

**INFLUENCE OF PERSONALITY TRAITS, SCHOOL ENVIRONMENT
AND PSYCHOLOGICAL INTERVENTIONS IN MANAGING MENOPAUSE
CRISES AMONG PUBLIC PRIMARY SCHOOL TEACHERS IN
LAIKIPIA COUNTY, KENYA**

MARY WANGUI NDUNG’U

**A Thesis Submitted to the Institute of Postgraduate Studies of Kabarak University
in Partial Fulfilment of the Requirements for the Award of Doctor of Philosophy in
Education (Guidance and Counselling)**

KABARAK UNIVERSITY

NOVEMBER, 2023

DECLARATION

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RECOMMENDATION

To the Institute of Postgraduate Studies

This thesis entitled, **‘Influence of Personality Traits, School Environment and Psychological Interventions in Managing Menopause Crises among Public Primary School Teachers in Laikipia County, Kenya’** and written by **Mary Wangui Ndung’u** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the thesis and recommended it to be accepted in partial fulfilment of the requirements for the award for the degree of Doctor of Philosophy in Education (Guidance and Counseling).

Signed:

Date:

Dr. James Kay, PhD

School of Education, Humanities and Social Sciences

Kabarak University

Signed:

Date:

Prof. Owen Ngumi, PhD

School of Education, Arts and Social Sciences

Zetech University

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DEDICATION

To my Dad and Mum, my husband John Maina and children Evans, Rose and Maggie.

ABSTRACT

Menopause crisis is not considered a major issue in most organizations and therefore it is disregarded at work place. Among female teachers, it may be worsened by unfavourable working environment, personality traits and lack of psychological interventions but the significance of these factors is not yet known in Laikipia County. This study examined the influence of personality traits, school environment and psychological interventions on menopause crisis for public primary schools' female teachers in Laikipia County. Specifically, the study examined the influence of the physical environment, social environment, personality traits and psychological interventions on menopause crises. The study utilized *ex post facto* research design because it was not possible or acceptable to manipulate the characteristics of human participants. The study was based on the Person-Environment-Occupation Theory of Occupational Performance, Aaron Beck's Behavioral Cognitive Theory and the Big Five theory of personality. The target populations were 600 female teachers, 50 teacher counselors, 5 Sub County Directors of Education in the Ministry of Education, giving a total of 655 respondents in Laikipia County. The researcher used stratified sampling, two stage clustered sampling, random sampling and purposive sampling techniques. The sample of the study was 289 respondents. The research instrument of the study was a structured questionnaire, Focus Group Discussion and a key informant interview schedule. To ensure instruments validity, expertise views from the lecturers in the School of Education Kabarak University were incorporated in order to improve the face and construct validity of the instruments. A pilot-test was done in the neighbouring Nyandarua County in order to test the reliability of the research instruments. Both descriptive and inferential statistics were used to analyze data aided by a computer based Statistical Package for Social Sciences (SPSS) version 22. The statistical analysis entailed the computation of frequencies and percentages. Informed consent was sought from the respondents before the questionnaires were issued and an assurance given to them that the information they provided would be treated with confidentiality. The findings revealed that personality traits have a statistically significant influence on the psychological interventions of menopause crisis with a Linear Regression analysis where ($r^2=0.632$; p-value of 0.0349) which was significant at 0.05 level of significance as well as physical environment where ($r^2=0.683$; p-value of 0.0398) which is significant at 0.05 confidence level and social environment at ($r^2=0.645$; p-value of 0.03) which significant, while psychological interventions was found to be significant at ($r^2=0.545$; $p > 0.0390$) at 0.05 confidence level. From the findings of the study, it can be concluded that personality traits, school environment and psychological interventions influence in managing menopause crisis. It is recommended that counselors and should aim at helping menopausal female teachers deal with their emotional instability. School administrators should provide working environments that are conducive to the female teachers. Findings from the study provided insight that it is helpful to school managers to identify some of the environment related gaps in their schools that need to be addressed in order to make their working environment more conducive to menopausal women. Policy makers will gain insight into initiatives that could ensure women teachers undergoing menopause are least affected psychologically and physically. It has also added to the body of knowledge on the matter under study that could be beneficial to interested researchers, students and academicians.

Keywords: *Menopause, Crisis, Female Teachers, Coping, Environment, Personality Traits, Counseling Strategy*

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LIST OF ABBREVIATIONS AND ACRONYMS

CBT	Cognitive Behaviour Therapy
CD-TSC	County Director- Teacher Service Commission
EU	European Union
FT	Female Teachers
FGD	Focused Group Discussions
HD	Head Teachers
HS	Hospital Superintendent
KCSE	Kenya Certificate of Secondary Education
KDHS	Kenya Demographic and Health Survey
KNBS	Kenya National Bureau of Statistics
KIs	Key Informants
MOE	Ministry of Education
NACOSTI	National Commission of Science, Innovation and Technology
NIH	National Health Institute
NUT	National Union of Teachers
OSH	Occupational Safety and Health
PEO	Person-Environment-Occupation
RCN	Royal College of Nursing
STUC	Scottish Trade Unions Congress
SD	Standard Deviation
SCDE	Sub County Director of Education
SPSS	Statistical Package for Social Science
TSC	Teachers Service Commission
TUC	Trade Union Congress
USWA	Union of Shop, Distributive and Allied Workers
UK	United Kingdom
USA	United States of America
USA	United States of America
WASH	Water, Sanitation and Hygiene

CONCEPTUAL AND OPERATIONAL DEFINITION OF TERMS

Climacteric: Refers to the period of life starting from the decline in ovarian activity after the end of ovarian function that the female teacher undergoes.

Counselling: This refers to a psychosocial support that would be accorded to women going through menopause.

Crisis It is the stage during the transition of natural occurrence that marks the end of the reproductive years of a woman.

Environment Related Factors: In this study, it is the totality of conditions within the school which may affect female teachers in menopause transition that include the physical facilities, work place rules and practices and relationship with colleagues.

Female Teacher: This refers to the person who is teaching at the public primary school.

Menopause Crisis: Refers to a transition stage during which a woman stops being reproductive. It is when a woman experiences a trend of events after menstruation has stopped.

Menopause: In this study, it is female teachers who are no longer reproductive, those who are at the age of 44 to 55 years.

Personality Traits: In the study these are the characteristics of female teachers in public primary schools.

Physical Environment: In this study, these are the classrooms, staffrooms, toilets and also the rest areas that the female teachers use.

Psychosocial Counselling: In this study, this refers to counseling given to female teachers undergoing menopause and that targets at their psychological wellbeing in order to support their ability to cope with menopause.

Social Environment: In the study, it is how female teachers at menopause relate with other stakeholders in a school; The social setting

Psychological Interventions: In this study, it is the counselling strategies used by female teachers in coping with menopause crises.

Vasomotor Symptoms: Refer to hot flashes, night sweats and heart palpitations experienced by the female teachers.

Teacher Counsellor: Refer to a teacher who is teaching at public primary school and has undergone training in counselling to give psychosocial support to primary school pupils and other teachers.

Sub County Director of Education: Refer to the person in charge of administration of education matters in the sub county.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Menopause is a universal bio-psychosocial phenomenon that is sometimes perceived as unpleasant for women (Ilankoon, et al, 2021). However, it is a normal physiological event that every woman who lives long will experience. It is a normal stage of development experienced by women as part of the natural aging process. Although many women transit through menopause with manageable symptoms, several biological and psychosocial changes that take place during this phase and the related experiences by women vary widely (Ohemeng, 2009). Since it is a bio-psychosocial phenomenon menopause requires biological, psychological and social approaches for its effective management. Monteleone et al (2017) gave the view that the nature of menopausal symptoms is common to all women; however, geographical location and ethnicity influence the prevalence of certain symptoms. Again, individual factors such as personal history, current health status and socioeconomic status considerably worsen a woman's experience of menopause. In addition, Baloyi (2012) suggested that menopause with its physical and emotional changes appear to be an inevitable road for women to travel. The moment of choice for women at menopause involves embracing the new self or trying to cling to identities from earlier self and also consider how the society they live in views women after menopause.

In the same light, the work environment, policies and conditions need to be responsive to the phenomenon to avoid aggravating the menopausal symptoms (Kennedy, 2016). According to Loehr (2016), approximately 27 million women affected by menopause work every day in the United States of America (U.S.A). Many of the affected women report feeling that they are viewed as less competent due to the menopausal

complications they are experiencing. In Canada, a study by Leger Marketing (2007) showed that for the working professional women, hot flashes interfered with work and caused anxiety in the workplace for a quarter of respondents. The study estimated that Canada would have a population of 2.7 million women affected by menopause between 2010 and 2020.

In the European Union (EU), the median age at menopause ranges from 50.1 to 52.8 years. Palacios, et al., (2010) assert that the employment rate for older women (aged 50–64) in 2012 was 41.7% which is less than for those in middle age (ages 25–49), for whom the average employment rate was 71.2%. However, the employment rate of older women increased in the previous few years in almost all European member states. The greatest increase observed in Germany, Slovakia and the Netherlands, was by more than 20 percentage points. The highest employment rates of older women in 2012 were found in Nordic countries (Sweden: 69.6%, Finland: 59.7%, Estonia: 61.2%) while the lowest rate was reported by Malta, at 15.8% (OSH Europe, 2016). This depicts an appreciating trend of older women who are at work and who are likely to be affected by menopause in Europe and thus the need to get psychological and social support for the management of the menopause phenomenon.

In Asia, the median age at menopause is from 42.1 to 49.5 years (Palacios, et al., 2010). Huang et al (2020) indicated that menopause in white Caucasian women occurs on average age of 51 years while in Asian countries the mean age of onset of menopause was at an average of 49.3 years. In Pakistan, the average age at menopause was 46.88 and the most common climacteric symptom was hot flashes. These findings are supported by AlDughaiter, Almutairy and Al Ateeq (2015) that the mean age of menopause was 48.3 years. Lol et al (2005) in their study on the age of menopause and menopause transition in a multiracial population in Singapore revealed that the mean age

of menopause was 49.0 years. In view of these findings, it can be reasoned that many women in the Asian continent experience menopause at an average age of 49 years. A study that documented the prevalence of menopausal symptoms in women in Kelantan Malaysia revealed that the mean age at menopause was 49.4 ± 3.4 (S.D.) years while both the mode and median were 50 years. They revealed typical symptoms that could directly affect job performance which included prevalence of tiredness at 79.1%, reduced level of concentration at 77.5%, headache at 49.4% and anxiety at 39.8% (Dhillon, et al., 2007). Another observation by Xueyin et al (2021) reported that menopausal status, residence and chronic diseases were associated with menopausal symptoms in middle-aged Chinese women. A study on tribe and caste population of East India Dasgupta et al (2015) found out that tribe and caste populations differed with respect to oestrogen-deficiency and menopausal problems. Khan et al (2017) in their cross-sectional study of North India reported significant differences in the association of urinary incontinence with increasing age groups and consequent years spent in menopause.

This implies that menopause is a crisis that needs appropriate attention on the continent. Alwi et al (2021) in their study on the perceptions of menopause among women of Sarawak, Malaysia found out that 22.5% of the participants agreed that problems during menopause are a natural process while 21.9% suggested that menopause should be treated medically; 32.3% agreed that natural approaches for menopause are better than hormonal treatments. In assessing knowledge, attitude and practices towards menopause Al-Olayet, Al-Qahtani and Dalah (2010) found that 57.5% recognized that menopause was concerned with cessation of menstruation and 47.9% denied any physical and psychological effects of menopause. These reports agree with Ilankoon and Kerstin (2021) who suggested that although menopause may result in extremely unpleasant physical symptoms, there is evidence of a low rate of reported menopausal symptoms

amongst women in Asian cultures. This means that attitudes towards menopause are influenced by the beliefs and culture of the society (Khandehroo, et. al, 2021). This study examined the influence of personality traits, school environment and psychological interventions in managing menopause crises among public primary school teachers.

In Africa, menopause is a transitional period that differs from one female population to another (Olaseha, et al., 2015). Ramakuela (2015) reported that women in rural villages of Limpopo Province in South Africa associated cessation of menstruation with aging rather than menopause. Once menstruation stopped, one was regarded as old. The majority of women lacked accurate knowledge and information regarding their expectations of menopause and the aspect of human aging. As a result, they could not make informed choices about menopause and aging, making its management more complex and uncertain. According to Hinchliff (2019), the average age of menopause for white women is 51 years. Using this as a comparison point, African American, Latino, Thai, Mayai and Latin women tend to experience menopause earlier than white women, whereas Asian women experience menopause around the same time.

A study by Okonofua et al (2000) among the women of Yoruba descent who had been menopausal for at least 5 years, revealed that the mean and median ages of menopause were 48.4 and 48.0 years respectively. These findings are consistent with those of Adefuye et al (2017) in their Questionnaire-based Descriptive Cross-Sectional Study of 562 women aged between 44- and 65-years attending outpatient clinics and who had experienced at least 24 continuous months of amenorrhea that was carried out at Olabisi Onabanjo University Teaching Hospital, who found out that the mean age of menopause was 48.9 years. The study concluded that the mean age of menopause is lower than the global average age of menopause of 51 years. The findings also established that menopause in Nigerian women is commonly complaint-free. This means according to

Velez (2021), black women spend more time in the menopause transition than white women. These findings concur with those of Sidibe (2005) who held the view that menopause occurs earlier in African women than in European or American women. Sidibe also gave the view that symptoms of menopause in Africa do not vary greatly from European countries but social, economic and nutritional factors may influence the biological pattern.

A study by Ohemeng (2009) concludes that in contrast to Ghanaian women living in Canada who are surrounded by a culture where menopause is medicalized, most women in Ghana do not view menopause as a disease but rather as a normative life transition. This implies differences in socioeconomic contexts when it comes to managing menopause crisis. According to Makuwa et al (2015), the majority of South African aging population are women who spend late adulthood experiencing natural menopause. The South African government spends billions of Rand on different services for aging women but little attention is given to women facing menopausal challenges. Similarly, Kelson (2018) indicated that despite an abundance of information regarding menopausal women in Western Society, African menopausal women have been overlooked in menopausal research.

Muchanga (2021) in his study on the Knowledge, Attitudes and Practices towards Menopause among Congolese Middle-aged and Post-Menopausal women found out that Congolese women had limited knowledge, positive attitudes and unconventional practices towards menopause. According to Wambua (1997), menopause for most African women marks the end of reproductive potential. For women with multiple births, menopause is likely to be welcomed as an end to childbearing under conditions of limited fertility control technology. This concurs with Agunbidde and Gilbert (2019) in their article on older peoples' perception of menopause and sexuality among the Yoruba

men and women where they posit that menopause is a bio-psychosocial marker of aging that provides gendered spaces for women to abstain from or suppress their sexual desires. These findings call for more research about the experiences of African women regarding menopause.

In Kenya, a study on the Median age at Menopause in a Rural Population of Western Kenya by (Noreh, et al., 2000) revealed that the median and modal age of menopause was 48.28 years. These findings are consistent with Omboki (2017) in his University of Nairobi Study on 1078 women in Western Kenya, where he found out that the average age for women reaching menopause was 48 years. This is supported by Njenga (2020) who held the view that the age at which women reach menopause is quite variable and can be from as early as 30 years or as late as 60 years in some rare cases; but the commonly accepted age is any time between 45 and 55 years. Generalizing for the whole country, these results would suggest that on average a Kenyan woman will live for over ten years beyond menopause since the life expectancy is 65.8 (World Life Expectancy, 2018). In the same view, Mulder (2008), reported that among the Kipsigis, a population of South-Western Kenya who doesn't use contraception, age at menarche and age at last birth could be determined for a cohort of post-menopausal women.

A study on experiences of menopause on sexual intimacy and coping strategies used among Karen Married Women (Gunyani, 2016) revealed that women used different coping mechanisms such exercise therapy, change of diet, conventional treatment, change of dressing, social support, humor and spiritual intervention to manage their menopausal experiences. According to Wambui (2011), menopause is a culturally welcomed and accepted phenomenon. Again, women need to understand that menopause is a natural aging process rather than a disease. This is especially so with the increased life expectancy in Kenya which translates to a bigger population of women in the post-

menopausal time (The Standard, 2011). A study by Ruto (2016) on the Assessment of Knowledge and Practices on Menopause among Peri menopausal women in Kipkaren, Eldoret Town, Kenya, found out that most perimenopausal women understand the meaning of menopause, its causes, symptoms and ways of managing the condition. The study also found a significant relationship between the education level and understanding of menopause. This line of exploration is contrasted by Sitati, Obimbo and Gichangi (2021) in their study on the knowledge and beliefs on osteoporosis among African postmenopausal women in the Kenyan semi-rural County of Kiambu which established that women demonstrated limited knowledge about osteoporosis. In this regard, it can be reasoned that Kenyan women have a limited understanding of menopausal symptoms and therefore they are likely to face challenges brought about by menopausal symptoms. This is likely to make them fail to seek help and consequently suffer in silence. In the same line of exploration Contesse (2016) in their study of the association between menopause and unprotected sex in high-risk HIV-positive women in Mombasa, Kenya reported that many HIV-positive women now live well beyond menopause and that postmenopausal women are no longer at risk of pregnancy and may fail to use condom compared to premenopausal women. This implies that menopause transition stage acts as a time of birth control for some Kenyan women.

Managing menopause is a matter of importance for occupational health for women and especially in developing countries (WHO, 2014). Nonetheless, management and treatment of unpleasant and often uncomfortable menopause symptoms boils down to an individual's circumstance and would include lifestyle changes, changes in diet, prescription medication, or psychological treatments (counselling) (Women's Health Concern, 2018, Jean Hailes, 2018).

According to Neumann (2014), research has shown the positive effect of psychotherapy and mindfulness techniques on women with depression during menopause, as well as the use of cognitive therapies as alternatives for women unwilling to use pharmaceutical treatments. Cognitive Behaviour Therapy (CBT) as a brief, non-medical approach helps women undergoing menopause with a wide range of psychological issues such as depressed mood, anxiety and stress, night sweats, hot flushes, fatigue and sleep problems (Women's Health Concern, 2018). Other suggested strategies for managing menopause include implementing health promotion programs as well as improving the working environment and work policies as well as raising awareness of menopause in order to help affected women to maintain their wellbeing and productivity (Hammam, Abbas, & Hunter, 2012).

According to Business Daily (2021), menopause is rarely discussed even though half of the world's population experiences or will experience this biological transition at some point in their lives. Menopause is not a medical condition or an illness but a natural component of the life cycle, yet this topic remains unspoken, especially in the workplace. Women between the ages of 45 to 55 have readily risen over the last three decades. It is crucial that menopause be demystified as a natural phenomenon and ensure that menopause and its effects on women are part of the workforce conversation. If this is not done, a number of women will leave their jobs prematurely and create a gap, especially in leadership. In view of this observation Bojar and Rothenberg (2011) opines that one-third of a woman's life is around or after menopause where a 50-year-old woman is a full-time working person expected to be fully active in intellectual, physical and social terms. Drawing from this observation it is important for all stakeholders to take the necessary steps in order to retain these women in work.

Welham (2016) asserts that teaching is a demanding and stressful occupation, especially with large class sizes. For the primary school teacher, it can be challenging since this category of teachers have to cope with the younger colleagues who are leaving college and male teachers who do not understand what these female teachers are going through. In addition, in the female-dominated teaching profession, many senior teachers and principals are also male. All women teachers will go through a change of life at some stage in their careers. However, with weak health education and support programs for women undergoing menopause the female teacher is more likely to suffer silently as she struggles with the resultant psychological and physical symptoms (Brown, *et al.*, 2014). However, by making some practical changes in the work environment in recognition of this, employers could bring benefits to everyone in the teaching profession. If the working environment is conducive for the female teacher during the menopause crises, she can offer better services and by implication successfully go through menopause while still working. Furthermore, and arguably, if female teachers understood their personality traits better, this could help them cope with menopause-related crises.

Most studies have looked at menopause as a purely biological transition ignoring the influence of the environment and personality-related factors on the menopause crises (Leidy, 2000; Burger, Dudley, Robertson, & Dennerstein, 2002; Buckler, 2005). There is scanty empirical data on how personality traits, school environment and psychological interventions influence menopause experience especially on primary school teachers in Kenya and in Laikipia County in particular. It is for this reason that this study sought to determine how the personality-related factors, school environment and psychological interventions influence the menopause crises among female teachers in Laikipia County.

1.2 Statement of the Problem

Although menopause is a normal midlife transition for women, it remains poorly understood. The confidentiality with which menopause crises are handled in African societies leave many women without proper skills and social support for its crisis management. Although it is a normal transition for all women in mid-life, many are ill prepared when the time comes and find the symptoms distressing and disruptive to their day-to-day activities. Given that the working-class women have to manage work-life balance and meet the expectations of their employers and clients, the working environment and their personality characteristics could have deleterious consequences on menopause crises.

This presents significant implications for female teachers whose work environment exposes them to stress and burnout. Lack of supportive environment, coupled with some of the personality traits could further aggravate the menopause crises in the teaching profession. The psychological interventions on menopause –related complications are not enough to offer these teachers coping mechanisms. This means that there is teacher absenteeism, lack of motivation to work coupled with low performance in these public primary schools. It needs to be mentioned that female teachers in public primary schools work under unfavourable conditions that affect their job performance. There is need to do a study of this kind for there is not enough evidence that research has been conducted in Laikipia county investigating the factors such as personality traits, physical environment, social environment and psychological interventions and their influence on menopause crises. This study was therefore done to bridge the knowledge gap by exploring the influence of personality traits, school environment and psychological interventions in managing menopause crises with specific reference to public primary schools in Laikipia County.

1.3 Purpose of the Study

The purpose of this study was to examine the influence of personality traits, school environment and psychological interventions in managing menopause crises among public primary school teachers in Laikipia County.

1.4 Objectives of the Study

The study was guided by the following objectives:

- i. To investigate the influence of personality traits on psychological interventions in managing menopause crises among female teachers in public primary schools in Laikipia County.
- ii. To establish the influence of the schools' physical environment on the psychological interventions in managing menopause crises among female teachers in public primary schools in Laikipia County.
- iii. To determine the influence of the schools' social environment on the psychological interventions in managing menopause crises among female teachers in public primary schools in Laikipia County.
- iv. To examine the influence psychological interventions in managing menopause crises among female teachers in public primary schools in Laikipia County.

1.5 Research Hypotheses

To test the objectives, the study posited the following null hypotheses which were tested at 0.05 level of significance:

H₀1: There is no statistically significant difference between personality traits and management of menopause crises among female teachers in public primary schools in Laikipia County

H₀2: There is no statistically significant difference between physical environment and management of menopause crises among female teachers in public primary schools in Laikipia County

H₀3: There is no statistically significant difference between social environment and management of menopause crises among female teachers in public primary schools in Laikipia County

H₀4: There is no statistically significant difference between psychological interventions and management of menopause crises among female teachers in public primary schools in Laikipia County

1.6 Significance of the Study

The findings of this study have potential benefits for different stakeholders in the primary education sector. The findings may provide insight that could enable them to cope better with their teaching profession. The school managers may acquire insight into how they could provide physical and emotional support to women undergoing menopause with an aim of boosting their performance. The study may also be useful to the Ministry of Education (MOE) officers since it has granted them insight into what should be done and how they might support women undergoing menopause psychologically and physically. The study can provide knowledge and insight to policy makers that could be basis of formulating interventions that could mitigate the psychological and physical effect of menopause on teachers. The study has also provided insights that could support the counselors in their bid to counsel women who are undergoing menopause. It could enable them to know the skills gaps that exist as well as viable approaches that enable school counselors support women undergoing menopause better. The study may help academicians and students of counselling to build the knowledge base in the discipline by adding on the existing literature on the role of

environment and personality traits, generally on women undergoing menopause and specifically on menopausal female teachers. It may also provide possible approaches that could be used to support career women undergoing menopause.

1.7 Assumptions of the Study

The study was carried out based on the following assumptions:

- i. Information provided by the respondents in their respective questionnaires, interview and Focus Group Discussion (FGD) were genuine indicators of the influence of the environment and personality traits in the psychological interventions of menopause crises.
- ii. All the respondents chosen for the study had adequate knowledge of the environmental and personality factors that influence the psychological interventions of menopause crises among female teachers in the public primary schools in Laikipia County.

1.8 Scope of the Study

The study was limited to the issues set out in the objectives. Geographically, the study was conducted in Laikipia County and targeted public primary school female teachers working in the year 2019. Data was collected in 2019. The target population included those women between 44 and 55 years of age, on the extent to which selected school environment and personality related factors may influence female teachers in menopause crises in Laikipia County Kenya. These categories of teachers were selected because they were better placed to provide data on their personality characteristics and the working environment in schools that influence their management of menopause crises. These female teachers would also provide information on their experiences in psychological interventions as a coping mechanism. The Sub County Directors were included in the

study because they provided information on the physical infrastructure development in public primary schools with an aim of establishing whether there is sensitivity to female teachers undergoing menopause in the area of study. Teacher counselors in the county were also identified to provide information on the prevalence of psychological interventions of menopausal female teachers. Laikipia County was selected because despite the significant number of primary schools in the county and the subsequent number of teachers, the area has not had sufficient attention given to teachers undergoing menopause in these schools and how these influences performance of education in the area.

1.9 Limitations of the Study

The study encountered the following limitations:

- i. The study was only limited to public primary schools hence the results may not be generalized to private primary schools.
- ii. Some respondents were sceptical and uncooperative in giving the much-needed information. However, the researcher took time to explain the purpose of the study and encouraged them to be open and cooperate during data collection.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature on the influence of personality traits, school environment and psychological interventions of menopause crisis among female teachers in Laikipia County. It also looked at the literature related to the objectives of the study that is: influence of personality traits on menopause crises, influence of physical environment on menopause crises, influence of social environment on menopause crises and influence of psychological interventions in managing menopause crisis. The chapter also covered the theoretical framework and conceptual framework of the study.

2.2 The Concept of Menopause

National Health Institute (2016) showed at human being go through many body changes throughout their lifetime due to varying levels of hormones in the body which occur at transitions of life. Menopause is one such major transition period in the life of every woman. At menopause a woman stops experiencing menstruation and is no longer fertile. The stage is generally associated with unavoidable manifestation of aging process in women that is unique to female reproductive life cycle. This often begins in the late 30's and most women experience total loss of production of estrogen by their mid-50. The usual age of onset of menopause is between ages 44 to 55. Sometimes, one experiences earlier or later than this but the average age is 51 years.

The term menopause is defined as the last menstrual period which is associated by not having had a menstrual period in 12 months. Chlouhi (2017), defined menopause as permanent loss of menstrual periods, determined retrospectively after a woman has experienced 12 months of amenorrhea without menstrual period any other obvious cause. It is a bio social and cultural phenomenon, comprising a biological and social transition

in women's lives (Drew et al 2022). Mbengono *et al* (2021) defined menopause as a physiological state which induce deep changes in a woman's life. This the set of symptoms are induced by estrogen deficiency.

According to Muchanga (2021), menopause is a natural process of aging defined as a definite cessation of ovarian follicles activity and consequently ends of menstruation. In the same line of exploration, Ilankoon and Kerstin (2021), asserts that menopause is a bio-psychosocial phenomenon involving the transition in a woman's life from being fertile to infertile. This is a complex and critical period due to the fact that the woman is subject to face many challenges due to changes in her physical and emotional life.

2.2.1 Stages of Menopause

The symptoms which involve this shift occur in four main overlapping stages. The first stage is pre-menopause. This marks the onset of women's reproductive-lives levels of the hormones estrogen and progesterone that increase and decrease in a regular pattern while ovulation occurs about two weeks later. Pre-menopause is the first of the four stages in menopause process which begins when a woman enters the reproductive years and finishes with the first signs that menopause is about to begin. This happens in their early to mid-40s (Women's Health Research Institute, 2013). During this stage, women undergo a normal menstrual cycle.

Pre-menopause is followed by peri-menopause. According to McCarthy and Raval (2020), peri-menopause or menopausal transition period includes the final years in a woman's reproductive life. Santoro et al (2018) suggested that perimenopause represents a period of time during which newly arising symptoms present complex management decisions for women. It is a stage of transition that is characterized by erratic fluctuation of the estrogen hormone (Milner et al, 2021). This period is also referred to as climacteric or turning point. It is a period of important emotional, physical and

psychological changes in a woman's life (Nelson-Porter, 2014). The phase begins some years before the menopause as the ovaries begin to produce less estrogen at around forty years of age. Peri-menopause lasts until the menopause transition when the ovaries stop releasing eggs. The hormone levels begin to fluctuate in order to prepare the body for the menopause transition.

Menopause is the third stage and which indicates a permanent cessation of ovulation and menses. It reflects a near-complete but natural decrease of ovarian hormone secretion. The medical definition of menopause is when a woman has her last period which happens because the woman's ovaries stop producing eggs and the amount of estrogen hormone in her body falls (Royal College of Obstetricians and Gynecologists, 2016).

A woman who has been period free for one year, has not experienced pregnancy and is not breastfeeding is said to be in menopause (Yadav & Gupta, 2014). Many symptoms beginning from early stages are experienced during menopause. These includes hot flushes, breast tenderness, decreased sex drive, fatigue, irregular periods, vaginal dryness, discomfort during sex, worsening of premenstrual syndrome, urine incontinence when coughing or sneezing, the urge to urinate, insomnia, weight gain, slowed metabolism, thinning hair, dry skin and reduced breast fullness (Mayo Foundation for Medical Education and Research, 2016). It is a unique stage of female reproductive cycle. Miguel (2022) posts that menopause is a natural and an inevitable transition that can cause uncomfortable symptoms.

Menopause is followed by post menopause; - the time immediately after menopause. Technically, a woman is post-menopausal from the onset of menopause until the end of her life (Menopause Symptoms, 2015). Post menopauses are the years after menopause. During this stage menopausal symptoms such as hot flushes can ease up for most women. As a result of a lower level of oestrogen, postmenopausal women are at a higher

rate of experiencing a number of health conditions such as osteoporosis and heart disease (Cleveland Clinic, 2015).

2.2.2 Personal (Physical and Psychological) Effects of Menopause

Menopausal symptoms though well tolerated by some women, may be troublesome to others. Symptoms experienced with the menopausal transition and early post menopause are varied and span in both physical and psychological domains. More than 80% of the women experience physical and psychological symptoms in the years when they approach menopause with various disturbances and discomfort in their lives (Gupta & Yadav, 2014). These suggestions concur with Gracia and Freeman (2018) who found out that 80% and above of women, experience some degree of psychological or physical symptoms around menopause. Severe symptoms can compromise the overall quality of life for those going through menopause. A study carried out on 152 women on a Tertiary Care Hospital found out that 38.6% had been portrayed experiencing vasomotor symptoms that included hot flashes and night sweats. Psychosomatic symptoms like insomnia, muscle and joint pains were seen in almost half of the population.

The overall prevalence of psychological effects was found to be 18.8% and 26.5% respectively (Jyothi & Kolisetty, 2015). In Ibadan Nigeria, Olaseha, Ibraheem and Oyewole (2015) found that in the majority of women at least one had symptom of menopause that could be listed into any of the four types namely; somatic symptoms, hormonal deficiency, emotional and skeletal symptoms. This report concurs with those of Iddrees, et al (2022) in their study of the impact of menopause on psychological wellbeing of women in Sialkot Pakistan who found out that there was a strong negative correlation between menopausal symptoms and psychological wellbeing. The findings further conclude that menopause negatively affects the psychological wellbeing of menopausal women.

There are some women who experience serious symptoms which may impair their quality of life (Taavoni et al., 2013). To many women, menopausal period is a challenging period of life, often associated with lowered self-esteem (Stöppler, 2018). Differences make some women more vulnerable to menopausal symptoms. Brown, Bryan, Brwon, Bell and Judd (2014) found out that about 75% of peri and post-menopausal women have vasomotor symptoms. However, some women experience more discomfort and distress in response to these symptoms. This is in congruence with the findings of Tang et al (2019) who noted that these menopause symptoms differ among women but there are many symptoms that are prevalent such as: anger, feeling overwhelmed, feeling revved, depression, anxiety mood swings, reduced self-esteem, hot flashes, night sweats, insomnia, fatigue, overly emotional, shorter cycles closer together and heavy bleeding with blood clots. Hormonal changes that come with menopause might cause mood swings where one feels overly emotional and likely to snap at the slightest annoyance (The Standard, 2020).

All women above 50 years go through a period of transition from fertile to non-fertile stages of life. The ovarian function of a menopausal woman begins its decline at this time and is used as a clinical marker. The primary menopausal challenges experienced by these women can be grouped into psychological, vasomotor, sexual complaints, and somatic. The occurrence and seriousness of these symptoms differ widely from different cultural populations and from individual to individual in the same cultural population (Bindhu, 2013). The characteristic symptoms of menopause based on vasomotor symptoms are hot flushes and night sweats. These symptoms directly result from decrease in oestrogen level as women approach menopause stage. Menopausal symptoms and their relationship with menopause transition vary widely. The key results in a doctoral thesis done by Rubinstein, (2014) revealed that there were four beliefs that

influenced the prediction of perceptions and severity for treatment utilization by women during menopause. The four social constructions of menopause are first, that menopause renders women unnoticed and with no value; second, menopause is an affliction that change women; third, menopause is amenable to treatment with hormone therapy and fourth, menopause is a phase that is temporary after which there is recovery. A study by Mwenza (2015) among the British Pakistan women revealed that women from lower social classes higher were significantly less likely to undergo vasomotor symptoms than those of a higher occupational social class.

Psychogenic symptoms that include insomnia, low attention span, nervous tension, lack of energy, despondency are among the most frequently reported symptoms of menopausal transition (Stöppler, 2018). A report by Tang et al (2019) on Clinico-Epidemiological study on Health problems of post-menopausal women in rural area of Vadodara District, in Gujarat reported that 80% of them suffered from physical symptoms of fatigue and 74.8% headache. Vasomotor symptoms such as hot flushes were at 40.1%, night sweats 40.8%, palpitations at 37.4% as well as psychological symptoms like insomnia 57.1%, lack of concentration in the work at 33.3% and anxiety (38.1%). Most post-menopausal women go through a myriad of health problems that are related to the environmental settings they come from. The most immediate and vital symptoms of menopause are the effects of hormonal changes on many organ systems of the body (Thiyagajaran, & Shakila, 2014). The symptoms experienced at the onset of menopause are primarily self-timing, non-fatal but are nonetheless distressing and sometimes disabling.

A study carried out by Arounassalame and Poolamar, (2013) indicated that the mean age group based on the study was 45years. The study subjects experienced low backache at (79%) and concurrently, muscle joint pain at 77.2%. The least frequent symptoms were

increase in feeling of dryness during intimacy at 10.8%. Scores of hot flushes and night sweats were significantly more in menopause transition group while the value of physical domains were significantly more in late post-menopausal group. A study carried out by Khatri, Hande and Pal (2013) on menopausal symptoms in peri-menopause and post menopause women on thirty women found out that the most severe symptoms reported included vasomotor subscale and subsequently psychological subscale. The mean age of menopause was reported as 48.9. The report indicated that after the onset of menopause there is increase in menopausal symptoms.

Dalal and Agarwal (2015) poses that menopause is a psychological event that is experienced by all women who reach midlife. The variation of the menopausal symptoms, the onset of menopause and its perception is primarily based between and within populations. Fatigue was the most common complaint among menopausal women followed by vasomotor symptoms (Sabir & Mustafa, 2012). Symptoms shown to be associated with a decrease in oestrogen after menopause are night sweats, insomnia, hot flushes, and vaginal dryness. Other symptoms include on and off menstrual bleeding, arteriosclerosis, osteoporosis, dyslipidaemia, depressed mood, forgetfulness, anger, headache, dizziness, deterioration in postural balance, palpitations, reduced skin elasticity, dry eyes, dry mouth, restless legs and muscle and joints pain.

A study conducted by Hussain et al (2013) indicated that most of the women reported that tiredness was the primary and immediate consequence of menopause while 41.5% were of the opinion that it was a hot flush. (76.6%) which was the highest percentage of women, expressed the view that osteoporosis was the prevalent long-term consequence of menopause. 156 women who were purposely selected for a cross-sectional study from four different sites in Pune city between 40 and 55 years of age revealed that the mean age of menopause was 45.8 years. They reported experiencing at least four symptoms.

The highest number of reported symptoms were psychological followed by vasomotor and then urogenital symptoms. The report further indicated that about 130 million Indian women are expected to live longer into old age by 2015. Menopause is emerging as an issue due to urbanization, changing lifestyle and increased longevity in urban Indian women who are evolving as a homogeneous group (Aarti, 2011).

Peri and post menopause women undergo a varying range of menopausal symptoms. Most middle-aged women are concerned about losing their striking nature of womanhood after undergoing menopause. Most post-menopausal women may experience a sense of loss and despondency after they stop nurturing and tending to their maternal roles as their children grow and are autonomous. Korean women experience serious and severe symptoms which include; memory loss, recurrent fatigue, exhaustion and dry skin (Kang, Park, & Kwak, 2014).

Shinde (2014) reported that the onset of menopause brings with it psychological problems that affects the woman's self-esteem resulting in insomnia, changes in appetite and chronic fatigue. The woman's mood is riddled with feelings of sadness, emotional instability, emptiness, despondency and dysphoria. It affects the way the woman thinks, interfering with concentration and decision making. One's behaviour changes with increased anger, loss of temper, withdrawal of her social circle and the lack of desire to engage in activities that were once deemed pleasurable.

Sleep difficulty is one of the hallmarks of menopause. The major predictor of disturbed sleep is the presence of vasomotor symptoms. Menopausal women have lower sleep efficacy and increased sleep complaints. These women are also at a higher risk of psychological complaints. All these symptoms have been attributed to hormonal changes (Jehan, et al., 2015), Elazim, Lamadah, & Luma, 2014). A cross sectional multi-center study conducted by Afzal et al (2014) on 50 women for each hospital revealed that most

common symptom reported was joint problems by 90% of women and forgetfulness with the least at 10%. A depressive mood was reported at (85%), lack of sleep (80%), palpitation (70%), anxiety (65%), hot flushes (60%), urinary incontinence (30%) According to Achar et al (2014), in their study on women knowledge of peri-menopausal phase and symptoms in Njoro District Kenya, majority of women provide their opinion that menopausal symptoms were a challenge to their marital relationships. This was also reflected with the behaviour and relationships to the community.

2.2.3 Menopause and Career Women

Currently, menopause affects the lives of millions of women at a global level. The overall health and wellbeing of middle-aged women has become a major public health concern around the world. More than 80% of women experience physical or psychological symptoms in the year when they approach menopause with various challenges in their lives. This leads to a reduced quality of life. Over the next few decades, as the population ages, it will be an increasing concern. However, there is little to no data and research on consciousness of menopause-related symptoms among women in developing countries. A woman's work ability is severely influenced negatively by menopause and varies across individuals. Menopause is directly responsible for higher work absenteeism and productivity impairment (Mwangi, 2019).

Hashimoto et al (2020) in their online cross-sectional research with 599 Japanese employed women aged 45 to 65 years found out that higher number of menopausal symptoms were directly proportional with lower work performance. The maintenance of health and provision of the right working environment would help career women and heighten work performance by significantly reducing menopausal symptoms. Potocnik and Steffan (2022) hold the view that menopause is one of the most unique and individualized aspects of health-related gendered aging at work as a higher number of

women are working through their entire menopause cycle. According to Atkison et al (2019), more women reported a moderate to severe impact of menopause on their working lives and some even left employment altogether. The author's view concurs with those of Moyer (2022) in a survey conducted by the British, out of 2000 women aged between of 45 and 67 who reported that they were experiencing symptoms of menopause, one in five were considering quitting while one in four women were unhappy in their jobs due to the of lack of support. Tommaso et al (2018) asserts that the symptoms of menopause can be distressing particularly as they occur at a time when women have important roles in society. Bell et al (2022) agrees that menopause is often seen as a taboo subject within the workplace, yet it affects around half of women's working population. There is a growing call for more sensitization and support for menopause in workplace (Mcphail, 2018).

A study of women over 40 years who were working at Australian Universities reported that there was a strong relationship between the seriousness of symptoms and a higher intention to resign with the onset being reduced engagement and a lack of satisfaction with work (Mcphail, 2018). Similarly, Bryson et al suggests that the number of menopause symptoms women face at age 50 is associated with higher unemployment rates. A study carried out by Osborne (2021) reported that more than half of women in menopause transition felt discriminated in the workplace. This is supported by Casey, (2021) in his assertion that menopause symptoms can affect relationships with colleagues, deter quick decision making, reduced attention span and memory and higher levels of absenteeism. Again, Hamilton and Osman (2022) has given their view on the same, that lack of confidence in managing menopausal symptoms in the workplace has accounted for the intent to quit and abandon ambitions of promotion opportunities.

Menopausal women averaging at the age of 51 have been reported to increasingly engage in other working activities outside their homes in the recent years. However, as Hill (2022) reports, more than one million women in United Kingdom could leave their jobs in response to a lack of support from their employers as they go through menopause. Hill further reported that a quarter of the women surveyed (24%) are unhappy in their jobs because of lack of support, with (63%) noting that their workplace has not introduced friendly policies targeting the comfort of women undergoing menopause. These findings are contrary to those of Yoeli et al (2021) who reported that government employers and trade unions are increasingly developing 'menopause at work' policies for female staff.

Supporting women in female-dominated professions and especially those who are teaching whilst at the same time experiencing symptoms of menopause should feature high on any school leaders' agenda (Dhai 2021). This is because, though all women will inevitably experience menopause challenges at some stage in their lives, teachers however, could experience more challenges than women in other professions because of the state of their work. According to the findings of National Union of Teachers (NUT), (2014), 80% of the teachers do not disclose that they are experiencing menopause due to the fact that this would be embarrassing. Others felt that their managers were younger, a man or both and also worried about the issue of confidentiality as regards menopause (National Union of Teachers, 2014)., Female teachers face more difficulties more than other female employees due to the nature of their work despite all women undergoing menopause at some stage in their life (Mcphail, 2018). McCarthy (2020) asserts that teaching is a demanding job in aspects such as physical, mental and emotional state regardless of the best of times, so when it comes to menopause, it cannot be ignored. The education industry struggles to recruit and retain talented staff, in retrospect, most female teachers experiencing menopause suffer in silence and are inclined towards quitting

which weakens the sector. The stigma surrounding menopause to warrant an open discussion of the same is non-existent in the workplace, despite the fact that nearly half of the world's women population experience or will experience this biological transition which marks the end of woman's menstrual cycle and fertility.

Kopen Hager, (2015) pointed out that, women are working more and retiring later and have a higher mortality. An approximate of 45% of the over 50-year-old workforce in virtually all forms of employment are women, all of whom will experience menopause and its symptoms. Some women will experience mild to moderate symptoms whilst in others they may be severe and debilitating. About half of these women will find it somewhat, or fairly difficult to cope with their work, 5% will be severely compromised and about half will not be affected entirely. The age bracket of 45 and 55 is a critical stage since most women are likely to move into top leadership positions, menopause often intersects at this stage interfering with making important decisions (Patterson, 2020).

2.3 Schools' Physical Facilities and Women Undergoing Menopause

Although men and women face various health challenges as they grow older, menopause is a peculiar health issue to women but which is largely ignored at workplace (Altmann, 2014). Kopen Hager, (2015) reported that peri-menopausal symptoms have been shown to cause a range of physical and emotional symptoms for women in workplace. Things that make hot flushes more difficult to cope with are hot working condition and poor ventilated environments Kopen Hager, (2015), Thorogood, 2015). In accordance with Salah (2010) work place design directly affects employees' performance by determining job satisfaction, employee morale and citizenship. This in return determines a flow in the systems of work in an organization as well as employee coordination and efficiency in communication. As a result, it will lead to reduced absenteeism and employee

commitment resulting in higher performance. A study by Nanzushi (2015) revealed that a spacious office with enough lighting and devoid of noise would facilitate increased employees' performance. These corroborated with the findings of Kopen Hager, (2015) that a conducive physical environment would save the employees from work-related stress and enhance their performance to the expected standards.

Many women reported working in environments where there was little ventilation which created friction among co-workers in the congested workspaces (Griffiths, et al, 2013). In addition, most women work in places where there are inadequate toilet facilities and no rest areas. Women need access to clean bathrooms and more constant toilet breaks when they experience heavy menstrual bleeding or have urinary incontinence during menopause. They also need access to clean drinking water and to cold water (Thorogood, 2015) because lack of it can make menopause particularly tough for menopausal women in general and specifically for teachers. However, most office spaces are not designed to efficiently accommodate the needs of a menopausal woman which practically makes the female teachers feel undervalued.

Many primary school staffrooms are crowded making it difficult for the female teachers who are experiencing menopause symptoms (Crownor, 2015, National Union of Teachers, 2014). Biró, (2007) points out that enhancing the supply of fresh air through improved ventilation is tantamount to increased alertness, reduced tiredness and a stable mood. In addition to this, improved ventilation boosts the arithmetic potential of pupils and hence their performance. In addition, in a post on the urban green periodical about the effect of poor ventilation on the performance of female employees, Scheib, (2017) postulates that good ventilation puts a check on absenteeism and infectious airborne diseases, hence ensuring that workers' health and their entire welfare is assured. A similar study by Paola (2009) further postulates that classroom congestion may induce a

negative effect on the performance of students. In addition, larger classes are associated with lower probability of passing exams.

Stuckey and Stuckey (2018) pointed that vasomotor symptoms of menopause that go untreated can have a major effect on women and work. Recent studies have provided alternatives and suggestions that advocate modifications of the working environment, including proper ventilation to help ease these symptoms. According to Sarrel & Jack (2015), large number of women transits through menopause whilst in paid employment. with menopausal symptoms resulting in discomfort for career women especially if disregarded, yet employees are practically silent on this potential yet concurringly expensive issue. Physical work place factors such as workplace temperature and design, directly influence the relationship between symptoms and work.

According to Eker et al, (2020), physical facilities and stressors at the work- place were found to heighten menopausal complaints and had reverse effects on job performance. An environment assessment should address personal hygiene issues such as lavatory facilities, rest areas and access to refreshing clean drinking water. Accessibility of water and sanitation (WASH) facilities in the workplace will help grant women their right to health and boost their standards of living and lead to higher productivity and greater participation. To the society in general, it will enhance equal and equitable access to WASH facilities especially in vulnerable situations. (Aidara, 2016). Hunter, (2015), further postulates that provision of adequate and clean drinking water directly influences the rate of absenteeism and this may be due to improved hydration hence improved academic commitment and passion for the students. Another study by Nanzushi (2015) revealed that a spacious office with enough lighting and devoid of noise would facilitate increased employees' performance It needs to be mentioned according to Morris (2021) that employers should facilitate the health and safety, both physically and mentally of

their employees. This includes ensuring that workplace practices are favourable to menopausal women. These include increasing availability to cold drinking water for menopausal employee, adequate washrooms and bathroom facilities.

This study examined the extent to which primary schools in the study area have done a risk assessment and subsequently provided for needs of menopausal women by managing temperature and ventilation. It also sought to establish the extent to which physical facilities such as adequate and appropriate toilets, rest areas and access to clean drinking and cold water are in place in the primary schools in Laikipia County in order to meet the environmental requirements for menopausal women. Schools should look at introducing policies such as giving teachers control over their immediate working environments including room temperatures providing easy access to cold water, toilet and washing facilities.

2.4 Social Environment and Women Undergoing Menopause

According to Thorogood (2015), work environments have been shown to trigger the effects of menopausal symptoms. Low self-confidence while managing menopausal symptoms in the workplace has resulted to the increasing intent to quit and abandoned ambitions of promotional opportunities (Hamilton & Osman, 2022). This is supported by Sexton (2022) in the survey of 4000 women in United Kingdom where 59 % reported that menopause has impacted negatively on women careers while 49 % indicated that menopausal symptoms had forced them to take time off. In the same line of exploration Evandrou et al (2020) found out that 53.5% of employed women at age 50 indicated at least one serious symptom. In addition, menopausal symptoms can pose challenges to some middle-aged women in reference to staying in employment or maintaining their number of working hours. In the same view, Monteleone et al (2017) asserted that menopausal symptoms have a significantly huge effect on the quality of life of women

and on performance at work place. This is contrary to Norton (2020) who indicated that most women experiencing menopause remained in employment. These views imply that if menopausal women were to remain in employment, their social working environment must be made conducive for them to cope with the menopause challenges and at the same time continue working.

According to Smith (2020), menopausal women fear age-based discrimination in the workplace. A study by Rees, Bitzer and Cano (2021) further suggested that women should not be stigmatized, marginalized or dismissed when menopausal symptoms emerge. This is because according to Usher (2020), menopause can have adverse effects on women's confidence, social ability and their sense of self-worth. Making the work place a menopause friendly environment positively influences women undergoing the symptoms (Hamilton &Osman, 2022). There is need for institutions that hire a growing number of menopausal women to provide solutions at both individual and social levels that assist these women deal with their menopausal transition while working (Guidetti et al 2019). Since the menopausal effect is not limited to gender or age as it can impact on colleagues directly or indirectly, it should therefore be considered an organizational issue (NHS, Employers, 2021). It is therefore crucial for employers to be aware of the potential effect of the menopause on staff and support those who are experiencing it (Douglass, 2020).

Curran (2022) asserts that many women seek promotions in work place when they in the age bracket of 45 and 55 years which coincide with menopause transition. However, according to Sneddon and Seddon (2021), the number of women eligible for leadership roles may be shrinking due to inadequate support for menopausal employees. The authors' views concur with Newson (2017) who indicated that menopausal symptoms can result to women retiring early or shy from putting themselves forward for specialists

posts or senior roles thus affecting the critical balance of providing a diversity of working teams within the institutions.

For some women, menopause related ailments can result in taking sick leaves consequently, they have to follow sickness absence procedures (Dalal & Agarwal, 2015). Evidence adduced from Olajubu, et al (2017) in their study using Pearson correlation coefficient showed a negative significant correlation ($r=-0.311$, $p=0.001$) between menopausal symptoms and perceived workability in which menopausal symptoms had a negative effect on the ability to work of the respondents. The amount of time menopausal women need to take off work will vary. This may lead to these women being dismissed from work or face challenges from their employers which in turn may affect their health (Fenton & Panay, 2014). Despite this, employers do not seem to recognize that women of menopausal age may need special attention (Mathews, 2015). In addition, many managers are not trained on the awareness of women experiencing menopausal issues at the work place. This means that many women feel compelled to shy from voicing their symptoms. Subsequently, they will prefer to strain rather than ask for the adjustments that may assist them.

Many women enter menopause at the highest level of their professional and productive lives. These women have crucial skills, knowledge and experience that employers desperately need to retain, so they should easily acquire and develop resources to help them wade this normal and natural stage of the aging process (Banks, 2019). In mitigation, employers should proactively create a culture that makes women feel comfortable expressing what they are experiencing (Rapaport, 2016). Employers and managers need to constantly address the sensitive issue of menopause sensitization to help reduce the stigma attached to old age and gender discrimination which lies in wait for women choosing to work longer (Mathews, 2015). This line of argument is consistent

with Hughes (2021) observation that acknowledging the challenges that women at work face and assisting them to remain in work will be a vital factor in retaining female staff in this age bracket which is significant in avoiding the loss of these key knowledge and experience. It is the employers' duty to care and sensitize on the negative impacts of stigma and embarrassment when menopausal women are in the presence of work mates (Thorogood, 2015). Women at work need to feel the comfort of being valued by their colleagues and treated in an open and respectful manner (Griffiths, MacLennan, & Hassard, Menopause and Work: An Electronic Survey of Employees' Attitudes in the UK, 2013). The more supported a woman employee feels the more likely she is to remain in work or return to work sooner than expected (Union of Shop, Distributive and Allied Workers, 2015).

According to Emslie et al (2020), menopause ranks among the ill-fitted, most impactful and most stigmatizing taboos still existing in the place of work. The presence of poor policies and provokingly outdated gender and age-related assumptions fuel negative effects on productivity on menopausal women. It is crucial to develop current and informed institutional policies, training and activities targeting the wellbeing, sustainability and productivity of the menopausal woman. (Viotti, 2020). Bailey et al (2019) asserts that a cultural shift is required in the workplace to openly discuss menopause. Therefore, methodical informal conversations between managers and employees will assist in the implementation of changes in health including issues relating to the menopause. It may be highly crucial simply to concede that this is a normal stage of life and make accommodating changes. (Guidance on Menopause and the Workplace, 2016). These reports are contrary to Jack et al (2021) who reported that although menopause has long been a taboo subject in many work places, the silent is now broken. This is because a significant rise in multidisciplinary research in the last decade has

increased focus from governments and employers concerned about an aging workforce and greater media and celebrity attention given to the issue of menopausal women in work place and their needs. This means that a step is being taken to mitigate on the issues that may be affecting female workers and therefore find a lasting solution to their social working environment.

Hardy (2020) reported that there were over a million working women in the UK aged 45-60. 51 years being the mean age of menopause has found a significant number of employed women working while in their menopause transition. The experience of menopause transition varies largely among women. It is in work context that women report greater challenges in managing symptoms and can feel embarrassed and keep secret their menopausal status fearing they may be discriminated for experiencing menopause. McPhail (2018) noted that there was a well-founded link between the grievousness of symptoms and reduced interactions and contentment with their job as well as a higher intention to resign in contrast, menopause did not fully impact the performance of the job. As a result, a large number of women from Australia are dealing with a silent career killer. There is a significant intention to quit their jobs, noted absenteeism and a lack of interest and contentment while doing their jobs. Caluori, (2019) in his report on The Rise of Menopause in the Workplace Support reported that there is an increasing growth in the number of menopausal women in the British workforce. He therefore reasons that futuristic employers should offer the appropriate support targeting this particular demographic. Caluori further asserts that for any organization that values its employees' well-being and harbors an inclusive culture, providing the necessary support makes sense for economic reasons. These include higher retention rates, improved performance and motivation.

Working time arrangements should be not be rigid to ensure they meet the needs of menopausal women who may need to leave abruptly. Sickness absence guidelines and procedures should clarify that work places are flexible enough in order to cater for menopause-related sickness absence (TUC-UK, 2013). Flexible working hours makes it easier for menopausal women to manage their symptoms. They may also need more breaks during the day.

According to Keynes (2022), the 2018 workforce census in United Kingdom showed that teaching is a female dominated workforce where 74% of teachers are women and 27% of women teachers are aged over 45 years. This demographic structure of school workforce means that a significant portion of the workforce will be affected by menopausal symptoms in their daily activities. According to the findings of Brewis (2020), with more than 60000 women between the ages 46 and 55 working in higher education in the UK, institutions must pay attention to the fact that a huge proportion of staff who are likely to be undergoing menopausal symptoms that could have a negative effect on their working lives.

In a school context, teaching is demanding and stressful occupation especially where there are large class sizes. Working hours, working in fixed positions and working in public places are causes of stress for menopausal women. The stressful work results to increased menopause related symptoms. Consequently, some women consider working as partial workers while being concerned about the resulting effect on their career. Others may consider leaving the labour force altogether (Trade Unions Congress, 2013). However, this stress can be reduced by supportive co-workers and managers if they are willing to listen and adjust. Female staff can be encouraged to discuss health matters with each other if they are embarrassed to talk to their supervisors. Organizational understanding and support of good practice should allow women some flexibility for

time off, rest breaks, paid time off for medical appointments and by allowing women to report to female managers. However, most often the managers may not be conscious about menopause related issues. For example, a report by Wales Trades Union Congress (2017) showed that it is difficult for male managers to understand or sympathize with menopausal workers. Often, they might be embarrassed or reluctant to discuss the issue or, conversely might tend to belittle the experience and the related symptoms. Though in the wider cycles this may not be necessarily be a gender issue; younger women may also be very dismissive of issues that don't affect them.

Female workers in the recent past have a higher mortality rate, they are working more and retiring later. Keynes (2022) found that there was a noted increase in the number of women in employment rising from 4.3 % in the year 2005 to 6.0% in the year 2015. This means that female workers are now increasing in the workforce as older women also increases. Guidozi & Kopenhagen, (2015), reported that about 45% of the over 50-year old workforces in virtually all forms of employment are women, all of whom will inevitably go through the menopause and its symptoms. A low attention span, depression, hot flushes tiredness, lowered confidence, sleepiness despondency and forgetfulness were cited as contributing factors. The need for support and understanding from line management is vital and can make a major difference to how a woman will deal with the negative impact the menopausal symptoms may have on her productivity, her job satisfaction and her competency. This study sought to assess the working environment for menopausal teachers in primary schools within Laikipia County. It also sought to determine the extent to which the schools' managers as representatives of the employer are aware about issues affecting menopausal women and the extent they go to create a favourable environment that is suitable to menopausal women. It sought to determine the prevalence of organizational understanding and support for good practice that allow

menopausal women to have flexible work schedule and reporting structure.

Head teachers should make their schools menopause-friendly to support female employees and stop teachers from quitting the profession. It is important to ensure that schools have menopause friendly policies as teaching is a profession dominated by females which is grappling with a recruitment and retention crises. (Hazel, 2019)

2.5 Personality Related Factors and Women Undergoing Menopause Crises

Personality traits are associated with menopausal symptoms (Augoulea et al, 2019).

Personality related factors are the individual differences in trait patterns of thinking, feeling and behaving in relation to menopause. Since categorization of personality is too broad, in this study the researcher was guided by the commonly used big five personality traits, a term coined by Goldberg in 1981. The big five are: -neuroticism, extraversion, agreeableness, openness and conscientiousness (Psyche Study, 2016, Cherry, 2018).

Neuroticism is the state of being neurotic, a condition according to Ready et al., 2012) is a long-term tendency to be in an emotional state that is negative. People with neuroticism tend to have more depressed moods. They suffer from feelings of guilt, envy, irritability and anxiety more frequently and more damning than other people. Those who score highly tend to be sensitive to environmental stress and responded poorly to it. They view everyday situations as menacing while every major or trivial frustration is troublesome and may lead to hopelessness. An individual with neuroticism typically feels conscious and shy.

According to Wagner et al (2015), neuroticism is an issue of relevant concern to women undergoing menopause since it was found to be stable among the middle and older adults. Incidentally, associations of neuroticism to psychopathology have been reported to be broader stronger and clearer in comparison to any other personality trait. When

heightened, neuroticism has been shown to have a wide array of clinical syndromes, such as anxiety, mood disorientation and even substance use disorders. Research conducted on emotional complexity and the emotional state in older adults in USA suggested that neuroticism could be a liability for individuals as they grow older, not only because they experience less contentment but also because their "negative affect" is associated with poorer mental health. In conclusion neuroticism was significantly found to be negatively associated with emotional well-being (Ready, Åkerstedt, & Mroczek, 2012).

High neuroticism personality traits render women more vulnerable to serious symptoms of menopause. This indicates that negative menopausal experiences can be predicted with individually and separately (Connor, 2015). According to Cheng-Hsiang (2015), in their study of the effects of menopause status, previous diagnoses of depression, vasomotor symptoms and neuroticism on depressive symptoms among climacteric women, neuroticism played a vital role in the persistence of depression among climacteric women after 30 months.

According to Lora (2015), high levels of neuroticism personality trait proved women to be more vulnerable to severe menopausal symptoms. The author's view concurs with Cheng-Hsiang (2015) in their correlational study on the Relationship between Symptoms of Menopause and Personality Traits in Polish Perimenopausal Women, where the frequency of psychological symptoms of menopause were directly related to neuroticism where ($r=0.46$, $P=0.000$). Higher neuroticism and interference from hot flashes are associated with insomnia. Vasomotor symptoms and a greater degree of emotional instability are contributors towards establishing which women are most likely to experience insomnia during menopause. These findings show relevance of neuroticism to a woman's experience of insomnia as she goes through the menopause transition (Baker, de Zambotti, Colrain & Baker, 2014).

Extraversion and Introversion as terms used by Jung describe the various attitudes individuals refer to project their energy. In psychology the meaning of the two words is different from the way they are referred in everyday language. While extravert individuals mainly tap their energy from external stimuli, such as personal interaction, social gatherings and shared ideas, introverts will find social interaction and gatherings uncomfortable and are best think clearly information and think creatively in a private setting (Difference.com, 2016; Grover, 2016; Delvis, 2014). Individuals on high levels on extraversion tend to find comfort in social situations, are outgoing, express themselves as they receive attention even from people they don't know. Most psychologists are of the view that the need for social stimulation is what drives extraverts' behaviour. Lowly extraverted individuals are regarded as introverts and characteristically more comfortable socializing in small groups and with familiar people. To them demanding social gatherings are draining and are reluctant to draw attention to themselves when in groups (Psychologist World, 2018). At the workplace, extraverted workers may be more inclined to enjoy tasks involving teamwork, working with others, or public speaking while introverts prefer working solo in reserved settings even while in meetings (Difference.com, 2016). In addition, while extraverts often thrive on collaboration, introverts prefer to find out what their specific tasks are and accomplish them alone. Elsewhere, while introverts, more often prefer to work on one task at a time, extraverts often enjoy the challenge of several projects. Introverts may also find it challenging in an environment with too many distractions, while extraverts may have difficult working in isolation (Delvis, 2014).

Though hereditary factors have been shown to influence personality trait, research has equally suggested a significant role of environmental factors in personality development. Furthermore, studies have revealed a connection between subjective well-being and

extraversion that even when alone, extraverts are happier than introverts (Psychologist World, 2018). A study by Lauriola and Iani (2015) revealed that there is a good relationship between extraversion and most measures of well-being in both younger and older individuals. In addition, lower levels of extraversion (that is introversion) are associated with depression among all stages of menopausal women (Wieder-Husla, et al 2014). This implies that there is a difference on menopause crises for different women based on whether they are introverted or extraverted.

Agreeableness is one of the “super traits” in the Big Five model of personality where individuals high in it are trustworthy, altruistic, honest, modest, empathetic and cooperative. This trait is most evident in interpersonal behaviours that describes the spectrum from compassion to resentment (Berwick, 2013). At the workplace, employees with high level of agreeableness may be more inclined to influence self-image and shape a person’s social philosophy of life. People who score high on this dimension are usually trusting of others, concerned with others’ wellbeing and value honesty while those who score low on empathy are more sceptical and less friendly. According to Wieder-Husla et al (2014), agreeableness is significantly ($p < 0.05$) correlated with all quality of life domains, which means that women at menopause who show positive friendly attitudes toward other people are altruistic, emphatic and eager to co-operate with others and have higher quality of life. A positive correlation exists between accuracy and agreeableness (Song & Shi, 2017). This implies that agreeable individuals can make more accurate judgments when compared to those that are not agreeable.

Conscientiousness is a higher order personality trait that incorporates ideals such as competence, orderliness and self-control (Javaras, 2012). Furthermore, conscientious-oriented people have been shown to have personality traits such as wisdom, love for beauty, intellectual curiosity, independent judgment, artistry, flexibility and a high

sensitivity toward positive and negative emotions (Kaufman, 2013). In addition, people with high levels of conscientiousness appear to be able to regulate emotion and recover more easily from negative stimuli possibly by reducing symptoms of anxiety and depression (Javaras, 2012). According to trait theory research, people who are high in this trait may perceive a need for services but feel they must take care of their problems themselves.

A study by Cheng-Hsiang (2015) on the relationship between personality characteristics and sleep quality in menopausal women found a reverse correlation between overall sleep quality and conscientiousness, though this correlation was not significant. Another study by Schneider-Matyka et al (2016) found that there is a significant correlation between selected quality of life domains and the level of conscientiousness. Open individuals are known to be imaginative and creative as well as intelligent, insightful and clever (Kaufman, 2013). At the workplace, employees with high level of openness may be more inclined to divergent thinking, ability to consider new ideas and intellectual curiosity (Oluyinka, 2011). Hayslip, (2010) describe the trait of openness as allowing people to experience life fully. Lack of openness results in people being conventional and conservative. A study by Schneider-Matyka et al (2016) found that there is no correlation between the World Health Organization brief on quality of life and openness to experience for women undergoing menopause though openness has positively been correlated to ability of women to make good life judgments (Mattarozzi et al 2015).

Esmaelzadel et al (2020) in their study found a high level of neuroticism ($P < 0.001$), low levels of extraversion ($P < 0.002$), openness to experience ($P=0.039$) and conscientiousness ($P=0.001$) indicating severity of menopausal symptoms. These findings are consistent with those of Malgorzata (2019) in the Correlation Study of the Relationship between Symptoms of Menopause and Personality Traits in Polish

Perimenopausal Women who found out that personality traits correlated with symptoms of menopause, where neuroticism showed the strongest correlation with the frequency of psychological symptoms of menopause ($r=46$; $p=000$). No correlation was found between openness to experience and the frequency of vasomotor symptoms. A positive correlation was determined between extraversion /introversion scores of Cervantes Personality Scales (CPS) and Somatic and Urogenital Subscale scores of menopause Rating scale and between emotional instability /neuroticism scores of MRS which according to Ergin (2018), the effects of personality traits on menopausal symptoms can be identified in advance and menopausal complaints can be reduced by increasing support. This is contrary to the findings of Rahun et al (2017 in their study of menopause complains in relation with trait anxiety and personality trait who found out that personality traits had no relationship with the symptoms of menopause. Again, personality traits, social and other factors are important mediators of vasomotor symptoms during the menopausal transition phase (Kaufman, 2013).

According to Younas (2017), in the study about a sensitive journey of women that was aimed at knowing the relationship between personality, coping and psychosocial problems of women with menopause revealed that women with neuroticism personality trait use ineffective coping strategies and are more likely to have psychosocial problems of menopause while women with openness to experience personality trait use effective coping strategies and are less vulnerable to psychosocial problems of menopause. This implies that neurotic personality trait affects menopausal women's coping mechanism making them unable to cope with menopause related complications while those menopausal women with openness personality trait are able to cope with menopause crisis. This study sought to establish the relationship between personality traits and psychological interventions of menopause crises for public primary schools' teachers in

Laikipia County.

2.6 Role of Psychological Interventions in Managing Menopause Crises

Psychological intervention is defined as a relationship aimed at promoting a better adaptation of the individual to a given situation with an aim of optimizing one's personal resources in relation to autonomy, self-knowledge and self-help (Ricou, Marina & Canario, 2019). In psychology, psychological interventions are actions performed to bring changes in people.

Psychological interventions on menopause are aimed at providing knowledge on psychological and social experience with an aim of developing interventions to treat symptoms of menopause (Towey & Cordingley, 2006). According to Yazdkhasti, Simbar and Abdi (2015), most interventions for menopause related symptoms such as osteoporosis are educational, physical activity, healthy diet, stress management and healthy behaviour. This claim concurs with Koyuncu et al (2018) who concluded that health education is an effective method to positively change the perceived severity of menopausal symptoms and menopause related level of knowledge and attitude. Added to these claims, Ambroziak and Batorowicz (2011) asserts that psychological interventions are effective ways to modify experience of menopause for they provide evidence-based data on menopausal transition and develop skills for symptoms' management. This means that there is potential to change experiences by the designed psychological interventions. Similarly, psychological and behavioural interventions may be effective in reducing menopause related symptoms (Wong, Yip & Kitty, 2018). Van Driel et al (2019) concurs with this suggestion and asserts that psychological interventions reduce hot flashes and other menopausal symptoms.

Menopause presents many challenges for middle aged women worldwide. These are women who are in prime of their lives juggling busy careers and family responsibilities. Therefore, mindfulness-based interventions may have a role in facilitating psychological adjustment during menopause transition (Molefi, 2019). According to Zou et al (2022), virtual interventions have emerged as avenues for menopausal women to manage and cope with symptoms. Virtual interventions were found to be feasible in terms of being usable and cost effective and eliciting satisfaction and compliance among menopausal women. These interventions might have the potential to improve the physical and psychosocial health outcomes of menopausal women. Chiboola and Chiboola (2018) asserts that mind and body practices may be of benefit in reducing stress and bothersomeness of some menopausal symptoms. In particular, hypnosis which is a mind body intervention has consistently shown to have a clinically significant effect on reducing hot flashes.

Psychosocial counselling is also a psychological intervention that is used to assist women cope with the deleterious menopausal symptoms. The term psychosocial counselling is used to describe the influence of social factors on an individual's mental health and behaviour (Turner & Gellman, 2013). According to Loughry and Eyber (2003), the term psychosocial implies a very close relationship between psychological and social factors. Loughry and Eyber further opines that psychosocial counselling seek to positively influence human development by addressing the negative impact of social factors on people's thoughts and behaviours. In the same vein, Chiboola and Chiboola (2018) posits that psychosocial counselling aims to enhance the client's psychological and social functioning in the context of his environment and circumstance. In the same vein, psychosocial counselling focus more on managing specific human problems and social issues. In this regard, it can be reasoned that psychosocial counselling aim at

enabling the client who comes to seek help to regain a state of psychosocial wellbeing (Ibrahimzai, Azimis, 2008). Therefore, psychosocial counselling helps to reconnect people who feel victimized to reach their potential and enable them participate in their lives fully. In this study psychological interventions approach was used in order to address menopausal women's social and psychological needs.

Counselors need to develop an awareness of the interaction of individuals, psychological and socio-cultural influences on women in midlife. This awareness will equip the counsellor to come to terms with the inevitability of focusing on resolving developmental conflicts in affected women. Counselors should use the technique in construction of the meaning of menopause. Counselling is a process that involves several strategies that include considerations for broader psychological issues as well as analysis of the nature of events in the lives of these women and their meaning, empowerment through support, affirmation of commitments and self-exploration (Parker, 2016). Interventional strategies that target psychological distress may promote coping with midlife transition and improve mental health among menopausal women (Harris,2013). It may also involve psycho social intervention and educational programs to ensure women a better transition throughout their menopausal phase (Harris,2013). Khoori et al (2021) asserts that for many women, menopause brings a lot of changes some of which are emotional. At this stage menopausal women need therapy that will help them talk through their feelings and learn new and more effective strategies to help them cope with these stressors. Muhammed et al (2018) posits that depression and anxiety are commonly prevalent among middle aged women. Therefore, women should be screened in the menopause transition period especially for clinically significant depression and anxiety. The author's view concurs with those of Madriaga and Huber (2019) who indicated that women at this stage should be screened for depression to detect early symptoms of the

disorder. Learning about the factors that contribute to depression during menopause can help women find ways to cope during this transition stage.

Smadi (2017) recommended group counselling in an attempt to create awareness of the nature of menopause stage in order to reduce the level of anxiety and depression. Similarly, Molod et al (2021) suggested group counselling in order to improve the quality of life of women during the transition to menopause. This is contrary to Aparicio et al (2021) who reported that women who engaged in an exercise program improved their emotional wellbeing compared to those that participated to counselling program. This implies that counselling of menopausal women should be accompanied with other life skills that would help them cope with menopause crisis. Moghani et al (2018) in their study on the Relationship between Stress Anxiety and Depression with Menopausal Women Experiences, showed direct and significant association between stress, anxiety and depression scores with experiences of women in menopause at ($P=0.001$, $r=0.68$). The study concluded that with the increasing scores of depression, anxiety and stress, the scores of women experiences in menopause increased. Therefore, these changes require counselling and supportive program to improve adaptation to menopausal psychosocial changes.

Khoori et al (2021) suggested that counselling, health education and the core life skills have been able to improve the quality of life of menopausal women by changing their behaviour and promoting their health. Similarly, Gayathripriya, *et al* (2018) gave the view that menopause awareness programs need to be initiated at the community level for better health and quality of life. This is supported by AlQuaiz et al (2017) who posited that establishing educational and counselling programs could improve social support and hence quality of life of menopausal women. This is supported by Malik et al (2021) who gave the view that the stigma and fear associated with menopause should be reduced by

providing counselling to women regarding the effects of menopause and the importance of adopting a physical and healthy lifestyle. This is contrary to Gayathripriya, *et al* (2018) who found that counselling was ineffective compared to education in improving sexual functioning in menopausal women. These findings give the view that counselling is essential in helping menopausal women deal with the distresses brought about by menopause but this can only be effective if accompanied with other approaches such as education on life skills that can help these women cope with menopause related complications.

According to Harris (2013), value clarification is another process which can help women realize that incongruence of values with behaviour and circumstances that can cause conflicting emotions about their ideas of who they really are. They should be assisted in developing internalized values that will support them through the aging process. When women's values were congruent with their behaviours and circumstances, they report feeling happy, satisfied and comfortable; whereas incongruence in these areas result in feelings of guilt, sadness, anger, anxiety, fear and loneliness. Nevertheless, the positive aspect of the negative feelings is that this should be seen as an impetus for a woman to begin the process of assessing changes in her environment.

The use of metaphor such as Penelope's Loom, a Greek myth, is also advocated as a valuable tool to help women create a more positive attitude toward aging and menopause (King, 2017). The Loom helps the client see that each life is unique with myriad threads coming together to form a life tapestry. These threads may include menopause, intimate relationships and multiple roles and expectations. The counsellor can help a woman unravel and re-weave her tapestry in midlife. In addition, assertiveness training and cognitive restructuring are very effective in helping a woman to develop resistance to external influences that influence her perception of herself as a valued member of

society. This is because women with menopause do not consider themselves as “real women” (Rubinstein, 2013).

Applying Cognitive Behavioural Therapy (CBT) in order to build behavioural response to menopausal related symptoms such as uncomfortable hot flashes have the capacity to change how a person thinks and feels as well as overcoming anxiety and insomnia (Green, et al, 2012). According to Saskia et al (2011), evidence CBT and physical exercise leads to a positive impact on menopause symptoms. A study that assessed the effect of CBT on depression in menopausal women in Tooiserkan Iran, in their randomized clinical trial, 76 menopausal women who presented to health centers of Tooiserkan, revealed that changes of depression scores within-group comparisons for the women under study before and after CBT with a span of one month was significant ($P < 0.001$) while those changes in the control group were not significant and which suggested that overall use of CBT for menopausal women in a group set-up could improve their quality of life (Soori, et al., 2018).

Stremes (2018) posits that counselling can provide the safe space to explore one’s own personal transition through menopause by looking at ways to deal with anxiety and depression and coping strategies when everything just feels too overwhelming. According to Andrea et al (2019), specialist support has been found to be effective in making the experience of work better for menopausal women. Similarly, Tiznobaik and Taheri (2018) claims that counselling has beneficial effects on lifestyle modification in both menopause women and their spouses regarding improvement of nutritional habits and physical activity. Educational programs can help with managing symptoms and provide advice on diet and exercise and also support women as they prepare for the possible consequences of menopause transition at work. Going through menopause can be debilitating experience with hot flushes coming on at any time of day and night plus

sleep insomnia making this period a difficult transition in women's lives. The drop in hormone levels can cause depression, anxiety and panic attacks. Women can therefore be left feeling unable to cope, with nowhere to turn to and feeling misunderstood in work places (Stremes, 2018).

Smail, et al (2020) reported that psychological symptoms along with vasomotor symptoms, express a key link to negative attitude towards menopause. Therefore, interventional strategies that target psychological distress may promote coping with midlife transition and improve mental health among menopausal women. Similarly, Gayathripriya, *et al* (2018) in their study on the menopause knowledge, attitude, symptom and management of menopause among midlife employed women, found out that there was a significant correlation between the menopausal attitude and management of menopause. The study suggested that the fundamental data of developing midlife's women's symptoms index and providing menopause management could be a strategy to encourage successful menopausal transition in middle aged women.

Gayathripriya, *et al* (2018) in their Meta-Analysis explored the prevalence of different information sources on women about menopause where they found out that information from friends was the highest at 44%, followed by relatives (35%), while medical providers were 30% of the participants. They therefore suggested that women perceive menopause as a natural process whereby information is best gained from informal sources. This is supported by Gayathripriya, *et al* (2018) who reported that women sought solutions to their problems in healthcare providers, peers and the family. This means that these women would seek guidance on menopausal issues affecting them from the same informal sources.

Harris (2013) in their study findings uncovered a knowledge gap and lack of support for women impacted by menopause. They found out that Muslim women regarded their

menopause phase as a time for them to engage in religious duty fully. A study by Ilankoon and Kerstan (2021) found out that women in Sri Lanka managed menopausal problem mainly on their own as they viewed menopause as a natural stage of aging. The results indicate the need for psychosocial intervention and educational program to ensure women a better transition throughout their menopausal phase.

According to Harris (2013) education is the most significant predictor of self –assured level of knowledge on the menopausal transition. The author’s view concurs with those of Gebretatyos et al (2020) who suggested that adequate knowledge and positive attitude towards menopause are important for women to tackle changes related to menopause. Therefore, educational interventions are beneficial to women in intensifying their knowledge and tuning them towards a positive attitude. Proper health education and psychological intervention programs regarding menopause are strongly recommended particularly to female teachers who experience more difficulties than other female employees due to the nature of their work.

2.7 Theoretical Framework

This study was based on the Person-Environment-Occupation Model of Occupational Performance, Cognitive Behavioral Therapy which was founded by Aaron Beck and the Big Five theory of personality whose main proponent is Lewis Goldberg.

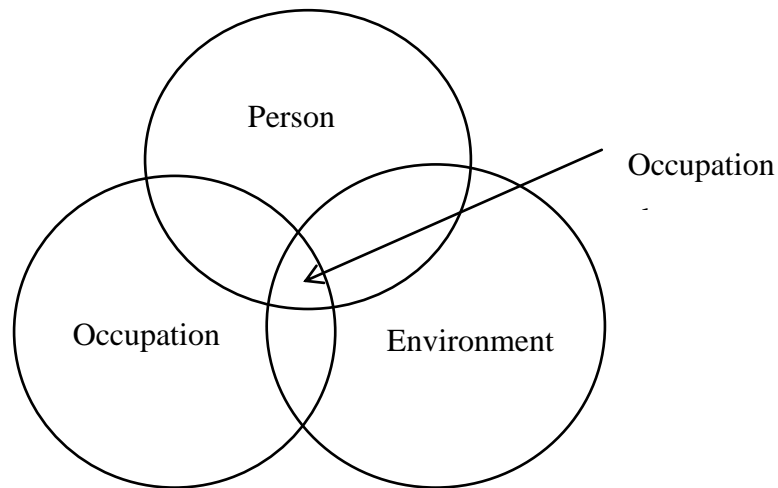
2.7.1 Person-Environment-Occupation Model of Occupational Performance

Person-Environment-Occupation (PEO) Model of Occupational Performance was founded by Law et al (1996) in a response to an identified need of occupational therapy literature. Occupational therapy attempts at explaining complex dynamic relationships between people, their occupations and their environments. The model is relevant in that it helps counseling therapists to conceptualize, plan, communicate and evaluate

occupational performance interventions (Strong, et al., 1999). Therapists must clearly communicate their practices and how their practice influences outcomes. This is presented in the diagram below.

Figure 1

Diagrammatic Representation of PEO



Source: University of Cape Town, (2009)

The model is based on several assumptions that include the fact that a person is dynamic and always developing and interacting with the environment. The environment changes and so does behaviour. Environments can have enabling or constraining effects on occupational performance and that environment is often easier to change than the person. The model further posits that occupations are complex and the relationship between the PEO is transactional. Occupation performance changes over life span.

Though occupational scientists recognize the role of a context (that is environment) for the individual and their occupation, they have continued to implicitly or explicitly create the dualistic view of a person and the context thus creating a problem for understanding occupation as well as the relationship of person and context. Three case studies by Strong et al (1999) illustrated that the PEO model is usable by occupational therapists to systematically approach analysis of occupational performance issues while considering

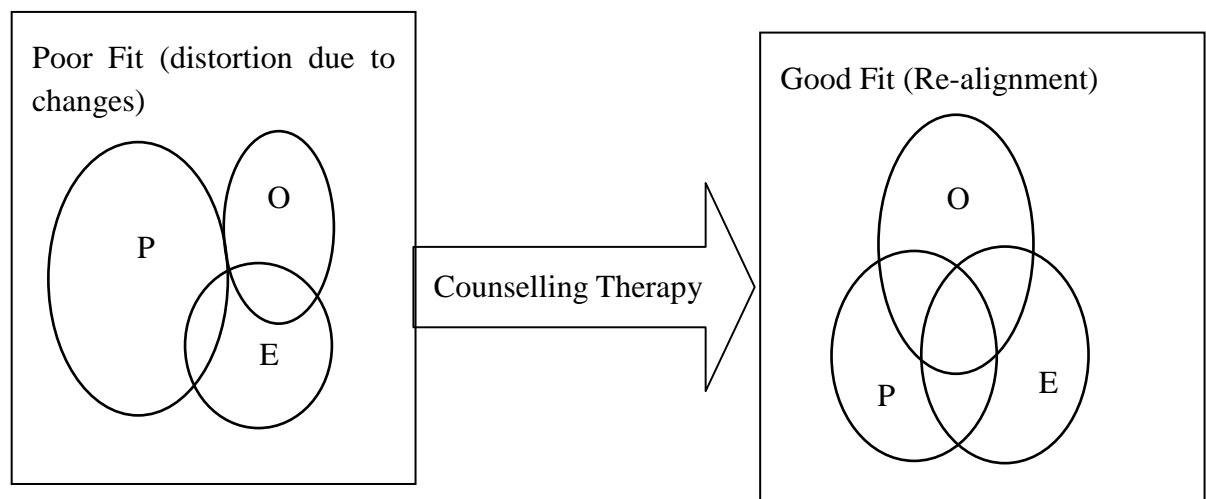
the complexities of human functioning and experience.

PEO posits the individual worker to be a unique person with a variety of roles and who is worthy regardless of age, disability, social condition or developmental difficulty. The model gives a holistic model to the person within the purview of mind, body and spirit. It incorporates the performance components that are a characteristic of an individual in form of motor, process and communication/interaction. On the other hand, the environment has the physical component (natural or built), the social, socioeconomic, cultural and the institutional. Occupation refers to activities, tasks and occupations that make everyday life, or everything that people do to occupy themselves (University of Cape Town, 2009).

As a person progresses in life occupational performance gets altered due to changes of a person and of the environment. In this study, the environment presents a component that can be altered or modified in order to adjust to the changes of female teachers undergoing menopause in the study area. In the counselling session, the goal of the counselling therapist is to attain optimum productivity as shown in Figure 2.

Figure 2

Occupational Re-alignment



Counselling should help the head teachers identify those occupational and environmental issues that should be modified in order to restore the productivity of teachers undergoing menopause. The study sought to establish whether precepts of this theory are being applied among primary school female teachers undergoing menopause in the study area.

Strengths of the Person –Environment Occupation Model

PEO model has the potential to provide meaningful framework in which to conceptualize patients in an acute physical health care setting. It offers flexibility regarding the extent to which occupational performance is addressed (Maclean et al 2012).

Application of PEO to Psychological Interventions on Women in Menopause Crisis

The PEO model is built on the theory that interaction of person, environment and occupation facilitates participation. If there is good fit of these constructs, meaningful participation increases, whereas poor fit can threaten engagement (Wong & Leland, 2018). PEO model is used in enabling client's satisfaction while participating in meaningful occupation of their choice (Karen & Susan, 2011). The model can be used to guide the female teachers in menopause transition achieve their satisfaction in the work place by trying to balance their activities to fit in their working environment.

The model will guide the head teachers in creating a working environment that is conducive for the female teachers experiencing menopause symptoms. This theory deal with only the working environment and therefore there was need to apply other theories that would help understand the psychological behaviour of menopausal female teachers and their personalities hence the use of cognitive behavioural therapy and the big five personality traits model.

2.7.2 Cognitive Behavioral Therapy

Cognitive Behavioral Therapy (CBT) was founded by Aaron Beck (Miller, 2019). Beck realized that patients were presenting repeated stories that he labelled automatic negative thoughts. He worked with depressed patients where he found dysfunctional beliefs or thoughts that depressed people were experiencing. He believed that a close personal relationship with patients was crucial in order to develop a trusting relationship that will allow for exploration of automatic negative thoughts. McLeod (2019) defines Cognitive Behavioral Therapy (CBT) as a form of talking therapy which can be used to treat people with a wide range of mental health problems. It is based on the idea that how we think (cognition), how we feel (emotion) and how we act (behaviour) all interact together. Specifically, our thoughts determine our feelings and our behaviour. CBT is a method that aims to reduce psychological distress and dysfunction by exploring and addressing how the integration of individual's thoughts, feelings and behaviours are contributing to the present problem (Teater, 2013).

Cherry (2021) posits that Cognitive Behavioral Therapy is a type of a psycho therapeutic treatment that helps people learn how to identify and change destructive or disturbing thought patterns that have a negative influence on behaviour and emotions. CBT focus on changing the automatic negative thoughts that can contribute to and worsen emotional difficulties, depression and anxiety. Negative and unrealistic thoughts can cause us distress and result in problems. When a person suffers with psychological distress, the way in which they interpret situations becomes skewed, which in turn has a negative impact on the actions they take.

CBT aims to help people become aware of when they make negative interpretations of behavioural patterns which reinforce the distorted thinking. Cognitive therapy helps

people to develop alternative ways of thinking and behaving which aims to reduce their psychological distress. CBT is a type of talking therapy which involves identifying and challenging unhelpful thoughts. It works to help people learn alternative thinking patterns and behaviours which can then improve the way they feel (Klearminds, 2022). CBT is a psycho social intervention that aims to reduce symptoms of various mental health conditions. CBT focuses on challenging and changing cognitive distortions such as thoughts beliefs and attitudes and their associated behaviours to improve emotional regulation and develop personal coping strategies that solve current problems.

According to Harris (2013) Cognitive Behavioral Group treatment program is an alternative or complementary treatment option for reducing the frequency and intensity of debilitating menopausal symptoms in midlife women. CBT treatment report high levels of satisfaction for menopausal symptoms. Emotional health during menopause requires a balance between self-nurturing and the obligations of work and caring for others. Many women are able to identify sources of tension and symptoms of stress but may still find it difficult to take time for themselves. This is true especially for female teachers who work under a tight schedule and long hours of teaching. With CBT, menopausal women can explore the psychological disorders and develop coping mechanisms in order to create a renewed sense of self confidence, balance and harmony.

Strengths of Cognitive Behavioural Therapy

Cognitive Behaviour Therapy combines cognitive therapy and behaviour therapy. Cognitive therapy focuses on the client's thinking patterns, while behaviour therapy focuses on the client's associated behaviour to individual's patterns of thinking.

Cognitive Behaviour Therapy aims at teaching patients to be their own therapist by helping them understand their current ways of thinking and behaving and by equipping

them with the tools to change their maladaptive cognitive and behaviour patterns (Byrne & Fenn, 2013). Regoli (2018) asserts that the skills learned through CBT session offer useful real-world skills. When working with CBT counsellor, the individual does skill-based practice where the client identifies coping strategies which can be used in any situation one finds oneself and is able to become resilient because of that action, thereby creating positive cycles which promote progress toward a solution. CBT raises self-esteem by making client focus on problems and working towards the solution (Byrne & Fenn, 2013).

Weaknesses of Cognitive Behavioural Therapy

Sharma (2021) posits that CBT is a short-term therapy treatment compared to other treatments. People who chose CBT usually spend 30 to 60 minutes per session depending on their problem. CBT focuses on the person's capacity to their thoughts, feelings and behaviour (Content, 2019 & Regoli, 2018).

Application of Cognitive Behaviour Therapy to Psychological Interventions on Women in Menopause Crisis

A study into the effects of CBT on menopause showed that it may reduce hot flashes, depression and sleep disorder (Towney, 2019). The British Menopause Society (2015) recommended CBT for treatment option for anxiety experienced by women during menopause transition as women report feeling anxious due to unpredictable hot flashes and social embarrassment which can make them avoid social activities. It also recommends CBT as a treatment option for depressed mood for women during menopause transition. CBT has been proposed as a low risk treatment for menopausal symptoms showing improvement in frequently reported symptoms (Byrne & Fenn, 2013).

2.7.3 The Big Five Theory of Personality

This study was also based on the big five theory of personality whose main proponent was Goldberg (1981) who together with colleagues vigorously advocated for it. The theory is based upon the lexical hypothesis: that those individual differences that are most salient and socially relevant will come to be encoded into the natural language (Goldberg, 1999). The “Big Five” personality dimensions or personality traits have been gathered through many years of psychological research (Rentfrow, 2018). The five broad personality traits described by the theory are extraversion, agreeableness, openness, conscientiousness and neuroticism (Cherry, 2016). While they don’t capture the idiosyncrasies of everyone’s personality, it is a theoretical framework in which to understand general components of our personality that seem to be the most important in our social and interpersonal interactions with others.

Openness Personality Trait

People who like to learn new things and enjoy new experiences usually score high in openness. Openness includes traits like being insightful and imaginative and having a wide variety of interests. Openness to Experience describes a dimension of cognitive style that distinguishes imaginative, creative people from down-to-earth conventional people. Open people are intellectually curious, appreciative of art and sensitive to beauty. They tend to be, compared to closed people, more aware of their feelings. They tend to think and act in individualistic and nonconforming ways. Intellectuals typically score high on Openness to Experience; consequently, this factor has also been called Culture or Intellect. Nonetheless, Intellect is probably best regarded as one aspect of Openness to Experience. Scores on Openness to Experience are only modestly related to years of education and scores on standard intelligent tests.

Conscientiousness Personality Trait

People that have a high degree of conscientiousness are reliable and prompt. Traits include being organized, methodical and thorough. Conscientiousness concerns the way in which we control, regulate and direct our impulses. Impulses are not inherently bad; occasionally time constraints require a snap decision and acting on our first impulse can be an effective response. Likewise, in times of play rather than work, acting spontaneously and impulsively can be fun. Impulsive individuals can be seen by others as colourful, fun-to-be-with and zany. Conscientious individuals avoid trouble and achieve high levels of success through purposeful planning and persistence. They are also positively regarded by others as intelligent and reliable. On the negative side, they can be compulsive perfectionists and workaholics. Furthermore, extremely conscientious individuals might be regarded as stuffy and boring. Unconscientious people may be criticized for their unreliability, lack of ambition and failure to stay within the lines, but they will experience many short-lived pleasures and they will never be called stuffy.

Extraversion Personality Trait

Extraverts get their energy from interacting with others, while introverts get their energy from within themselves. Extraversion includes the traits of energetic, talkative and assertive. High extraversion is often perceived as attention-seeking and domineering. Low extraversion causes a reserved, reflective personality, which can be perceived as aloof or self-absorbed (Toegel & Barsoux, 2012). Introverts lack the exuberance, energy and activity levels of extraverts. They tend to be quiet, low-key, deliberate and disengaged from the social world.

Agreeableness Personality Trait

These individuals are friendly, cooperative and compassionate. People with low agreeableness may be more distant. Traits include being kind, affectionate and sympathetic. Agreeableness reflects individual differences in concern with cooperation and social harmony. Agreeable individuals value getting along with others. They are therefore considerate, friendly, generous, helpful and willing to compromise their interests with others'. Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others' well-being and therefore are unlikely to extend themselves for other people.

Neuroticism Personality Trait

Neuroticism is also sometimes called Emotional Stability. This dimension relates to one's emotional stability and degree of negative emotions. People that score high on neuroticism often experience emotional instability and negative emotions. Traits include being moody and tense. Freud originally used the term neurosis to describe a condition marked by mental distress, emotional suffering and an inability to cope effectively with the normal demands of life. He suggested that everyone shows some signs of neurosis, but that we differ in our degree of suffering and our specific symptoms of distress. Today neuroticism refers to the tendency to experience negative feelings.

Those who score high on neuroticism may experience primarily one specific negative feeling such as anxiety, anger, or depression, but are likely to experience several of these emotions. People who are high in neuroticism are emotionally reactive. They respond emotionally to events that would not affect most people and their reactions tend to be more intense than normal. They are more likely to interpret ordinary situations as threatening and minor frustrations as hopelessly difficult. Their negative emotional

reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. These problems in emotional regulation can diminish a neurotic's ability to think clearly, make decisions and cope effectively with stress.

At the other end of the scale, individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable and free from persistent negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings; frequency of positive emotions is a component of the extraversion to Mitchell (2013) personality and social psychologists agree that both personal and situational variables are contributors to human behaviour. This study will measure the personality of female teachers in the study area. This will be done by using the big five aspects scale from the International Personality Item Pool.

Strengths and weaknesses of the Big Five Personality Model

The Big Five test model has proven to be fairly accurate in predicting patterns of behaviour over a period of time. The model is able to differentiate domains of the individual differences that have similar surface manifestations. It captures the commonalities amongst most of the existing systems of personality description and provides an integrative descriptive model. Lim (2020) asserts that unlike other theories that sort individuals into binary categories, the Big Five Model asserts that each personality is a spectrum. Therefore, individuals are ranked on a scale between two extreme ends. By ranking individuals in each of these traits, it is possible to effectively measure individual differences in personality.

However, the model has weaknesses when applied to measure personality traits. The model is limited by its universalism, as it cannot help us understand personality expression specific to cultures, genders or ages. The biggest limitation of the Big Five Personality test is its subjective nature which can lead to social desirability bias. Thus,

the test can be used in combination with other measurements (Grohol, 2019).

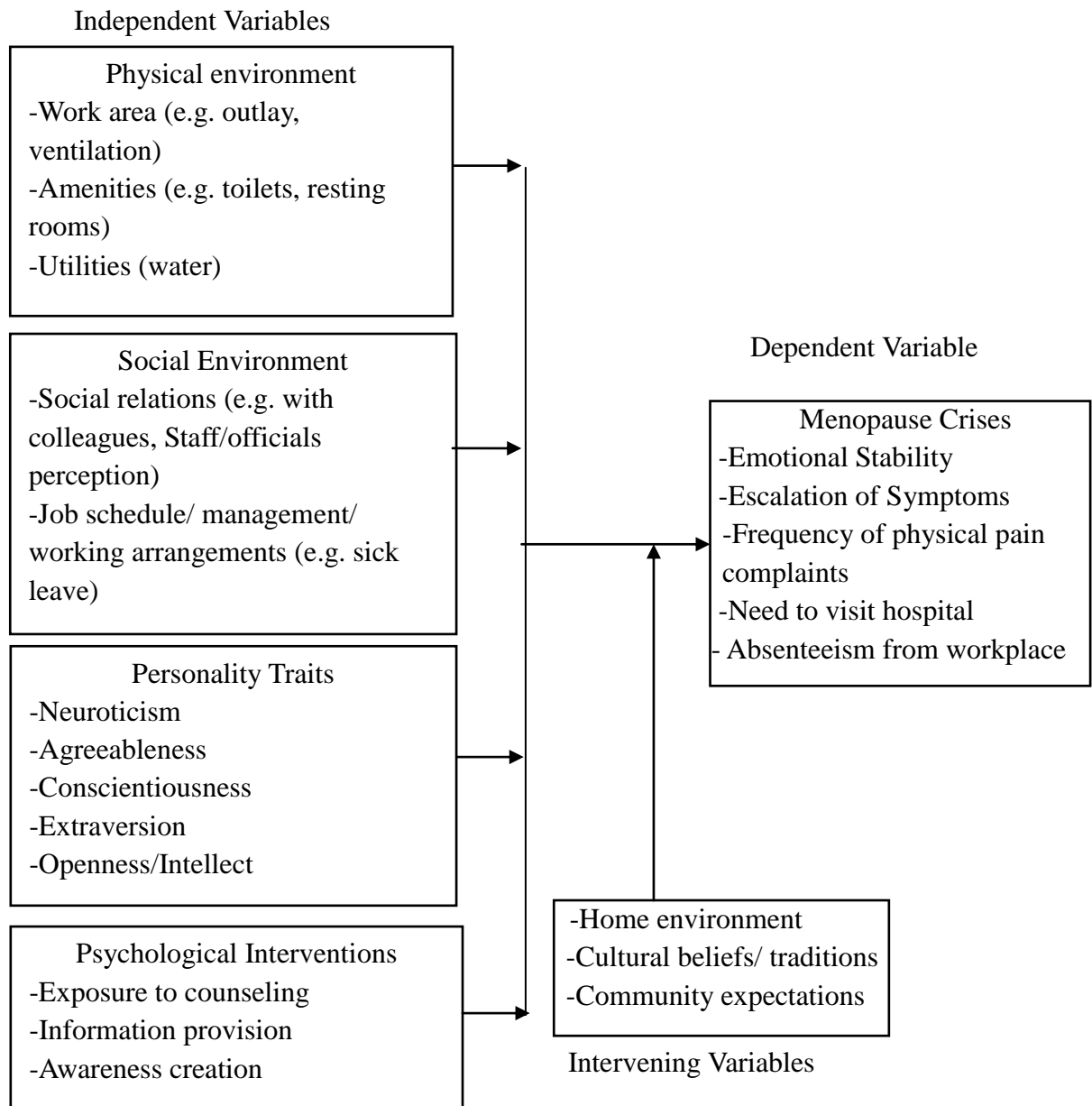
The Big Five Model can be applied in counselling menopausal women as it gives a simple blueprint to understanding others and improving relationships by knowing why people tend to behave the way they do. The theory can be used to help understand oneself and how to get along with others better than ever before.

2.8 Conceptual Framework

A conceptual framework refers to the extent a researcher conceptualizes the relationship between contextual variables in the study and shows the relationship graphically or diagrammatically (Mugenda & Mugenda, 2003). It is a pictorial representation where descriptive categories are systematically placed in a broad structure on explicit propositions, statements of relationships between two or more empirical properties accepted or rejected. It comprises of independent and dependent variables. The utility of a conceptual framework in supporting doctoral study is to define the research problem, establish theoretical coherence, organize research design and implement and frame conceptual conclusions (Berman, 2015). The relationship in Figure 3 describes the association between the independent variables and the dependent variable.

Figure 3

Conceptual Framework



Source: Author, (2023)

Figure 3 shows the relationship between the main variables in the study. These variables are the independent variables that are made up of the physical environment, the social environment, the personality traits and psychological interventions that affect menopause crises in female teachers working in public primary schools in the study area. With the interaction between the female teachers in menopause transition with the influencing

factors, a change in behaviour is realized which leads to menopause crisis. Menopause crises is the dependent variable that was influenced by factors such as personality traits, physical environment, social environment and psychological interventions. In the conceptual framework, home environment, cultural beliefs and community expectations are the intervening variables that were not studied but may affect how female teachers manage menopause crisis. During menopause, many women lack social support from family and significant others perhaps contributing to more turbulent menopause symptoms.

Cultural beliefs and the community are perceived to influence female teachers' menopause crisis. The variation in women's experience of menopause indicates that different cultural groups of women may have different experiences and needs during menopause transition. Attitudes and sociocultural perceptions provide the context within which women experience menopause. Cultural influences greatly affect how women perceive and manage their menopausal symptoms. These intervening variables will interfere with the relationship between the independent and dependent variables. The single direction arrow from the independent variables towards the dependent variable indicates that menopause crisis may be influenced by the physical environment, social environment, personality traits and psychological interventions.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter describes the research design that was adopted in carrying out the study. This is followed by the location of the study, the target population, sample size and sampling procedure, instrumentation, reliability and validity of the research instruments, data collection procedure and data analysis techniques.

3.2 Research Design

The study utilized *ex post facto* correlational research design. *Ex- post facto* research can be viewed as experimental research in reverse. *Ex post facto* research is ideal for conducting social research when is not possible or acceptable to manipulate the characteristics of human participants. It is a substitute for true experimental research and can be used to test hypotheses about cause and effect or correlational relationships, where it is not practical or ethical to apply a true experimental or even a quasi-experimental design (Simon & Goes, 2013). The research design was appropriate for this study since the independent variables were not be manipulated to establish their effects on the dependent variables. The research design was adopted in order to determine the influence of the independent variables under study that include environment, personality related factors and psychological interventions on female teacher's menopause crises (the dependent variable).

3.3 Location of the Study

The study was conducted in Laikipia County. The County is made up of five Sub Counties with a total of 317 public primary schools. Laikipia County was selected because it has rural, sub urban and urban populations. Therefore, findings generated by

the study was generalizable to the entire County. Again, Laikipia County is a vast county experiencing ASAL climatic conditions. Therefore, accessing psychological interventions may not be easy. The County was also selected because despite the significant number of primary schools in the county and the subsequent number of teachers, the area has not had sufficient attention given to teachers undergoing menopause in these schools.

3.4 Target Population

The research targeted female teachers between the ages of forty-four and fifty-five years of age from all public primary schools, teacher counselors in public primary schools and Sub County Directors of Education in the five sub counties in Laikipia County that are; Nyahururu, Laikipia West, Laikipia North, Laikipia Central and Laikipia East Sub Counties. The accessible population were 600 female teachers from public primary schools in the age bracket of 44 to 55 years, 50 teacher counselors, (Laikipia County TSC Office, 2018) and 5 Sub County Directors of Education. Female teachers in public primary schools in Laikipia County were selected because they work in environments that are not conducive compared to their counterparts in the secondary and university sectors. Female teachers in the age bracket of 44 and 55 were selected because they had experience on issues of menopause. Teacher counselors on the other hand were considered because they handled female teachers' issues that required psychological interventions. The Sub County Directors in the Ministry of Education provided information on physical infrastructure development with an aim of establishing whether there is sensitivity to female teachers undergoing menopause when doing physical development in the public primary schools in the study area. The accessible population was the 655 individuals as shown in Table 1.

Table 1*Accessible Population for the Study*

Sub-County	Nyahururu	Laikipia West	Laikipia Central	Laikipia East	Laikipia North	N
Teacher counselors	10	10	10	10	10	50
Female Teachers	181	131	147	97	44	600
Sub County Directors (MOE)	1	1	1	1	1	5
Total						655

Source: County Director Education Office, Laikipia County (2018)

3.5 Sample Size and Sampling Procedures

This study used stratified, two stage clustered sampling, random sampling and purposive sampling. A sample is a subset of a population that is used to represent the entire group as a whole. According to Nyumba et al (2018) cited by Aulawi (2012), the size of the sample is determined by four factors; - how much sampling error can be tolerated; population size; how varied the population is with respect to the characteristics of interest; and the smallest subgroup within the sample for which estimates are needed. Sampling is the act, process or technique of selecting a suitable sample or a representative part of a population for the purpose of determining parameters or characteristics of the whole population (Baran & Jones, 2016).

This study used stratified sampling to obtain the sample. Stratified sampling is a probability sampling method that is implemented in sample surveys. The target population elements are divided into distinct groups or strata where within each stratum the elements are similar to each other with respect to select characteristics of importance to the survey (Parsons, 2017). Under stratified sampling, each sub-population is sampled independently. The target population has three sub-populations; the female teachers (FT), the teacher counselors (TC) and Sub County Directors of Education (SDE). Each of the

sub-population was stratified independently. Total of 600 female teachers between 44 and 55 years were sampled after obtaining their total number from Laikipia County TSC Office.

Cluster sampling refers to a sampling method that has the following properties: the population is divided into N groups, called clusters; the researcher randomly selected 'n' clusters to include in the sample. The number of observations within each cluster M_i is known and $M = M_1 + M_2 + M_3 + \dots + M_{N-1} + M_N$. Each element of the population was assigned to one and only one cluster which in this case is a sub-county. Under Two-stage sampling a subset of elements within selected clusters are randomly selected for inclusion in the sample (Berman, 2015).

In stage one of the clustered sampling the public primary schools were grouped into five and along the administrative sub-counties. The five sub-counties are Nyahururu, Laikipia West, Laikipia Central, Laikipia East and Laikipia North (Laikipia County Government, 2016). The sample size of female teachers was allocated proportionately in the sub-counties according to the number of public primary schools in each sub-county. Records from Laikipia County TSC office were obtained which provided details of female teachers per Sub County and their respective ages. The ages of the teachers were recorded to obtain the number of teachers in each school who were in the age bracket between 44 and 55 years. The records of teachers' information were treated with utmost confidentiality. The number of teachers in each sub county in the study used systematic random sampling to arrive at the specific participants in each sub-county.

In systematic random sampling, the researcher first randomly picked the first item or subject from the population. Then, the researcher selected each n^{th} subject from the list. The procedure involved in systematic random sampling is very easy and can be done manually. The results are representative of the population unless certain characteristics of

the population are repeated for every n^{th} individual, which is highly unlikely. The 'n' was arrived at by dividing the number of samples under each sub-county with the population of primary schools. The list provided by the Ministry of Education was used as the sampling frame for public primary schools in the sub-counties.

Purposive sampling was also used to select five Sub County Directors of Education and fifty teacher counselors. Ten teacher counselors from each of the five Sub Counties were included in the Focus Group Discussions (FGD). Nyumba et al (2018) intimates that FGD method is used to obtain data from a purposely selected group of individuals rather than from a statistically representative sample of a broader population. Purposive sampling is a non-probability sampling technique in which decisions concerning the respondents is taken by the researcher based upon various criteria such as specialist knowledge of the research issue, capacity and willingness to participate in the research as well as participants' likelihood to contribute appropriate data both in terms of relevance and depth. Ames, Glenton and Lewin (2019) posits that purposive sampling of primary studies in the synthesis is one way of achieving a manageable amount of data. On the other hand, Guarte and Barrios (2006) opines that purposive sampling is described as a random selection of sampling units within the segment of the population with the most information on the characteristics of intense.

The sample size was determined by the formula for Determining Sample Size from a Given Population by Krejcie and Morgan (Aulawi, 2010). Krejcie and Morgan (1970) formula to determine sampling size is:

$$S = \frac{X^2NP(1-P)}{d^2(N-1) + X^2P(1-P)}$$

S = required sample size

χ^2 = the table value of chi-square for one degree of freedom at the desired confidence level which was 1.96 for 95% confidence level.

N = the population size

P = the population proportion (assumed to be .50 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion which was expressed as a proportion (.05); it is margin of error. Each stratum was sampled independently as per Table 2.

Table 2
Sample Size for the Study

Category	N	Sample		KIs
	FT	TC=50	FT=234	SCDE =5
Nyahururu Sub-county	181	10	71	
Laikipia West	131	10	51	
Laikipia Central Sub-county	147	10	57	
Laikipia East Sub-county	97	10	38	
Laikipia North Sub-county	44	10	17	
Totals	600	50	234	5

TC=Teacher Counselors, FT= Female Teachers, SCD MOE=Sub County Directors Ministry of Education. The sample size was 289.

Table 3
Distribution of the Respondents in the Study

Respondents	Male	Female	Total
SDE	3	2	5
Teacher Counselors	25	25	50
Female Teachers		234	234

3.6 Instrumentation

The study utilised a questionnaire for the female teachers, focus group discussion for teacher counselors and interview schedule for Sub County Directors of Education. The study thus adopted the triangulation technique of data collection. The technique involves collecting data from different sources and checking information collected from different sources for consistency of evidence (Mertens, 2005). Triangulation is a method used to increase credibility and validity of research findings. It is used to enrich research (Noble & Heale, 2019) as it uses multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena.

3.6.1 Questionnaire

A structured questionnaire was used to gather raw data from the female teachers in public primary schools in the study area. The questionnaires had six sections A, B, C, D, E and F. Section A gathered data on the respondent's demographic characteristics that included, background data in regard to age, marital status, teaching experience, length of service in the current station, school category, location of the school (rural or urban), professional qualification and the designation of the respondents. Section B had items that gathered data on physical working environments; Section C comprised of items that gathered data on the social environment in relation to menopause crises; section D on the other hand comprised items on the female teachers' personality traits in relation to menopause crises; section E captured data on the role of psychological interventions in menopause crises among female teachers while section F captured psychological issues that affect menopausal female teachers. The items were rated on 5-point Likert scale which is a psychometric scale used to rate and scale responses in survey research. The respondents were guided by a Likert Scale in which: 1 represented Strongly Disagree

(SD), 2 was Disagree (D), 3 was Neutral; 4 was Agree (A); 5 was Strongly Agree (SA)

3.6.2 Focus Group Discussion

Focus Group Discussions (FGD) was used to gather qualitative data from teacher counselors. This was guided by open ended questions that elicited qualitative responses. Focused group discussion is a qualitative method that involves unstructured group interviews where the focus group leader actively encourages discussion among participants on the topic of interest (Mertens, 2005). This suggestion concurs with Nyumba et al (2018) who suggested that FGD is frequently used as a qualitative approach to gain an in-depth understanding of social issues. The Focus Group Discussion targeted 50 teacher counselors, 10 from each Sub County. The participants were asked to discuss points using objectives of the study as a guide. The FGD sessions took one hour to complete. The instrument for FGD is attached in Appendix III.

3.6.3 Interview Schedule

Qualitative data was also obtained by conducting in-depth oral interviews to key informants that targeted the five Sub County Directors in the Ministry of Education, one from each Sub County. This supplemented the quantitative data gathered from the questionnaires which strengthened its interpretation. An in-depth interview guide was developed using unstructured questions to get information from the respondents. The interview guide was based on the specific objectives as set out in the study. The key informants were purposively selected based on their personal and professional knowledge of the physical facilities in the public primary schools and their effect on the menopause crises among female teachers. The Sub County Directors and the MOE provided information on physical infrastructure development with an aim of establishing whether there is sensitivity to female teachers undergoing menopause when doing the

physical development in the public primary schools in the study area. The instrument for interview schedule is attached in Appendix II.

3.7 Pilot Study

A preliminary pilot study was conducted among female teachers, teacher counselors and Sub County Directors of education. The questionnaire was piloted on 23 female teachers who were aged between 44 and 55 years. An in-depth interview schedule was piloted on one SCDE and an FGD was conducted with five teacher counselors. The sample size for pilot was equal to 10% of the entire sample size in the neighbouring Nyandarua County. Piloting was done in order to improve upon various aspects of the study design, particularly clarity, validity and reliability of the research instruments. The research instruments were pretested in one sub county namely Nyandarua North in the neighbouring Nyandarua County in order to obtain an independent group of respondents who were not participating in the main study.

Piloted data was then analysed to check on whether the methods of data collection were appropriate. The data helped in checking whether there was clarity of the questions in the questionnaire. After computing the scores, the reliability coefficient for influence of personality traits on menopause was 0.732, social environment 0.823, physical environment scored 0.793 while psychological interventions scored 0.845. The expected minimum reliability coefficient is 0.7. Therefore, the range between 0.732 to 0.845 was above the expected level. This means that the instrument was reliable and capable of measuring the study variables.

3.7.1 Validity of the Research Instrument

Validity of a research refers to how well a test measures what it is supposed to measure (Wren & Phelan, 2005; Kimberlin & Winterstein, 2008). Validity of the research

instruments is critical because it determines whether the researcher's findings truly represent the phenomenon being investigated and the degree to which conclusions arrived from their investigations can be generalized to the entire population. Validity therefore has to do with how accurately the data obtained in the study represents the variables of the study. If such data is a true reflection of the variables, then the inferences based on such data will be accurate and meaningful (Mugenda & Mugenda, 2003).

Validity is broadly categorized into whether it is external, that is, the extent to which the results of a study can be generalized to other settings (ecological validity), other people (population validity) and over time (historical validity), or internal; which refers to whether the effects observed in a study are due to the manipulation of the independent variable and not some other factor. The content-related validity is concerned with content validity, face validity or construct validity. Content validity ensures that each variable has adequate items on the questionnaire. Face validity is simply a measure of whether the test appears (at face value) to measure what it claims to. Face validity is determined by a review of the items and not through the use of statistical analyses. Construct validity refers to the extent to which a test captures a specific theoretical construct or trait (Trochim, 2006).

The variables of study were personality traits, the physical environment, the social environment and psychological interventions and their influence on the female teachers' menopause crises (dependent variable). In order to test the validity of the research instrument (questionnaire), the questionnaire was given to lecturers in the School of Education, Kabarak University whose expertise views and critique was used in improving the face and construct validity of the instruments. The questionnaire was also pilot tested to respondents equal to 10% of the sample size in schools within the neighbouring Nyandarua County in order to assess the time taken to fill the questionnaire

as well as removing ambiguous and confounding items.

On the basis of the responses from the pilot study and suggestions from the experts, items that appeared to be unclear or lead to misinterpretation were rephrased before being executed in the main study. This ensured that the instrument is valid when collecting the main data.

3.7.2 Reliability of the Instrument

Reliability of a research instrument refers to the degree to which an instrument yields consistent results or data after repeated trials. If a measuring instrument is reliable it provides consistent results (Kothari & Garg, 2014; Mugenda & Mugenda, 2003; Mertens, 2005). It means the consistency of the scores from one instrument to another and from one set of items to another and also refers to the internal consistency of the items being tested. The use of reliable instrument means that accurate data was obtained. The results from the pilot study established the clarity and comprehensibility of each item in the questionnaires. A test re-test method was applied by administering the questionnaire to the same group of respondents within a span of two weeks. The scores from both tests were obtained and correlated to obtain reliability co-efficient using the Cronbach's Alpha. Cronbach's Alpha is computed by correlating the score for each scale item with the total score for each observation and then comparing that to the variance for all individual item scores.

The formula is as below:

$$\alpha = \left(\frac{k}{k-1} \right) \left(1 - \frac{\sum_{i=1}^k \sigma_{y_i}^2}{\sigma_x^2} \right)$$

Where:

k refers to the number of scale item

$\sigma_{y_i}^2$ refers to the variance associated with item i

σ_x^2 refers to the variance associated with the observed total scores

A correlation co-efficient of 0.786 was obtained, which was above 0.7 and was therefore accepted.

Table 4

Reliability Test of Variables

Variable	Reliability Coefficient	Status
Personality Traits	0.778	Accepted
Physical Environment	0.815	Accepted
Social Environment	0.783	Accepted
Counselling	0.769	Accepted

A measure for internal consistency method was applied and a reliability coefficient obtained. The research findings indicated that Personality Traits had a reliability coefficient of 0.778, Physical Environment had a reliability coefficient 0.815, Social Environment had a reliability coefficient of 0.783 and psychological interventions had a reliability coefficient of 0.769. According to Mugenda and Mugenda (2012), a reliability coefficient of 0.70 or more implies high degree of reliability of the data. Therefore, all the factors showed that the Cronbach's Alpha above had the required reliability coefficient of 0.70. Thus the results of the study are highly reliable as indicated in Table 4.

3.8 Data Collection Procedures

The researcher secured an authorization letter from Kabarak University and then used it to obtain a research permit from the National Commission of Science, Innovation and Technology (NACOSTI). The researcher then obtained authorization to conduct the research from Laikipia County Commissioner and Laikipia County Director of

Education. Collection of data was done in year 2019 between January and April. The researcher visited the respondents and administered the questionnaires, interview schedule and FGD and collected them immediately with support from trained research assistants. The questionnaires were hand-delivered to the respondents to ensure that they were well distributed according to the population size and as per the sample. The respondents were given 40 minutes to complete filling the questionnaire. Data and any information collected from the respondents was kept confidential and only used for the purpose of the study. After picking up the filled-up questionnaire, they were checked immediately for errors and missing or blank items and then they were coded to ensure easy tracking. The researcher also interviewed the Sub County Directors of Education and had an FGD with the teacher counselors and recorded their responses. The respondents were assured of confidentiality as menopause is sensitive to female teachers. The research instruments were then stored safely, awaiting keying in of the responses into the computer.

3.9 Data Analysis and Presentation

The Data obtained was both quantitative and qualitative. Collected data was triangulated by looking for areas of convergence, corroboration and contrast between responses from the questionnaires, key informant interviews and FGD. This approach established whether different instruments lead to the same findings. Qualitative responses were transformed into quantitative elements through data reduction method or coding in the Likert scale. Data was then summarized and presented using tables and expressed in percentages that enabled easy interpretation with regard to the variables considered. Quantitative data was summarized and analysed descriptively then presented in graphs and frequency and percentage tables. This data was analysed using statistical tools with the aid of Statistical Package for Social Sciences (IBM-SPSS) Version 22. Qualitative

data was used to supplement the interpretation of quantitative data. The analysed data was then interpreted in line with the researcher's objectives.

The study did statistical analysis using regression. For purposes of establishing the interdependence between the variables, correlation analysis has been done on the statistical data in which the Pearson Product Moment correlation coefficient has been established between the four independent variables against the dependent variable. In addition, the study obtained regression co-efficient of the variables against the dependent variable, the menopause crises in female teachers. The model that was used is as below:

A regression model for inferential data analysis

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_i$$

Was used where;

Y is Menopause crises

β_0 = constant

$X_1 - X_3$ are the independent variables: (social environment, physical environment, personality traits and counselling)

X_1 = Social Environment

X_2 = Physical Environment

X_3 = Personality Traits

X_4 = Psychological interventions

β_1 = Regression coefficient of variable X_1

β_2 = Regression coefficient of variable X_2

β_3 = Regression coefficient of variable X_3

β_4 = Regression coefficient of variable X_4

ε_i is the error term.

The regression model helped to determine the effect of each independent factor on menopause crises in female teachers and also to test the null hypotheses between the variables. The null hypotheses were posited by the researcher on the assumption that there was no difference between both the measured characteristics of the study population and the data-generating process. The results of data analysis were presented using frequency and percentage tables. Graphs were used to enhance clarity of data presentation.

3.10 Ethical Considerations

The researcher obtained a research permit and authorization from the relevant bodies before carrying out the research. Informed consent was sought from the respondents before the questionnaires were issued and an assurance given to them that the information they provide would be treated with confidentiality. In this research the identity of the respondents has been kept confidential through anonymity in the data collection tool and information gathered can only be used for the purposes of the study. The research assistants were trained before data collection on matters of ethical concerns. The respondents were also given a free will to participate and contribute voluntarily to the study. A copy of findings could be made available to any willing person or institution on request. Where interviews were done, they were followed up with respective acknowledgements. The researcher has also acknowledged all literature cited in the study to avoid cases of plagiarism. All respondents were informed with clarity of their rights and the confidentiality of the information related to their participation.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter contains presentation, analysis and interpretation of data gathered during the study, which is organized in line with the objectives of the study. This study analysed the female teachers' menopause crisis. The research sought to give results to the research objectives. The study also tested the research hypothesis at .05 confidence level. The first section presents the description of the response rate of the respondents and the next section describes the demographic characteristics of the female teachers. The sections that follows contain the results as per the objectives of the study. The analysis was carried out using descriptive and inferential statistics. Presentation of the findings was done in form of tables, graphs and discussion.

4.2 Response Rate

The researcher targeted a sample of 289 respondents. However, 264 responded which entailed 209 female teachers, 50 Teacher Counselors and 5 Sub County Directors of Education (MOE) thereby giving a response rate of 91.3%. The results are presented in Table 5. According to Best and Khan (2006), a response rate of 50% is considered adequate, 60% good and above 70% very good. In view of this, the response rate was considered very good and exceeded the threshold postulated by Best and Khan. On the basis of this, the researcher went ahead to analyse data as presented in the following section.

Table 5*Response Rate*

Category	Sample	Responses	Percentage
Female Teachers	234	209	89.32
Teacher Counselors	10	10	100
Sub County Directors of Education (MOE)	5	5	100

4.3 Demographic Characteristics Female Teachers

Data on the background information of the respondents was analysed and then presented in the section below.

4.3.1. Age of Female Teachers

The researcher obtained data on the age of the female teachers and then presented the results in Table 6.

Table 6*Age of Female Teachers*

Respondents	Parameter	Frequency	Percentage (%)
Female Teachers	44-46 years	26	12.4
	47-49 years	47	22.5
	50-52 years	70	33.5
	53-55 years	66	31.6

According to the age of the female teachers, 12.4% of the respondents were at the age bracket of 44-46 years while 22.5% were between 47 and 49 years old. Majority of the respondents (33.5%) were from 50-52 years old and 31.6% were between 53 and 55 years old. This agrees with Mertens (2005). on a study on age at menopause, menopausal

symptoms and problems among urban women from western Odisha, India whose findings were that menopausal age in developed countries range from 48 to 51 years. In addition, according to the Indian Menopause Society Research, the average age of Indian menopausal women is 47.5 years.

4.3.2 Marital Status of Female Teachers

The researcher obtained and analysed data on the marital status of the respondents then presented the findings in Table 7.

Table 7

Marital Status of Female Teachers

Variable	Parameter	Frequency	Percentage
Marital status	Single	33	15.8
	Married	142	67.9
	Divorced	18	8.6
	Widowed	16	7.7

The respondents were asked to indicate their marital status. Of the female teachers sampled, 15.8% of the respondents were single, 67.9% were married, 8.6% were divorced and 7.7% were widowed. This further suggests that interventions in support of women can be done through family-based support but more study is required.

4.3.3 Education Levels of Female Teachers

The researcher obtained and analysed data on the education levels of the female teachers then presented the findings in Table 8.

Table 8*Education Levels of Female Teachers*

Variable	Respondents	Parameter	Frequency	Percentage (%)
Highest level of education achieved	Female teachers	P 1 Trained	10	4.8
		Diploma	102	48.8
		Bachelor's degree	91	43.5
		Master's degree	6	2.9

Findings in table 8 revealed that among the female teachers, 48.8% were Diploma holders while 43.5% were Bachelor's degree holders. Those P 1 trained female teachers were 4.8% and those with master's degree were 2.9%. Most of the female teachers are diploma holders. These findings are consistent with Kamal and Salik (2015) in their study on the effect of demographic variables on experience of menopausal symptoms among premenopausal, perimenopausal and post-menopausal women where it was indicated that in all the groups of menopausal stages, women with lower level of education experience more menopausal symptoms than women with higher level of education.

4.3.4 School Location, Period of Service and Position of the Respondents

The researcher obtained and analysed data on the school location, period of service and position of the respondents then presented it in the Table 9.

Table 9*School Location, Period of Service and Position of the Respondents*

Variables	Respondents	Parameter	Frequency	Percentage (%)
Location of the school	Female teachers	Urban	78	37.3
		Rural	131	62.7
period in that school as a teacher	Female Teachers	Below 20 years	3	1.4
		21-25 years	16	7.7
		26-30 years	23	11.0
		31-35 years	44	21.1
		36 and above years	123	58.9
		Female teachers	Deputy	18
	Headteacher			
	Senior Teacher	69	33.0	
	Assistant teacher	118	56.5	
	Others	4	1.9	

Respondents were asked to indicate their school location; 37.3% of the schools were located in urban areas while 62.7% were in the rural areas. The study results suggest that most women at menopause are in the rural set-up compared to about a third that are in the urban areas. This implies that support activities for women undergoing menopause to rural situation should be considered and supported. The study further obtained data on period that female teachers had been in the school. The research results showed 1.4% of the respondents had below 20 years of teaching experience in their school while 7.7% had between 21 and 25 years of teaching experience; 11% had 26-30 years of experience, 21.1% had 31-35 years of teaching experience and 58.9% had above 36 years of teaching experience in the same school. Cumulatively 80% of the respondents had above 30 years of teaching experience with those possessing above 36 years' experience serving as the modal class of the distribution.

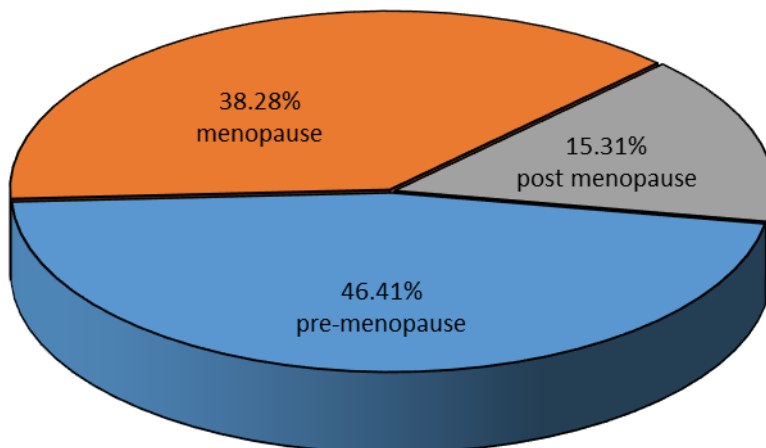
From the research output above, 8.6% of the female teachers were deputy head teachers while 33% were senior teachers; 56.5% of the respondents were assistant teachers and 1.9% were ‘others.’ From the observations made, there was low representation of female teachers at higher levels of hierarchical ladder especially that of senior teachers and deputy head teachers. This implies that there was inequality in the allocation of senior posts in schools with relation to gender but most had progressed fairly in their job groups.

4.3.5 Best Self-Description in Reference to Menopause

On how best the female teachers could describe themselves in reference to menopause, majority 46.4% thought they were at pre-menopause, 38.3% were at menopause while 15.3% of the respondents were at post menopause stage. The results are presented in Figure 4 below. The findings suggest that most female teachers affected by menopause in the study are at menopause stage but they proceed on retirement during post-menopause stage.

Figure 4

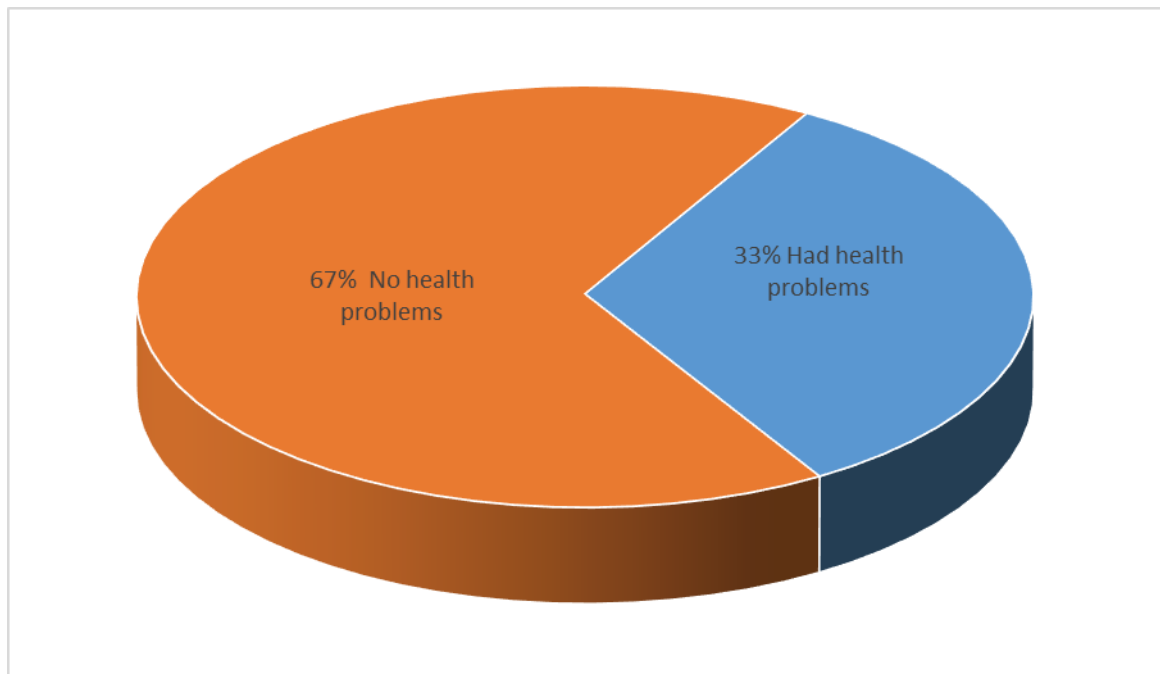
Statement that Best Describes the Respondent in Respect to Menopause



The study sought to determine whether the female teachers had significant menopause related health problems. The results shown in Figure 5 showed that 33 % of the respondents were for the opinion that menopause to them is a significant issue of health concern while 67% thought it was not. This suggests that onset of menopause is not a major health concern. This contrasts with the findings of Hammam, Abbas and Hunter (2012) in their study that showed that menopause transition is an important occupational health issue especially for women in developing countries. The study recommended implementing health promotion programs, improving working environment and work policies, raising awareness of menopause in order to help women to cope with the menopause transition and to maintain well-being and productivity at work

Figure 5

Responses on whether Female Teachers had Significant Menopause Related Health Problems



4.4 Influence of the Personality Traits on the Menopause Crises

The first objective of the study was to determine the influence of the personality traits on the psychological interventions in managing menopause crises among female teachers in

public primary schools in Laikipia County. Additional data was captured using the teacher counselors Focused Group Discussion and sub county directors' interview schedule which was used to supplement the information provided by the female teachers.

4.4.1 Descriptive Data Analysis

Results of descriptive analysis of data on personality traits is presented in the following section. The respondents were guided by a Linkert scale in which 1 represented Strongly Disagree (SD), 2 represented Disagree (D), 3 represented Neutral (N), 4 represented Agree (A) and 5 represented Strongly Agree (SA).

The researcher obtained and analysed data on neurotic personality trait and presented it in Table 10.

Table 10

Descriptive Results on Neuroticism Personality Traits and Menopause Crisis

Code	Statements	1=SD	2=D	3=N	4=A	5=SA
N1	I am a person whose moods go up and down easily	17.7% (37)	26.3% (55)	21.1% (44)	26.3% (55)	8.6% (18)
N2	I can be stirred up easily	18.7% (39)	24.9% (52)	18.2% (38)	30.0% (64)	7.7% (16)
N3	I feel threatened easily	20.6% (43)	27.8% (58)	12.4% (26)	28.7% (60)	10.5% (22)
N4	I become overwhelmed by events	13.9% (29)	32.1% (67)	21.1% (44)	29.2% (61)	3.8% (8)
N5	I keep my emotions under control	7.7% (16)	20.1% (42)	21.1% (44)	28.7% (60)	22.5% (47)
N6	I don't get embarrassed easily	11.5% (24)	42.1% (36)	18.2% (38)	17.2% (88)	11.0% (23)

The results posted in Table 10 revealed that respondents agreed on all items. Three items recorded slightly over a third agreeing with the statements. These are 'I become overwhelmed by events' at 33% while 27.8% were neutral. This indicates that women undergoing menopause are affected strongly by events. This concurs with Fang (2007) who noted that menopause can alter the harmonious functioning of the brain leading to difficulties in concentration, reduced memory as well as difficulty in focusing for long periods.

The findings revealed further that 53.1% agreed with the statement that they don't get embarrassed easily while 28.7% were not sure. This is in congruence with the views of Dalal and Agarwal (2015), that at menopause there occurs a drop-in oestrogen which as a result leads to symptoms such as hot flushes, irregular menstrual bleeding, night sweats, insomnia and vaginal dryness. These symptoms therefore make women at menopause get easily embarrassed even to talk about what they are going through.

The findings revealed that more than a quarter of the respondents (27.8 %) disagreed that they keep their emotions under control while 27.8% were not sure. This implies that women in menopause transition find it difficult to control their emotions which may affect their relationship with their colleagues in work place. This concurs with the findings of Fang (2007) who stated that perimenopause symptoms may be more erratic, unpredictable and intense; so much so that many women feel they are losing control or as if they are going crazy. Additionally, the menopausal women are characteristic of common symptoms such as tiredness, hot flushes and night sweats (Sabir & Mustafa, 2012).

Majority of the respondents (73%) had the opinion that their moods go up and down while 44 % were neutral. Findings of Fang (2007) showed that during the transition to menopause, levels of the hormone oestrogen drop, causing wide-ranging changes

throughout the body and many of these changes have direct connections to menopausal mood swings displayed through irritability, depression, anxiety, crying episodes and feeling weepy and insomnia. Stöppler (2018) further posits that psychogenic symptoms such as trouble in sleeping, lack of energy, difficulty in concentration, nervous tension, feelings of sadness are among the most frequently reported symptoms of menopausal transition. These are exhibited due to the concept of menopause among women where the oestrogens levels decrease.

Table 11

Female Teachers' Means on Influence Neuroticism to Menopause Crisis

Code	Statements	Mean	Sd
N1	I am a person whose moods go up and down easily	2.82	1.246
N2	I can be stirred up easily	2.84	1.260
N3	I feel threatened easily	2.81	1.334
N4	I become overwhelmed my events	2.77	1.129
N5	I keep my emotions under control	3.38	1.247
N6	I don't get embarrassed easily	3.24	1.201

The means of the items ranged from 2.81(SD=1.334) to 3.38 (SD=1.247). Most of the means were above 2.5 meaning that majority of the female teachers agreed with the statements. An examination of the SD reveal that they were high ranging from 1.201 to 1.334. This is an indication that there were variations in the respondents to the items. These findings concur with Bal (2011) who found that higher levels of neuroticism lead to lower quality of life among postmenopausal women. This implies that personality would play an important role in women's quality of life during transition period of menopause. Similarly, Malik (2021) found out that neuroticism accounted for 56.6% variation in quality of life which is a high influence on the quality of life of menopausal women. Similarly, Fang (2007) revealed that all stages of menopausal women who have

high levels of neuroticism are more vulnerable to depression which is a psychological effect of menopause.

The researcher obtained and analysed data on agreeable personality trait and presented it in Table 12.

Table 12

Descriptive Results on Agreeable Personality Trait

Code	Statements	1=SD	2=D	3=N	4=A	5=SA
A1	I sympathize with other's feelings	1.0% (2)	9.6% (20)	9.6% (20)	51.1% (108)	28.2% (59)
A2	I like to do things for others	2.9% (6)	14.4% (30)	12.4% (26)	43.5% (91)	26.8% (56)
A3	I am not interested in other people's problems	36.8% (77)	43.1% (90)	7.7% (16)	6.7% (14)	5.7% (12)
A4	I respect authority	4.8% (10)	3.8% (8)	3.8% (8)	45.9% (96)	41.6% (87)
A5	I avoid imposing my will on others	3.8 % (8)	9.6% (20)	5.7% (12)	50.1% (106)	30.1% (63)
A6	I love a good fight	23.4% (49)	16.7% (35)	29.7% (62)	20.6% (43)	9.6% (20)

The results in table 12 reveal that respondents agreed on all the items. However only two items had less than two thirds agreeing on the statements. The two are 'I am not interested in other peoples' problems which recorded 12.4% while 7.7% were neutral. The statement 'I love a good fight' had 30.2% of the respondents agreeing while 29.7 % were neutral. Majority of the respondents (87.5%) revealed that they respect authority an implication that the respondents are agreeable while 80.8% revealed that they avoid imposing their will on others. The findings revealed that 79.9% agreed that they sympathize with others' feelings while 70.3% revealed that they like doing things for others. These findings concur with Wieder-Husla et al (2014) who found that

agreeableness is significantly ($p < 0.05$) correlated with all quality of life domains. This means that women at menopause who show positive friendly attitudes toward other people are altruistic, emphatic and eager to co-operate with others have higher quality of life. This concurs with Song and Shi (2017) who found that a positive correlation exists between accuracy and agreeableness. This implies that agreeable individuals can make more accurate judgments when compared to those that are not agreeable.

Table 13

Female Teachers' Means on Influence of Agreeable Personality Trait to Menopause Crisis

Code	Statements	Mean	Sd
A1	I sympathize with other's feelings	3.97	.922
A2	I like to do things for others	3.77	1.085
A3	I am not interested in other people's problems	2.01	1.111
A4	I respect authority	4.16	1.009
A5	I avoid imposing my will on others	3.94	1.043
A6	I love a good fight	2.76	1.282

The means of the items in table 13 ranged from 2.01 (SD=1.111) to 4.16 (SD=1.009). Most of the means were above 2.5 meaning that majority of the respondents agreed with the statements. However, a look at the item that stated that 'I am not interested with other peoples' problems 2.01 (SD=1.111) had a low mean. This is an indication that most of the female teachers disagreed with the statement. The SD indicated that there was a high variation to the responses. These findings concur with Malik and Sudhesh (2021) that agreeable personality trait significantly correlated to the quality of life among menopausal women.

The researcher obtained and analysed data on conscientiousness personality trait and presented it in Table 14.

Table 14*Descriptive Results on Conscientiousness Personality Trait*

Code	Statements	1=SD	2=D	3=N	4=A	5=SA
C1	I finish what I start	5.7% (12)	15.3% (32)	13.4% (28)	45.9% (96)	19.6% (41)
C2	I always know what I am doing	5.7% (12)	11.5% (24)	23.9% (50)	37.3% (78)	5.7% (45)
C3	I mess things up	33.5% (70)	37.8% (79)	16.3% (34)	7.7% (16)	4.8% (10)
C4	I postpone decisions	20.1% (42)	17.7% (37)	22.0% (46)	36.4% (76)	3.8% (8)
C5	I like order	5.7% (12)	6.7% (14)	10.5% (22)	41.6% (87)	35.4% (74)
C6	I am not bothered by disorder	33.5% (70)	45.9% (96)	10.0% (21)	5.7% (12)	4.8% (10)

The results posted in Table 14 revealed that the respondents agreed on all items except two. The two items were ‘I mess things up’, where 43% agreed while 17.2% were not sure while ‘I am not bothered by disorder’ 10.5% agreed while 79.4% disagreed, an implication that menopausal women are not affected by situations that affect order as they are able to organize themselves. Further the findings revealed that 40.2% agreed that they postpone decisions while 37.8% were not sure. Another 65.5% revealed that they finish what they start while 13.4% were not sure. This is an indication that female teachers in menopause transition are capable of meeting deadlines. This corroborates with the findings of Afridi, (2017) that menopause exhibit signs such as: difficulty focusing on daily tasks, forgetfulness, losing one’s train of thought while reading or talking and unclear or fuzzy thought processes. Marcin, (2017) further bolds out that

though menopausal symptoms vary with individuals, there are some common symptoms such as night sweats , weight gain, thinning hair, memory lapses and difficulty in focus and concentration as a result of “brain fog”. A majority (77 %) agreed that they like order while 10% were neutral. Further, the results revealed that 71.3% disagreed that they mess things up while 16.3% were neutral. It therefore implies that menopausal female teachers in the study area do not tend to mess things up but they are orderly.

Table 15

Female Teachers’ Means on Influence of Conscientiousness to Menopause Crisis

Code	Statements	Mean	SD
C1	I finish what I start	3.58	1.137
C2	I always know what I am doing	3.57	1.120
C3	I mess things up	2.12	1.107
C4	I postpone decisions	2.86	1.219
C5	I like order	3.94	1.117
C6	I am not bothered by disorder	2.02	1.049

The six items in table 15 were measured using Likert scale of 1 to 5 where the lowest 1 represented Strongly Disagree and the highest 5 represented Strongly Agree. A mean of 2.5 to 5.0 represented high influence while a mean of less than 2.5 meant less influence. The six items indicated that the means ranged from 2.02 (SD=1.049) to 3.94 (SD=1.117). Most of the means were above 2.5 meaning that majority of the respondents agreed with the statements. However, there were two items that had low means ‘I am not bothered by disorder’ 2.02 (SD=1.049) and ‘I mess things up’ 2.12 (SD=1.107). This means that most of the respondents disagreed with the statements. The SD were high as per the statements 1.049 to 1.219 which is an indication that there was a high variation of the responses to the items.

The researcher obtained and analysed data on extraversion personality trait and presented it in Table 16.

Table 16

Descriptive Results on Extraversion Personality Trait

Code	Statements	1=SD	2=D	3=N	4=A	5=SA
E1	I warm up quickly to others	5.7% (12)	16.7% (35)	18.2% (38)	45.0% (94)	14.4% (30)
E2	I laugh a lot	10.0% (21)	29.7% (62)	23.0% (48)	23.9% (50)	13.4% (28)
E3	I reveal little about myself	11.0% (23)	12.4% (26)	13.4% (28)	44.5% (93)	18.7% (39)
E4	I am not a very enthusiastic person	19.6% (41)	30.6% (64)	24.9% (52)	18.2% (38)	6.7% (14)
E5	I take charge	2.9% (6)	11.5% (24)	16.3% (34)	44.0% (92)	25.4% (53)
E6	I can talk others into doing things	8.6% (18)	13.4% (28)	10.5% (22)	49.3% (103)	18.2% (38)
E7	I hold back my opinions	16.7% (35)	42.1% (88)	17.2% (36)	18.2% (38)	5.7% (12)

The results posted in Table 16 reveal that female teachers agreed on all the items. All the items except three had over half agreeing on the statements. The items were ‘I laugh a lot’ had 37.3% agreeing and 23% were neutral. In her article, Afridi, (2017) notes that laughter brings one closer to people, moves one into more positive mind-sets, can stimulate the immune system, enhance learning and memory and help coping better with the stressors in people’s lives. However, in some instances it has been reported to be harmful and thus controlled laughter might be more appropriate (Benwell, 2019). ‘I am

not an enthusiastic person' findings revealed that 24.9% agreed while 24.9% were neutral. Afridi, (2017) proffers that the absence of positive thoughts has a greater negative impact on health and well-being than does the presence of negative ones and that women undergoing menopause should cultivate positive thoughts and emotions. According to Dargan (2017), women undergoing menopause often lack the spark, energy and vitality to carry out their obligations and in addition, it is relevant to avail support to women going through menopause in view of helping them in getting vibrant and resourceful again. The statement that 'I hold back my opinions' 23.9% agreed while 17.2% were not sure. Fang (2007) proffers that open communication will foster effective decision making as well as enhance transparency which will in turn promote trust. Additionally, it will enhance efficient collaboration that promotes synergy and integrated workflows that make it easy to build value.

A majority, (59.4%) agreed that they warm up quickly to others while 18.2% were neutral. This corroborates with the findings of Afridi (2017) that Social interactions with family and community, nurturing relationship and healthy emotional support from friends are very effective means of coping with menopausal symptoms. Afridi, (2017) also postulates that menopause is a period in life characteristic of a drop in the physiological processes of the body and may lead to psychosocial alterations in form of interpersonal relationships.

Further, the findings revealed that 63.2% of the respondents agreed that they reveal little about themselves while 13.4% were not sure. This means that at menopause, female teachers reveal little about their self and this is contrary to the findings of Aarti, (2011) that social support is key to health and can even help one live longer. This is one of the first pieces of advice women share. Aarti further states that during menopause, women need other women with a rich life experience and wisdom to share.

Majority, (69.4%) agreed that they take charge. This serves as a backup that at menopause, primary school female teachers do take charge. In a report by the Fang (2007) there was a relationship between the menopausal symptoms and employee performance and that the severity of the menopausal symptoms may lead to a drop-in engagement at the work place as well as compromised job satisfaction. This may in return propagate a higher intention to quit work. The respondents agreed that they talk to others into doing things (67.5 %) while 10.5% were not sure. These findings are an implication that public primary school female teachers undergoing menopause can talk others into doing things. It further suggests a relatively stable emotional and mental outlook of the female teachers.

Table 17

Female Teachers' Means on Influence of Extraversion on Menopause Crisis

Code	Statements	Mean	SD
E1	I warm up quickly to others	3.45	1.105
E2	I laugh a lot	3.01	1.217
E3	I reveal little about myself	3.47	1.241
E4	I am not a very enthusiastic person	2.62	1.184
E5	I take charge	3.78	1.043
E6	I can talk others into doing things	3.55	1.184
E7	I hold back my opinions	2.54	1.139

The seven items in Table 17 on extraversion personality trait to menopause were measured using Likert scale of 1 to 5 where the lowest 1 represented strongly Disagree and the highest 5 represented Strongly Agree. A mean of 2.5 to 5.0 represented high influence while a mean of less than 2.5 meant less influence. The seven items indicate that the means ranged from 2.54 (SD=1.139) to 3.78 (SD=1.0413). Most of the means were above 2.5 meaning that majority of the respondents agreed with the statements. The

SD was high as per the statements 1.043 to 1.241 which is an indication that there was a high variation of the responses to the items. These findings collaborate with Fang (2007) whose study revealed that the lower levels of extraversion are associated with depression among all stages of menopausal women which is a psychological effect of menopause. The researcher obtained and analysed data on openness personality trait and presented it in Table 18.

Table 18
Descriptive Results on Openness Personality Trait

Code	Statements	1=SD	2=D	3=N	4=A	5=SA	Mean	SD
O1	I think quickly	4.8% (10)	18.7% (39)	32.1% (67)	30.6% (64)	13.9% (29)	3.30	1.074
O2	I formulate ideas clearly	5.7% (12)	3.8% (8)	23.0% (48)	47.8% (100)	19.6% (41)	3.72	1.010
O3	I avoid difficult reading material	15.8% (33)	30.6% (64)	10.5% (22)	35.4% (74)	7.7% (16)	2.89	1.262
O4	I love to reflect on things	1.9% (4)	3.3% (7)	9.1% (19)	66.0% (138)	19.6% (41)	4.01	0.734
O5	I seldom day dream	15.3% (32)	30.6% (64)	20.1% (42)	22.5% (47)	11.5% (24)	2.84	1.257

An examination of the results in table18 reveals that the respondents agreed on all the items. All the items had more than a third agreeing on the statements. A majority (85.6%) revealed that they love to reflect on things while 9.1% were not sure. Another 67.4% revealed that they formulate ideas clearly while 23% were not sure which implies that in Laikipia County, primary school female teachers at the menopausal age do formulate ideas clearly. Fang (2007) points out that menopause experience may lead to deterioration of professional self-esteem and in some times an individual may succumb

to sour moments at work; characteristic of mood swings and sudden memory lapses and this may crush the professional life of an individual. However, some women seem to harmoniously advance through menopause a period that marks the end of reproductive period but for others, menopausal symptoms may be so severe to the point of making menopause experience unbearable.

Further 44.5% of the findings revealed that they think quickly while 32.1% were neutral. This implies that in Laikipia County, primary school female teachers undergoing menopause think quickly. Contrary to this, Aarti, (2011) noted that women undergoing menopause exhibit signs such as: difficulty focusing on daily tasks, forgetfulness, losing your train of thought while reading or talking and unclear thought processes.

The results revealed that more than a third (34%) of the respondents agreed that they seldom day dream while 20.1 % were not sure. A cross-sectional study by Aarti, (2011) found that midlife influences daydreaming in such a way that there is a much larger mean for daydreaming frequency at 45-49 years of age for both men and women and a much smaller mean for sexual daydreaming beginning with 50- to 54-year-old women. The most salient outcome of the study was that daydreaming tended to be more prevalent among women who exhibited various psychological symptoms and who were less physically healthy and that menopause was not a moderating variable.

Table 19*Female Teachers' Means on Influence of Openness to Menopause Crisis*

Code	Statements	Mean	SD
O1	I think quickly	3.30	1.074
O2	I formulate ideas clearly	3.72	1.010
O3	I avoid difficult reading material	2.14	1.262
O4	I love to reflect on things	4.01	0.734
O5	I seldom day dream	2.04	1.257

The five items on openness personality trait to menopause were measured using Likert scale of 1 to 5 where the lowest 1 represented strongly Disagree and the highest 5 represented Strongly Agree. A mean of 2.5 to 5.0 represented high influence while a mean of less than 2.5 meant less influence. The five items indicate that the means ranged from 2.04 (SD=1.257) to 4.01(SD=0.734). Most of the means were above 2.5 with the highest item 'I love to reflect on things' 4.01 (SD=0.734) meaning that majority of the respondents agreed with the statement. However, there were two items that had low means 'I seldom day dream' 2.04 (SD=1.257) and 'I avoid difficult reading material 2.14 (SD=1.262). This means that most of the respondents disagreed with the statements. The SD were high as per the statements 0.734 to 1.262 which is an indication that there was a high variation of the responses to the items.

4.4.2 Inferential Statistics

The researcher did inferential statistics using regression analysis. The output of the analysis is presented in the section below.

Regression Analysis of the Relationship between Personality Traits and Menopause Crisis

The study did a regression analysis of the Relationship between Personality Traits and psychological interventions of Menopause Crisis and presented the findings in Table 20.

Table 20

Linear Regression of Personality Traits and Management of Menopause Crisis

Independent Variable	Neuroticism	Agreeableness	Conscientiousness	Extraversion	Openness	Overall Significance
Dependent Variable						
Menopause Crises Management	$r^2=0.652$	$r^2= 0.610$	$r^2=0.650$	$r^2=0.603$	$r^2=0.64$	$r^2=0.632$
Significance	0.013	0.041	0.033	0.048	0.0069	0.0349

**Correlation is significant at 0.05 confidence level

Table 20 shows the results of linear regression of personality traits and psychological interventions in managing menopause crises. There is a strong relationship between neuroticism and psychological interventions of menopause crises where ($r^2=0.652$; $p>0.013$) which was significant at 0.05. The results of the findings indicate that there is a significant difference between neuroticism and menopause crises. This disagrees with (Ready et al, 2012) who found that neuroticism was negatively associated with one's emotional well-being.

On agreeableness, the results show a strong relationship where ($r^2= 0.610$; $p>0.041$) which was significant at 0.05. The noted magnitude of linkage between agreeableness and menopause crises is consistent with Wieder-Husla et al (2014) who found that agreeableness significantly correlated at $p>0.05$ with all quality of life domains which means that women at menopause show positive, friendly attitude towards other people.

This can be achieved through psychological interventions of menopause related crises discomforts. There was a strong relationship between conscientiousness and menopause crises where ($r^2=0.650$; $p>0.033$) which was significant at 0.05. The results of the findings indicate there was a significant difference between conscientiousness and menopause crises. This agrees with the Schneider-Matyka et al (2016) who found a significant correlation between quality of life domains and the level of conscientiousness. The aforementioned findings concur with those of Azhari and Ghorban (2016) in their investigation of the relationship between personality characteristics and vasomotor symptoms in menopausal women where they found a significant correlation between intensity of hot flashes ($p=0.028$) and conscientiousness. The findings concluded that the treatment of menopausal women requires paying close attention to the personality of menopausal women to achieve effective treatment.

The relationship between extraversion and menopause crises show a strong relationship as indicated by ($r^2=0.603$; $p>0.048$) which was significant at 0.05. The findings revealed a significant difference between extraversion and menopause crises. These findings are consistent with Lauriola and Ian (2015) who found a positive relationship between extraversion and most measures of well-being in the younger and older individuals. There was a significant relationship between openness personality trait and menopause crises where ($r^2=0.643$; $p>0.0398$) which was significant at 0.05. The results of the findings indicated that there was a significant difference between openness and menopause crises.

The overall relationship between personality traits and menopause crises shows that ($r^2=0.632$; $p>0.0349$) which was less than 0.05 level of confidence. The null hypothesis H_{01} the influence of personality trait on the psychological interventions in managing

menopause crisis in not statistically was false and was therefore rejected. In conclusion, there was no significant difference between independent variable ‘personality traits’ and dependent variable ‘menopause crises. This has the implication that personality trait is a reliable predictor of the psychological interventions of menopause crises. These findings contrast with the findings of Tilmaz and Alvcı (2021) in their study on the relationship between personality traits, menopausal symptoms and marital adjustment where correlational analysis revealed significant negative correlations between marital adjustment and personality traits and menopausal symptoms. The relationship between personality traits and menopause crises using linear regression is further illustrated in Figure 6.

Figure 6

Linear Regression of Personality Traits v/s Menopause Crises

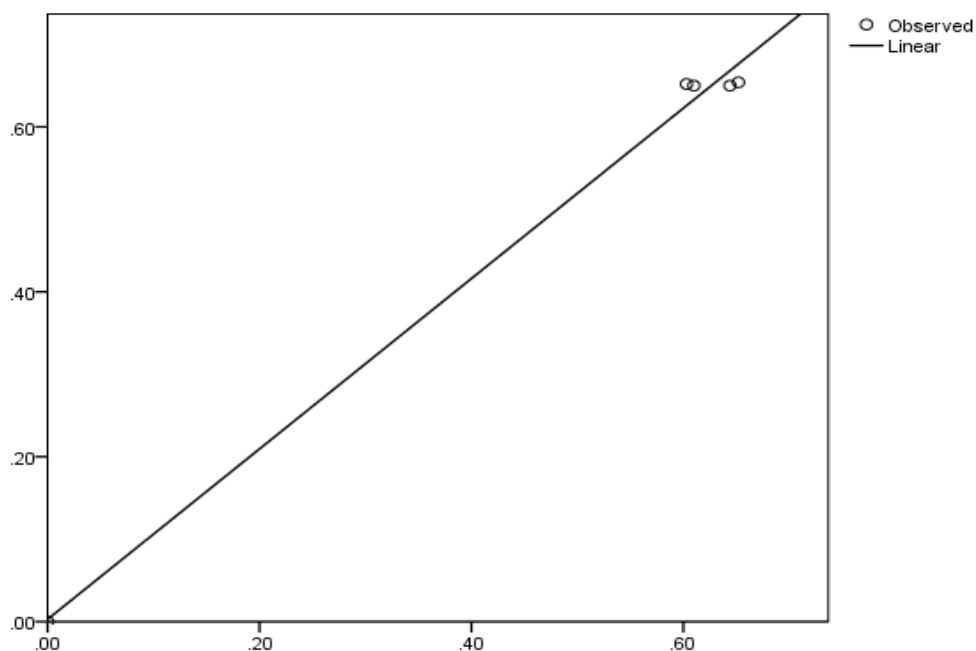


Figure 6 illustrates the close relationship between independent and dependent variables.

4.4.3 Focus Group Discussion on Personality Traits and Menopause Crises

The study obtained data on personality traits through FGD. Teacher counselors gave the information about the influence of personality traits and menopause crisis among female

teachers. The counselors reported that there were female teachers who portrayed neurotic personality traits like emotional instability that interfered with their work. They further revealed that conservative female teachers and those who are introverts tend to express uncomfortable menopausal symptoms since they fail to share out their experiences with their colleagues.

Teacher counselors gave the information that women who portrayed agreeable personality trait demonstrated by friendly attitude towards others experienced mild menopausal symptoms compared to those who had a negative attitude towards others. This is consistent with the suggestions of Song and Shi (2017) that agreeable individuals can make more accurate judgments when compared to those that are not agreeable. Further the counselors were asked to give opinions about menopausal women who portray conscientious personality trait. The teacher counselors revealed that those women who were orderly and regulated their emotions portrayed ability to reduce anxiety and depression tendencies. This concurs with Javaras (2012) suggestion that people with high levels of conscientiousness appear to be able to regulate emotion and recover more easily from negative stimuli possibly by reducing symptoms of anxiety and depression.

Further, the counselors revealed that menopausal women that were open to experience considered new ideas that they were given that guided them to deal with menopausal symptoms and therefore they were able to cope with the challenges that menopause subjected them into. This is consistent with Oluyinka (2011) report that at work, employees with high level of openness may be more inclined to divergent thinking, ability to consider new ideas and intellectual curiosity.

The counselors revealed that menopausal symptoms alter concentration and focus on the job responsibilities hence could have a negative effect on professional experience and

performance. This agrees with Griffiths, MacLennan and Hassard (2013) whose study concluded that employers and healthcare practitioners should be aware that menopausal transition causes difficulty for some women at work and that much can be done to support them. They also revealed that hot flushes and unpredictable menses among female teachers lowers the self-esteem and makes female teachers feel embarrassed. Menopause related myths inhibit female teachers from disclosing their menopause states and experience for fear of being negatively branded by their colleagues especially those who are less exposed about menopause. Failure to appreciate and accept one's menopausal status was also reported to affect the psychological state of menopausal women at work and which could affect their performance.

4.5 The Influence of Physical Environment on Menopause Crises

The second objective of the study was to establish the influence of physical environment in managing menopause crises among female teachers in Laikipia County. Data on the influence of physical environment was gathered using asset of nine (9) closed ended items on the female teachers' questionnaire. Additional data was captured using the teacher counselors Focused Group Discussion and Sub County Directors' interview schedule which was used to supplement the information provided by the female teachers.

4.5.1. Descriptive Data Analysis

The respondents were guided by a Linkert scale in which 1 represented Strongly Disagree (SD), 2 was Disagree (D), 3 was Neutral (N), 4 was Agree (A) and 5 was Strongly Agree (SA). The data obtained from the study was analysed then presented in the Table 21.

Table 21*Distribution of Responses on Physical Environment on Menopause Crises*

Item	SD	D	NS	A	SA
There are enough physical facilities in this school for all the teachers	18.6% 29	38.5% 60	10.3% 16	25% 39	7.7% 12
We have adequate toilets to meet the needs of female teachers undergoing menopause	17.9% 28	37.2% 58	14.7% 23	7.7% 12	22.4% 35
The distance from the office to the classrooms is favourable to female teachers going through menopause	26.3% 32	30.1% 23	8.3% 13	20.5% 47	14.7% 41
The staff room is spacious enough for the women undergoing menopause to feel comfortable	32.1% 22	28.2% 44	14.7% 23	12.2% 50	26.3% 17
There is adequate clean water supply in our school.	26.9% 22	26.9% 42	10.3% 16	14.1% 34	26.9% 42
The classrooms in this school are spacious enough	20.5% 32	44.9% 22	6.4% 10	14.1% 70	14.1% 22
The classes in this school are highly ventilated which is favourable for female teachers going through menopause.	26.9% 16	30.7% 37	10.9% 28	26.9% 42	10.3% 33
The offices in this school are well ventilated	21.2% 13	21.2% 13	13.5% 21	22.4% 35	21.8% 34
The classrooms are crowded which is not favourable for female teachers in this school.	22% 34	26% 56	10% 23	27% 0	32% 42

An examination of the results posted in Table 21 reveal that the respondents disagreed on all the items. All the items except one had more than half of the respondents disagreeing with the items. This is an indication that schools' physical facilities influence the female teachers' menopause crisis. The item 'the offices in the school are well ventilated' 67.6% disagreed while 17.9% were not sure. This means that enough ventilation is important to

allow women who are menopausal get enough air and overcome hot flashes. This concurs with Biró (2007) who pointed out that enhancing the supply of fresh air through improved ventilation is tantamount to increased alertness, reduced tiredness as well as stable mood. Additional to this, improved ventilation boosts the arithmetic potential of pupils and hence their performance. In a post on the urban green periodical, about the effect of poor ventilation on the performance of employees, Scheib (2017) postulates that good ventilation puts a check on absenteeism and infectious airborne diseases, hence ensuring that workers' health and their entire welfare is assured.

Heldari et al (2017) posits that every manager must conduct risk assessment to identify potential health and safety hazards. Brewis (2020) in his study on the health and socioeconomic impact on menopausal women working from home case reports in women's health pointed that during the global COVID-19 pandemic, huge number of women who usually work on their employer's premises have been working from home with many others made redundant. For menopausal women, who make-up even greater proportion of working women, working from home may have positive and negative health and socio-economic impacts. This is because a woman's experience of menopause is unique to her, working from home means individual women can take the steps necessary to ameliorate her specific symptoms.

Majority of the respondents (70.0%) disagreed that the classrooms in the school are spacious enough while 6.4% were not sure. Findings by Nanzushi (2015) showed that a spacious office with enough lighting and devoid of noise would facilitate increased employees' performance. These corroborated with the findings of McCoy and Evans (2005) that a conducive physical environment would save the employees from work-related stress and enhance their performance to the expected standards. While many women undergo menopausal transition while they are in paid employment, the effect of

poor working conditions on women's' experience of the menopause has received scant empirical attention. A study by Riach et al (2016) in a forced entry multivariate regression analysis revealed that high supervisor support, ($\beta=0.10$; $p=0.04$), being employed on full-time basis ($\beta=-0.11$; $p=0.02$) and having control over workplace temperature ($\beta=-0.11$; $p=0.02$) were independently associated with lower menopausal symptoms reporting. These findings may help inform the development of tailored occupational health policies and programs that cater for the needs of older women as they transit through menopause in the workplace. On the other hand, Saltimo et al (2020) in their study on fostering work ability among menopausal women suggested that to improve women's job sustainability across their entire work-life plan, it may be crucial to develop organizational policies, training and activities specifically dedicated to sustaining menopausal women's well-being.

It was revealed further that 60% of the respondents disagreed that the staffrooms are spacious enough for the women undergoing menopause while 14.7% were not sure. A study by Fang (2007) on the effects of poor office environment on the secretary's job performance showed that small floor space and congested nature of offices does not give the secretaries adequate comfort and balance to discharge their duties effectively and efficiently. Similarly, a study by Nanzushi (2015) revealed that a spacious office with enough lighting and devoid of noise would facilitate increased employees' performance. These corroborated with the findings of Tang et al (2019) that a conducive physical environment would save the employees from work-related stress and enhance their performance to the expected standards.

Further findings revealed that 57.1% of the respondents disagreed that there are enough physical facilities for all teachers in the school while 10.3% were not sure. Another 58% of the respondents disagreed that the classrooms are not crowded while 15% were not

sure. This implies that with inadequate facilities female teachers' menopausal symptoms tend to exuberate making it difficult for them uncomfortable as they work.

Majority (55.1%) of the respondents disagreed that there are adequate toilets in the schools to meet the needs of female teachers undergoing menopause while 14.7% were not sure. This implies that there were inadequate toilets to meet the needs of female teachers undergoing menopause in Laikipia County. Aidara (2016) asserts that accessibility of WASH facilities in the workplace will help grant women their right to health and boost their standards of living and lead to higher productivity and greater participation. To the society in general, it will enhance equal and equitable access to WASH facilities especially in vulnerable situations. The findings further revealed that 53.9% of the respondents disagreed that there is adequate clean water supply in the schools while 10.3% were not sure. This means that women who are in menopause lack enough water to cool themselves once hot flashes occur. This corroborates with the findings of a report by Aidara (2016) on the effect of drinking water on work capacity and productivity; that drinking water increases alertness and attention while decreasing water intake leads to confusion and a drop in overall cognitive performance in adults. This collaborates with Hunter (2015) who postulates that provision of adequate and clean drinking water directly influences the rate of absenteeism and this may be due to improved hydration hence improved academic commitment and passion for the students. The distance from the office to the classrooms posted 56.4% of the respondents disagreeing that it is favourable to female teachers going through menopause while 8.3% were not sure. This implies that the female teachers find moving from their offices to classrooms tiring as they cover long distances to the classrooms. In accordance with Salah (2010), work place design directly affects employees' performance, by determining job satisfaction, employee morale and citizenship. This in return determines the seamless

flow of events in an organization as well as employee coordination and efficiency in communication. As a result, it will lead to reduced absenteeism and employee commitment resulting in higher performance.

Further analysis was done to determine whether the female teachers' menopause crisis was influenced by physical environment. The means of responses to items were computed and then transformed into influence of physical environment in managing menopause crisis as presented in Table 22.

Table 22

Female Teachers' Means on Influence of Physical Environment on Menopause Crisis

Item	Mean	SD
There are enough physical facilities in this school for all the teachers	1.65	1.254
We have adequate toilets to meet the needs of female teachers undergoing menopause	1.79	1.427
The distance from the office to the classrooms is favourable to female teachers going through menopause	2.27	1.504
The staff room is spacious enough for the women undergoing menopause to feel comfortable	2.97	1.270
There is adequate clean water supply in our school.	2.21	1.449
The classrooms in this school are spacious enough	2.18	1.398
The classes in this school are highly ventilated which is favourable for female teachers going through menopause.	2.25	1.308
The offices in this school are well ventilated	2.81	1.349
The classrooms are crowded which is not favourable for female teachers in this school.	2.03	1.472

The means of the items in table 22 ranged from 1.65 (SD=1.254) to 2.97(SD=1.270).

Most of the means were below 2.5 implying that majority of female teachers disagreed

with the statements. The SD ranged from 1.270 to 1.504 which was very high. This indicates that there was reasonable variation in the items. The high mean is an indication that physical environment influence menopause crisis among female teachers.

The influence physical environment on menopause crisis was done using a regression analysis then results presented in table 23.

Table 23

Linear Regression of Physical Environment and Menopause Crises.

Independent Variable	Work area	Amenities- Toilets, Resting Rooms	Utilities- water	Overall significance
Dependent Variable	office outlay ventilation			
Menopause Management Crises	$r^2=0.680$	$r^2=0.640$	$r^2=0.620$	$r^2=0.683$
Significance	0.042	0.039	0.0384	0.0398

**Correlation is significant at 0.05 confidence level

Table 23 shows the results of linear regression of the physical environment and menopause crises among female teachers in Laikipia County. The relationship between menopause crises and the work area shows a significant relationship with ($r^2=0.68$; $p>0.042$) which was significant at 0.05. The result of the study indicates that there was a significant difference between the work area that includes the office outlay and ventilation and menopause crises.

Menopause crises and school amenities posted a significant relationship ($r^2=0.64$; $p>0.039$) which was significant at 0.05. The results further showed that there was a significant difference between the school amenities and menopause crises The relationship between menopause crises and utilities showed a significant relationship where ($r^2=0.620$; $p>0.0384$) which was significant at 0.05 level of significance. The

findings showed that there was a significant difference between the available utilities in the study area and menopause crises.

Overall the regression relationship between physical environment and menopause crises shows that ($r^2=0.683$; $p>0.0398$) which is less than 0.05. The null hypothesis was therefore rejected. In conclusion, there was a significant difference between the independent variable 'physical environment'; and the dependent variable 'menopause crises'. Thus, the inadequate unfavourable physical facilities in the public schools were lowering the coping of menopause crises among female teachers in the study area. The observation also intimates that if physical facilities that include spacious and well-ventilated classrooms, ventilated staff working area, water and toilets are targeted and provided in public primary schools, coping with menopause among female teachers in the said schools may be realized.

Salah (2010) pointed that workplace design directly affects employees' performance only by determining job satisfaction and employee morale. Thorogood (2015) indicated that women need access to clean drinking water because lack of it can make menopause particularly tough for menopausal women in general and specifically for teachers. This line of argument is consistent with Garick (2019) observation that the aspects of work which women cite as making menopause symptoms worse are high temperature, poor ventilation, humidity and no access to quiet rest place.

The relationship between physical environment and management of menopause crises using linear regression is further illustrated in figure 7.

Figure 7

Linear Regression of Physical Environment and Menopause Crises

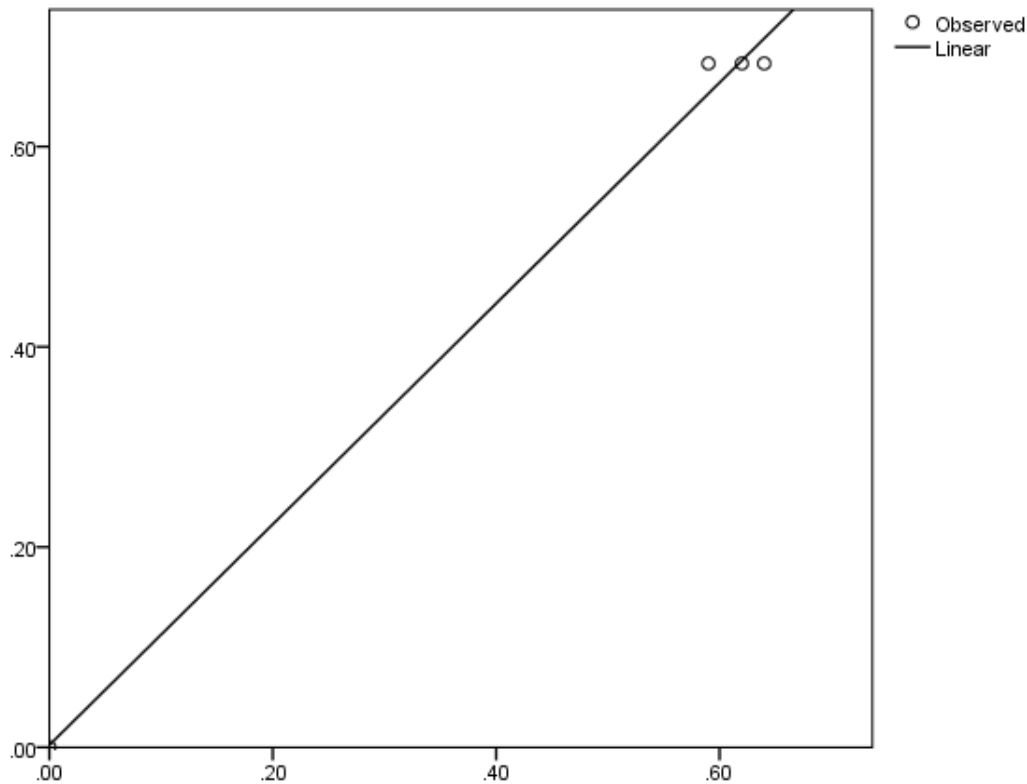


Figure 7 illustrates how the independent variables are close to the dependent variable indicating a close relationship.

4.5.3 Interview Schedule and FGD Data on Physical Environment and Menopause Crisis

The study obtained qualitative data on physical environment through a key informant interview and through FGD.

The study aimed at determining the influence of schools 'physical environment on the psychological interventions in managing menopause crisis among female teachers in public primary schools in Laikipia County. The teacher counselors and Sub County Directors of education were asked to give information about the availability of water in the public primary schools. The responses indicated that there was inadequate clean and

safe drinking water in most public primary schools. A study by Stachenfeld (2015) showed that older adults and particularly women undergoing menopause are more at risk of dehydration because they may replenish fluids in their body at a slower rate. Access to water by women undergoing menopause has been identified as a reliever to associated conditions especially hot flashes that is common to over 75% of menopausal women. The hot flashes that can hit anytime and often accompanied by night sweats, headaches, dizziness, nausea, chills and/or vomiting have a potential of affecting daily activities of the affected person. However, water can support a menopausal woman during uncomfortable condition (Advanced Purification Engineering Corp, 2019). This means that lack of access to clean water by menopausal teachers can have a negative effect on their bodies and thus there is need to improve supply of clean water to the schools as a way of making their lives comfortable.

The SCDEs and teacher counselors were asked to give reports about the availability of toilet facilities to which they reported that most of public primary schools have inadequate toilets for teachers and those that are available are mostly not in very good conditions. The study by Baker, et al (2017) provided evidence that WASH access and practices are associated with self-reported reproductive tract infection symptoms in rural Indian girls and women from different reproductive life stages. There is need therefore to ensure that primary schools in Laikipia County are able to access WASH facilities in order to boost the physical health of female teachers undergoing menopause.

The SCDEs and teacher counselors reported that class rooms and staffrooms were crowded and that in a number of schools, classrooms are located far from the staffrooms. These conditions are not suitable for menopausal female teachers. A study by Hardy, Hunter, & Griffiths (2018) that sought to determine what working menopausal women want revealed that most women were concerned about their physical work environment.

They suggested that they would prefer to see improved ventilation and temperature controls in their working areas as well as readily available cold drinking water. Other issues they expressed were a well-designed, supportive seating and accessible rest areas and toilets. In retrospect, there is need to ensure that the physical facilities are conducive enough to ensure menopausal female teachers are comfortable.

4.6 Influence of Social Environment on Menopause Crises

The third objective of the study sought to establish the influence of social environment on psychological interventions in managing menopause crisis among female teachers in Laikipia County. Data on the influence of social environment was gathered using asset of 12 closed ended items on the female teachers' questionnaire. Additional data was captured using the teacher counselors Focused Group Discussion which was used to supplement the information provided by the female teachers.

4.6.1 Descriptive Data Analysis on Influence of Social Environment on Menopause Crises

The respondents were guided by a Linkert scale in which 1 represented Strongly Disagree (SD), 2 was for Disagree (D), 3 was for Neutral (N), 4 was Agree (A) and 5 was for Strongly Agree (SA). The study obtained data that was analysed and presented in Table 24.

Table 24*Influence of Social Environment on Menopause Crises*

Statements		SD	D	N	A	SA
Male teachers relate well with older women in the work place	%	4.8	13.4	8.6	44.5	28.7
	f	10	28	18	93	60
Female teachers at menopause are open to their female colleagues	%	7.7	27.8	21.1	31.1	12.4
	f	16	58	44	65	26
There is a smooth relationship between older female and young male teachers	%	6.7	23.9	7.7	39.7	22.0
	f	14	50	16	83	46
Staff believe that menopause is a non-issue	%	13.9	17.7	16.7	27.8	23.9
	f	29	37	35	58	50
TSC officials are aware of menopausal condition of affected female teachers	%	42.6	22.0	16.7	8.1	10.5
	f	89	46	35	17	22
Females teachers at menopause are accorded consideration attention such as sick leaves when need be	%	50.2	23.0	8.6	14.4	3.8
	f	105	48	18	30	8
Working schedule is considerate of female teachers who are at menopause	%	61.7	23.4	6.2	4.8	3.8
	f	129	49	13	10	8
Women at menopause are allowed to move to a different location if their health condition makes it necessary	%	33.5	38.8	14.8	8.1	4.8
	f	70	81	31	17	10
The school has informal support (that is support beyond official support, e.g. being given water) networks to help female teachers who are at menopause	%	50.2	26.8	16.3	2.9	3.8
	f	105	56	34	6	8
The school has occupational health guidelines in support of female teachers at menopause when they experience a problem during work	%	51.7	27.3	12.4	3.8	4.8
	f	108	57	26	8	10
Female teachers at menopause feel embarrassed discussing their issues with male colleagues	%	15.3	14.8	22.0	27.8	20.1
	f	32	31	46	58	42
Female teachers at menopause discuss their needs with their bosses and co-workers.	%	56.0	23.0	12.4	5.7	2.9
	f	117	48	26	12	6

The results as shown in Table 24 showed that 73.2% of the respondents agreed that male teachers relate well with older women in the workplace while 8.6% were not sure. This implies that in most of the situations, female teachers do not encounter problems when relating with male teachers. According to Wales Trades Union Congress (2017), it is difficult for male counterparts and especially line managers to understand or sympathize with menopausal workers. Often, they might be too embarrassed or reluctant to discuss the issue or, conversely might tend to belittle the experience and the related symptoms.

The study sought to find out whether menopausal female teachers are open to their other female colleagues. Data revealed that 43.5%, (91) of the respondents agreed that female teachers who are at menopause are open to their other female colleagues, compared to 35.5% (74) of those that had a different opinion. A study by Gavin (2014) showed that older women depict a high level of enthusiasm in their jobs and even seek and utilize any opportunities that may prop up all through their operation in an attempt to build up their career path and success. A study by Wales Trades Union Congress (2017) showed that though in the wider cycles menopause is not necessarily regarded as a gender issue; younger women may be very dismissive of issues that do not affect them. This means that despite there being a good relationship between young female teachers and menopausal female teachers, the possibility of disjointed approach between the young female teachers and those undergoing menopause is there.

The study further sought to know whether there is a smooth relationship between menopausal female teachers and young male teachers. The results indicated that 61.7% of the respondents agreed while 7.7% of the female teachers were not sure. Duffy et al (2011) suggested that improved support networks would diminish some of the confusion about symptoms experienced by menopausal women. Miller (2019) concurs with this suggestion and asserts that within the workplace, depression is linked to poor

interpersonal relationships with colleagues and decreased work satisfaction. The study further sought to determine whether female teachers undergoing menopause would consider menopause as a non-issue. The results showed that cumulatively 51.7% agreed that it is a non-issue, while 16.7 were not sure. According to Davies (2017), menopause is traditionally perceived as a private matter or 'a women's issue'. Subsequently it is seldom discussed as an open topic. It is rarely considered in the design of workplaces and working practices.

The study further sought to determine whether TSC officials are aware of menopausal conditions of affected female teachers. Cumulatively, 64.6% of the respondents were of the opinion that TSC officials were not aware while 16.7% were not sure. This implies that to the employer, menopause is not given a strong consideration and most often it is just assumed. This agrees with views by Newson (2017) that often symptoms of the menopause are under recognized, undervalued and not taken seriously. These psychological symptoms associated with menopause such as loss of self-confidence, low self-esteem, anxiety and depressive symptoms are the ones that often affect women the most. This collaborates with Prothero et al (2021) who found that majority of menopausal women do not feel supported at work.

The study sought data on whether female teachers at menopause are accorded consideration such as sick leaves when need be. The study findings revealed that 83.2% of the respondents cumulatively disagreed that they were accorded consideration such as sick leaves when need be while 8.6% were not sure. This implies that in most cases, the administration will not grant an unwell female teacher leave to go and attend clinic for ailments or discomfort related to menopause. Menopause has adverse influence on a woman's work ability but varies across individuals. Menopause is associated with higher work absenteeism and productivity impairment due to the invaluable experience and

skills of menopausal women. Absenteeism and work productivity impairment adversely affect work performance and organizational productivity. Menopause impairs work ability, performance and quality of related work outcome. Evidently, menopause presents a critical aspect of workplace issues which require management support (Mwangi, 2019).

Menopause impairs work productivity and increases work absenteeism. There is need for work places to adopt measures for supporting menopausal women to improve work productivity and to mitigate its adverse effects particularly recognizing menopause as a work place issue. This requires organizations to develop and institutionalize appropriate policies and staff support programs to support women during menopause transition and improve their work productivity.

A study carried out by Geukes et al (2011) revealed that menopausal symptoms are negatively associated with work ability and may increase the risk of sickness absence. Many career women go through the menopause while working full time or part time. Menopausal symptoms such as hot flushes, irregular periods, mood swings and poor memory are often at odds with the self-confident professional image which women want to convey while working. This means that it might be prudent to consider granting menopausal female teachers leave of absence when they need it in view of enabling them work with confidence after the treatment.

As per the findings, 85.1% disagreed with the statement that the working schedule is considerate of female teachers who are at menopause. The findings implied that work schedule not favour female teachers undergoing menopause in Laikipia county. These findings are consistent with Webster (2016) who asserts that the awareness of employers has to be raised to explore a wide range of accommodations that are flexible to working arrangements and working environments. This is because menopausal symptoms can be exacerbated by work and working conditions (Norton & Tremayne, 2020). In the same

line of exploration Viotti et al (2021) indicated that women with high menopausal symptoms receive more exposure to the negative effects of job demands and workability compared to women with low menopausal symptoms.

The study further sought to determine whether female teachers at menopause are allowed to move to a different a location if their health condition makes it necessary. The study revealed that a cumulative (72.3 %,) disagreed with this opinion while 14.8% were not sure. This implies that in most of the cases geographical job transfers on matters of conditions tangential to menopause among female teachers in the primary schools in Laikipia County are not allowed. It is not therefore possible for any teacher to be granted a transfer from one school to another within the county or to another on the basis of menopause-related health issues.

The study further sought to determine whether the school has informal support (that is social support that is beyond official support,) networks to help female teachers who are at menopause. The study showed that cumulatively, (87 %,) of the respondents disagreed with the view that their school offered them informal support to help them based on the fact that they were at menopause while 16.3% were not sure. This implies that in most primary schools in Laikipia County there are no informal support mechanisms for female teachers undergoing menopause. Verdonk, Bendien and Appelman (2022) gave the view that due to taboo, menopause remains unrecognized and unaddressed within an organizational context. Polat et al (2021) agrees with these findings and found a positive and significant relationship between menopausal symptoms and social support and that menopausal symptoms decreased as social support increased. This is inconsistent with Arnot (2021) who gave the view that there was no strong evidence that emotional support led to lower vasomotor symptoms.

The study further sought data on whether the school has occupational health guidelines in support of female teachers at menopause when they experience a problem during work. The obtained data revealed that cumulatively (79 %,) of the respondents disagreed with the statement while 12.4% were not sure. This implies that in most primary schools within Laikipia County, there are no occupational health guidelines that would support female teachers when they reach menopause. This is a policy issue that would call upon education managers and stakeholders to take a better and keener interest on issues of health and female teachers undergoing menopause. This agrees with Gumusay & Erbil, (2018) in their study of relationship between perceived social support and attitudes towards menopause among women and affecting factors. They pointed out that majority of women had a negative attitude towards menopause and perceived social support during menopause was at low levels. Information programs need to be focused on developing positive attitudes in both men and women in order to strengthen women's social support and preparation during menopause.

The study further sought data on whether female teachers at menopause feel embarrassed discussing their issues with male colleagues. Cumulatively, (30.1%) agreed with the statement while 22% were not sure. This implies that in most of the cases, matters to do with menopause are not discussed between female teachers undergoing menopause and their male counterparts. This implies that the expression of female teachers to male teachers on menopause is limited and which could mean that male teachers' awareness on menopause matters affecting female teachers is limited. Clarabut (2021) agrees with these findings and gave the view that majority of menopausal women are unwilling to disclose menopausal related health problems to their colleagues due to negativity and stigma around menopause. This is because they can feel embarrassed believing that it can undermine their professional image.

The study sought data on whether female teachers at menopause are accorded consideration such as sick leaves when need be. As per the findings, (85.1%) disagreed with the statement that the working schedule is considerate of female teachers who are at menopause. The findings implied that work schedule does not favour female teachers undergoing menopause in Laikipia County. The study further sought to determine whether female teachers at menopause are allowed to move to a different a location if their health condition makes it necessary. The study revealed that 72.3%, disagreed with this opinion while 14.8% were not sure. This implies that in most of the cases geographical job transfers on matters of conditions tangential to menopause among female teachers in the primary schools in Laikipia County are not allowed. It is not therefore possible for any teacher to be granted a transfer from one school to another within the county or to another on the basis of menopause-related health issues.

The study further sought to determine whether female teachers undergoing menopause are able to discuss their needs with their bosses and co-workers. The responses showed that 79% disagreed while 12.4% were not sure. This means that cumulatively the number of respondents that could not agree with the statement which suggests that matters of menopause at primary schools in Laikipia County are by and large maintained as personal and private. This agrees with Davies, (2017) whose views shows that menopause is traditionally perceived as a private matter or ‘a women’s issue. Most often colleagues and bosses do not take such as matters that would affect them. Sexton (2022) concurs with this assertion and posits that menopause is one of the greatest workplace issues that many have never heard of and some are unwilling to talk about. This implies that menopause experience makes women to suffer in silence rather than disclose what they are going through. The findings concur with Clarabut (2021) suggestion that many menopausal women are unable to complain to their employers fearing they will be seen

as old, incapacitated or lazy. They don't want to be singled out as having women issues. This implies that menopausal women do not share the challenges they experience with their employers. This line of exploration is consistent with Parsa, Tabesh and Karami (2015) who suggested that supportive consulting can be suitable for improving women's health, reducing problems and enhancing quality of life during the menopause period. This implies that women in menopause transition need to discuss their needs with their bosses and co workers

Further analysis was done to determine whether the female teachers' menopause crisis was influenced by social environment. The means of responses to items were computed and then transformed into influence of social environment on menopause crisis as presented in Table 25.

Table 25*Female Teachers' Means on Influence of Social Environment on Menopause Crisis*

Statements	Mean	SD
Male teachers relate well with older women in the work place	2.11	.760
Female teachers at menopause are open to their female colleagues	2.60	1.09
There is a smooth relationship between older female and young male teachers	1.49	1.06
Staff believe that menopause is a non-issue	1.07	1.00
TSC officials are aware of menopausal condition of affected female teachers	2.00	.800
Females teachers at menopause are accorded consideration attention such as sick leaves when need be	1.80	1.05
Working schedule is considerate of female teachers who are at menopause	1.90	.092
Women at menopause are allowed to move to a different location if their health condition makes it necessary	1.67	.820
The school has informal support (that is support beyond official support, e.g. being given water) networks to help female teachers who are at menopause	2.84	1.02
The school has occupational health guidelines in support of female teachers at menopause when they experience a problem during work	1.91	0.930
Female teachers at menopause feel embarrassed discussing their issues with male colleagues	2.02	0.910
Female teachers at menopause discuss their needs with their bosses and co-workers.	2.92	0.870

The means of the items in table 25 ranged from 1.07 (SD=1.07) to 2.92 (SD=1.00). Most of the means were below 2.5 meaning that majority of the female teachers disagreed with the statements. An examination of the SD reveal that they were high ranging from 0.76 to 1.09. This is an indication that there was variation in the respondent's responses to the items. This means that the respondents were of the view that social working environment influence menopause crisis. According to Collier (2022), improving knowledge about menopause will contribute to a work environment where women feel that their needs are addressed. Similarly, Van der Heijden (2021) asserts that sustainability of women's

careers in the second half of life is of increasing importance given the increasing equal representation of men and women in working organizations and the impact of the changing nature of work in the 21st century on older workers.

4.6.2 Inferential Statistics

The study did inferential statistics for data on physical environment against menopause crisis. A regression analysis was done then results presented in the section below.

Regression Analysis of the Relationship between Social Environment and Menopause Crisis

The study did regression analysis on the Social environment then presented the data as shown in Table 26.

Table 26

Linear Regression of Social Environment and Menopause Crises

Independent Variable	Relations with colleagues	Relations with staff officials	Job schedule management and sick leaves	Overall significance
Menopause crises management	$r^2=0.623$	$r^2=0.631$	$r^2=0.602$	$r^2=0.645$
Significance	0.0124	0.031	0.045	0.030

**Correlation is significant at 0.05 confidence level

Table 26 shows the results of linear regression of the social environment and menopause crises among female teachers from the study area. The relationship between menopause crises and female teachers' relationship with colleagues shows a significant relationship with ($r^2=0.623$; $p>0.014$) which was significant at 0.05 level of confidence. The results

of the study indicate that there was a statistically significant relationship between female teachers' relationship with colleagues at work places and menopause crises.

Relations with staff officials and female teacher's menopause crises were found to be significant where ($r^2=0.631$; $p>0.031$) which was significant at 0.05. The analysis indicated that there was a statistically significant relationship between female teachers' relations with staff and menopause crises. On job schedule management and menopause crises, the results show a significant relationship where ($r^2=0.602$; $p>0.045$) which was significant at 0.05 significant level. The results of the study indicate that there was a significant difference between the female teachers' job schedule and the psychological interventions of menopause crises.

Overall the regression relationship shows a significant relationship where ($r^2=0.645$; $p>0.03$) which was less than 0.05 level of confidence. Based on the foregoing observations, the null hypothesis H_{03} that the influence of social environment in managing teachers' menopause crises' is not statistically significant was found to be false and therefore rejected. In conclusion, there was a relationship between independent variable 'social environment' and dependent variable 'menopause crises'. Social environment and menopause crises were therefore statistically independent.

Thorogood (2015) pointed that work environment has been shown to exacerbate the effects of menopausal symptoms. Garick (2019) further established that long hours, short deadlines and high work load can make menopause symptoms worse. There is need for interventions to help female workers deal with the challenges emanating from menopause related crises so that they can perform their duties effectively.

The relationship between social environment and menopause crises using linear regression is further illustrated in Figure 8.

Figure 8

Linear Regression of Social Environment and Menopause Crises

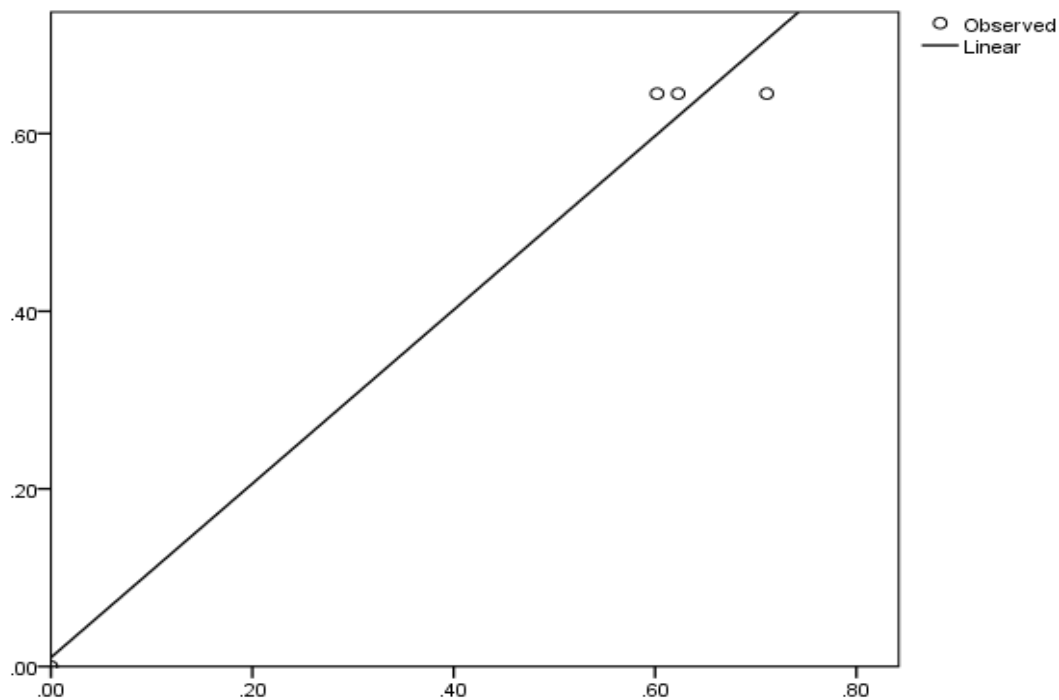


Figure 8 illustrate a linear relationship between independent and dependent variables.

4.6.3 Focus Group Discussion Social Environment and Menopause crises

The study obtained qualitative data on social environment through FGD. The study sought to determine how social environment in the school affect menopause crisis among female teachers. Qualitative data was obtained on issues such as social interaction with colleagues and provision of sick offs.

Information from teacher counselors showed that young male teachers are less concerned and less aware of the menopause crisis. However, elderly males are more appreciative of menopause issues due to their long span of experience and exposure on menopause issues. These findings show a variation between how age affects the way female teachers relate to menopausal female teachers. A study by Gavin et al (2015) identified that feelings of diminished usefulness and relevance to one's role were tied to the culture of

menopausal women's immediate working environment. Women reported various levels of gender and age discrimination or stereotypes within the workplace. The findings indicate that gender-based issues are relevant to menopausal women and could affect their productivity.

On the work, the counselors reported that teaching schedules were tight to an extent that the menopausal female teachers were denied rest and relaxation time. They were instead overloaded with tasks and duties. Women undergoing menopause are not readily granted sick offs in case of menopausal symptoms. These findings are contrary to Papadatou (2019) in the study done in the United Kingdom showed that many working menopausal women feel forced to take days off work with 24% of those interviewed saying they had taken a sick day off due to suffering associated with menopause symptoms. The study revealed that the UK's national average of menopausal women who called to work while sick more than once stood at 11%. A study by Gavin et al (2015) revealed that work-related and organizational factors have an important role to play in ameliorating or exacerbating women's experience of menopause while at work. The extent to which menopausal symptoms lead to upheaval of women's working lives, suggests that there is a rationale for institutions to develop policies that offer menopausal women adequate support at work.

Asked whether female teachers disclose their menopausal conditions the counselors gave the information that some myths about menopause inhibit menopausal female teachers from disclosing their conditions for fear of being stigmatized. Local organizational culture has been reported to have a strong influence on women's experience of menopause at work. Women worked in male-dominated jobs tend to emphasize the stigma associated with hormonal variations, which results to a silence on matters related to women's bodies. In the same light, women in demanding and senior

positions more often believe that menopause is a non- issue to be discussed in the workplace as it could affect how others perceive them in terms of their strengths and abilities (Gavin et al, 2015). Stigmatization is thus an issue that affects the way menopause issues are handled and managed in many organizations.

4.7 Psychological Interventions Used in Managing Menopause Crises

The fourth objective of the study sought to establish the influence of psychological interventions in managing menopause crises among female teachers in Laikipia County. Data on the influence of psychological interventions was gathered using asset of 9 closed ended items on the female teachers' questionnaire. Additional data was captured using the teacher counselors Focused Group Discussion and Sub county directors' interview schedule which was used to supplement the information provided by the female teachers. The female teachers closed ended items are summarized in Table 27 .

4.7.1 Descriptive Data Analysis

Data obtained was descriptively analysed and presented in the section below. The first part dealt with examining psychological issues related to menopause while the second part captured how the respondents coped with issues related to menopause.

4.7.2 Psychological Issues among Menopausal Female Teachers

This section captures results of data analysis on psychological issues affecting menopausal female teachers. The outcome of data analysis is presented in Table 27.

Table 27*Psychological Issues among Menopausal Female Teachers*

Item	SD	D	NS	A	
I experience emotional instability	14.8%	22%	22.5%	33.5%	7.2%
	32	47	48	72	15
I am experiencing persistent feelings of sadness	18.7%	3.8%	14.4%	29.2%	34 %
	40	73	31	63	8
Respondents complain of lack of concentration in their work	5.7%	28.7%	8.1%	33%	24.4%
	52	62	17	71	12
Respondents complain of insomnia due to menopause related symptoms	1.9%	29.2%	10%	26.3%	32.5%
	70	57		63	4
Respondents complain of fatigue in the work place	13.4%	29.1%	10.5%	27.3%	19.1%
	41	59	23	64	29

An examination of the findings posted in table 27 revealed that respondents agreed with most of the items. The results reveal that 40.7% of the respondents agreed that they experience emotional instability while 36.8% disagreed with the statement while 22.5% were neutral. These findings concur with Kaur and Kaur (2022) who indicated that the cognitive performance of women was sensitive to severe depression and sexual dysfunction. Similarly, Farvareshi and Mirghafourvand (2022) in their study on the effect of acceptance and commitment therapy on mood, sleep quality and quality of life in menopausal women asserts that during menopause, depression and anxiety are among the most common psychological symptoms of menopause. Kruif et al (2016) revealed that perimenopause is a phase in which women are vulnerable to develop depressive symptoms.

The findings of Tang et al (2019) in their study of the symptoms of anxiety and depression among Chinese women transitioning through menopause also revealed that

symptoms of depression were more common than symptoms of anxiety. This implies that depression is one of the most common psychological symptoms of menopause. With regard to the statement that 'I experience persistent feelings of sadness' (63.2%) of the respondents agreed while 14.4 % were neutral. Aragno, Fagiolini and Cuomo (2022) concurs with these findings and claims that menopause appears to be a period of vulnerability to mood alteration especially depressive episodes and impairment of quality of life.

The results further indicate that a majority (70.4%) of the respondents agreed that they complain of lack of concentration while 10.5% were neutral. Clarabut (2021) concurs with these findings and asserts that during menopause, many women will report various physical and psychological symptoms that adversely affect their quality of life. The psychological symptoms include sadness, irritability, tearfulness, decreased memory, low concentration depression and anxiety.

Further, the findings revealed that 57.4 % of female teachers reported that they experience sleep disorder as a result of menopause while 34.4% disagreed. This collaborates with Abdelaziz et al (2022) whose findings revealed that more than one third of Saudi postmenopausal women had poor sleep quality. Again, Clarabut (2021) claims that sleep disturbance is one of the most commonly reported and most bothersome symptoms of the menopausal transition. Further Clarabut (2021), revealed that menopausal period is one of the most critical stages of a woman's life. Complications of the menopausal period including sleep disorders can affect the physical and mental state of women.

A majority, (58.8%) of the respondents revealed that they experience fatigue in the work place while 31.1% disagreed with the statement. According to Decandia et al (2022), women show an increased risk of cognitive impairment and emotional disorders when

approaching menopause. Similarly, Tang et al (2019) claims that women experience negative emotions, negative attitudes, low adjustment worries and psychological effects that cause severity of menopausal symptoms.

4.7.3 Influence of Psychological Interventions in Managing Menopause Crisis

The study obtained data on how menopausal female teachers are managing menopause crisis. Data obtained was analysed and presented in Table 28.

Table 28

Psychological Interventions in Managing Menopause Crisis

Item	SD	D	N	A	SA
Exposure to counselling has helped me acquire knowledge and skills on how to manage menopause related psychological complications	7.4% 16	11.6% 25	11.2% 24	28.8% 62	40.9% 88
Counselling has made me cope with menopause crisis	19.3% 5	1.9% 20.2	8.6% 22	29.2% 57	32.5% 70
Counselling has made me understand the psychological effects of menopause	18.7% 37	14.4% 29	10.9% 22	32.1% 64	38.3% 77
Counselling has made me aware that I can go through menopause and still continue working	27.3% 54	19.1% 38	10.5% 21	27.3% 55	29.7% 59
Exposure to counselling has made me know that menopause is a natural transition	28.7% 57	5.7% 11.4	8.1% 16.2	24.4% 49	33.1% 66.2
I believe that menopause crisis requires counselling	18.7% 37	3.8% 8	14.4% 31	29.2% 63	34% 73
Exposure to counselling has made me know that menopausal women are more vulnerable to depression and anxiety	29.2% 58	1.9% 4	26.3% 57	32.5% 70	34.2% 68
Exposure to counselling discourage women from talking about their menopause experiences	13.4% 29	19.4% 41	10.5% 23	29.7% 64	27.3% 59
Menopause related complications make me seek counselling services	14.8% 32	22% 47	22.5% 48	33.5% 72	22.5% 48

Results posted in table 28 reveal that the respondents agreed on all the items. All the items posted more than half of the respondents agreeing with the statements. This means that counselling influences the psychological interventions of menopause crisis. The results reveal that exposure to counselling has helped female teachers acquire knowledge and skills on how to manage menopause related psychological complications (69.7%) while 11.2% were neutral. The findings are consistent with Brahmana and Makiyan (2021) suggestion that counselling about menopause adds to knowledge to women who are 50-year-old and that counselling provides benefits by increasing the women's understanding of menopause. Dayaratna et al (2021) further established that counselling increased participant treatment knowledge, reduced treatment decisional conflict and helped to clarify treatment preference. These findings are contrasted by Alfred et al (2006) whose findings suggested that women are faced with confusion of information and uncertainty when making decisions at menopause where focus group participants saw menopause as a natural progression rather than a medical condition and decision making about therapies as personal responsibility.

In the same line of exploration Bahri et al (2016) in their study of attitudes towards menopause among Iranian women found out that among 3453 participants, 25% of the women had positive attitude, 58% had neutral attitude and 17% had negative attitude towards menopause. Majority of Iranian women had neutral attitude towards menopause which may be evidence of poor knowledge about menopause. Bahri further suggested that appropriate educational programs be developed and implemented by policymakers in order to increase knowledge and raise awareness among women. This is in order to avoid situations as reported by Tang et al (2019) where women interviewed repeatedly had questions and concerns regarding perimenopause and often reported receiving conflicting and confusing information about menopause. This implies that they are

unable to make sound decisions about their menopause experience. This observation paralleled the findings of Ama and Ngome (2013) study on menopausal perceptions and experience of older women from selected sites in Botswana which noted that participants had low levels of knowledge and awareness of menopause. These findings imply that women in menopause transition have little knowledge about menopause.

With regard to the item that 'counselling has made me cope with menopause crisis, (61.7%) agreed while less than ten percent (8.6%) were neutral. This agrees with Ngozi (2017) who reported that the overall condition of menopausal woman is challenging and therefore implicated in counselling. Counselling services are required for proper adjustment of women who are yet to reach menopause. Therefore, according to King et al (2014), dealing with psychological and spiritual aspects of menopause is a vital resource for physicians, counselors, therapists and psychologists and especially for the women that they treat. Similarly, Kisa (2012) suggested that counselling of women on menopause related issues in gynaecology is recommended.

A majority (70.4%) of the respondents revealed that counselling has made them cope with menopause crisis while 10.9% were not sure. These findings agree with Agarwal et al (2018) in a study of assessment of menopausal symptoms and coping strategies among middle age women in North Central India where they found a strong significant association between menopausal symptoms and coping strategies adopted by menopausal women. Similarly, White and Myers (2006) suggested that implications for mental health counselors include the need to help mid-life women understand and cope with the variety of common life changes that individually and collectively help to define their mid-life experience.

The results further revealed that over half (57%) indicated that counselling has made them understand the psychological effects of menopause, while 10.9% were not sure. This is in contrast with Bremer (2022) who claims that many women may not recognize the psychological symptoms as being related to menopause. This line of argument is consistent with Pathak, et al (2017) observation that majority of women have negative outlook towards menopause considering it as a loss of youth and higher susceptibility towards health problems. This shows that awareness towards menopause should be increased by information, education and counselling so as to help these women to live their postmenopausal years healthier and more active.

The findings further indicated that female teachers were of the view that counselling has made them aware that they can go through menopause transition while still working where (57.4%) agreed while 17% were neutral. Setorgio et al (2012) suggested that counselling and support are needed to enable women manage menopause symptoms better. Polat et al (2021) concurs with these claims and found out that there was a positive and significant relationship between menopausal symptoms and social support and that menopausal symptoms decreased as social support increased. There is need for consultancy for menopausal women in order to decrease their menopausal complaints.

With regard to 'Exposure to counselling has made me know that menopause is a natural transition', 63.2% of the female teachers agreed with the statement while 14.4% were not sure. Tang et al (2019) concurs with these findings and asserts that menopause is a physiological and natural period in women's lives and therefore available solutions to improve quality of life include counselling interventions.

Further, the findings revealed that 66.7% agreed that they believe that menopause crisis require psychological interventions while 14.4% were not sure. This is congruent with

Bhore (2015) claim that menopausal women require more information about their physical and psychosocial needs and that strength during menopause can contribute to improving the perception of this stage and the importance of self-care. Similarly, Lee *et al* (2014) in their study of the effectiveness of Telephone based counselling for improving the quality of life among middle aged women found out that the intervention group showed a significant increase in self health management at the four and eight months follow up evaluations. Ebrahimi (2019) agrees with these findings as per their study of the effect of self-efficacy counselling on the management of menopausal symptoms in peri menopause dimension in Mahabad City where they found out that the mean score of menopausal symptoms in the psychological dimension between intervention group (3.18) was lower than the score in the score group (>2.64) after the end of the intervention which was statistically significant ($p < 0.001$). These results showed that counselling based on self-efficacy could be effective in reducing menopausal symptoms in the psychological dimension. Shaberaban and Gnanadurai (2016) agrees with these findings and claims that counselling was effective in improving self-esteem among menopausal women.

Further analysis revealed that 57% of the respondents agreed that exposure to counselling has made them know that menopausal women are more vulnerable to depression and anxiety while 10.5% were not sure. Kakkav (2012) findings indicated an improvement in psychological (depression, irritability and anxiety), somatic (vasomotor) and urogenital symptoms as an effect of exhaustive counselling. This implies that compliance and positive attitude to menopause were achieved after counselling that resulted to lowering the effects of menopausal symptoms. This is congruent with Moghani, Farzareh and Vida (2018) in their study of the relationship between stress, anxiety and depression with menopausal women experiences where they found a direct

and significant association between stress, anxiety and depression score with experience of women in menopause ($p=0.001$, $r=0.68$). The study concluded that with increasing scores of depression, anxiety and stress, the score of women's experiences in menopause increased. Therefore, these changes require counselling and supportive program to improve adaptation to menopausal psychosocial changes.

With regard to the statement that 'exposure to counselling discourage women from talking about their menopause experiences, 56% agreed while a slightly higher than a third of the respondents (32.5%) had a different opinion. This implies that some female teachers talked about their menopause experiences with others even after undergoing counselling. This means that these menopausal women shared their menopause experiences with significant others. The findings further revealed that 57.4% of the respondents indicated that menopause related complications make them seek counselling services while 22.5% were not sure. This is in congruent with Linton et al (2016) who asserts that counselling remains a critical aspect in empowering women to make informed choices about their health care.

Further analysis was done to determine whether the female teachers' menopause crisis was influenced by psychological interventions. The means of responses to items were computed and then transformed into influence of psychological interventions on menopause crisis as presented in Table 29.

Table 29*Female Teachers' Means on Influence of Psychological interventions in Managing Menopause Crises*

Statement	Mean	SD
Exposure to counselling has helped me acquire knowledge and skills on how to manage menopause related psychological complications	2.65	1.242
Counselling has made me cope with menopause crisis	2.80	1.306
Counselling has made me understand the psychological effects of menopause	2.40	1.112
Counselling has made me aware that I can go through menopause and still continue working	2.67	1.321
Exposure to counselling has made me know that menopause is a natural transition	2.86	1.240
I believe that menopause crisis requires counselling	2.84	1.245
Exposure to counselling has made me know that menopausal women are more vulnerable to depression and anxiety	2.10	1.302
Exposure to counselling discourage women from talking about their menopause experiences	2.30	1.202
Menopause related complications make me seek counselling services	2.76	1.230

The nine items on the influence of psychological interventions in managing menopause crisis were measured using Likert scale of 1 to 5 where the lowest 1 represented strongly Disagree and the highest 5 represented Strongly Agree. A mean of 2.5 to 5.0 represented high influence while a mean of less than 2.5 meant less influence. The nine items indicate that the means ranged from 2.10 (SD=1.302) to 2.86 (SD=1.240). Most of the means were above 2.5 meaning that majority of the respondents agreed with the statements. However, there were two items that had low means. These were 'Exposure to counselling discourage women from talking about menopause experiences (2.10 SD=1.302) and 'menopause related complications make me seek counselling services (2.30 SD=1.202). This means that the respondents disagreed with the statements. The SD were high as per the statements (1.112 to 1.306) an indication that there was a high

variation of the responses to the items. This is an indication that psychological interventions influence menopause crisis. These findings contrast with the findings of Farokhi, et al (2015) on the effect of skill life training in quality of life in menopausal women where they found that comparison of the quality of life ($p=0.0$) vasomotor symptoms ($p=0.01$) S and sexual health ($p= 0.008$) between the two groups before and after one-month skill life training had a significant difference between them, but the psychosocial aspect ($p=0.14$) and physical wellbeing ($p=0.06$) were not significant. Lee and Lee (2022) claims that in order to improve the psychological wellbeing of middle-aged women, it is important to increase their self-efficacy and minimize stress. Moreover, managing menopausal symptoms and increasing self-compassion through effective coping may maximize psychological wellbeing of menopausal women. This implies that counselling should be enhanced in order to help menopausal women cope with the psychological and physical challenges brought by menopause.

4.7.4 Inferential Statistics

The study did inferential statistics for obtained data. A regression analysis was done then results presented in Table 30.

Table 30

Linear Regression of Psychological Interventions and Menopause Crises

Independent Variable	Exposure to counselling services	Information provision	Counselling environment	Counselling type (psychological, social)	Awareness creation on menopause	Willingness to seek counseling	Follow-up feedback	Overall significance
Menopause Crises Management	$r^2=0.252$	$r^2=0.0615$	$r^2=0.0409$	$r^2=0.0647$	$r^2=0.640$	$r^2=0.0712$	$r^2=0.763$	$r^2=0.0545$
Significance	0.070	0.037	0.052	0.031	0.012	0.0325	0.032	0.0390

**Correlation is significant at 0.05 confidence level

Table 30 shows the results of linear regression of psychological interventions in managing menopause crises. The relationship between menopause and exposure to counselling services in the public primary schools in Laikipia County shows a weaker relationship with ($r^2=0.0252$; $p < 0.070$) which was significant at 0.05. This indicated that there was no significance difference between accessibility to counselling strategies and menopause crises. The linear regression of information creation and menopause crises shows a strong relationship with $r=0.0615$; $p>0.037$ which was significant at 0.05 level of confidence. Therefore, there was a significant relationship between counselling skills and menopause crises management.

The relationship between counselling environment and menopause crises shows a weaker relationship with ($r=0.0409$; $p >0.052$) which was not significant at 0.05 confidence level. Type of counselling were found to have a strong relationship with menopause crises with ($r^2=0.647$; $p>0.031$) which was significant at 0.05 level of significance. The relationship between menopause and creation awareness to counselling showed a weaker relationship with ($r^2=0.0640$; $p<0.012$) which was not significant at 0.05 confidence level.

The relationship between menopause crises and willingness of female teachers to seek further counselling in menopause indicated a strong relationship with ($r^2=0.712$; $p >0.0325$) which was significant at 0.05 level of significance while follow-up and feedback indicated a strong relationship with menopause crises with ($r^2=0.763$; $p>0.032$) which was significant at 0.05.

The overall results of the relationship between the independent variable 'psychological interventions and dependent variable 'menopause crises' indicated that there was a significant difference. There was sufficient evidence to support the claim as evidenced by

($r^2=0.0545$; $p >0.0390$). Therefore, counselling strategies were significantly correlated with menopause crises. From the foregoing results it can be reasoned that the null hypothesis was tenable. In this regard, the hypothesis was rejected and conclusion made that psychological interventions and menopause crises were statistically significant. This concurs with the findings by Natasya and Widdiarti (2022) in their study on the level of knowledge of menopausal mothers about menopause before and after counselling in the Congregation of Keluarga Allah Bandung, showed that there were differences in the level of knowledge before and after being given counseling with a P-value of 0.000($p<0.05$).

Counselling is broad and requires a variety of counselling techniques in order to be effective. This is consistent with Tang et al (2019) who concluded that regular additional follow up telephone-oriented counselling sessions can increase the effectiveness of face to face counselling sessions. This form one of the many skills that counselors can use to reach out to female teachers facing menopause challenges.

The influence of psychological interventions in managing menopause crises using linear regression is further illustrated in Figure 9.

Figure 9

Linear Regression of Psychological Interventions and Menopause Crises

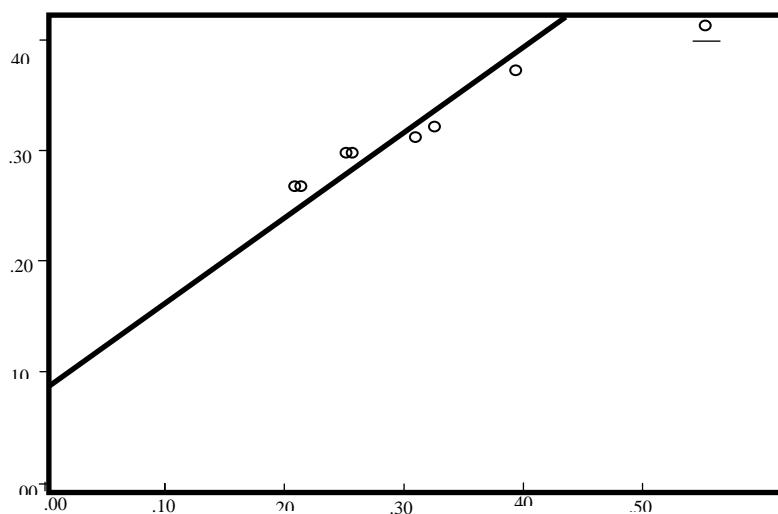


Figure 9 indicates that the independent variables are close to dependent variable showing there is a relationship.

4.7.5 Interview Schedule and Focus Group Discussion on Psychological Interventions in Managing Menopause Crises

Qualitative data on counselling strategies used in intervention of menopause crisis through a key informant interview and through FGD was obtained. Additional data was captured using interview schedule from the Sub County Directors of Education and FGD from teacher counselors to add to the information that was provided by the female teachers. The SCDE provided information on availability of physical facilities for counselling in public primary schools while the teacher counselors provided information on counselling strategies they provided in these schools.

Report from SCDE from all sub counties indicated that there are counselling departments in the public primary schools. These departments have offices that are fairly equipped with facilities to facilitate counselling. They also gave the information that those offices are located in places that offer confidentiality to clients. On counselling challenges, the SCDEs reported that many public primary schools have inadequate counselling facilities.

The teacher counselors reported that they offer counselling services in schools in areas such as social and psychological counselling. They gave information on the mode of counselling that they offer to be mainly individual and group counselling. The teacher counselors also described the counselling that they offer to mostly learners and at times to fellow teachers who seek counselling. The counselors were asked whether they face any challenges and they reported that there are problems of shortage of personnel to carry out counselling as each school has only one teacher counsellor who is trained.

They also experience heavy work load as they are expected to also attend lessons. Time allocated for counselling is also limited as it is only after the end of lessons that they are able to attend to counselling sessions. The counselors were asked about the availability of counselling facilities and they reported that the available facilities were inadequate while others have none and are forced to use open field to offer individual counselling. Those that are available are located in places that do not support confidentiality. The researcher enquired about whether female teachers seek counselling and the counselors gave the information that few female teachers seek their counselling services and those who do so find it embarrassing to open up about their menopausal experiences.

The counselors were also asked whether they have had any training to handle menopause related complications from the female teachers and they gave the information that they were not adequately trained to do it. The counselors were asked about recommendations they would give about counselling in public primary schools. They suggested that the Ministry of education should provide counselling facilities in schools. They also suggested that more counselors should be trained particularly to handle issues affecting teachers and specifically they should be trained to handle menopause crisis.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter discusses the summary of the research findings, conclusions and recommendations from the study on the influence of personality traits, school environment and psychological interventions in managing menopause crises among public primary school teachers in Laikipia County.

5.2 Summary of the Major Findings

Specifically, the study examined the influence of personality traits on menopause crises, influence of physical environment on menopause crises, influence of social environment on menopause crises and the influence of psychological interventions on menopause crises. The study comprised of 655 respondents where 600 were female teachers, 50 teacher counselors and 5 Sub County Directors (MOE). The mean age of menopause was 51 years or female teachers between 44-55years. The findings from this study will contribute to the knowledge in this area and help policy makers and education stakeholders develop initiatives that could ensure women teachers undergoing menopause are helped to cope with the challenges.

5.2.1 Personality Traits and Menopause Crisis

The first objective was to determine the influence of personality traits on psychological interventions in managing menopause crisis among female teachers in public primary schools in Laikipia County. The findings showed that there was statistically significant difference between female teachers' personality characteristics and menopause crisis ($r^2=0.65$; $p>0.0349$) at 0.05 confidence level. Therefore, the null hypothesis that stated that 'there is no statistically significant difference between personality traits and management of menopause crises among female teachers in public primary schools in

Laikipia County' was rejected. Majority were of the view that their personality characteristics influenced how they managed the menopause crises.

5.2.2 Schools' Physical Environment and Menopause Crisis

The second objective was to determine the influence of schools' physical environment on the psychological interventions in managing menopause crisis among female teachers in public primary schools in Laikipia County. Results revealed that there was a statistically significant difference between the schools' physical environment and the female teachers' menopause crises which was depicted at ($r^2=0.683$; $p>0.0398$) at 0.05 confidence level. Therefore, the null hypothesis that stated that' there is no statistically significant difference between physical environment and management of menopause crises among female teachers in public primary schools in Laikipia County was rejected. The respondents reported that their schools had inadequate physical facilities to meet their menopausal needs.

5.2.3 Schools' Social Environment and Menopause Crisis

The third objective was to determine the influence of schools' social environment on psychological interventions in managing menopause crisis among female teachers in public primary schools in Laikipia County. Findings indicated that social environment was found to be statistically significant where ($r^2=0.645$; $p>0.03$) at 0.05 confidence level with the menopause crises. Therefore, the null hypothesis that stated that there is no statistically significant difference between social environment and management of menopause crises among female teachers in public primary schools in Laikipia County was rejected.

5.2.4 Psychological Interventions in Managing Menopause Crisis

The fourth objective was to examine the influence of psychological interventions in managing menopause crisis among female teachers in public primary schools in Laikipia

County. Results revealed that there was a statistically significant difference between the psychological interventions and menopause crises where ($r^2=0.545$ $p>0.0390$) at the confident level of 0.05. The null hypothesis that stated that ‘there is no statistically significant difference between psychological interventions and management of menopause crises among female teachers in public primary schools in Laikipia County’ was rejected. Female teachers perceived that psychological interventions influence their menopause crises.

5.3 Conclusions

Based on the findings the study concludes the following:

Personality traits have a statistically significant influence on the psychological interventions of menopause crisis. Neurotic, agreeableness, conscientiousness, extraversion and openness personality traits were found to be statistically significant. Different personality characteristics influence menopause crisis.

Results further indicated that the physical environment has a statistically significant influence on the psychological interventions of menopause crises. Most schools have inadequate physical facilities to support menopausal female teachers especially toilets and that a significant number of schools do not have adequate access to clean water.

The study concludes that menopause is not given a strong consideration by the employer and most often it is just assumed. Administration rarely grants an unwell female teacher leave to go and attend clinic for ailments or discomfort related to menopause while work schedules are not favourable to menopausal primary schools’ female teachers. In most cases geographical job transfers on matters of conditions tangential to menopause among female teachers are not allowed.

Based on the findings, the study concludes that there is a statistically significant relationship between psychological interventions and menopause crisis among female teachers in public primary schools in Laikipia County. There is need to make psychological interventions available for menopausal female teachers specifically for all women undergoing menopause in order to reduce the challenges that they face as they go through this transition.

5.4 Recommendations

From the research findings, the following recommendations were made based on the objectives of the study.

5.4.1 Policy Recommendation

- i. The schools' administrators should aim at helping menopausal female teachers to feel less threatened, less overwhelmed and more in control of their emotions and moods. Female teachers in menopause transition should understand their personality characteristics so that they can understand themselves and cope with stresses brought by menopause symptoms.
- ii. The study recommends that school administrators should always ensure that schools have clean and comfortable toilets that are neither too close nor too far from the staffrooms. They should also ensure that there is enough ventilation in classrooms and work areas. School administrators should also ensure that schools have access to clean tap water.
- iii. The study recommends that employers should consider menopause as an issue that affects their job. In addition, they should help menopausal female teachers cope better with all colleagues especially those younger in age and male and help them cope better in their job-relations as a way of promoting job performance.

The school administrators should encourage open communication as a way of boosting menopausal women to be more open and to share their experiences. School administrators should be ready to grant formal support to female teachers undergoing menopause such as leave of absence to unwell female teachers who need to attend clinic for ailments or discomforts related to menopause and support work schedules that are favourable to menopausal primary school female teachers. They should grant geographical job transfers on matters or conditions tangential to menopause among female teachers and provide occupational health guidelines that would support these teachers when they reach menopause.

- iv. Ministry of Education should continue supporting the counselling department in schools by providing counselling rooms. Counselling of female teachers and particularly of teachers who have reached menopause should be emphasized. The Teachers Service Commission should train more teacher counselors who can handle menopause issues in schools.

5.4.2 Recommendation for Further Research

The study suggests further research in the following areas:

- i The influence of the socio-economic and cultural factors with regard to menopause crises management among female workers in Kenya.
- ii The role of family-based support systems in the management of menopause crisis among working women in Kenya.
- iii Counselling costs versus opportunity costs among menopausal women in Kenya
- iv The effect of different Counselling Therapies on the coping mechanisms of menopausal working women in Kenya.

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APPENDICES

Appendix I: Female Teachers' Questionnaire

Introduction

This questionnaire is a tool of data collection for a study being conducted by Mary Wangui Ndung'u. She is a PhD Student in Guidance and Counselling at Kabarak University. The purpose of the study was to examine the influence of personality related traits, school environment and psychological interventions on menopause crisis for public primary school teachers in Laikipia County with an aim of developing an appropriate counselling strategy. The study will provide insight that is helpful to female teachers and school managers who will identify some of the environment related gaps in their schools that need to be addressed in order to make their working environment more conducive to women going through menopause crises. The study will also be useful to the Ministry of Education in regard to identifying shortcomings in the provision of the physical facilities in primary schools that would support women undergoing menopause. It will also add to the body of knowledge on the matter under study that would be beneficial to interested researchers, students and academicians. All information you give is confidential, your name will not be written in the questionnaire to protect your identity. Your participation is voluntary and you can choose to decline to answer any questions you are not comfortable with. Your participation is highly appreciated. Thank you for your cooperation.

Instructions

This questionnaire consists of several parts; kindly answer all the questions by ticking in the appropriate box. Please answer all questions in the relevant sections honestly and exhaustively. All the information given would strictly be used for this study only and would be treated with utmost confidentiality.

SECTION A: Background Information

1. Highest level of education achieved

Untrained [] Diploma [] Bachelor's degree [] Master's Degree []

2. What is your age?

44-46 years [] 47-49 years [] 41-50 years [] 50-52 years [] 53-55 years []

3. What is your marital status?

Single Married Divorced Widowed

4. For how long have you been a teacher? _____ Years

5. For how long have you been a teacher in the current school? _____ years

6. Where is your school located?

Urban Rural

7. What is your position as a teacher in your school?

Deputy Head Teacher Senior Teacher Teacher other (specify).....

8. In the statements below please tick the one that best describes you in reference to menopause?

Status	Brief Description	Tick (<input type="checkbox"/>) here
Peri-menopause	Just a few years before menopause, characterized by period changes (for example hot flashes and/or night sweats, mood changes, vaginal dryness, mood swings trouble sleeping or an increase in fat around my waist).	
Menopause	menstrual periods stop permanently and increase of symptoms such as hot flashes and/or night sweats, mood changes, vaginal dryness, mood swings trouble sleeping or an increase in fat around my waist	
Post menopause	Years after menopause, a stage in which all menopausal symptoms have eased and increase in osteoporosis indicated by back-aches and head aches	

9. Do you have any significant health problems that have been diagnosed by a doctor?

Please tick in the space below.

Response	Tick (✓)
Yes	
No	

If yes, kindly state the condition _____

SECTION B: Effect of Personality Traits on Menopause Crises

Please rate the extent you can describe yourself as you generally are now, not as you wish to be in the future, based on the scale below

Use a Likert scale of 1 to 5 Where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree.

Code	Statements	1=SA	2=D	3=N	4=A	5=SA
N1	I am a person whose moods go up and down easily					
N2	I can be stirred up easily					
N3	I feel threatened easily					
N4	I become overwhelmed my events					
N5	I keep my emotions under control					
N6	I don't get embarrassed easily					
A1	I sympathize with other's feelings					
A2	I like to do things for others					
A3	I am not interested in other people's problems					
A4	I respect authority					
A5	I avoid imposing my will on others					
A6	I love a good fight					
C1	I finish what I start					
C2	I always know what I am doing					

C3	I mess things up					
C4	I postpone decisions					
C5	I like order					
C6	I am not bothered by disorder					
E1	I warm up quickly to others					
E2	I laugh a lot					
E3	I reveal little about myself					
E4	I am not a very enthusiastic person					
E5	I take charge					
E6	I can talk others into doing things					
E7	I hold back my opinions					
O1	I think quickly					
O2	I formulate ideas clearly					
O3	I avoid difficult reading material					
O4	I love to reflect on things					
O5	I seldom day dream					

SECTION C: Effect of Physical Environment on the Level of Menopause Crises

Please Rate the extent to which the following physical factors influence the level of menopause crises in the work place.

Use a Likert scale of 1 to 5 Where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree.

Statements	1	2	3	4	5
Our classrooms are located far from the staff room					
Our staffrooms are small and congested					
Chairs provided for teachers are comfortable for long hour sitting					
The staffroom is well ventilated					
Cold drinking water is available in the staffroom					
Female teachers have water in hand during lessons					
The classrooms and staffroom are in close proximity to a female rest room/toilets					

The female rest room toilets in the work place are in hygienic conditions					
Rest or relaxation area in the work place is available					
Classrooms have either shade or window blinds					
Classrooms attended by women teachers are free of high levels of noise					
The school has private consulting rooms for female teachers					

SECTION D: Effect of Social Environment on the Level of Menopause Crises

Please Rate the extent to which the following social factors influence the level of menopause crises in the work place.

Use a Likert scale of 1 to 5 Where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree.

Statements	1	2	3	4	5
Male teachers relates well with older women in the work place					
Female at menopause are open to their female colleagues					
There is a smooth relationship between older female and young male teachers					
Staff believe that menopause is a non-issue					
TSC officials are aware of menopausal condition of affected female teachers					
Females at menopause are accorded consideration attention such as sick leaves when need be					
Working schedule is considerate of female teachers who are at menopause					
Women at menopause are allowed to move to a different station if their health condition makes it necessary					
The school has informal support (that is support beyond official support, e.g. being given water) networks to help					

female teachers who are at menopause					
The school has occupational health guidelines in support of female teachers at menopause when they experience a problem during work					
Female teachers at menopause feel embarrassed discussing their issues with male colleagues					
Female at menopause discuss their needs with their bosses and co-workers.					

SECTION E: Psychological Interventions and Menopause Crisis

Section B: The following statements are on the influence of counselling on menopause crisis

Please Rate the extent to which the following counselling factors influence the level of menopause crises in the work place.

Use a Likert scale of 1 to 5 Where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree.

1. Exposure to counseling has helped me acquire knowledge and skills on how to manage menopause related psychological complications.

[SD] [D] [N] [A] [SA]

2. Counseling has made me cope with menopause crisis

[SD] [D] [N] [A] [SA]

3. Counseling has helped me understand the psychological effects of menopause

[SD] [D] [N] [A] [SA]

4. Counseling has made me aware that I can go through menopause and still continue working.

[SD] [D] [N] [A] [SA]

5. Exposure to Counseling has made know that menopause is a natural transition

[SD] [D] [N] [A] [SA].

6. I believe that menopause require psychological interventions.

[SD] [D] [N] [A] [SA]

7. Exposure to counselling has made me know that menopausal women are vulnerable to depression and anxiety.

[SD] [D] [N] [A] [SA]

8. Exposure to counselling discourage women from talking about their menopause experiences. [SD] [D] [N] [A] [SA]

9. Menopause related complications make me seek counselling services

[SD] [D] [N] [A] [SA]

Section F: Psychological Issues among Menopausal Female Teachers

Please Rate the extent to which the following psychological issues influence the level of menopause crises in the work place.

Use a Likert scale of 1 to 5 Where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly agree.

1. I experience emotional instability

[SD] [D] [N] [A] [SA]

2. I experience persistent feelings of sadness

[SD] [D] [N] [A] [SA]

3 I complain of lack of concentration

[SD] [D] [N] [A] [SA]

4. I experience sleep disorder

[SD] [D] [N] [A] [SA]

5. I complain of fatigue in the work place

[SD] [D] [N] [A] [SA]

**Appendix II : Key Informant Interview Schedule for Sub County Directors of Education
(MOE)**

What are your views regarding menopause crises in general and specifically its effect on female teachers in Laikipia County?

1. Physical Environment is an important factor to women undergoing menopause. In your views how would you relate?

- i. the location of classrooms,
- ii. water availability,
- iii. state of classrooms,
- iv. hygienic conditions of the toilets and
- v. the relaxation area of teachers and their suitability to women undergoing menopause

2. Personality traits influence the way individuals behave in different circumstances. This may include handling of menopause crises among female teachers. Kindly give your views on how personality issues such as openness of an individual affects self-esteem, concentration to job tasks and general management of an individual undergoing menopause crisis.

3. How would you regard the role of psychological interventions during menopause crises among female teachers based on your experience on the following issues?

Counselling department,

Office space and furniture,

4. How would you rate the physical working environment of female teachers in the public primary schools in your area?

Do you have suggestions on how physical facilities could be improved to support women undergoing menopause?

Thank you for your cooperation

Appendix III: Focus Group Discussion Guide for Teacher Counselors

Questions to guide focus group for teacher counselors

Introduction -

Purpose of the study

Seek co-operation and verbal consent from interviewees

Assure the group of confidentiality

1. What is the prevalence of menopause in your school?
2. Are there cases of menopausal female teachers who seek counselling from you?
3. What is the female teacher's view of the influence of the environment and personality traits to the psycho social counselling of menopause crisis?
4. What psychological interventions can be applied to female teachers who are menopausal?
5. What are your recommendations or suggestions with regard to coping mechanisms of female teachers to menopause crisis?

Thank you for your cooperation

Appendix IV: The Items In The Big Five Aspects Scales

Neuroticism	
Combined Volatility and Withdrawal for 20-item scale (Alpha = .89)	
Volatility	
+ keyed	10-item scale (Alpha = .85)
	Get angry easily.
	Get upset easily.
	Change my mood a lot.
	I am person whose moods go up and down easily.
	Get easily agitated.
	Can be stirred up easily.
- keyed	Rarely get irritated.
	Keep my emotions under control.
	Rarely lose my composure.
	I am not easily annoyed.
Withdrawal	
10-item scale (Alpha = .84)	
+ keyed	Am filled with doubts about things.
	Feel threatened easily.
	Worry about things.
	Am easily discouraged.
	Become overwhelmed by events.
	I am afraid of many things.
- keyed	Seldom feel blue.
	Feel comfortable with myself.
	Rarely feel depressed.
	I am not embarrassed easily.
Agreeableness	
Combined Compassion and Politeness for 20-item scale (Alpha = .84)	
Compassion	
+ keyed	10-item scale (Alpha = .84)
	Feel others' emotions.

	Inquire about others' well-being.
	Sympathize with others' feelings.
	Take an interest in other people's lives.
	Like to do things for others.
- keyed	I am not interested in other people's problems.
	Can't be bothered with other's needs.
	I am indifferent to the feelings of others.
	Take no time for others.
	Don't have a soft side.
Politeness	
10-item scale (Alpha = .75)	
+ keyed	Respect authority.
	Hate to seem pushy.
	Avoid imposing my will on others.
	Rarely put people under pressure.
- keyed	Insult people.
	Believe that I am better than others.
	Take advantage of others.
	Seek conflict.
	Love a good fight.
	Am out for my own personal gain.
Conscientiousness	
Combined Industriousness and Orderliness for 20-item scale (Alpha = .84)	
Industriousness	
+ keyed	10-item scale (Alpha = .81)
	Carry out my plans.
	Finish what I start.
	Get things done quickly.
	Always know what I am doing.
- keyed	Waste my time.
	Find it difficult to get down to work.

	Mess things up.
	Don't put my mind on the task at hand.
	Postpone decisions.
	Am easily distracted.
Orderliness	
	10-item scale (Alpha = .80)
+ keyed	Like order.
	Keep things tidy.
	Follow a schedule.
	Want everything to be "just right."
	See that rules are observed.
	Want every detail taken care of.
- keyed	Leave my belongings around.
	I am not bothered by messy people.
	I am not bothered by disorder.
	Dislike routine.
Extraversion	
Combined Enthusiasm and Assertiveness for 20-item scale (Alpha = .85)	
enthusiasm	
+ keyed	10-item scale (Alpha = .81)
	Make friends easily.
	Warm up quickly to others.
	Show my feelings when I am happy.
	Have a lot of fun.
	Laugh a lot.
- keyed	Am hard to get to know.
	Keep others at a distance.
	Reveal little about myself.
	Rarely get caught up in the excitement.
	I am not a very enthusiastic person.
Assertiveness	
10-item scale (Alpha = .85)	

+ keyed	Take charge.
	Have a strong personality.
	Know how to captivate people.
	See myself as a good leader.
	Can talk others into doing things.
	Am the first to act.
– keyed	Do not have an assertive personality.
	Lack the talent for influencing people.
	Wait for others to lead the way.
	Hold back my opinions.
Openness/Intellect	
	Combined Intellect and Openness for 20-item scale (Alpha = .85)
Intellect	
+ keyed	10-item scale (Alpha = .84)
	Am quick to understand things.
	Can handle a lot of information.
	Like to solve complex problems.
	Have a rich vocabulary.
	Think quickly.
	Formulate ideas clearly.
– keyed	Have difficulty understanding abstract ideas.
	Avoid philosophical discussions.
	Avoid difficult reading material.
	Learn things slowly.
Openness	
	10-item scale (Alpha = .78)
+ keyed	Enjoy the beauty of nature.
	Believe in the importance of art.
	Love to reflect on things.
	Get deeply immersed in music.
	See beauty in things that others might not notice.


	Need a creative outlet.
– keyed	Do not like poetry.
	Seldom get lost in thought.
	Seldom daydream.
	Seldom notice the emotional aspects of paintings and pictures.

Source: Note. DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007).

Appendix V: KREJCIE and Morgan's Sample Size Table

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Appendix VI: Introduction Letter from the University


KABARAK UNIVERSITY
INSTITUTE OF POST GRADUATE STUDIES

Private Bag - 20157
KABARAK, KENYA
E-mail: directorpostgraduate@kabarak.ac.ke

Tel: 0773265999
Fax: 254-51-343012
www.kabarak.ac.ke

15th November, 2018.

Ministry of Higher Education Science and Technology,
National Council for Science, Technology & Innovation,
P.O. Box 30623 – 00100,
Nairobi

Dear Sir/Madam,

RE: RESEARCH BY NDUNGU MARY WANGUI GDE/M/1235/09/11


The above named is a student of Kabarak University taking Degree of Doctor of Philosophy in Education (Guidance and Counselling). Her research is entitled “**Influence of Environment and Personality Traits on Psychosocial Management of Menopause Crisis among Public Primary school Teachers in Laikipia County, Kenya.**” *She* has been **Examined and Accepted** by the Board of Postgraduate Studies.


The information obtained in the course of this research will be used for academic purposes only and will be treated with utmost confidentiality.


Please provide the necessary assistance.

Thank you.

Yours faithfully,


Dr. Betty Tikoko
DIRECTOR - (POST GRADUATE STUDIES)



 Kabarak University is ISO 9001:2015 Certified

Appendix VII: NACOSTI Research Authorization Letter



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/33571/28315**

Date: **21st May, 2019**

Mary Wangui Ndungu
Kabarak University
Private Bag - 20157
KABARAK.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***“Influence of environment and personality traits on psychosocial management of menopause crisis among Public Primary School teachers in Laikipia County, Kenya”*** I am pleased to inform you that you have been authorized to undertake research in **Laikipia County** for the period ending **21st May, 2020**.

You are advised to report to **the County Commissioner, and the County Director of Education, Laikipia County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.


BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Laikipia County

The County Director of Education
Laikipia County

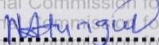
National Commission for Science, Technology and Innovation is ISO9001:2008 Certified


Appendix VIII: NACOSTI Research Permit

THIS IS TO CERTIFY THAT: **Permit No : NACOSTI/P/19/33571/28315**
MS. MARY WANGUI NDUNGU **Date Of Issue : 21st May,2019**
of KABARAK UNIVERSITY, 1959-20300 **Fee Received :Ksh 2000**
Nyahururu,has been permitted to
conduct research in Laikipia County

on the topic: INFLUENCE OF
ENVIRONMENT AND PERSONALITY
TRAITS ON PSYCHOSOCIAL
MANAGEMENT OF MENOPAUSE CRISIS
AMONG PUBLIC PRIMARY SCHOOL
TEACHERS IN LAIKIPIA COUNTY, KENYA

for the period ending:
21st May,2020


Applicant's
Signature


Director General
National Commission for Science
Technology & Innovation


THE SCIENCE, TECHNOLOGY AND
INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science,
Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke



NACOSTI
National Commission for Science,
Technology and Innovation
RESEARCH LICENSE

Serial No.A 24681
CONDITIONS: see back page

Appendix IX: Research Authorization from County Director of Education, Laikipia

MINISTRY OF EDUCATION
STATE DEPARTMENT OF EDUCATION
COUNTY DIRECTOR OF EDUCATION OFFICE - LAIKIPIA

Telegrams: "Education" LKP.
Telephone: 062-31518, 31519
Email: laikipiacountydirector@yahoo.com



County Director of Education,
Laikipia County,
P.O. Box 253.
NANYUKI.

When replying please quote:
Ref: **LPA/C/A/94. VOL.1 /(96)**

13th August, 2019



TO: WHOM IT MAY CONCERN

RE: RESEARCH AUTHORITY – MARY WANGUI NDUNGU

The National Commission for Science, Technology and Innovation letter ref. No. **NACOSTI/P/19/33571/28315** dated **21st May, 2019** refers.

This is to inform you that the above named person has been authorized to carry out research on ***"Influence of environment and personality traits on psychosocial management of menopause crisis among Public Primary school teachers in Laikipia County, Kenya"***, for a period ending 21st May, 2020.


After completion of your research findings please furnish this office with a copy of the research.

DR. FELIX AMADI
For: **COUNTY DIRECTOR OF EDUCATION,**
LAIKIPIA.

C.C.
National Commission for Science,
Technology and Innovation,
NAIROBI.

The County Commissioner,
LAIKIPIA

ISO 9001:2008 CERTIFIED 

Appendix X: Research Authorization from County Commissioner, Laikipia

**THE PRESIDENCY
MINISTRY OF INTERIOR & CO-ORDINATION OF NATIONAL
GOVERNMENT**

When replying please quote
Fax: 062-2031874
E-MAIL: cclaiikipiacounty@yahoo.com



COUNTY COMMISSIONER
LAIKIPIA COUNTY
P.O. BOX 11-10400
NANYUKI

Ref. NO. CC.ED.12/14 VOL.11/(53)

13th August, 2019

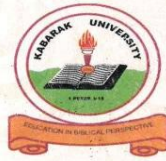
Mary Wangui Ndungu
Kabarak University
Private Bag – 20157
KABARAK

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “*Influence of environment and personality traits on psychosocial management of menopause crisis among public primary school teachers in Laikipia County, Kenya*” I am pleased to inform you that you have been authorized to carry out research in Laikipia – County for the Period ending 21st May, 2020.


COUNTY COMMISSIONER
LAIKIPIA
EVANS OTIENO
FOR COUNTY COMMISSIONER
LAIKIPIA

Appendix XI: Evidence of Conference Participation



KABARAK UNIVERSITY

Certificate of Participation

Awarded to

Mary Wangui Ndung'u

for successfully participating in the 12th Annual Kabarak University International Research Conference held from 5th – 6th July 2022 and presented a paper entitled *“Influence of Social Environment to the Physiological Management of Menopause Care Among Public Primary Schools”*.

Conference Theme

21st Century Issues and Practices In Education

Prof. Frederick Ngala
Dean School of Education,
Humanities and social sciences

Dr. Moses Thiga
Director - Research, Innovation
and Outreach

Kabarak University Moral Code

As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord.

(1 Peter 3:15)



Kabarak University is ISO 9001:2015 Certified



KABARAK UNIVERSITY

Certificate of Participation

Awarded to

Mary Wangui Ndung'u

for successfully participating in the 12th Annual Kabarak University International Research Conference held from 5th – 6th July 2022 and presented a paper entitled ***“Influence of physical environment to the physiological management of menopause crisis”***.

Conference Theme

21st Century Issues and Practices In Education

Prof. Frederick Ngala
Dean School of Education,
Humanities and social sciences

Dr. Moses Thiga
Director - Research, Innovation
and Outreach

Kabarak University Moral Code

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(1 Peter 3:15)



Kabarak University is ISO 9001:2015 Certified

INFLUENCE OF THE SCHOOLS' PHYSICAL ENVIRONMENT IN MANAGING MENOPAUSE CRISES AMONG FEMALE TEACHERS

¹Wangui Ndung'u M., ²Ngumi Owen, ³Kay James

Department of Education Psychology, Kabarak University

DOI: <https://doi.org/10.5281/zenodo.8430432>

Published Date: 11-October-2023

Abstract: Menopause is not a medical condition or an illness but a natural component of the life cycle, yet this topic remains unspoken, especially in the workplace. The study aimed at establishing the influence of physical environment on menopause crisis. The study was carried out among the female teachers in public primary schools in Laikipia County, Kenya. Female teachers were selected because they had experience on issues of menopause. The study adopted *ex post facto* research design. The study was based on the Person-Environment-Occupation Theory of Occupational Performance. A sample of 234 female teachers was selected through stratified random sampling and cluster sampling while a sample of fifty (50) teacher counselors and five (5) sub directors of education from five sub counties were selected through purposive sampling. Data collection instruments were questionnaire, interview schedules and focus group discussions. The results revealed that physical environment have a statistically significant influence on menopause crisis where ($r^2=0.683$; p-value of 0.0398) which is significant at 0.05 confidence level. The findings indicated that physical environment influences menopause crisis among female teachers in public primary schools. The study recommends that employers should give better consideration to female teachers undergoing menopause as an issue that affect their job.

Keywords: Physical working Environment, Menopause, Crisis.

1. INTRODUCTION

Although men and women face various health challenges as they grow older, menopause is a peculiar health issue to women but which is not given attention (Altmann, 2014). Kopen Hager, (2015) reported that peri-menopausal symptoms have been reported to cause a range of physical and emotional symptoms for women in place of work. Things that make hot flushes more difficult to cope with are hot working areas and poor aerated environments Kopen Hager, (2015), Thorogood, 2015). In accordance with Salah (2010) work place design directly affects employees' performance by determining job satisfaction, employee motivation and citizenship. This in return determines a flow in the systems of work in an organization as well as employee coordination and efficiency in communication. As a result, it will lead to reduced absenteeism and employee commitment resulting in higher performance. A study by Nanzushi (2015) revealed that a spacious office with enough lighting and devoid of noise would facilitate increased employees' performance. These corroborated with the findings of Kopen Hager, (2015) that a conducive physical environment would save the employees from work-related stress and enhance their performance to the expected standards.

2. RESEARCH DESIGN

The study utilized *ex post facto* correlational research design. *Ex-post facto* research can be viewed as experimental research in reverse. *Ex post facto* research is ideal for conducting social research when is not possible or acceptable to manipulate the characteristics of human participants. It is an alternative for true experimental research and can be used to test hypotheses

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EFFECT OF THE SCHOOLS' SOCIAL ENVIRONMENT IN MANAGING MENOPAUSE CRISES AMONG FEMALE TEACHERS

¹Wangui Ndung'u M., ²Kay James, ³Ngumi Owen

Department of Education Psychology, Kabarak University

DOI: <https://doi.org/10.5281/zenodo.8420901>

Published Date: 09-October-2023

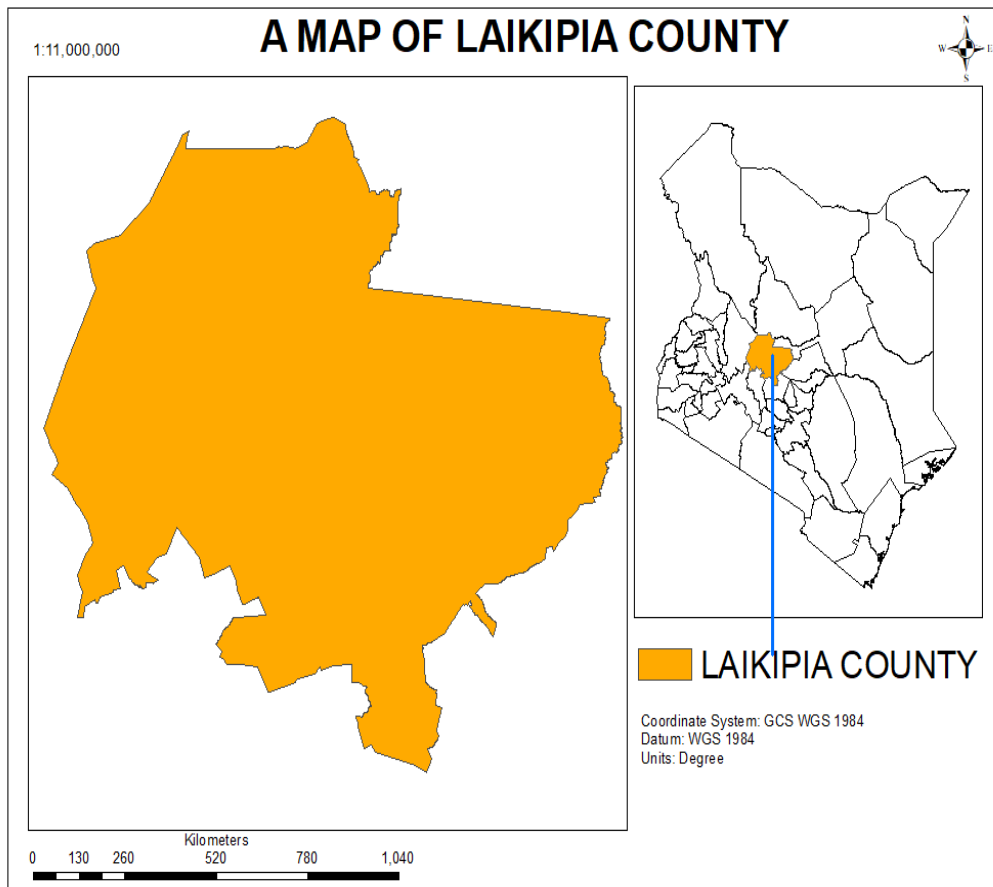
Abstract: Menopause crisis is not regarded as a major issue in most organizations and therefore is not considered at workplace. Among female teachers, it may be worsened by an unfavourable social working environment but the significance of these factors is not yet known. This study investigated the influence of schools' social environment on menopause crisis for female teachers of public primary schools. The study utilized ex post facto research design because it was not possible or acceptable to influence the characteristics of respondents. The study was based on the Person-Environment-Occupation Theory of Occupational Performance. The researcher used stratified sampling, two stage clustered sampling, random sampling, and purposive sampling techniques. The sample of the study was 289 participants. The research instrument of the study was a structured questionnaire, Focus Group Discussion, and a key informant interview schedule. The results revealed that social environment has a statistically significant influence on menopause crisis with a Linear Regression analysis where ($r^2=0.645$; p-value of 0.03). From the findings of the study, it can be concluded that, social environment influence menopause crisis. School administrators should provide working environments that are conducive to female teachers. Findings from the study provided insight that it is helpful to school managers to identify some of the social environment related gaps in their schools that need to be addressed in order to make their working environment more conducive to menopausal women. Policy makers will gain insight into initiatives that could ensure women teachers undergoing menopause are least affected socially.

Keywords: menopause, crisis, female teachers, coping, social environment.

1. INTRODUCTION

According to Thorogood (2015), work environments have been shown to increase the effects of menopausal symptoms. Low self-concept while managing menopausal symptoms in the workplace has resulted to the increasing intent to quit and abandoned ambitions of promotional opportunities (Hamilton & Osman, 2022). This is supported by Sexton (2022) in the survey of 4000 women in United Kingdom where 59 % reported that menopause has impacted negatively on women careers while 49 % indicated that menopausal symptoms had forced them to take time off. In the same line of exploration Evandrou et al (2020) found out that 53.5% of employed women at age 50 indicated at least one serious symptom. In addition, menopausal symptoms can pose challenges to some middle-aged women in reference to staying in employment or maintaining their number of working hours. In the same view, Monteleone et al (2017) asserted that menopausal symptoms have a significantly huge effect on the quality of life of women and on performance at work place. This is contrary to Norton (2020) who indicated that most women experiencing menopause remained in employment. These views imply that if menopausal women were to remain in employment, their social working environment must be made conducive for them to cope with the menopause challenges and at the same time continue working.

Appendix XIII: A Map of Laikipia County in Kenya



Source: Kenya Open Data Africa