafaxine for the management of vasomotor symptoms in patients with hormone receptor-positive breast cancer: a randomized controlled trial. *J Clin Oncol*, 28(4), 634-640.
- Williams, R. E., Levine, K. B., Kalilani, L., Lewis, J., & Clark, R. V. (2009). Menopause-specific questionnaire assessment in US population-based study shows negative impact on health-related quality of life. *Maturitas*, 62(2), 153-159.

- World Health Organisation (1994). Quality of life Assessment: An Annotated
 Bibliography. World Health Organization Technical Report
 Series, 866, 1-107.
- World Health Organization (1996). Research on the menopause in the 1990s.
 Report of a WHO scientific group. World Health Organisation Tech Rep Ser, (866), 1–107.
- Yazdkhasti, M., Simbar, M., & Abdi, F. (2015). Empowerment and coping strategies in menopause women: a review. *Iranian Red Crescent Medical Journal*, 17(3).
- Yoğun E. A, & Miman. M (2016) Impact of the Demographic Factors on the Emotional Intelligence level: A Research of the Food and Beverage Sector. International Journal of Business and Management : 2319 – 8028.

APPENDIX A UNIVERSITY OF CAPE COAST **COLLEGE OF EDUCATION** DEPARTMENT OF EDUCATION AND PSYCHOLOGY

QUESTIONAIRE

Dear Respondent,

This research is design to assess how middle aged women understand their emotions while going through daily life activities. Your cooperation and consent is been solicited for to participate in this study. Confidentiality of your response is guaranteed.

Section A **Demographic characteristics**

Please indicate your response to the following questions with the appropriate answer by ticking () the space besides the information.

I. Age	. /	Age
--------	-----	-----

2.

a.	40 - 45	[]
b.	46 - 54	[]
c.	5 5- 61	[]
Ma	rital status		
a.	Single	[]
b.	married	[]

- c. divorced [] []
- d. Widowed
- 3. Educational level
 - a. Read and Write []
 - b. Basic/intermediate []
 - c. Secondary []
 - d. Tertiary []

Section **B**

These symptoms present itself during menopause stage of life whose appearance is quite different from the usual ones you used to experience before the menopause stage. Please indicate whether you experience these symptoms by ticking YES or NO and use the scale below to indicate the extent each of the following items affect your quality of life BY CIRCLING Not at all bordered on a scale of 0 to 6 extremely bothered. Please rate the extent to which the symptoms appear bothersome to you after ticking YES to the item.

No	SYMPTOMS	NO	YES	1	2	3	4	5	6
	VASOMOTOR								
1.	Hot flushes	No	Yes	1	2	3	4	5	6
2.	Night sweat	No	Yes	1	2	3	4	5	6
3.	Sweating	No	Yes	1	2	3	4	5	6
	PSYCHOSOCIAL								
4.	Being dissatisfied with personal life	No	Yes	1	2	3	4	5	6
5.	Feeling anxious or nervous	No	Yes	1	2	3	4	5	8
6.	Difficulty in remembering things	No	Yes	1	2	3	4	5	6
	than I used to								
7.	Accomplishing less than I used to	No	Yes	1	2	3	4	5	6
8.	Feeling depressed or moody than I	No	Yes	1	2	3	4	5	6
	used to								
9.	Being impatient with other people	No	Yes	1	2	3	4	5	6
10.	Feelings of wanting to be alone	No	Yes	1	2	3	4	5	6
	than I used to								
	PHYSICAL								
11.	More Flatulence than I used to	No	Yes	1	2	3	4	5	6
12.	Feeling of Aches in muscle and	No	Yes	1	2	3	4	5	6
	joints than I used to								
13.	I often Feel tired or worn out than	No	Yes	1	2	3	4	5	6
	previously experienced								
14.	I have Difficulty sleeping	No	Yes	1	2	3	4	5	6
15.	I experience Aches in back of head	No	Yes	1	2	3	4	5	6
	and neck more than I used to								
16.	Decrease in physical strength	No	Yes	1	2	3	4	5	6
17.	Decrease in stamina for rigorous	No	Yes	1	2	3	4	5	6
	activity								

© University of Cape Coast https://erl.ucc.edu.gh/jspui

18.	I Feel a lack of energy	No	Yes	1	2	3	4	5	6
19.	I have dry skin	No	Yes	1	2	3	4	5	6
20.	I have gained more Weight	No	Yes	1	2	3	4	5	6
21.	Increased hair growth in my face	No	Yes	1	2	3	4	5	6
22.	My appearance, texture or tone of	No	Yes	1	2	3	4	5	6
	skin have changed								
23.	I Feel bloated than I used to	No	Yes	1	2	3	4	5	6
24.	I experience Low backache than I	No	Yes	1	2	3	4	5	6
	used to								
25.	I Urinate more than I used to	No	Yes	1	2	3	4	5	6
26.	I Involuntary urinate when laughing	No	Yes	1	2	3	4	5	6
	or coughing								
	SEXUAL								
27.	My sexual desire have changed	No	Yes	1	2	3	4	5	6
	than it used to be								
28.	I try to Avoid intimacy than I used	No	Yes	1	2	3	4	5	6
	to								
29.	I experience Insufficient vaginal	No	Yes	1	2	3	4	5	6
	secretion during intercourse								

Section C

Please answer each statement below by putting a circle around the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from 'Completely

Disagree' (number 1) to 'Completely Agree' (number 7).

	1	5	6		. 7			
	Completely Disagree			Co	mplet	ely Ag	gree	
1.	Expressing my emotions with words is not	1	2	3	4	5	6	7
	a problem for me							
2.	I often find it difficult to see things from	7	6	5	4	3	2	1
	another person's viewpoint							
3.	On the whole, I'm a highly motivated	1	2	3	4	5	6	7
	person							

© University of Cape Coast https://erl.ucc.edu.gh/jspui

4.	I usually find it difficult to regulate my	7	6	5	4	3	2	1
	emotions							
5.	I generally don't find life enjoyable	7	6	5	4	3	2	1
6.	I can deal effectively with people	1	2	3	4	5	6	7
7.	I tend to change my mind frequently	7	6	5	4	3	2	1
8.	Many times, I can't figure out what	7	6	5	4	3	2	1
	emotion I'm feeling							
9.	I feel that I have a number of good	1	2	3	4	5	6	7
	qualities							
10.	I often find it difficult to stand up for my	7	6	5	4	3	2	1
	rights							
11.	I'm usually able to influence the way other	1	2	3	4	5	6	7
	people feel							
12.	On the whole, I have a sad or negative	7	6	5	4	3	2	1
	perspective on most things							
13.	Those close to me often complain that I	7	6	5	4	3	2	1
	don't treat them right							
14.	I often find it difficult to adjust my life	7	6	5	4	3	2	1
	according to the circumstances							
15.	On the whole, I'm able to deal with stress	1 2		3	4	5	6	7
16.	I often find it difficult to show my	7	6	5	4	3	2	1
	affection to those close to me							
17.	I'm normally able to "get into someone's	1	2	3	4	5	6	7
	shoes" and experience their emotions							
18.	I normally find it difficult to keep myself	7	6	5	4	3	2	1
	motivated							
19.	I'm usually able to find ways to control my	1	2	3	4	5	6	7
	emotions when I want to							
20.	On the whole, I'm pleased with my life	1	2	3	4	5	6	7
21.	I would describe myself as a good	1	2	3	4	5	6	7
	negotiator							
22.	I tend to get involved in things I later wish	7	6	5	4	3	2	1
	I could get out of							
23.	I often pause and think about my feelings	1	2	3	4	5	6	7
24.	I believe I'm full of personal strengths.	1	2	3	4	5	6	7
25.	I tend to "back down" or give up even if I	7	6	5	4	3	2	1
	know I'm right							
26.	I don't seem to have any power at all over	7	6	5	4	3	2	1
	other people's feelings.		1					

© University of Cape Coast https://erl.ucc.edu.gh/jspui

27.	I generally believe that things will work	1	2	3	4	5	6	7
	out fine in my life							
28.	I find it difficult to bond well even with	7	6	5	4	3	2	1
	those close to me							
29.	Generally, I'm able to adapt to new	1	2	3	4	5	6	7
	environments							
30.	Others admire me for being relaxed	1	2	3	4	5	6	7

Thanks for participating.

APPENDIX B

UNIVERSITY OF CAPE COAST COLLEGE OF EDUCATION STUDIES FACULTY OF EDUCATIONAL FOUNDATIONS

DEPARTMENT OF EDUCATION AND PSYCHOLOGY

 Telephone:
 233-3321-32440/4 & 32480/3

 Direct:
 033 20 91697

 Fax:
 03321-30184

 Telex:
 2552, UCC, GH.

 Telegram & Cables:
 University, Cape Coast

 Email:
 edufound@ucc.edu.gh



Your Ref:



UNIVERSITY POST OFFICE CAPE COAST, GHANA

6th February, 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

THESIS WORK LETTER OF INTRODUCTION: ADDAE ESTHER

We introduce to you Ms. Esther Addae, a student from the University of Cape Coast, Department of Education and Psychology. She is pursuing Master of Philosophy degree in Clinical Health Psychology and is currently at the thesis stage.

Ms. Esther Addae is researching on the topic:

"Influence of emotional intelligence on the quality of life of menopausal women in the Kumasi Metropolis"

She has opted to collect data at your institution/establishment for the Thesis work. We would be most grateful if you could provide her the opportunity for the study. Any information provided is purely for academic purposes and would be treated as strictly confidential.

Thank you.

Yours faithfully,

Glori Sagoe.

Chief Administrative Assistant For: HEAD

151

APPENINIX

UNIVERSITY OF CAPE COAST COLLEGE OF EDUCATION STUDIES

ETHICAL REVIEW BOARD UNIVERSITY POST OFFICE

Our Ref. CES-ERB/UCC.edu/V3/19-12 Your Ref:

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

<u>Chairman, CES-ERB</u> Prof. J. A. Omotosho jonotosho@ucc.edu.gh 0243784739

<u>Vice-Chairman, CES-ERB</u> Prof. K. Edjah <u>kedjah@ucc.edu.gh</u> 0244742357

<u>Secretary, CES-ERB</u> Prof. Linda Dzama Forde <u>lforde@ucc.edu.gh</u>)244786680 CAPE COAST, GHANA

Date: March 4 2019

The influence of emotional interligence the quality of life of menopausal the Kumasi Metropolis

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed-his/her proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/her study. The ERB would be grateful if you would give him/her the necessary assistance to facilitate the conduct of the said research.

Thank you. Yours faithfully,

Prof. Linda Dzama Forde (Secretary, CES-ERB)

152

APPENDIX D

RELIABILITY MEASURES AND CORRELATION MATRIX OF THE INSTRUMENT

VASOMOTOR DIMENSION

Case Processing Summary

-	-	N	%
Cases	Valid	18	90.0
	Excluded ^a	2	10.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

	Cronbach's Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.651	.640	3

Inter-Item Correlation Matrix

	Hot flushes	Night sweat	Sweating
Hot flushes	1.000	.764	.319
Night sweat	.764	1.000	.301
Sweating	.319	.301	1.000

PSYCHOSOCIAL DIMENSION

	-	Ν	%
Cases	Valid	17	85.0
	Excluded ^a	4	15.0
	Total	20	100.0

Case Processing Summary

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

	Cronbach's Alpha	
	Based on	
Cronbach's Alpha	Standardized Items	N of Items
.742	.723	7

	Being dissatisfied with personal life	Feeling anxious or nervous	Difficulty in remembering things than I used to	Accomplishing less than I used to	Feeling depressed or moody than I used to	Being impatient with other people	Feelings of wanting to be alone than I used to
Being dissatisfied with personal life	1.000	.742	172	255	.199	.319	.145
Feeling anxious or nervous	.742	1.000	.151	.042	.270	.459	.315
Difficulty in remembering things than I used to	172	.151	1.000	.665	.276	.035	.133
Accomplishing less than I used to	255	.042	.665	1.000	.170	.019	003
Feeling depressed or moody than I used to	.199	.270	.276	.170	1.000	.037	.168
Being impatient with other people	.319	.459	.035	.019	.037	1.000	.543
Feelings of wanting to be alone than I used to	.145	.315	.133	003	.168	.543	1.000

Inter-Item Correlation Matrix

SEXUAL DIMENSION

		Ν	%
Cases	Valid	19	95.0
	Excluded ^a	1	5.0
	Total	20	100.0

Case Processing Summary

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha Cronbach's Alpha Based on Standardized Items N of Items .611 .619 3

Reliability Statistics

Inter-Item Correlation Matrix

	My sexual desire have changed than it used to be	I try to Avoid intimacy than I used to	I experience Insufficient vaginal secretion during intercourse
My sexual desire have changed than it used to be	1.000	.478	.348
I try to Avoid intimacy than I used to	.478	1.000	.554
I experience Insufficient vaginal secretion during intercourse	.348	.554	1.000

Physical Dimension

Case Processing Summary

-	-	N	%
Cases	Valid	13	65.0
	Excluded ^a	7	35.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

	Cronbach's	
	Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.530	.553	16

	More Flatulence than I used to	Feeling of Aches in muscle and joints than I used to	l often Feel tired or worn out than previously experienced	l have Difficulty sleeping	I experience Aches in back of head and neck more than I used to
More Flatulence than I used to	1.000	.539	.368	166	028
Feeling of Aches in muscle and joints than I used to	.539	1.000	.242	786	338
l often Feel tired or worn out than previously experienced	.368	.242	1.000	264	574
I have Difficulty sleeping	166	786	264	1.000	.474
I experience Aches in back of head and neck more than I used to	028	338	574	.474	1.000
Decrease in physical strength	.610	.768	.620	608	334
Decrease in stamina for rigorous activity	.518	.698	.578	514	173
I Feel a lack of energy	.334	.702	.156	541	030
I have dry skin	.611	.537	.404	368	196
I have gained more Weight	339	391	363	.320	.026
Increased hair growth in my face	558	471	195	.287	.481
My appearance, texture or tone of skin have changed	.072	.036	.441	195	361
I Feel bloated than I used to	.066	116	009	.227	.282
I experience Low backache than I used to	.511	.866	.350	709	209
I Urinate more than I used to	.769	.535	.662	467	370
I Involuntary urinate when laughing or coughing	070	295	533	.354	.171

.

Inter-Item Correlation Matrix

•

Digitized by Sam Jonah Library

.

	Decrease in physical strength	Decrease in stamina for rigorous activity	I Feel a lack of energy	I have drv skin	I have gained more Weight
More Flatulence than I used to	.610	.518	.334	.611	339
Feeling of Aches in muscle and joints than I used to	.768	.698	.702	.537	391
I often Feel tired or worn out than previously experienced	.620	.578	.156	.404	363
I have Difficulty sleeping	608	514	541	368	.320
I experience Aches in back of head and neck more than I used to	334	173	030	196	.026
Decrease in physical strength	1.000	.900	.808	.588	358
Decrease in stamina for rigorous activity	.900	1.000	.750	.415	559
I Feel a lack of energy	.808	.750	1.000	.413	137
I have dry skin	.588	.415	.413	1.000	195
I have gained more Weight	358	559	137	195	1.000
Increased hair growth in my face	369	260	263	301	.306
My appearance, texture or tone of skin have changed	.097	.224	226	.045	300
I Feel bloated than I used to	.178	.367	.315	058	.099
I experience Low backache than I used to	.751	.756	.656	.595	677
I Urinate more than I used to	.698	.523	.324	.535	293
I Involuntary urinate when laughing or coughing	380	526	154	111	.698

Inter-Item Correlation Matrix

- -

	Increased hair growth in my face	My appearance, texture or tone of skin have changed	I Feel bloated than I used to	l experience Low backache than I used to
More Flatulence than I used to	558	.072	.066	.511
Feeling of Aches in muscle and joints than I used to	471	.036	116	.866
I often Feel tired or worn out than previously experienced	195	.441	009	.350
I have Difficulty sleeping	.287	195	.227	709
I experience Aches in back of head and neck more than I used to	.481	361	.282	209
Decrease in physical strength	369	.097	.178	.751
Decrease in stamina for rigorous activity	260	.224	.367	.756
I Feel a lack of energy	263	226	.315	.656
I have dry skin	301	.045	058	.595
I have gained more Weight	.306	300	.099	677
Increased hair growth in my face	1.000	086	.134	475
My appearance, texture or tone of skin have changed	086	1.000	.099	.154
I Feel bloated than I used to	.134	.099	1.000	150
I experience Low backache than I used to	475	.154	150	1.000
I Urinate more than I used to	500	.271	140	.515
I Involuntary urinate when laughing or coughing	019	533	.246	554

•3

•

Inter-Item Correlation Matrix

	l Urinate more than I used to	I Involuntary urinate when laughing or coughing
More Flatulence than I used to	.769	070
Feeling of Aches in muscle and joints than I used to	.535	295
I often Feel tired or worn out than previously experienced	.662	533
I have Difficulty sleeping	467	.354
I experience Aches in back of head and neck more than I used to	370	.171
Decrease in physical strength	.698	380
Decrease in stamina for rigorous activity	.523	526
I Feel a lack of energy	.324	154
I have dry skin	.535	111
I have gained more Weight	293	.698
Increased hair growth in my face	500	019
My appearance, texture or tone of skin have changed	.271	533
I Feel bloated than I used to	140	.246
I experience Low backache than I used to	.515	554
I Urinate more than I used to	1.000	274
I Involuntary urinate when laughing or coughing	274	1.000

Inter-Item Correlation Matrix