OCCUPATIONAL STRESS: LEVEL, CAUSES, EFFECT AND COPING STRATEGIES BASED ON DEMOGRAPHIC CHARACTERISTICS AMONG DRUGS AND SUBSTANCE ABUSE REHABILITATION COUNSELLORS IN SELECTED COUNTIES OF KENYA

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A Thesis Submitted to the Graduate School in Partial Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy in Counselling Psychology of Egerton University

EGERTON UNIVERSITY

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DECLARATION AND RECOMMENDATION

Declaration This thesis is my original work and has not been previously presented for an award of a degree in any other university.		
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DEDICATION

I dedicate this work to Jehovah Shalom my peace, Jesus Christ who is my redeemer and the Holy Spirit who guided me throughout this study.

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I am grateful to the Almighty God for granting me this opportunity to advance in my studies. I am also grateful to Egerton University for having admitted me as their student. I am greatly indebted and sincerely grateful to my supervisors Prof. Micah Chepchieng and Dr. Owen Ngumi for their guidance, support and continuous advice on academic matters. I sincerely appreciate their patience and commitment to see me through the PhD programme. You have always been there for me whenever I needed your wise counsel. Your unfailing support and encouragement inspired me to press on. I am sincerely grateful to my friends and church members especially Bishop Zachary Kibaliach and his wife Betty for always being there for me. The words of encouragement, spiritual guidance, other forms of support, prayers and the love you showed me surely kept me going. I owe my deepest gratitude to Drugs and Substance Abuse Rehabilitation Counsellors and administrators who responded to the questionnaires and interviews. Thank you for sharing your valuable time and making this research a success even in the midst of your passion to help your precious clients come out of addiction. I thank my extended family members my mum Jane Ngeno, my dad Thomas Ngeno, my brothers Dan and Chris and their families, my sisters Margaret, Lily, Judy and their families. I thank you so much for your endless love, prayers and moral support. I am also grateful to my in laws for being supportive emotionally and physically. Finally yet importantly, I extend my thanks and love to my beloved husband Solomon Mutai for his continuous encouragement and support throughout this programme. My thanks and appreciation goes to my children Lewis, Hilda, Victor, Emmanuel and Janet my daughter in law for their significant sacrifices. Thank you so much for being such wonderful children. You gave me your support, unconditional love and encouragement that actually motivated me to continue and complete my studies.

ABSTRACT

Occupational stress is a common phenomenon among drugs and substance abuse rehabilitation counsellors. Though occupational stress and coping strategies have received increased attention, apparently the current level of attention attributed to level, causes, effects and coping strategies among drugs and substance abuse rehabilitation counsellors still remains a point of concern. This study therefore sought to establish the level, causes, effects of occupational stress and coping strategies among rehabilitation counsellors working in drugs and substance abuse rehabilitation centres in selected counties in Kenya. This study adopted a descriptive survey research design. The study population comprised of 204 rehabilitation counsellors who were drawn from 44 drugs and substance abuse centres that are distributed in 14 counties in Kenya. Simple random sampling technique was used to select five counties that participated in the study and all counsellors and administrators in the five counties formed the sampled population. A total of 112 (85%) drugs and substance abuse rehabilitation counsellors completed the occupational stress questionnaire and 13 administrators were interviewed in five counties. Descriptive statistics (mean, standard deviation and percentages) were used to analyse the data. A two way Analysis of Variance (ANOVA) was used to test the significance and determine whether to reject or accept the study hypotheses. All tests were based on the 0.05 level of significance. The data was analysed using a computer programme, the Statistical Package for Social Sciences (SPSS) version 19.0. An analysis of the findings indicated significant difference in the level of occupational stress across age, marital status and educational level of the rehabilitation counsellors who participated in this study. Furthermore, causes of occupational stress were found to be workload, clients', organisational and interpersonal demands. Analysis of the findings indicated that the causes of occupational stress varied according to age. The findings revealed that there existed significant difference in the effects of occupational stress across gender, marital status and educational level of the rehabilitation counsellors who participated in this study. The study established that a significant difference existed in the coping strategies across gender, marital status and experience of the rehabilitation counsellors who participated in this study. From the findings of the study, it was recommended that regular assessment of occupational stress for preventive measures be done among substance abuse rehabilitation counsellors in order to manage and treat the increasingly complex needs of clients.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACA: American Counselling Association

AIDS: Acquired Immune Deficiency Syndrome

CND: Commission of Narcotics and Drugs

GAS: General Adaptation Syndrome

HIV: Human Immunodeficiency Virus

HSE: Health and Safety Executive

NACADA: National Authority for the Campaign Against Drug Abuse

NACOST: National Council for Science and Technology

NHS: National Health Safety

P-E FIT: Person Environment Fit

SPSS: Statistical Package for Social Sciences

UK: United Kingdom

USA: United States of America

WHO: World Health Organization

CHAPTER ONE INTRODUCTION

1.1 Background to the Study

The concept of occupational stress has been an issue of increasing concern to researchers and the public over the last two decades and efforts in this area have gained momentum with the current concern on the quality of working life (Martha, 2011). Occupational stress has become one of the most severe health problems in the contemporary world and it is more severe than decades ago (Health and Safety Executive, 2014). Stress is an adaptive response mediated by physical and behavioural process. Occupational stress describes physical, mental and emotional wear and tear brought by incongruence between the requirement of the work and the capabilities, resources and needs of the employee to cope with job demands.

Available statistics show that occupational stress has become costly over the past years. In the U.S.A, occupational stress costs employers an estimated \$200 million per year in absenteeism, lower productivity, staff turnover, workers compensation and other stress related expenses (Lent, 2011). It is estimated that work related stress caused workers in Great Britain to lose 11.3 million working days in 2013/14 (Health and Safety Executive, 2014). Countries such as Canada and the United Kingdom are finding that stress is a major contributor to employee disease, depression, injury, and lowered company productivity. It is estimated that every day, 270,000 people take time off for stress related illnesses at a cost of economy of £10.2 billion annually (Health and Safety Executive, ibid). Stress related cost, including absenteeism, cost Australian economy AU\$ 414.81 billion a year, and directly costing employers AU\$ 10.11 with a total of 3.2 million days lost per year. Additional financial effects include employee lawsuits for workplace stress with monetary awards, an increase in workers' compensation, and an increase in disability claims (WHO, 2005). These and other reports suggest that occupational stress is a growing global costly epidemic.

Occupational stress is also an issue of growing concern in developing countries since the health and safety initiatives is on for chemical, biological and physical exposures, while the psychosocial risks at work are still largely neglected yet their causes and consequences still insufficiently understood (Houtman, Jetting off & Cedillo, 2007). It is well documented in

developed countries that have an abundance of research that occupational stress has the capacity to affect the physical, mental and social well-being of workers and that there are a number of real risks involved. Kortum, Leka and Cox (2010) noted that poor occupational health and reduced working capacity of workers caused by stress may cause economic loss up to 10-20 % of the Gross National Product of a country. In South Africa, the economic burden of funding stress-related illness and disorders runs into billions of rands per annum (Idris, 2009). The awareness of the effect of occupational stress is also reflected in Kenya's Labour Law that stresses on the quality of life and safety while at work (The Occupation Health and Safety Act, 2007). However, there is a true gap of coherent research in developing countries especially in Kenya to provide an insight on occupational stress and the coping strategies that may appraise it.

Occupational stress is not limited to any particular profession. Occupational stress is documented as a common occurrence in helping professions throughout the world (Victoria, 2012; Gupta, 2010). The National Health Services (2011) in the United Kingdom reported that occupational stress occurred among Mental Health professionals at higher levels than those in product-oriented professions. Rehabilitation counsellors, just like other mental health workers, play a central role in dealing with clients' psychological, emotional and mental issues to promote optimum mental health. Studies such as Crim (2013) and Layne (2001) reveal that rehabilitation counselling is an inherently stressful profession as it has a long history of serving persons who are suffering.

Rehabilitation counsellors represent a population at high risk for occupational stress exposure and stress related outcomes. Crim (2013) emphasise that due to unique nature and high demands of their professions, rehabilitation counsellors regularly experience occupational stress not common to the general population. The virtue of working with persons who are suffering, suicidal, violent, a client's death, chronic relapses, conducting therapy, and meeting demanding obligations increase the likelihood of occupational stress (Crim, 2013; Victoria, 2012). Rehabilitation counsellors are expected to demonstrate empathy, genuineness and unconditional positive regard to their clients for an effective counsellor-client relationship (Jackson, 2004). These stressors are in addition to other stressors such as paperwork, scrutiny of job performance, slow progress in career advancement, interpersonal relations and professional

disillusionment, role demands and role tasks (Crim, 2013; Victoria, 2012, Lent, 2011; Layne, 2001). While rehabilitation counsellors can be considered experts in assessing and treating distress and impairment in others, it is obvious that many still fail to acknowledge and address occupational stress in their own lives resulting in them being distressed (Lent, 2011; Martha, 2011).

Drug and substance abuse rehabilitation counsellors enter the field of rehabilitation with a variety of motivations (Martha, 2011). In Kenya, many choose counselling as a career because of a desire to help others in need, receive intellectual stimulation, or even achieve high status (Okech & Kimemia, 2012). For the most part they are dedicated, concerned persons who wish to offer themselves and their resources to assist clients in their development and rehabilitation (Gachutha, 2006). They supports and advocate for the progress of each client through daily communications, thinking and problem solving as this is at the core of counselling process. It is conceivable that drugs and substance abuse rehabilitation counsellors have a huge impact on their clients' lives on a daily basis. This is through attending to their many psychological, behavioural and physical concerns. However, there is an inescapable stress producing conflict between the counsellors' commitment to give or help and reality that frequently one cannot offer enough help especially when it comes to relapses or the dying clients. This experience actually triggers occupational stress in rehabilitation counselling.

In Kenya, there is evidence which suggests that counsellors working in rehabilitation centres experience occupational stress and burnout due to handling high caseloads of addiction clients in which some are suffering from HIV/ AIDS and are prone to relapses (Gachutha, 2006). Rehabilitation Counsellors who are emotionally, cognitively, and physically exhausted may not be able to convey empathy, warmth and unconditional positive regards in promoting a therapeutic relationship with clients (Gupta, 2010). Hart (2004) reported that occupational stress affects performance and organisations should find effective ways of managing stress. Gachutha (2006) suggested that there is need for carrying out studies that determines effective strategies of coping with occupational stress. At present, there are scanty information about occupational stress and coping strategies among drugs and substance abuse rehabilitation counsellors in African countries especially in Kenya in particular. Thus, the need for a study on occupational

stress and coping strategies in this field is undeniable. The current study sets out to examine occupational stress and coping strategies among rehabilitation counsellors working in drugs and substance abuse rehabilitation centres in selected counties.

1.2 Statement of the Problem

Rehabilitation counselling is a critical activity of drugs and substance abuse rehabilitation counsellors. The role of substance abuse rehabilitation counsellors is to assist clients to return to normalcy by addressing their emotional and psychological aspects of addiction which is done through counselling, assessment and case management. Drugs and substance abuse rehabilitation counsellors are overwhelmed emotionally due to listening to reports of trauma, horror, pain, grief and hopelessness from their clients. Drugs and substance abuse rehabilitation centres are required to maintain counsellors' wellness as it is a prerequisite for quality service delivery. However, this seems not have been addressed since there are noticeable effects of occupational stress among drugs and substance abuse rehabilitation counsellors that often emanates from working with clients who are suffering, chronic relapses, conducting therapy and meeting demanding role obligations. The effects of occupational stress may result in emotional drainage among the rehabilitation counsellors and symptoms can be displayed in terms of dissatisfaction absenteeism, sick offs, reduced service quality and clients outcome. As such, this may lead to rehabilitation counsellors causing harm to both themselves and to those whom they provide services. Moreover, the reputation of counsellors and the utility of therapy may be doubted when substance abuse clients work with distressed professionals. Again it is a common belief that working with substance abuse clients is particularly distressing, however, there is very little empirical evidence to support or refute this view. Indeed, the concept of occupational stress among rehabilitation counsellors has received little attention in Kenya since this is still a growing area of interest. This study therefore intends to fill this knowledge gap. It is therefore imperative to examine occupational stress and the coping strategies used by drugs and substance abuse rehabilitation counsellors in selected counties of Kenya.

1.3 Purpose of the Study

The purpose of this study was to determine whether differences existed in the level, causes and effects of occupational stress and coping strategies among the drugs and substance abuse rehabilitation counsellors in the selected counties in Kenya.

1.4 Objectives of the Study

The objectives of the study were to:

- (i) Determine whether differences exist in the level of occupational stress among rehabilitation counsellors in selected counties of Kenya based on demographic characteristics.
- (ii) Determine whether differences exist in causes of occupational stress among rehabilitation counsellors in selected counties of Kenya based on demographic characteristics.
- (iii) Find out whether differences exist in the effects of occupational stress on rehabilitation counsellors centres in selected counties of Kenya based on demographic characteristics.
- (iv) Establish whether differences exist in the coping strategies that are utilised by rehabilitation counsellors in selected counties of Kenya based on demographic characteristics.

1.5 Hypotheses of the study

The following null hypotheses were tested in the study:

- **HO**₁: There is no statistically significant difference in the level of occupational stress among rehabilitation counsellors based on demographic characteristics.
- **HO2:** There is no statistically significant difference in the causes of occupational stress among rehabilitation counsellors based on demographic characteristics.
- **HO3:** There is no statistically significant difference in the effects of occupational stress among rehabilitation counsellors based on demographic characteristics.
- **HO4:** There is no statistically significant difference in the coping strategies that are utilized by rehabilitation counsellors based on demographic characteristics.

1.6 Significance of the Study

An understanding of rehabilitation counsellors' occupational stress and coping strategies will assist educators, policy makers, project directors to understand better where to provide extra support. In the long term, the findings are expected to help educational and professional training institutions to pro-actively design training programs that would better prepare their students and employees by increasing their awareness of, effects and ways of handling occupational stress. The educational and professional training institutions are able to train their students on how and where they might experience occupational stress, and how to cope with it. The findings of the study may also be of great significance in developing policies of counsellors' welfare and managing stress in counselling profession. The findings may be used to guide policy makers to develop stress prevention, coping strategies or management models specific to Kenyan situation hence filling the gap. The findings will assist the drugs and substance abuse centres in managing occupational stress and implementing the coping strategies that were found to be actively utilised by the respondents. Rehabilitation counsellors experiencing occupational stress will receive support services such as Employee Assistance Programs and supervision which will not only improve their health but may also reduce costs for health care as well. Improved wellness and functioning of the rehabilitation counsellors will lead to improved services to the clients. Rehabilitation centres will benefit through retention of their employees that will improve therapeutic outcome. Finally, it is also hoped that the findings could have direct implication for the potential directions of the future research endeavours that might serve to expand our current knowledge of occupational stress and coping resources among drugs and substance abuse rehabilitation counsellors.

1.7 Scope of the Study

The issues that were examined in the study included levels, causes, and effects of occupational stress. The study also established how rehabilitation counsellors utilise coping strategies to counter the effects of occupational stress in their place of work. The study was carried out in drugs and substance abuse rehabilitation centres in five counties namely Kiambu, Nairobi, Nyamira, Trans Nzoia and Uasin Gishu. The counties were randomly selected. All the participants in the study were full time and part-time counsellors who were working in the drugs and substance abuse rehabilitation centres.

1.8 Limitations of the Study

The findings of the study were limited to drugs and substance abuse rehabilitation counsellors in the selected counties and may not be generalised to all drugs and substance abuse rehabilitation counsellors. Any generalisation may be done with caution. This is due to difference in operations of rehabilitation centres which may not have uniformity and hence may alter the variables in other parts of the country. The other limitation was scanty studies that had been conducted in Kenya on occupational stress among drugs and substance abuse rehabilitation counsellors. However, since the phenomenon under study was universal, the researcher relied so much on a review of relevant literature done in other countries. Some respondents feared to express themselves freely during the interview. This was overcome by the researcher assuring them on ethical issues especially confidentiality and that the information was going to be used for research only.

1.9 Assumptions of the Study

The study was based on the following assumptions;

- (i) Other factors, which were not addressed in this study, were assumed not to affect the study as they were not part of the study variables such as stress process, personality, life stressors and job burnout.
- (ii) Rehabilitation counsellors experienced occupational stress and use various coping strategies to reduce or alleviate the stress.

1.10 Definition of Terms

For the purpose of this study, the following terms were operationally defined as;

- **Appraisal:** Refers to how the counsellors are dealing with the stressors effectively.
- **Caseload:** Number of clients, within a given amount of time who are provided optimum services by drugs and substance abuse rehabilitation counsellors.
- **Causes:** Refers to reasons why occupational stress occurred among drugs and substance abuse rehabilitation counsellors.
- **Coping Strategies:** Refers to different mechanisms used by drugs and substance abuse rehabilitation counsellors in appraising occupational stress in their daily events.
- **Demographic Characteristics:** Statistical data about the factors of drugs and substance abuse rehabilitation counsellors, such as the age, gender, marital status, educational qualifications and experience.
- **Drug and Substance Abuse:** Improper use of drugs and substance and or, over indulgence and dependence on addictive substance such as alcohol or narcotics for other purposes outside medical prescription.
- **Drugs and Substance Abuse Rehabilitation Counsellor:** Counsellors who works (designate) in drugs and substance abuse centres. They are sometimes referred as rehabilitation counsellors in the study.
- **Effects:** These are behavioural, physiological and psychological processes that occur under the influence of stress and disrupt normal functioning of the drugs and substance abuse rehabilitation counsellor. It is also referred as strain in this study.
- Occupational Stress: A state of mental or emotional strain or tension resulting from adverse or demanding occupational circumstances of a drugs and substance abuse counsellor.
- **Rehabilitation Centre:** A place or institution where the drugs and substance abusers are treated and rehabilitated in order that they return to normalcy. It is also referred in this study as drugs and substance abuse rehabilitation centre.
- **Turnover:** It refers to the phenomena of drugs and substance abuse rehabilitation counsellor voluntarily quitting or resigning from drugs and substance abuse rehabilitation centre.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of related literature on occupational stress and coping strategies among rehabilitation counsellors. In this section, review of literature helped in defining the concept of occupational stress based on various views of different researchers. Historical background, the concept of occupational stress, causes, effects and coping strategies of occupational stress were reviewed. The study discussed theories of occupational stress and finally conceptual framework that guides the study. Researches regarding rehabilitation counselling and related fields were cited however; other research related to occupational stress and coping strategies were also reviewed.

2.2. Concept of Occupational Stress

Researchers, academics, laypersons and policy makers have not yet reached a consensus on the definition of occupational stress though it is a common problem in a workplace (Harwood, 2007; Kinman & Jones, 2005). Nabirye (2012) observed that occupational stress is a complicated construct that requires an initial understanding of a 'mother construct' called stress. The widely used definition of stress is psychological, behavioural and physiological reaction to certain life events or situation (Aamodt, 2010; Victoria, 2012). A difficulty within the literature on occupational stress is that the term is used inconsistently depending on the context and perspective of the research (Victoria, 2012). Melgosa (2006) argues that occupational stress is the by-product of modern life that results from ones efforts of trying to balance the demands of the workplace and the family life. WHO (2007) defines Occupational stress as a pattern of reactions that occurs when workers are presented with work demands not matched to their knowledge, skills or abilities and which challenge their ability to cope. Although there are varying definitions on occupational stress, this study adopts the definition by Aamodt (2010).

Related terms such as distress, impairment and burnout are also often used interchangeably with stress creating some conceptual overlap (Smith, 2009). The terms burnout and stress are used synonymously in the literature quite frequently. It should be noted that undergoing prolonged heightened stress does not necessarily result in burnout, as many professionals experience stress

and still remain healthy. Although individuals can experience stress for prolonged periods and not reach burnout, occupational stress on its own can still have detrimental effects on workers' wellbeing and quality of life. Thus, it should be considered that the literature reviewed in the present study might reflect this conceptual overlap. However, this study addresses occupational stress and not impairment or burnout. It would be of interest to investigate occupational stress among rehabilitation counsellors that may reveal more information on their experience and how they appraise occupational stress within their workplace as addressed in the current study.

Many researchers have also defined occupational stress as a negatively perceived quality and because of inadequate coping strategies, have negative mental and physical health related consequences (Cole, 2007; Eunha, 2006; Caulifield, Chang, Dollard and Elshaug, 2004). It has also been conceptualised as the result of detrimental working conditions, but also as causing poor conditions (WHO, 2007; Eunha, 2006). These explanations offer a more complete view of the dynamics of occupational stress and can account for documented differential experiences within a single situation (D'Aleo, Stebbins, Lowe, Lee & Ham, 2007). However, none of the above definitions is exhaustive but only intends to help in providing a reasonable picture about occupational stress. The present study conceptualised that although occupational stress may be negative, the effects of stress depends on the individuals appraisal in which the current study addressed under coping strategies.

Occupational stress has been conceptualised as input variable while occupational strain, psychological disorders, have been conceptualised as output variables (outcome). This makes it usually rather difficult to make a clear distinction between input and output. In particular, if we take into account that different constructs are used to indicate mental health in the stress/strain process, sometimes they are called negative emotions, anxiety, depression or anger (Oser, Biebel, Pullen & Harp, 2013; Smith, 2009; WHO, 2007). Moreover, stress can also be accompanied by non-specific tensions and physical sensations that can be labelled in different ways as well as their effect on cognitive and social processes (Crim, 2013; Jackson, 2004). However, this confusion has permeated much of the literature and in order to fill the gap about the terminology, the current study uses the word occupational stress to denote 'inputs' and strain to apply to output (outcomes).

Occupational stress is not limited to any particular profession or season (Lath, 2010). Occupational stress was popularly used in the seventeenth century to mean hardship, strain, adversity or affliction in the workplace. It was used in the eighteenth and nineteenth centuries to denote force, pressure, strain or strong effort with reference to an object or person. In engineering and physics, the term implies an external force or pressure exerted to distort and resisted by the person or object on which is exerted (Lath, 2010). In psychology, stress refers to some stimulus resulting in a detectable strain that cannot be accommodated by the organism and which ultimately results in impaired health or behaviour (Crim, 2013). Although stress is defined on different terms and different professions, little is known about the concept of occupational stress among rehabilitation counsellors in selected counties in Kenya in which the current study addresses.

Melgosa (2006) cited two major types of stress: eustress (good stress) and distress (bad stress). Eustress is often associated with individuals who have experienced moderate and low stress levels and distress is frequently associated with individuals who have experienced high stress level. Caulifield *et al.* (2004) stated that individuals who experience eustress will be able to meet job demands and this may help them to increase positive work life (satisfaction, positive moral values and increased productivity). Conversely, individuals who experience distress will not be able to fulfil job demands and this may result in decrease quality of work life (that includes low motivation, negative moral values and dissatisfaction). Although the concept of occupational stress has been researched widely, limited studies have been conducted in Africa, especially Kenya. It is for a better understanding that the study on occupational stress among the rehabilitation counsellors in selected counties in Kenya is undertaken.

2.3 Historical Background of Stress

The history of stress research can be traced back to Claude Bernard, a 19th century French physiologist, who taught his students about the maintenance of the internal milieu (Seyle, 1956). It was stated that despite the change in external environment, physical and chemical properties of tissue fluids should remain stable. When this self-regulating power fails, disease sets in. The nervous system was likened to a "conductor" that promotes harmony within the symphony of

human physiology. Survival is determined by consistent maintenance of the internal environment via continual compensatory reactions in response to changes in the external environment. The significance of this research lies in the necessary receptive atmosphere it created for the eventual development of the contemporary notion of stress. Bernard's more lasting legacy was the motivation his work gave to later researchers to take forward his pioneering studies and explore the nature of those adaptive changes by which the steady state is maintained (Selye, 1956)

In 1935, Walter Cannon an American Physiologist expanded on the teachings of Bernard on human physiology. This was done by laying scientific groundwork for understanding how various emotional states affect physiological functions and disease states by describing the "fight or flight" response. This response, evoked by potentially dangerous situations, included elevated heart rate and blood pressure, a redistribution of blood flow to the brain and major muscle groups and away from distal body parts, and decrease in vegetative functions. This term was coined "homeostasis," which meant physiological regulation to sustain stability in function and keeping variables within an acceptable range. Cannon pioneered the concept of physiological homeostasis and developed the use of an engineering concept of stress and strain in physiological context. In particular, the notion of critical stress levels that were capable of producing strain in the homeostatic mechanisms was proposed. Although the term was used somewhat casually, it is clear that Cannon's conception of stress involves physical as well as emotional stimuli.

The work of Seyle in the 1940s marked the beginning of the stress concept after discovering a wide variety of noxious stimuli (which he later referred to stressors), such as exposure to extreme temperature, physical injury, and physiological changes in laboratory animals. In each case, the cortex of the adrenal gland became enlarged, the thymus and other lymphatic structures became involutes and deep bleeding ulcers developed in the stomach and intestines. These effects were "non-specific" in that they occurred regardless of the nature of the insult and were superimposed upon any specific effects associated with the individual agents.

Selye's work spanned six decades and during this period, several other developments were to influence the course of stress research. One such influence was Harold Wolff who expounded the idea that life stress played a role in the aetiology of disease. The central thesis in Wolff's

work was that if individuals continually over mobilise their physical resources when confronted with problems originating in the symbolic environments, to an extent that these problems remain unresolved, a state of inappropriate mobilisation will be perpetuated. Stress is largely the result of the way in which that situation is perceived, and that this perception depends upon a wide variety of factors including the "generic equipment, basic individual needs, longings, earlier conditioning influences, a host of life experiences and culture pressures" (Seyle, 1956). Wolff's protection reaction response has also been criticised because the major problem with this concept is that it does not explain why individuals respond in different ways to noxious symbolic stimuli.

Other early contributors in the field included Mason in 1971 and McEwen and Mendelson in 1983. Mason believed that coping processes were constantly shaping the endocrine response to stressors and that this response varied with the particular properties of the stimuli. He disagreed with Selye that there was a nonspecific response to stimuli. Mason coined the term "psychoendocrinology," thus attributing to mental processes some of the variance in the endocrine response to stressful stimuli. Like Selye, McEwen and Mendelson (Lazarus & Folkman, 1984)) explained that stress is a term for certain types of experiences, as well as the body's responses to such experiences. The term generally refers to challenges, real or implied, to the homeostatic regulatory process of the organism. McEwen and Mendelson proposed that psychological stress (such as fear and anxiety) involved perceived threats to homeostasis and that these were likely to evoke psychosomatic reactions, such as gastric ulcers and immune suppression. This work focused on the neuroendocrine response of the brain to stressors and the development of depressive symptoms. The results indicated that glucocorticoid was one of the body's natural antidepressants.

Lazarus and Folkman (1984) introduced two distinctive concepts namely appraisal and coping. This shifted the focus away from regarding occupational stress as a variable to understanding occupational stress as a rubric consisting of many variables and processes. Later, coping research was carried with its emphasis on managing a stressful encounter in which it provided the climate for what became known as the self-help years (Victoria, 2012; Lath, 2010; Cooper & Dewe, 2004). Self-help techniques such as exercise, relaxation, meditation, biofeedback, and a

philosophy of life were considered as part of the coping strategies. During the last decade, the knowledge of stress management interventions increased substantially ranging from personnel, organizational strategies to Employee Assistance Programs and self-care strategies.

From the time when the literature of occupational stress first began to appear in the 1950s and 1960s, it has become a field of endeavour that has found its way into every facet of working life and beyond. There is no reason to suspect that the volume of research is likely to decrease. There is no doubt that the study of stress has been beleaguered by the bewildering use of the term. it is now such a part of our everyday vocabulary, and so much a part of our everyday lives, that it is difficult at times to know whether what is being discussed is a scientific reality or culturally manufactured concept that has become a 'social fact' (Cooper & Dewe, 2004). But just as there is a sense that occupational stress research has now reached a level of maturity there is still a lingering sense of disquiet about occupational stress among drugs and substance abuse counsellors in Africa, especially those working in Kenya. The current study utilises the history of occupational stress in understanding the phenomenon among the drugs and substance abuse counsellors in the selected counties in Kenya.

2.4 Causes of Occupational Stress in Rehabilitation Counsellors

In order to understand occupational stress, it is necessary to identify causes of occupational stress among rehabilitation counsellors. In reality, it is rare that only one cause of occupational stress is present. Sources of occupational stress are frequently interrelated and synergistic effects are observed due to a variety of sources of stress. Research has demonstrated that causes of occupational stress among rehabilitation counsellors vary (Crim, 2013; Gladding 2012; Miner, 2010). According to Melgosa (2006) occupational stress originates from internal and external factors. Intrinsic factors are related to work context while extrinsic factors are related to specific contents. The current research tried to establish the causes of occupational stress among rehabilitation counsellors in selected counties in Kenya.

Clients' characteristics have probably been the subject of the most empirical research conducted on the stressors affecting drugs and substance abuse rehabilitation counsellors. Elizabeth (2012) and Long (2008) reported that the primary factor underlying stress is that the counsellor perceives the client as non-attentive and giving. This is also activated by suicidal statements,

aggression, physical violence, and expression of anger toward the counsellor, inability to help severely depressed clients, apathy or lack of motivation, lack of observable progress and premature termination as the most stressful behaviours. Having experienced client aggression, suicidal statements, violence and over-involvement with clients, counsellors acknowledge on going concern for their safety and well-being, which extends beyond physical attacks to emotional wellness (Aloysius, 2006). Eventually, counsellors may begin to doubt themselves and their competency. Though, the findings of the above researches shows that client's contribution to counsellors' stress was eminent, little is known about clients' behaviours as a source of occupational stress among rehabilitation counsellors in the selected counties in which the current study addresses.

In addition to clients' behaviour, unsatisfactory career development, lack of promotional opportunities and thwarted ambition often represents additional sources of stress for rehabilitation counsellors (Lawson, Venart & Hazier, 2007). Implicitly in this is the reality that stresses- related problems originating from career development and job security often has the potential of impeding careers progression and may negatively influence rehabilitation counsellors' sense of well-being and commitment to work (Crim, 2013; Gladding, 2012; Niosh, 2008). For example, Most of the organisations have grades up to a certain level in which if one has to rise then one must change the career either as a supervisor or as administrator that translate into a majority of rehabilitation administrators having sparse training or knowledge concerning management or administration. Consequently this changes of roles have generated stressful working environment that is resulting into low job autonomy, job insecurities, poor promotional prospects and even situations where rehabilitation counsellors' are stuck in one position with no opportunity for advancement. Thus a need to determine the cause of occupational stress among the rehabilitation counsellors in the selected counties in Kenya

It has been observed that isolation and intense loneliness experienced by drugs and substance abuse rehabilitation counsellors in their therapeutic setup causes stress. According to Eunha (2006), isolation emanates from physical and psychological factors inherent in the practice of counselling. Psychological isolation emanates from isolation from colleagues. Victoria (2012)

observed that rehabilitation counsellors experience physical isolation that stems from conducting counselling in the same room hour after hour. Whereas most professions have a fair degree of social support in their work settings, counselling affords limited interaction among colleagues (Gladding, 2012; Miner, 2010: Lawson, 2007). Drugs and substance abuse rehabilitation counsellors also experience professional isolation where they need to control ones' emotions while on session, ambiguity of success and a measurement for such, difficulty in being empathic session after session. Thus, it is important to establish if the environment of counselling causes occupational stress among rehabilitation counsellors in Kenya.

The work of counselling is interpersonal in nature, and relies on the emotional and mental investment that rehabilitation counsellors make in building what is called therapeutic relationship with clients (Ducharme, Knudsen& Roman, 2008). The best practices guidelines for drugs and substance abuse rehabilitation counsellors' states that the ability to develop a therapeutic alliance with the client along with strong interpersonal skills such as empathy is associated with more positive treatment outcomes (Victoria, 2012). The research stated that client perceptions of the therapeutic relationship during treatment are significantly associated with meeting treatment goals for substance dependency, such as successfully acquiring relapse prevention skills at three months follow-up. It is within the relationship between client and counsellor that much of the healing and therapeutic processes take place (Oser, Biebel, Pullen & Kathie, 2013; Victoria, 2012). The consistent emotional availability and empathy on the part of the counsellor plays a vital role in promoting a trusting and safe environment for the client to explore issues that are often painful and overwhelming (Oser, et. al., 2013; Broderick, 2005). However, the emotional intensity that characterises the burdens shared is often thought to contribute to the stress inherent in the role of a helping professional. Although research has been carried out to establish therapeutic relationship of the client and the counsellor as a source of stress, little is known about the same among rehabilitation counsellors in Kenya.

Significant associations were found between demographic characteristics and the causes of occupational stress (Crim, 2013; Lent, 2011; Lawson, 2007). These variables include age, gender, education level, caseload and experience. Jackson (2004) found that age for counsellors significantly correlated with occupational stress while Layne (2001) did not find age as a

significant predictor of occupational stress. Years of experience in the profession has also been cited as one of the cause of stress on drugs and substance abuse rehabilitation counsellor although researchers differ on this issue (Duraisingam, Pidd & Roche, 2009; Layne 2001). Bride (2007) noted that stress level for female and male was similar, while other researchers have noted a difference in the stress levels on both genders. Broome, Knight, Edwards and Flynn (2009) noted that the level of education was one of the predictors of high stress among rehabilitation counsellors. The magnitude of reported stress at work appears to be a direct function of the above demographic factors, however it should be noted that occupational stress is not an automatic consequence of having these characteristics and no single study addressed all these variables. It may still be relevant to look at and establish if these variables are predictors of occupational stress among rehabilitation counsellors working in drugs and substance abuse centres in Kenya.

Organisational factors and job demands are other sources of occupational stress. Task and role demands are factors related to a rehabilitation counsellors' job (autonomy), working conditions and physical work layout (Miner, 2010). Task base stress includes demands such as work overload or task complexity. Other tasks that were cited by Rupert and Morgan (2005) are time pressure, deadlines, long hours of work, total hours worked and working conditions (e.g. understaffing). Victoria (2012) reported control over decision-making, ineffective decisionmaking and ineffective supervision, absence of proper performance recognition, unclear performance expectations and inadequate manpower as sources of work stress. Lent (2011) stressed that paperwork was cited by rehabilitation counsellors as the biggest stressor because each management care administrator has its own treatment plan. The paper work in which every counsellor must complete for every client is required for treatment planning documentation sessions and for billing. Although the literature review shows organisational factors that create stress for drugs and substance abuse rehabilitation counsellors, little is known about rehabilitation counsellors working in Kenya especially those in the selected counties. The current study tried to establish if organisational demands was a source of occupational stress among rehabilitation counsellors working in the selected counties in Kenya.

Role based stress concerns the role that the counsellor has to perform in the working setting that includes role conflicts, role overload, role boundary, role ambiguity and responsibility (Marzabadi & Tarkhorani, 2007). Role conflict exists when the counsellor is torn between conflicting work demands like doing tasks that one does not consider one's responsibility. These have detrimental effects on an individual, particularly when there is lack of support from drugs and rehabilitation centres on how to deal with these situations (Lent, 2011). Wright (2008) noted that any job that is psychologically and physically demanding leads to stress and so is the job of a rehabilitation counsellor. Role demands have been associated as major contributing factor of stress related effects and disorders such as burnout, hypertension and blood pressure (Niosh, 2008). While research depicts that role tasks causes occupational stress, little is known if role tasks are causes of occupational stress among rehabilitation counsellors in Kenya.

Workplace social support has been reported as one of the factors that contribute to stress when working in drugs and substance abuse rehabilitation centres (Broome *et al.*, 2009; Skinner & Roche, 2005; Skinner, 2005). Broome *et. al.* (2009) found that rehabilitation counsellors from organisations who enjoy social support from directors, doctors and other professionals have lower stress ratings and high job satisfaction. Duraisingam, Pidd and Roche (2009) found that addiction workers who had lower perceived workplace social support reported lower level of job satisfaction and high level of work stress. Although a significant amount of critical information has been obtained about workplace social support in rehabilitation centres, there is scanty information about the Kenyan situation.

Apart from sources of stress which relates to workplace, there are numerous other variables that cause stress. These include individual and family factors, socioeconomic and financial status, mental and health factors (Petrowski, Hessel, Eichenberg, Brahler, 2014; Crim, 2013, Lath, 2010; Niosh, 2008; Eunha, 2006). The typical personality traits of rehabilitation counsellors such as perfectionism, can lead individuals to become increasingly self-critical which can increase stress and lead to depression (Crim, 2013; Eunha, 2006). From the above mentioned discussions it is clear that causes of occupational stress vary, however, there is little information that reveals the causes of occupational stress among drugs and substance abuse rehabilitation counsellors in Kenya which would enable a concrete conclusion. For this reason, the current

study aims at identifying the causes of occupational stress based on demographic characteristics among drugs and substance abuse counsellors working in rehabilitation centres in the selected counties in Kenya.

2.5 Effects of Occupational Stress among Rehabilitation Counsellors

All researchers in occupational stress concede that there is a cause-effect relationship between stressors and strain (Lent, 2011; Knudsen, Ducharme and Roman, 2008; Harwood, 2007). Transactional model of stress, indicate that effect occurs when individuals appraise the demands of the stressor in excess of their ability to cope (Cope, 2003). Strain (effects) can be defined as the response to stress that is manifested by the individual and may include psychological, physical and biological strain (Wright, 2008). According to transactional stress-strain theory, strain is believed to be the result of the interaction of individually experienced stress and subsequent coping (Garner, Knight & Simpson, 2007). According to the above literature, the outcomes of stress are essential to the definition of occupational stress in any organisational setting. Cole (2007) organised the effects of occupational stress into physical, psychological, emotional and behavioural reactions (strain). According to Gladding (2008), effects of stress are believed to be the results of three outcomes namely; psychological, behavioural and physical The current study sets to establish the effects of stress that is experienced by strain. rehabilitation counsellors based on their demographic characteristics in the selected counties in Kenya.

In the occupational stress literature, psychological strain has been extensively researched (Miner, 2010; Aamodt, 2010). According to D'Aleo *et. al.* (2007), reaction to stress is being with initial shock and disbelief followed by defensive reactions, denial and ultimately acceptance. These reactions may be temporary or long term, mild or severe depending on the longevity of the causes, how strong they are, and the strength of the rehabilitation counsellor's ability to recover and cope. Layne (2001) classified psychological symptoms into four categories (subjective, cognitive, behavioural and affective). Subjective symptoms which were identified include; anxiety, depression, irritation, anger and loss of temper, frustration, low self-esteem, nervousness and empathy. Cognitive symptoms include; inability to make decisions, poor concentration, short attention span, hypersensitivity and mental blocks. Behavioural

symptoms of psychological strain include; alcoholism, drug abuse, emotional outbursts, excessive smoking and impulsive behaviour (Lawson, Venart and Hazier (2007). Rupert and Morgan (2005) indicated that psychological strain has an effect on rehabilitation counsellors' wellness and there is need for intervention. Although there are several studies that have identified and classified several symptoms of psychological effects of occupational stress, most are confined to the Western world and little has been documented about the Kenyan situation.

The experience of occupational stress is also associated with changes in the drugs and substance abuse rehabilitation counsellors' attitudes and behaviours, which relate to the maintenance of a healthy state in a rehabilitation setting (Layne, Hohenshill & Singh, 2004). These changes in the life of a rehabilitation counsellor could include the inhibition of health promoting behaviours, such as exercises and practice of relaxation, or the development of threatening behaviours such as smoking, alcohol abuse or drug taking (Gnilka, 2010). The studies provide information and are sources of critical arguments towards the issue of occupational stress and coping strategies in rehabilitation counselling that guides the present study into the phenomenon under study.

Occupational stress negatively impacts not only rehabilitation counsellors but also organisational functioning. Individuals under stress at work have been known to experience fatigue and/or low motivation which can directly influence an organisation's morale and decrease overall productivity. This sort of negative attitude can be contagious and adversely affect the moods and attitudes of other employees in the organisation and clients (Petrowski *et. al.*, 2014; Lath, 2010; Knudsen, Ducharme and Roman, 2008). Rehabilitation counsellors suffering from occupational stress have been shown to be ineffective in their work and tend to have higher rates of absenteeism (Knudsen, Ducharme and Roman, 2008). It has also been documented that occupational stress is also critical as it exacts significant organisational cost (Health and Safety Executive, 2014). Decreased productivity due to high levels of stress, increased expenditures for recruiting and training, and mental health services to address stress reactions may burden rehabilitation centres (Crim, 2013; Minor, 2010). In the view that the effects of organisational stress were documented, little is known on the organisational effects of stress among rehabilitation counsellors in rehabilitation centres in Kenya.

Physiological strain is associated with physiological responses by an individual to occupational stressors that ultimately poses physiological hazards to an individual exposed to these stressors (Tziporah & Pace, 2006; Meneze, 2005). There is an assumption that stress causes diseases (Cope, 2003). The relationship between stress and diseases is discussed in many models and framework (Lent 2011; Wright 2008). Studies have linked occupational stress to cardiovascular symptoms (diseases), endocrine, and immune system dysfunction, gastrointestinal symptoms, high blood pressure and heart rate, and infectious diseases (Long, 2008; Layne, Hohenshill & Singh, 2004). In his study, Harwood (2007) identified some of the physical reactions as difficulty in relaxing, unexplained headaches, erratic bowel function, unusual tiredness, dizziness, breathlessness, excessive perspiration, muscle tension and blood pressure. All the above can be experienced by drugs and substance abuse rehabilitation counsellors if not addressed in time. Although there are reports linking occupational stress to physiological effects, evidence in Kenya may not be compelling as might be expected as there are scanty information. This study sought to establish the physical effects of occupational stress among drugs and substance abuse rehabilitation counsellors in rehabilitation centres in selected counties in Kenya.

Behavioural effects have more reliably been shown to have statistically significant associations with reported occupational stress in relation to work related behaviour. According to Cole (2007) changes in behavioural patterns such as alcohol use or smoking tend to be the most apparent indicators of behaviour strain which can be translated into poor job performance, absenteeism, sick off and turnover. A decrease in drugs and substance abuse rehabilitation counsellors' performance and productivity can detrimentally influence the quality of service offered and can cause institutional dysfunction. Layne, Hohenshill, and Singh, (2004) revealed that behavioural manifestations of occupational stress among the rehabilitation counsellors included using alcohol and other drugs, withdrawal and, or aggressiveness. Although studies have linked behavioural effects with occupational stress, little has been documented about the drugs and substance abuse rehabilitation counsellors working in Kenya. The current study sought to find out if the rehabilitation counsellors in selected counties were also experiencing behavioural strain of occupational stress based on their demographic characteristics.

A considerable number of studies confirmed that burnout is one of the consequences of occupational stress (Victoria, 2012; Broome, Knight, Edwards, & Flynn, 2009; Ducharme *et al.*, 2008; Knudsen *et. al.*, 2008). Burnout is a psychological term that infers an excessive stress reaction to the prolonged exposure to occupational or professional stressors (Ducharme *et al.*, 2008; Layne, 2001). The three difference dimensions of burnout are emotional exhaustion, depersonalization, and lack of personal accomplishment. Burnout has been reported as prevalent problem among addiction counsellors and other providers of mental health care (Crim, 2013; Broome *et. al.*, 2009). Burnout can lead to consequences for the counsellor, the organisation, and the client. Counsellors suffering from burnout have more stress-related illness and mental health issues including depression, anxiety, and decreased self-esteem, as well as increased rates of physical health problems such as insomnia, headaches, and a general increase in overall illness (Ducharme *et. al.*, 2008; Garner, Knight & Simpson 2007). Although burnout is certainly of considerable importance, the present study does not focus on burnout but henceforth focuses on other effects in an effort to limit the scope of the investigation.

Rehabilitation counselling turnover as an effect of occupational stress has received considerable attention among stress researchers (Lent 2011; Knudsen, Ducharme and Roman, 2008; Aloysius, 2006; Layne, 2001). Turnover of rehabilitation counsellors have several negative consequences for the field of rehabilitation counselling. It may lead to emotional and physical ill health. With the current high admissions of drugs and substances abusers to the rehabilitation centres, turnover may ultimately affect the counsellors' performance and productivity as it may impair the quality of services offered by disrupting the client-therapist relationship. The counselling relationship is a reciprocal one with the drugs and substance abuse rehabilitation counsellor using clinical skills and theoretical approaches that encourage the client to actively participate in the counselling process. If a counsellor leaves a treatment centre then this will lead to change of a therapist that is usually detrimental to the client's course of treatment.

The solution for rehabilitation personnel turnover lies in an examination of the rehabilitation literature. Various researchers have thoroughly determined how the causes of turnover might be minimised or eliminated (Knudsen, Ducharme and Roman, 2008; Jackson, 2004; Layne, 2001). Some literature emphasize coping strategies, organisational factors, social clinical support,

management skills and knowledge, supervision, education and training expectations, job/role definitions, conflict resolution, management/supervision, sharing/communication and rest. As discussed, the effects of occupational stress frequently result in a wide variety of situations among the rehabilitation counsellors, yet the extent and nature of such strains vary widely among individuals and organisations under comparable circumstances. Although negative effects of occupational stress have been explored, there is still a need for an independent study specific to Kenyan situation to establish the effects of occupational stress among rehabilitation counsellors in selected counties in Kenya in which the current study addresses. The following section addresses the coping strategies among the drugs and rehabilitation counsellors.

2.6 Coping Strategies of Occupational Stress in Rehabilitation Counsellors

The harmful and costly effects of occupational stress demonstrate the need for coping strategies that will limit or appraise stressors in the working environment of rehabilitation counsellors. Coping is an extremely important part of stress appraisal or management (Cole, 2007). Like stress, coping is a multidimensional and contextual construct. The term coping has often been used to refer to the individual's efforts to deal with stress. Folkman and Moskowitz (2004) defines coping as the strategies, responses and resources that individuals use to combat stressors. Lazarus and Folkman (1984) on the other hand defines coping in the transactional model of stress as constantly changing cognitive and behavioural efforts to manage specific and/or exceeding the resources of the person. These definitions highlight the following factors related to coping. In the first instance, coping is a process and it is constantly changing as the individual evaluates ones efforts. Secondly, it is a learned way of responding to stressful circumstances. Thirdly, there has to be an effort on the part of the individual and fourthly, coping is an effort to manage the problem. In short, coping is a process of managing taxing work, expanding efforts to solve personal and interpersonal problems, and seeking to master, minimise, or tolerate stress.

According to Briggs and Munley (2008), therapists experience stress and have different coping strategies to handle their stress, which in turn may affect the therapeutic process. Glinka (2010) revealed that the degree in which a person experience stress depends on the appraisal of the stressors or the coping strategies utilised by the person at stake. The study states that individuals with greater coping resources in contrast to individuals with only a few coping resources are

more capable of successful coping. Contrary to popular belief, stress can be associated with both pleasant and unpleasant events and only becomes problematic when it remains unresolved. However, nobody can be free of stress as Melgosa (2006) states that anyone free from stress is dead. Therefore, this study examines the coping strategies that are utilised by drugs and substance abuse rehabilitation counsellors.

While there are numerous ways to conceptualise coping, one common way is the distinction between problem-focused and emotion-focused coping approaches (Matheny, Ashby & Cupp, 2005; Folkman & Moskowitz, 2004). Problem-focused and Emotion-focused coping have been found to be effective coping strategies being utilized to combat stress. Problem focused coping is defined as approaches that actively attack threat while emotion-focused coping is defined as approaches that manage the stress and emotions about threat (Gnilka, 2010; Briggs & Munley, 2008).

Emotional focused coping involves behaviours that alleviate the emotional consequences of the stressful environment but do not change the actual environment. Essentially, rehabilitation counsellor may use emotional-focused coping to reduce stress that includes any attempt to minimise, avoid, or deal with effects of stressors (Cole, 2007). Activities that can reduce emotional tension in drugs and substance abuse centres can be employed such as relaxation, breathing exercise and taking a break from the work setting can help a rehabilitation counsellor to cope with stressful situations. Folkman and Moskowitz (2004) suggest that the use of both problem-focused and emotion-focused coping jointly can be beneficial strategy for addressing stressors. However, little is known about the emotional and problem focused coping among the drugs and rehabilitation counsellors in Kenya. The current study examined problem-focused and emotion-focused coping strategies that were utilised by rehabilitation counsellors working in selected counties of Kenya.

Matheny, Ashby and Cupp (2005) on the other hand cautions that not all problem-focused and emotion-focused coping strategies are necessarily helpful, rather some are potentially unhealthy such as self-blame, denial, substance abuse, self-distraction, behavioural disengagement and wishful thinking that had a positive relationship with psychological distress. Counsellors, who

have negative self-talk in session, also viewed themselves as less helpful and their clients' reactions as more negative even after accounting for the therapeutic relationship (Jordan, Spangenberg, Watson, and Fouche, 2007). Conversely, more active coping strategies such as problem solving, self-controlling, seeking social support and humour had a negative relationship with psychological distress (Briggs & Munley, 2008). Although there have been studies that explored occupational stress and coping strategies among counsellors, there is scanty research on the same on the Kenyan situation.

Coping responses may be adaptive/healthful or maladaptive and this requires that drugs, substance abuse rehabilitation counsellors, and the entire work-system understand and engage in constructive coping (Gnilka, 2010; Marzabadi & Tarkhorani, 2007; Lawson, 2007). Rehabilitation counsellors should make an effort to obtain information that can increase the predictability of a stressful situation and, or assist in the perception of controlling future recurring occupational stress. Broome *et. al.* (2009) indicates that the coping rehabilitation counsellor manages or modifies a stressful event such as organisational changes by maintaining the usual productivity level and quality of work. In contrast, the non-coping rehabilitation counsellor who experiences a loss of emotional control may respond by having arguments and disputes with management and colleagues. This can increase absenteeism, escalation of accidents and intent to leave the place of work (Nabirye, 2010). This could also adversely affect service delivery in drugs and substance abuse centres (Layne, 2001). This indicates that although work stress is inevitable phenomenon, rehabilitation counsellors and drugs and substances abuse centres must learn to cope with, manage occupational stress effectively and constructively whenever it arises (Brattberg, 2006).

Another way to conceptualise coping is to understand the individual coping strategies and coping resources (Gladding, 2008; Lawson, 2007). Coping strategies and responses occur after a perceived stressor is encountered while coping resources such as social support and problem solving abilities are factors that are in place before stressors are encountered. Briggs and Munley (2008) observed that therapists who perceive that they have more coping resources available are more likely either to overcome or significantly reduce the perceived stressors. Jordan *et al.*, (2007) asserts that clinical and counselling psychologists grow to protect their coping resources

and are threatened when they are faced with perceived or actual loss of these coping strategies. They argue that the measurement of coping resources would be more predictive of stress reactions than simply quantifying the type and intensity of a demand. Lawson (2007) suggests that coping strategies that are in place influences every step of appraising or coping with stress. While considerable research have been conducted on relationship between stress, coping and various psychological outcomes, little is known about occupational stress and coping strategies of rehabilitation counsellors in Kenya in which this study is addressing.

Some researches posit that men and women tend to be equally reactive when subjected to acute stress situations (Nabirye, 2010; Jordan *et. al*, 2007; Cope, 2003). The findings reported that there are major gender differences in stress exposure, for example, the challenges and demands to which both men and women were exposed to in the work environment. The findings should be interpreted with caution, in that the different 'direct' work environment that the males and females were exposed to may have influenced the gender differences in stress exposure. The limitation to these findings brings into question the results pertaining to gender differences in coping with occupational stress. Long (2008) contends that previous stress related research has failed to include women thus impairing the accuracy and comprehensiveness of empirical findings in different ways, especially where the findings taken from studies conducted on men are being incorrectly generalised to women. Layne, Hohenshill and Singh, (2004) on the other hand contend that although gender has been included in some coping related studies, the findings regarding coping differences in men and women vary considerably according to the stressors. This study tried to establish if there was any gender difference in utilising the coping strategies among drugs and substance abuse rehabilitation counsellors.

There are strong indications that social support may moderate stressor-strain relationship among drugs and social support (Petrowski *et. al.*, 2014; Crim, 2013). Social support can be defined as helping relationships regarding work, colleagues, friends, and supervisors who are open to providing feedback and emotional support that is important to the rehabilitation counsellor (Brattberg, 2006). Social support influences occupational stress in two main ways namely direct and moderating effect. Direct effect for social support, reduces stress regardless of the intensity of the work stressors experienced (Ugoji & Isele, 2009). Others have found a moderating effect

in which social support interacts with work stressors to affect stress (Idris, 2009; Brattberg, 2006). Transactional stress model proposes that stress appraisal occurs only when there is a match between the need elicited by stressful events and the functions of support that are perceived to be available (Gnilka, 2010). Empirical evidence examining social support as a coping strategy among drugs and substance abuse rehabilitation counsellors especially in Kenya is limited given the suggested benefits of social support in appraising occupational stress in other professions. An investigation of whether social support is effective in appraising occupational stress among rehabilitation counsellors working in Kenya is imperative to understanding of the coping strategies that can be employed in a stressful environment. The current study tried to determine whether social support was utilised as a coping strategy among the drugs and substance abuse rehabilitation counsellors in the selected counties in Kenya.

The involvement in healthy and health promoting activities is another coping strategy, which differentiate individuals who cope better with stress (Melgosa, 2006). Regular exercise, sleep, a healthy diet, relaxation techniques, a general awareness of personal safety and counsellor supervision all contribute to the positive coping strategies (Lawson, Venart & Hazier, 2007). Self-care is not only important for counsellor longevity and stress reduction but was discussed in Section C of the American Counselling Association Code of Ethics (Professional Responsibility ACA, 2005). It states that counsellors engage in self-care activities to maintain and promote their emotional, physical and spiritual well-being to best march their professional responsibilities. Lawson (2007) reported that counsellors who reported high occupational stress had lower level of self-care, recreational and social support that also impaired clients' outcome while Briggs and Munley (2008) stated that both career sustaining behaviours and coping strategies were positively associated with the positive therapeutic outcome.

Attention to all areas of stress relief such as having more offs to taking more breaks throughout the working day need to be looked upon. Jackson, (2004) reported that counsellors who participated in their wellness (self-care) benefitted physically and emotionally. These benefits helped the counsellors to be more effective in their place of work in which without self-care, the counsellors could be more at risk to experience the physical and psychological effects of stress. Therefore, Counsellors have a responsibility to themselves to find support, counsel and

resources to decrease their susceptibility to mental health disorders and, or occupational stress. Although research shows that counsellors experience distress and may use coping strategies that are available to them, there is considerably scanty research on occupational stress and coping strategies among drugs and substance abuse rehabilitation counsellors that addresses the Kenyan situation. This study Due to the above-mentioned coping resources, this study sets out to discuss the theoretical framework linked to occupational stress among rehabilitation centres.

2.7 Theories of Occupational Stress

Developments throughout 19th to 20th centurymeant that attempts to provide any coherent theoretical framework required that different perspectives be identified, tested, reviewed, integrated, or even discarded. In order to understand different theories and to give them a sense of time, place, and meaning, the research attempted to explore them against the changes in how stress has come to be defined. The importance of exploring stress theories in this way lies in the way it gives a sense of whether they are still capable of expressing the stress process. It also expresses what this means for understanding the richness of the stress experience and the type of evidence they provide in terms of work stress and well-being. However, the following section does not review all the different theories of stress but four that best express the subject under study.

2.7.1 Seyle's Theory of General Adaptation Syndrome (GAS)

In 1936, Seyle introduced the notion of stress-related illness in terms of the General Adaptation Syndrome (GAS), suggesting that stress is a non-specific response of the body to any demand made upon it. During alarm, the body's defences against a stressor are mobilised. This division activates body systems to maximise strength and prepares them for the 'fight to flight' response. In resistance stage, the organism adapts to the stressors. How long this stage lasts depends on the severity of the stressor and the adaptive capacity of the organism. If the organism can adapt, the resistance stage will continue for a long time.

The earliest conceptualisation of stress, as a response developed out of Cannon's (1935) work in examining the central nervous system and adrenal system in response to fear or pain. He posited

that emergencies like fear and pain stimulate the central nervous system to instigate hormonal discharge of the adrenalin glands which results in cardiovascular changes to prepare the body for 'fight to flight'. Seyle in 1956 performed laboratory research focusing on understanding the effects of harmful substances on animals, which resulted in him being regarded as the founder of modern stress. He defined stress as a non-specific response of the body to any demand placed upon it. Based on his work of categorising responses to stressors, he posited that when individuals experience stressful stimulus, they would respond with a predictable set of reactions that he termed as General Adaptation Syndrome (GAS). GAS has a three-phase process namely,

- (a) Alarm reaction in which the body's defensive forces are called to arms by the activation of the autonomic nervous system;
- (b) Stage of resistance in which biological adaptation is at the maximum level in terms of bodily resources used; and
- (c) Exhaustion in which bodily resources are depleted and the organism loses its ability to resist so that further exposure to stress can lead to illness or intent to leave the work place.

During the time of alarm, the outward appearance of normality is displayed but the body's internal functioning is not normal. In this stage, the rehabilitation counsellor's body may react by alerting the system and mobilising coping resources. One probably experiences emotional arousal, increased tension, and more efforts to be in control with continuous anxiety and tension as symptoms that can surface within the rehabilitation counsellor. Continuing stress will cause constant neurological and hormones changes. GAS state that these demands take a toll; setting a stage for what he described as diseases of adaption, diseases related to continued persistent stress in which he termed it as the stage of resistance. In this phase, rehabilitation counsellor is able to find some way of dealing with stress so they can maintain their physical and psychological functioning. In the resistance phase, there is minimal achievement, and symptoms of strain (effects of stress) and even mild reality distortions are evident. Among the diseases Seyle considered to be the result of prolonged resistance to stress are peptic ulcers and ulcerative colitis, hypertension, cardiovascular diseases, hyperthyroidism, bronchial and asthma.

The last stage is exhaustion stage where a drugs and substance abuse rehabilitation counsellor's ability to adapt through continued stress is depleted and the resources they used in the resistance phase actually begin to fail. This stage is characterised by activation of the parasympathetic division of the atomic nervous system in the exhaustion stage. Functioning is at an abnormally low level to compensate for the abnormally high level of sympathetic activation that has proceeded. This theory identifies the exhaustion phase as the point of intervention. Drugs and substance abuse rehabilitation counsellors must be aware of the phases of GAS and coping strategies in which will assist them in combating with or appraising occupational stress. The drugs and substance abuse counsellors may apply the self-awareness techniques by taking breaks between the sessions, taking off duty or reducing workload in dealing with the stressful situation. Drugs and substance abuse rehabilitation counsellor may also implement crisis intervention in the nature of clinical supervision; debriefing and social support in order to boost one's psychological wellbeing (Gachutha, 2006).

Although Seyle discovery has been of immense significance to subsequent stress research, critiques of this model reported that the theory tends to ignore the external conditions that lead to stressful experiences. For example, the individual difference was ignored in perception and cognitive processes. Due to these criticism, there is need to look at other models which addresses the above criticism for example appraisal of the environment considering that the stress experienced by rehabilitation counsellors are assumed by the researcher to be emanating from the interaction with the environment.

2.7.2 Person-Environment Fit Theory of Occupational Stress

Person-Environment Fit theory on the other hand notes that if there is not an accurate fit between the person and the environment, effect (strain) will occur (Idris, 2009). A review of the literature suggests that researchers have attempted to find an explanation regarding the potential relationships that exist between stress, an individual, and the environment. P-E Fit theory suggests that individuals fit in certain occupations based on the interaction of a multitude of variables and stress is a result of inadequate person—environment fit. It suggests that individuals fit in certain occupations based on the interaction of a multitude of variables. Theoretically, P-E

Fit predicts that the magnitude of strain experienced by an individual is proportional to the degree of misfit between the individual and their occupations. Garner, Knight and Simpson (2009) stated that individuals vary in their abilities just as jobs vary in their incentives and demands.

The P-E Fit theory has attracted researchers who believe there is some efficacy in its relationship to stress (Layne, 2001). The research supported that occupational stress -strain is inversely related to measures of P-E Fit model that states that one kind of fit is the extent to which the individual's skills and abilities march the demands and requirements of the job. The second fit is the extent to which the job environment provides support to meet the individuals' needs and the resulting stress. Stressors are major contributors to psychological and physical strain. P-E Fit relates to the individual's fulfilment of psychological needs in order to do his or her own work well within a specified occupational environment. A mismatch between the drugs and substance abuse rehabilitation counsellor and one's working environment (Drugs and substance abuse rehabilitation centre) may cause stress. Mismatch occurs when there is a conflict between the drugs and substance abuse rehabilitation counsellors' expectations, perceptions or ability regarding the actual demands of the Job.

The dominant approach to these studies has been to examine the fit between an individual and a single aspect of the work environment. In reality, however, people do not interact with only one part of their environment. Rather, they are simultaneously nested in multiple dimensions of the environment (Kinman & Jones, 2008). This nested view suggests that many of the consequences attributed to fit are not simply the result of fit or misfit with a single aspect of the environment. Instead, broad consequences such as satisfaction, commitment, stress, adjustment and withdrawal are more realistically affected by the compilation and interaction of fit assessments across multiple aspects of the environment. The results of a recent empirical study by Ugoji and Isele (2009) support this notion that various aspects of fit simultaneously influence work attitudes. Gladding (2008) noted that P-E Fit are the needs of the worker to have a satisfactory social interaction with other employees and a perception that one's work is appreciated and meaningful. The purpose of this study was to examine how fit with single aspects of the work

environment combine and interact to affect a variety of drugs and substance abuse rehabilitation counsellor-level outcomes.

2.7.3 Stimulus Based Theory of Occupational Stress

Closer examination of occupational stress literature suggests that most studies research stress from a stimulus-based perspective (Idris, 2009). The stimulus-based approach regards stress as external forces or conditions (situational or environmental) effect on organism (individual) in a disruptive way. It is believed that the factors in the environment exert an influence on an individual. Stress is a characteristic, event, or situation in the environment (Kumary & Bakery, 2008). Essentially this model proposes that external stressors in the environment results in a stress reaction or strain. In addition, different categories of stimulus stressors have been identified in terms of addition, their ability to induce stress such as acute time-limited stressors, chronic intermittent stressors and stressors sequences and chronic stressors.

The value of conceptualising stress in rehabilitation counselling profession from a stimulus-based perspective is its recognition of a wide variety of work related events or situations. Contemporary researchers criticise this model, however, for its inability to explain and account for the complexities of the stress process (Jackson, 2004). By simply focusing attention on one component (i.e. stimulus), other components that take up the stress process become artificially separated (Idris, 2009). One result of this arbitrary separation in different situations is labelled stressful and, irrespective of whether they are stressful or not, they are presumed to have some intrinsically stressful properties (Layne, 2001). The fact that a drugs and substance abuse rehabilitation counsellor is bombarded with stimuli does not necessarily mean that one is distressed by them (Lent, 2011). It is argued that situational characteristics alone may be inadequate to predict an individual's response. Stress must be perceived to exist before it can result in strain in individuals and thus, there is need to look at a theory that provides a more all-encompassing approach to understanding drugs and substance abuse rehabilitation counselling stress.

2.7.4 Transactional Theory of Stress, Strain and Appraisal

A more preferable approach to conceptualise stress is one that takes into consideration that stress is relational in nature, involving some sort of transaction between the individual and the environment. Lazarus and Folkman's (1984) Transactional Model defines the stress process as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding one's resources and endangering the person's wellbeing". The term transactional implies that stress is neither in the person nor in the environment but in the relationship between the two. Stress therefore occurs when the magnitude of the stressor exceeds the individual's capacity to resist. According to Ugoji and Isele (2009), the stress arena is entered when individuals perceive that the demands made upon them exceed the ability to cope with them. Layne (2001) proposed that a transactional definition of stress differs from stimulus or response based definition of stress in three main ways:

- (a) Stress does not reside solely in a situation or in a response;
- (b) Stress is a process; a transaction between the drugs and substance abuse rehabilitation counsellors and the environment; and
- (c) Coping and adaptation are explicit parts of that transaction that help shape the stressful experience.

A transactional approach focuses on the individual and the environment that is appraised by the person as taxing or exceeding the person's resources and endangering ones' well-being. This approach assumes that appraisals play a crucial role in the stress process, which is a dynamic process in which drugs and substance abuse rehabilitation counsellors and environment constantly interact (Jackson, 2004). In any encounter, when the individual as threatening and endangering their well-being appraises an element in the environment, stress can occur. The model explains how a drugs and rehabilitation counsellor reacts to the threatening environment. Coping involves determining what can be done and, subsequently, attempting to alter the person-environment relationship and regulate emotional distress (Bride, 2007). Stress is appraised or reduced if the encounter is successfully resolved. Otherwise, the encounter will negatively affect the emotional, psychological, and physiological condition of the individual. Transactional approach proposes that the individual, work stressors, effects (strain) and coping

resources need to be considered jointly in explaining the stress-strain-coping process because they are interdependent.

2.8 Theoretical Framework

The Theoretical framework of this study is based on the three theories discussed earlier on namely Seyle's General Adaptation Syndrome (GAS), Transactional Theory of Stress, Strain and Coping and Person Environment Fit theory. There is no evidence to show the superiority of any of the four theories. Even though differences exist in the approaches to explaining occupational stress, there are three major similarities between the above theories. All the theories explain stress through cognitive and behavioural appraisal that describes a process in which a person evaluates a particular encounter with the environment, stressors that refer to environmental factors that were perceived as threatening and influence responses, and responses which refer to the effects of stress. First, all the theories focus on the levels and cause of stress which was thought to emanate from the working environment. Secondly, all theories point to the stressors or elements in the working environment that are appraised by the individual as threats and obstacles that cause limitation or loss of something in them while undertaking their routine work. Thirdly, these theories pointed to undesirable state of affairs where if the rehabilitation counsellor fails to cope with occupational stress will lead to strain (effect).

The strength of Lazarus Transactional Theory of stress and coping lies in its specification of the cognitive appraisal. It views causes of stress as being elements in the environment that was perceived as exceeding the individual's ability to cope. This theory posits that the interaction of potentially stressful events and organisational factors such as task, role and personal demands can trigger the appraisal process in which an individual assesses the degree of threat in relation to ones' well-being. This will provide a context for an assessment selection and effectiveness of the coping resources that can affect upon the wellbeing of the counsellor. The theory appears to best support the research on how the rehabilitation counsellors will identify the sources of stress, appraise, and cope with it. The theory acts as a guideline in formulation of a more in-depth understanding of the factors that are responsible for stress and its consequences on the counsellors' wellbeing. The theory consists of stress outcomes in the form of psychophysiological and behavioural aspects that coping strategies could apply. The key premise of

this theory is that appraisal and coping strategies mediates the relationship between stressor and the individual's stress, effect and coping process.

In order to gain a better understanding of occupational stress and coping strategies among drugs and substance abuse rehabilitation counsellors, the study incorporates Seyle' GAS theory and Person-Environment Fit theory. GAS provides an explanation of the stages of depletion while dealing with stress situations. It provides an explanation of the concept of work demands that are the workload put on the individual and the expectation of the organisation on performance. If the expectation of the organisation cannot tally with the individuals' performance, exhaustion may occur. Seyle (1956) states that certain levels of arousing stimuli are necessary and beneficial to individual and organization, however, severe or chronic work related pressure might cause stress. P-E Fit on the other hand explains stress as a product of the interaction between the individual and the potential sources of stress in the environment. A rehabilitation counsellor was considered fit if there is compatibility between the individual and the organisational roles and the capacity of the individual to adapt to work roles or demands. With the help of resources such as social support and supervision, roles then provide motivation, gratification and social meaning to rehabilitation counsellor but in the case of limited or depleted resources, occupational stress will occur.

In conclusion, the three theories underpin the present research by taking into consideration the influence of coping strategies among the rehabilitation counsellors. The strength of this lies in its specification of the cognitive appraisal of the causes as being elements in the working place that are thought as exceeding the individual's ability to cope. It also allows one to understand coping as the strategy that a person can utilise in times of stress in which it changes overtime. This is logical and realistic since an appraised stressor will elicit immediate psychophysiological reactions or stress outcomes that can be either positive or negative.

2.9 Conceptual Framework

Conceptual framework as shown in Figure 2.1 is a summary of the relationship among the variables that will guide the study. Occupational stress is a pattern of reactions that occurs when drugs and substance abuse rehabilitation counsellors are presented with work demands not

matched to their knowledge, skills or abilities and which challenge their ability to cope and there is a perceived imbalance between demands and environmental or personal resources. The reactions may include Physiological, psychological and behavioural effects. The conceptual frame work shows that the independent variables were the effects of stress (physiological, biological and behavioural effects). The dependent variables were occupational stress (levels and causes) and coping strategies. The intervening variables which include Age, gender, marital status, experience and educational qualifications play a great role in the Influence of occupational stress, coping strategies and its effects among the drugs and substance abuse rehabilitation counsellors.

From the related literature, the variables of the study were conceptualised as shown in Fig 2.1.

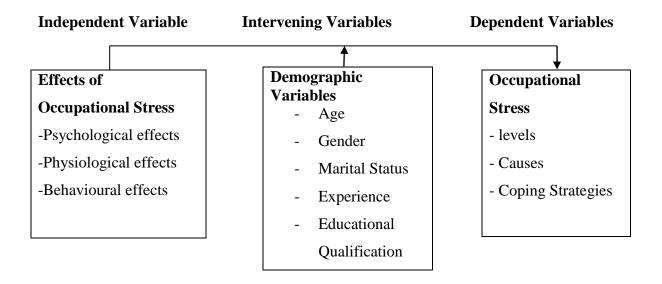


Figure 2.1 Conceptual frameworks on Occupational Stress and Coping Strategies among Drugs and Substance Abuse Counsellors in Selected Counties in Kenya

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that was adopted in carrying out the research on occupational stress and coping strategies among counsellors employed in drugs and substance abuse centres in selected counties of Kenya. It covers research design, location of study (rehabilitation centres covered), sample population, research instruments and data analysis.

3.2 Research Design

The study adopted a descriptive survey design that described occupational stress and coping strategies among rehabilitation counsellors in selected counties in Kenya. The research design enabled the researcher to obtain information from a representative population and described the situation, as it existed. The design was not only restricted to fact-finding but it assisted the researcher to formulate important principles of knowledge and solutions to the significant problem of occupational stress. Descriptive survey approach was adopted for this study because the researcher was interested in describing the state of affairs in drugs and substance abuse treatment centres. Since the design ensured unbiased representation of the population of interest, consequently the researcher had no control of the variables in the sense of being able to manipulate them and reported only the results of the research. The design was appropriate to the study because it assisted in obtaining the information of occupational stress and coping strategies among substance abuse rehabilitation counsellors in selected counties in Kenya.

3.3 Location of the Study

The study was carried out in drugs and substance abuse rehabilitation centres in the five selected counties in Kenya namely, Nairobi, Nyamira, Trans Nzoia, Uasin Gishu and Kiambu. Drugs and substance abuse rehabilitation centres were established to counter the increasing drug abuse and to provide for a healing process for the drug addicts. Some of the drugs and substance abuse centres have been established in hospitals, churches (faith-based) and others have been established by non-governmental organisations. They provide the 12-step oriented programme that involves licensed professional staff and medical/psychosocial treatment modalities. They are licensed and monitored by NACADA.

3.4 Population of the Study

The population of this study comprised of all counsellors working in Drugs and abuse substance abuse treatment centres. According to NACADA (2011) Report, there were 44 rehabilitation centres in fourteen counties in Kenya. There was a population of 204 rehabilitation counsellors in those rehabilitation treatment centres as shown in Table 1.

Table 1

Drugs and Substance Abuse Centres

	No. of	No. of Rehab	oilitation Counsellors
	Rehabilitation	Male	Female
County	Centres	(n)	(n)
Embu	2	4	4
Kajiado	4	9	10
Kiambu	6	12	15
Kwale	1	2	2
Lamu	1	4	1
Machakos	1	2	2
Mombasa	3	9	5
Muranga	1	2	3
Nairobi	15	29	50
Nakuru	2	4	4
Nyamira	2	4	8
Nyeri	1	3	2
Trans Nzoia	1	2	3
UasinGishu	2	4	5
Total	44	90	114

Source: NACADA Report (2011) and Rehabilitation Centres Personnel Offices (2011)

3.5 Sampling Procedures and Sample Size

To select the respondents for this study, the researcher used stratified sampling to categorize the centres into counties in which there were 44 centres in 14 counties. Since drugs and substance abuse rehabilitation centres were scattered in 14 counties, five counties were selected using simple random sampling technique. In simple random sampling, each member of a population has an equal chance of being included in the sample. Also, each combination of members of the population has an equal chance of composing the sample. According to Mugenda and Mugenda

(2003) the sample size depends upon the nature of the population under scrutiny and the purpose of the study. The sample size of drugs and substance abuse rehabilitation counsellors was determined by using the formula indicated by Krejcie and Morgan's (1970).

$$\frac{S = X_2 \text{ NP (1-P)}}{D^2 \text{ (N-1)} + X^2 \text{ P (1-P)}}$$
Where;
$$\frac{3.841 \times 200 \times (1-0.5)}{[0.05 (1 - 0.5^2 (200 - 1)] + [3.841 \times 0.5)]}$$
= 132

S= Required sample size

 X^2 = Chi square for the specific confidence at 1 degree of freedom (3.841 for the .95 confidence level)

N= The given population size

P= Population proportion (assumed to be 0.5)

D= Desired margin of error (a quantity equal to 1.96)

Krejcie and Morgan (1970) developed a table based on the above formula detailing the sample size selection for varius finite populations (Appendix C). The population of the drugs and substance abuse rehabilitation counsellors was 204. From the table, sample size required for a population of 204 is 132. Purposive sampling was used to get the sample required for the study from five counties. Drugs and substance abuse rehabilitation counsellors working in the five counties constituted the sample. Table 2 shows the distribution of the sample size for the study in the five counties. The researcher included all 26 administrators in charge of personnel in the 26 rehabilitation centres. Thus, the sampling procedure yielded 158 respondents.

Table 2
Distribution of Sample Size

County	No. of	No. of Rehab	ilitation Counsellors
	Rehabilitation		
	Centres	Male	Female
		(n)	(n)
Kiambu	6	12	15
Nairobi	15	29	50
Nyamira	2	4	8
Uasin Gishu	2	4	5
Trans Nzoia	1	2	3
Total	26	51	81

Source: Drugs and Substance Abuse Rehabilitation Centres Personnel Offices (2011).

3.6 Instrumentation

Researcher utilised two instruments namely Rehabilitation Counsellors' Questionnaire and Administrators' Interview Schedule to collect the data. Both instruments were utilised to gather information on Occupational stress (levels, causes, and effects) and coping strategies among drugs and substance abuse rehabilitation counsellors in the selected counties. The researcher modified and utilised three standardised questionnaires namely the Addiction Eployees Stress Scale (AESS) by Farmer *et. al.* (2002), Strain questionnaire by Seawood (2005) and Brief Cope. Modification of the questionnaire and the development of the interview were based on the examination of the research objectives, occupational stress instruments, and literature review. The researcher triangulated two research instruments to obtain complementary data on the same topic to best understand the phenomenon under study. The goal of the mixed methods approach is to draw from the strengths and minimize the weaknesses of both qualitative and quantitative approaches (Mugenda & Mugenda, 2003).

Questionnaire was divided into four sections (Appendix A). The majority of these items were likert-type rating scale where, in relation to each item, respondents were required to indicate the

point that effectively describes their opinion. Section one contained questions concerning rehabilitation counsellors' background information such as age, gender, marital status, number of years in the profession, average number of clients per day, hours worked per week and level of education. The literature review has shown that previous researches on occupational stress among rehabilitation counsellors frequently considered these characteristics as significant predictors of occupational stress.

Section 2 examined the levels and causes of occupational stress. The items focused on organisational structures and processes, inter-relationships lack of resources, workload, and client related difficulties. Section there of the questionnaire dealt with the effects of occupational stress such as physiological, psychological, and behavioural effects. Section four of the questionnaire dealt with the coping strategies that were utilized by rehabilitation counsellors. These included coping strategies like emotion-focused coping, problem-solving coping, social support, healthy and health promoting activities like exercises, self-care and negative coping strategies like absenteeism, sick-offs and turnover.

An interview schedule was developed to provide necessary qualitative data from personnel administrators working in in the selected counties. The questions were open-ended which gave the respondents a chance to discuss the statements freely and exhaustively. It was meant to generate confirmatory results on levels, causes and effects of occupational stress. It also assisted the researcher in establishing the coping strategies employed by rehabilitation counsellors in drugs and substance abuse rehabilitation centres in the selected counties. The aim of these interviews was to supplement quantitative data and confirm the information collected from the questionnaire (Kothari, 2008; Mugenda & Mugenda, 2003. It also assisted the researcher better understand occupational stress and coping strategies that were utilised by rehabilitation counsellors in selected counties, and be able to give recommendations.

3.7.1 Validity of the Instruments

Validity refers to the extent to which an instrument measures what it purports to measure. Kombo and Tromp (2006) argue that determination of content validity is primarily judgmental and intuitive. The research employed both contents and criterion validity by utilising the

research objectives, personal experience and literature review. This was used to review and evaluate the content of the research instruments. The instruments were then given to research experts (Supervisors) in the department of counselling psychology to evaluate the applicability and appropriateness of the content, clarity and the adequacy of the construction of the instrument. This constituted face and content validity. This was therefore found to be appropriate in determining the extent to which the set of items provided relevant and representative sample of the domain of tasks under consideration (Mugenda & Mugenda, 2003). The researcher ensured that data collected using the two instruments represents the content area under study.

3.7.2 Reliability of the Instruments

Reliability refers to the consistency of the scores obtained and how consistent they are for each individual from one administration of an instrument to another. In order to establish the reliability of the items in the questionnaires and the interview schedule, the researcher carried out an internal consistency of the items in the questionnaire by computing internal consistency co-efficiency of reliability. According to Mugenda and Mugenda (2003), a reliability index of a minimum of 0.7 is satisfactory for any research instrument. A high coefficient implied that items correlate highly among themselves. The researcher carried out a pilot study in Nakuru County and computed the internal consistency co-efficiency of reliability of the questionnaire that yielded an index of 0.72. Based on the results of the piloting, minor change was made in the questionnaire in which it was mainly typological errors. All items in the questionnaire were adopted for the study. The average time to complete the questionnaire with the pilot group ranged from 15 to 20 minutes.

3.8 Data Collection Procedures

The researcher sought for a research permit from National Commission for Science, Technology, and Innovations (NACOSTI). The researcher also contacted the administrators of the selected drugs and substance abuse rehabilitation centres in order to make pre-arrangements with individual rehabilitation counsellors on the appropriate date and time of data collection.

The instruments were hand delivered to the respondents in respective drugs and substance abuse rehabilitation centres. The questionnaires were self-administered. The instruments included a cover letter and an envelope to ensure anonymous return of the questionnaires. Adequate instructions and assurance of confidentiality were stipulated in the questionnaires. The respondents were made to understand that the information being gathered was intended to help the researcher to examine occupational stress (perceived levels, causes, and effects) and coping strategies utilised by rehabilitation counsellors in selected counties. After collection of the filled questionnaires and some follow-up, a total of 112 respondents filled the questionnaire The exercise took approximately two and a half months. The researcher interviewed administrators from the drugs and substance abuse rehabilitation centres in the selected counties.

3.9 Data Analysis

The study generated both qualitative and quantitative data through the research instruments. The researcher first established if all the questionnaires were duly completed. The data was coded for editing and analysis purpose. Based on the study objectives, qualitative data collected from the semi-structured interviews was grouped into meaningful patterns that revealed how the categories or themes were related (Kombo & Tromp, 2006). Codes were assigned for the openended questions in the questionnaires and the likert responses were grouped into subscales. Responses from both open- and closed-ended and those from the interviews were tallied using systematic thematic analysis. Descriptive and inferential statistics were used to analyse the data. As such, frequencies, percentages, means and standard deviations were used for the descriptive analysis while inferential statistics was basically done using Two-Way Analysis of Variance (ANOVA). The hypothesis was tested at significance level set at 0.05. The data was analysed by use of a computer programme, the Statistical Package for Social Sciences (SPSS) version 19.0. Each pile of data revealed how the responses for each objective and hypothesis were distributed. Data was tabulated and analysed to give a summary of the findings.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis and discussions of the results pertaining to objectives identified for the study. In the presentation, analysing and discussion, data was grouped into four sections that reflected the objectives and the research questions. The study adopted descriptive and inferential approach in which means, standard deviations (SD), percentages and Two-Way Analysis of Variance (ANOVA) were utilised to analyse the data. The Results were presented, discussed and interpreted in the order of the stated objectives and research questions. The first section presented the demographic information of the respondents. The second section focused on the level and causes of occupational stress while third section focused on effects of occupational stress. The fourth section presented the findings on coping strategies that were employed by drugs and substance abuse rehabilitation counsellors to combat with occupational stress. The views of the administrators were presented to confirm the results of drugs and substance abuse counsellors pertaining to occupational stress and coping strategies.

4.2 Demographic and Work Characteristics of Respondents

A total of 132 questionnaires were distributed to the rehabilitation counsellors by the researcher. Of the 132 questionnaires 120 ((91%) were returned. Some questionnaires 8 (6%) were not satisfactorily completed and thus were not used for data analysis. Thus, a total of 112 questionnaires were analysed. The demographic information sought included age, gender, marital status, educational qualification and experience in the profession. Thirteen administrators were interviewed and their data incorporated in the findings.

In regard to age distribution among rehabilitation counsellors, the highest number of the respondents as shown in Table 3 was 49 (35.7%) in the 26-30 age group, and the lowest 0.9% (1) was between 51 – 55 years old. Two administrators were below 40 while majority were above 40 years of age. The findings are inconsistent with the results of other similar studies (Crim, 2013; Sangeeta, 2009; Layne, 2001) which found out that most of the respondents were over 40 years. The findings also differs with the results of Gachutha (2006) who stated that counselling in Kenya was a second career for most practitioners because people go through re-

appraisal or re-assessment of their careers in their thirties and forties. The present finding suggests that young people are entering into counselling profession at an early age unlike before when counselling was viewed as a second profession. The finding could also suggest that most of the current counsellors are fresh graduates from colleges. The oldest drugs and substance abuse rehabilitation counsellors who were between 51-55 were few and an explanation may be due to the fact that turnover might have taken place as it is rampant in helping professions in which counselling is. It could also be concluded that most of them climbed up the professional ladder and became administrators or managers in drugs and substance abuse rehabilitation centres.

Table 3

Distribution of Respondents by Age

Age bracket	Frequency (f)	Percentage (%)
20 - 25	19	17
26 - 30	39	35.7
31 - 35	28	25
36 - 40	28	25
41 - 45	11	9.8
46 - 50	10	8.9
51 – 55	1	0.9
56 – 60	3	2.7
Total	112	100%

Majority of the respondents as shown in Table 4 were female 64 (57.1%) while 48 (42.9%) were Male. There were eight male and four female among the administrators. The findings are consistent with previous studies done in the West (Victoria, 2012; Sangeeta, 2009) which found that women comprised 50 to 90% of the counselling workforce in substance abuse centres. The gender distribution of the respondents also depicted the actual distribution of counsellors working in Kenya (Gachutha, 2006). Apparently, women have a more positive disposition

towards counselling as a profession than their male counterparts. The administrators also confirmed that majority of the rehabilitation counsellors were female.

Table 4
Distribution of Respondents by Gender and Marital Status

Characteristic	Frequency (f)	Percentage (%)
Gender		
Female	64	57.1
Male	48	42.9
<u>Total</u>	112	100
Marital Status		
Married	38	33.9
Single	61	54.5
Divorced	7	7.1
Widowed	5	4.5

The highest percentage for marital status as shown in Table 4 was single 54.5 % (61), and the lowest category was at 4.5% (5) for widowed respectively. The finding of this study differs with the results of other studies (Crim, 2013; Victoria; Sangeeta, 2009) which noted that married counsellors were more than their counterparts. The percentage of the single is higher than all other status and this can be attributed to many counsellors being young in age. There was no variable that differentiated the singles that had children from those who did not have children.

Table 5

Educational Qualifications of the Respondents

Qualifications	Frequency (f)	Percentage (%)
Doctorate	2	1.8
Master's Degree	10	8.9
Undergraduate Degree	15	13.4
Higher Diploma	49	43.8
Diploma	16	14.3
Certificate	15	13.4
Form Four	5	4.40
Total	112	100%

Table 5 shows the respondents' educational qualifications in which the results depict a wide variation. It is evident from the findings that the highest number of respondents 43.8% (49) held higher diploma certificates. The lowest number of respondents was only 1.8% (2) with PhD degree. The findings of this study were not in line with those in the literature review that stated that majority of those who work as addiction counsellors or drugs and substance abuse rehabilitation counsellors were either master's degree holders or undergraduate degree holders in the West (Crim, 2013; Victoria, 2012; Sangeeta, 2009). The research study did not specify if educational qualifications was specifically in counselling and not any other disciplinary. Respondents who had PhD in other disciplines and not counselling might have indicated their professional qualifications.

Again, counselling was one of the courses undertaken in education psychology, social work or psychology (Okech & Kimemia, 2012). The difference could also be attributed to most counsellors joined the profession as their second career (Gachutha, 2006). When thirteen administrators were asked why they employed those with certificate in counselling psychology or Form Four leavers, they reported that majority of them were in recovery from their own addiction thus bringing expertise to their counselling work. Educational qualifications in the

study depicts the Kenyan situation which shows that majority of the drugs and substance rehabilitation centre employ counsellors who hold Higher and Diploma level of education.

Table 6

Experience as a Rehabilitation Counsellor

Years	Frequency (f)	Percentage (%)
1-5	40	35.7
6 – 10	32	28.6
11 – 15	20	17.9
16 - 20	10	8.9
21 - 25	7	6.25
26 - 30	2	1.8
Above 30	1	0.9
Total	112	100%

Experience of the respondents was determined and the results were presented in Table 6. Respondents were asked to indicate the duration of service as drugs and substance abuse rehabilitation counsellors. The number of years that the respondents had worked ranged from 1-30 years. Results showed that majority of the respondents who were 40 (35.7%) had worked between 1-5 years, and only one (0.98%) had worked for over 30 years. Rehabilitation counsellors in this study appear to have shorter careers because majority had worked between 1-5 years. The result is consistent with other studies that found that majority of the counsellors in rehabilitation centres had worked for a short span depicting a turnover in the profession (Victoria, 2012; Sangeeta, 2009; Layne, 2001). While the trend of the respondents' duration of service may reflect that drugs and substance abuse rehabilitation counselling is relatively a new concept in Kenya (Okech & Kimemia, 2012), it may also reflect the turnover in addiction counselling in which those who might have experienced occupational stress or burned out might have left the field. The higher percentage of those who had served for less than five years may also indicate recent employment trends. They could be recent graduates who had gotten employment.

Table 7
Clients Served per Week

Clients served	Frequency (f)	Percentage (%)
Below 10	2	0.9
11 – 20	65	58
21 – 30	40	35.7
Above 31	6	5.4
Total	112	100%

The number of clients served was determined and the results were presented in Table 7. Majority of the respondents 65 (58%) served between 11 – 20 clients while the least of the respondents 2 (2.7%) served less than 10 clients per week. This was to determine if the respondents had a high case-load and work overload. The finding concurred with the other findings who found out that the case-load for rehabilitation counsellors was high resulting in the experience of occupational stress which could be detrimental both to the counsellor and organisation (Crim, 2013; Broome *et. al.*, 2009; Durchame, Knudsen & Roman, 2008; Garner, Knight & Simpson, 2007). This was interpreted to mean that the majority of the drugs and substance abuse counsellors handle many clients.

Table 8
Contact Hours per Week

Contact hours	Frequency(f)	Percentage (%)
10 – 20	7	6.3
21 – 30	37	33.0
31 – 40	39	34.8
41 – 50	23	20.5
Above 50	6	5.4
Total	112	100%

Respondents were asked to indicate the contact hours with the clients per week and the results were presented in Table 8. Majority of the 39 (34.8%) worked between 31 – 40 hours while the least six (5.4%) had beyond 50 contact hours per week. The finding is consistent with the results of other findings (Oser *et. al.*, 2013; Victoria, 2012; Garner, Knight & Simpson, 2007). The higher percentage of respondents who indicated that they served clients between 11–20 would imply that they are overworked and are experiencing stress due to work overload. The majority seems to be working normal hours that apply to any profession. However, the counsellors could be having other responsibilities like teaching, research and documentations in which the research could have discriminated. In general, having 31-40 hours, face-to-face counselling may be strenuous and so rehabilitation centres should be aware of occupational stress or burnout among the drugs and substance abuse rehabilitation counsellors.

4.3 Levels of Occupational Stress among Rehabilitation Counsellors Based on Demographic Characteristics

The first objective and hypothesis of the study was to establish the levels of occupational stress among the respondents based on demographic characteristics. There was need to first find the level of occupational stress among the respondents before determining it based on demographic characteristics. Respondents indicated their overall level of occupational stress in a five point-likert scale namely 1. Very high 2. High 3. High, Moderate, 4. Low and 5. Very low. The responses were as shown in Table 9.

Table 9

Levels of Occupational Stress among the Respondents

Level	Frequency(f)	Percentage (%)
Very high stress	14	13
High stress	42	38
Moderate stress	45	40
Low stress	8	7
No stress	3	2
Total	112	100

The researcher first established the level of occupational stress by calculating the frequencies. Those who experienced very high stress were 14 (13%), high stress were 42 (38%), moderate stress were 45 (40%), little stress were eight (7%) and three (2.7%) received no stress. The scores of the total sample were distributed into various levels to assess respondents with very high occupational stress (scores above 5.00), high (M= 4.0 - 4.9), moderate (M= 3.0 - 3.9), low (M= 2.0 - 2.9) and no stress (below M= 2.00). The overall counsellors' responses pertaining to level of occupational stress as presented in Table 9 depicts that very few respondents fell in low or very high occupational stress level category while majority of them fell in the category of moderate stress level.

The percentages from the five levels comprised of very high, high, moderate, less stress and no stress were clustered to form a level that was named high, moderate and no stress. The results were interpreted to mean that majority of the rehabilitation counsellors had moderate stress (M= 3.78, SD=1.3) even though a small segment of the respondents felt no or minimal stress. The finding is not consistent with other studies (Lawson, 2007; Layne, 2001) which found that the rehabilitation counsellors were stressed. The findings noted that counsellors who are unwell (stressed, distressed, or impaired) do not offer quality-counselling services to their clients, and they are likely to begin experiencing a degradation of their quality of life in other domains as well as physical, social, emotional and spiritual domains. The respondents' experience of moderate level of stress may be due to being aware of stress and its implications. It is also possible that the participants did not accept themselves as stressed as they might experience job satisfaction. Excessive exposure to occupational stress causes physical and mental problems and therefore it is important to detect stressed rehabilitation counsellors earlier in order to prevent deleterious long-term effects of stress among drugs and substance abuse rehabilitation counsellors.

The current findings were interpreted to mean that the drugs and substance abuse rehabilitation counsellors felt that counselling in drugs and substance abuse rehabilitation centres was stressful. The work of drugs and substance abuse rehabilitation counsellors entails high stress levels because of the unique environment of working with clients who are suffering. The findings of the study concurs with results which reported that counselling in addiction centres is

stressful due to the nature of issues dealt with (Crim, 2013; Victoria, 2012; Ducharme *et.al.*, 2008). Occupational stress that is experienced by respondents could also be attributed to the fact that rehabilitation centres have peak seasons and off- peak seasons as stated by administrators in rehabilitation centres. The respondents could be experiencing high stress during peak seasons and moderate stress during off- peak seasons. It would be difficult for a counsellor to provide safety and security for the drugs and substance abuse addicts when stressed and thus, the counselling process is jeopardised (Victoria, 2012). This shows that there is need for implementation of more coping strategies that combats high level of occupational stress that could foster the counsellors' well-being. Level of occupational stress among drugs and substance abuse rehabilitation counsellors was also analysed with respect to demographic characteristics.

Table 10
Level of Occupational Stress by Age

Age	f	M	SD	Level
20-30	54	4.03	.39	High
31-35	28	3.9	.41	High
36-40	28	2.05	.40	Low
41-45	11	2.15	.54	Low
46-50	10	2.06	.51	Low
51-55	1	4.02	.43	High
56-60	3	3.50	.42	Modera

Descriptive statistics of occupational stress levels by age was presented in Table 10. Overall, all age groups reported a level of stress with means scores from 2.15 to 4.03. The age group between 26-30 reported high stress with a mean score of 4.03 (SD= 0.39) while the age between 41-45 (M= 2.15, SD = 0.54) were less stressed. The findings indicated that drugs and substance abuse rehabilitation counsellors age from 26-35 and 51-55 perceived high level of stress while those in the middle age of 41-50 perceived Low level of stress. The findings of this study are not consistent with the findings of Crim (2013) who observed that older addiction counsellors

were more stressed than their young counterparts were. However, the findings of this study are in line with those of Victoria (2012) and Layne *et.al.* (2004) which stated that young addiction counsellors experienced high level of occupational stress than their older counterparts did. This may be attributed to what Gachutha (2006) found that young counsellors were not experienced and it might be hard to come to terms with reality. Their expectations might have been different from what they found in the centres. Another reason given by Gachutha (2006) was that counsellors in their mid-thirties and forties are in their career establishment stage.

Although some of the rehabilitation counsellors experienced less occupational stress, there was a unique finding in the current study on the age group between 51-55 years that they experienced high level of stress. This can be associated with role conflicts and ambiguity in the drugs and substance abuse rehabilitation centres (Layne, Hohenshill & Singh, 2004). However, these results could indicate a pattern that may be unique to Kenyan situation. For example drugs and substance abuse rehabilitation counsellors who are between 26 - 40 years may have other responsibilities such as studying in which is common in the Kenyan workforce and those who are between 51 - 55 may be doubling up as administrators.

Table 11
Level of Occupational Stress by Gender and Marital Status

	f	M	SD	Level
Gender				
Female	64	4.05	.44	High
Male	48	3.03	.43	Moderate
Marital status				
Married	38	4.03	.43	High
Single	61	3.01	.45	Moderate
Divorced	7	2.95	.43	Low
Widow/widower	5	3.01	.29	Moderate

Analysis of perceived level of occupational stress with respect to gender was carried out and the results are presented in Table 11. Results from a likert scale with five levels from the drugs and substance abuse rehabilitation counsellors revealed that female perceived more stress (M= 4.05, SD= .44) than their male counterparts (M= 3.03, SD= .43). The results are in line with the findings of Matheny *et.al.* (2005) who suggested that women experienced more physical and emotional distress than their male counterparts. The results were not in agreement with other studies (Victoria, 2012; Jackson, 2004) who found that male experienced more stress than their female counterparts. Gachutha (2006) on the other hand noted that there was no gender difference in the level of stress. The finding of this study was interpreted to mean that female counsellors experienced occupational stress than their male counterparts may be due to female counsellors having multiple roles such as domestic as well as work place roles. Stressful situations may arise both at home and at the centre. The findings were in line with Nabirye (2010) results that documented the disproportionate responsibility of employed women for households and child raising tasks.

Marital status mean scores ranged from (M= 2.95, SD=0.43 to M=4.03, SD= 0.43). Married respondents reported the highest level of occupational stress (M=4.03, SD= 0.43) while widows/wers (M= 2.95, SD=0.43) reported less stress. The finding contradicts Bride (2007) who found marital status not to be significant with level of occupational stress. This is interpreted to mean that married respondents could be facing family role overloads that can influence their jobs and the strains displayed in counselling indirectly.

Table 12
Level of Occupational Stress by Educational Qualifications

-				
Qualification	f	M	SD	Level
Form Four	5	2.15	0.27	Low
Certificate	15	2.84	.49	Low
Diploma	16	2.37	1.16	Low
Higher Diploma	49	2.23	1.09	Low
Undergraduate	15	4.19	.44	High
Masters	10	3.00	.47	Moderate
PhD	2	3.02	.37	Moderate

Table 12 shows that undergraduate degree holders (M =4.19, SD= 0.44) reported the highest level of stress while those with higher Diploma (M=2.23, SD=1.09) reported low stress. The reason why respondents with undergraduate degrees reported the highest level of occupational stress might be that they entered the job market with a different perception that was not met in rehabilitation centres. It has also been reported in the literature (Nabirye, 2010) that routine jobs with limited variations results in less job satisfaction, thus resulting in high stress. This could be the case for the degree holders who were expecting variations that could result in job satisfaction. This specific factor was not studied in previous studies (Victoria, 2012; Duraisingam, Pidd & Roche, 2009) and since there was variation in the levels of stress according to educational qualifications, then it can be concluded that educational qualification has an effect on the perceived level of occupational stress.

Table 13
Level of Occupational Stress by Experience

Experience	f	\mathbf{M}	SD	Level
1 - 5	40	4.03	.40	High
6 – 10	32	3.02	.45	Moderate
11–15	20	3.06	.35	Moderate
16 - 20	10	3.04	.49	Moderate
21 - 25	7	3.03	.47	Moderate
26 – 30	2	2.91	1.60	Low
30 above	3	2.30	1.37	Low

Respondents who had worked between 1–5 years reported the highest levels of occupational stress (M= 3.13, SD= 0.40) while those who had worked for above 30 years reported the lowest occupational stress (M= 2.30, SD= 1.37) as shown in Table 13. The results concurs with the findings of Crim (2013) and Layne (2001) who concluded that as the number of years a rehabilitation counsellor gains, the level of occupational stress one experience decreases. The results differ from the findings of Victoria (2012) who asserts that there is no significant difference between experience and the level of occupational stress. However, this can be argued

that drugs and substance abuse rehabilitation counsellors with less working years are usually young and have less experience. This can be understandable because the more experienced the counsellors are, the more they become familiar with the rehabilitation system and environment especially counselling, hence become capable of appraising stress in a positive way.

The study sought to establish statistically whether there existed significant difference in the level of occupational stress among rehabilitation counsellors based on demographic characteristics. The null hypothesis was formulated to be tested using a Two-Way ANOVA as follows:

HO1: There is no statistically significant difference in the level of occupational stress among rehabilitation counsellors based on demographic characteristics.

The test was significant at 0.05 significant levels. The results are presented in Table 14.

Table 14
Level of Occupational Stress Based on Demographic Characteristics

Socio-demographic characteristics	df	F	Sig.	_
Age	4	1.734	0.0152	
Gender	1	0.019	0.891	
Marital status	2	0.955	0.039	
Educational level	5	1.115	0.001	
Experience	1	0.838	0.363	

The results shown in Table 14 indicates that Two Way ANOVA test was significant with respect to age (p<0.0152), marital status (p<0.039) and educational level (p<0.001). This implies that there existed significant difference in the level of occupational stress across age, marital status and educational level of the rehabilitation counsellors who participated in this study. This is in

agreement with the results presented through the descriptive statistics. However, gender (p>0.891) and experience (p>0.363) do not affect the levels of occupational stress differently. Although descriptive statistics shows that there were differences on levels of occupational stress in gender and experience, inferential statistics shows no significant differences. The findings imply that men and women reported the same level of occupational stress. It also shows that all rehabilitation counsellors experienced stress regardless of the years of experience. This is a significant finding that is in contrast with the widely accepted view that women experience high level of occupational stress than men as explained earlier in descriptive findings and experienced respondents are likely to yield less stress than the inexperienced respondents (Crim, 2013; Victoria, 2012).

4.4 Causes of Occupational Stress among Drugs and Substance Abuse Rehabilitation Counsellors Based on Demographic Characteristics

The second objective and hypothesis was to find the causes of occupational stress among drugs and substance abuse rehabilitation counsellors based on demographic characteristics. Causes of occupational stress were first analysed by dividing them into four sub-scales and yielded the results as shown in Table 15.

Table 15
Causes of Occupational Stress based on Sub-Scales

Subscales	M	SD	Level
Workload demand sub-scale	5.24	0.8	Very high
Clients demand sub-scale	4.52	0.66	High
Organisational demand sub-scale	3.09	0.78	Moderate
Interpersonal demand sub-scale	2.39	1.91	Low

As can be seen in Table 15, the drugs and substance abuse rehabilitation counsellors felt that workload (M= 5.24, SD = 0.81), clients demands (M= 4.52, SD = 0.66) and organizational demands (M= 3.09, SD= 0.78) were stressful factors while on the other hand, interpersonal demand (M= 2.39, SD= 1.91) was less stressful. This result is in agreement with the findings of Farmer *et. al.* (2002) who suggested that clients demands rather than organisational demand was a significant predictor of job stress. The results reveal that the causes of occupational stress among drugs and substance abuse rehabilitation counsellors were work related demands, clients related demands and organisational related demands.

The findings of the current study indicated that workload was the main cause of occupational stress among the respondents. The findings concur with previous studies (Crim, 2013; Nabirye, 2012; Victoria, 2012; Broome et. al., 2009) who reported that workload was one of the main stressors that lead to stress or burnout. Workload could have emanated from excessive paper work for documentation, meeting deadlines and assignment of increased responsibilities. Perpetual workload is evident in the centres as the findings depicted that 58% of the respondents served between 11-20 clients while 35.7% served between 21-30 clients per week. This can be stressful as the work entails some procedures and documentation. Five administrators admitted that the drugs and substance abuse rehabilitation counsellors face occupational stress and chronic workload when rehabilitation centres face turnover, staff being on leave, vacancies not filled and when staffs that are hired are not experienced. These means that workload would be divided among current rehabilitation counsellors who are already having caseloads. Melgosa (2006) argued that some employees are motivated to perform when there is a lot of pressure. However, occupational stress in drugs and rehabilitation centres may need to be controlled since excessive pressure is known to result in negative effects for the clients, rehabilitation counsellors and centres.

The second factor that emerged as a cause of occupational stress in this study was client related demands. Important stressors identified among drugs and substance abuse rehabilitation counsellors in this subscale were issues to do with working with difficult clients, slow change in clients, dealing with death/ relapse/ suffering of clients and personal insult from client. Other stressors emanated from low client motivation and commitment levels. The results of this

research indicate that the nature of addiction itself presents considerable difficulties to counsellors in which can result in stress. The findings are in line with the results of other studies (Oser *et. al.*, 2013; Gachutha, 2006; Rupert & Morgan, 2005; Layne, 2001) which noted that issues like the rise in concurrent disorders (mental and personality disorders) rising from substance use are chronic conditions that can take toll on clients and counsellors alike. The findings are in agreement with observation made by Sangeeta (2010) who believed that counselling is an emotionally demanding job since it emerges in interactions with individuals who are either in crisis or suffering and perceived by society as unworthy.

This is also in agreement with the findings of Bride *et.al.* (2009) that 75% of drugs and substance abuse counsellors developed symptoms of secondary traumatic stress due to what clients shared about their traumatic events and sufferings. Much of occupational stress stemmed from having clients with multiple issues. Rehabilitation counsellors have to make a decision on whether to continue with the same clients or make a referral. Although making appropriate referrals is part of professional practice, critical decision need to be made about the appropriateness of that referral as some clients are difficult and uncooperative or sometimes may refuse to continue with another counsellor.

The third factor was organisational demands. Organisational demands are characteristics or functions of the workplace or work culture that may increase feelings of strain in the life of the employee. Research on the correlates and antecedents of stress suggest that a number of organisational-environmental variables are related to stress and burnouts. These includes time pressure, role conflict, role ambiguity, an absence of job resources, limited job feedback, limited participation in decision-making in matters affecting the employee, a lack of autonomy, unfairness or inequity in the workplace, and insufficient rewards (Knudsen *et.al.*, 2008; Folkman & Moskowitz, 2004). The results of the mentioned studies advocates this approach by arguing that organisational-environmental factors are antecedents to individual stress and should therefore be the appropriate targets for intervention rather than individuals.

The findings also concurred with other studies (Duraisingham, Pidd & Roche, 2009; Knudsen et. al., 2008) which stated that organisational demands are contributors of occupational stress in

rehabilitation counselling. However, the finding does not concur with the results of Lent (2011) which stated that organisational factors rather than client related demands were the major causes of stress. The explanation given was that respondents viewed paper work as the stressor, which was highly demanding. The finding of this study states that organisational demands such as meeting deadlines, lack of participation in policy-making decisions, lower perceived workplace social support and lack of opportunity for advancement contributed to occupational stress among the drugs and substance abuse rehabilitation counsellors. It was concluded that organisational demands was not a major contributor just as workload and clients related demands. This may be interpreted to mean that drugs and substance abuse rehabilitation centres have better organisational culture. This observation however requires further verification.

The fourth subscale was interpersonal demands. The respondents felt that interpersonal demands were not stressful like the other three subscales. This is in agreement with the results of past research that indicated that support from co-workers and a supervisor is beneficial in combating occupational stress and burnout (Broome *et. al.*, 2009; Ducharme, Knudsen & Roman, 2008). The study findings are in line with Brattberg (2006) who also noted that social support reduces stress regardless of the intensity of the work stressors experienced. Layne (2001) observed that good relationships between members of a group are a key factor in individual and organisational health. However, the finding differs with the results of Crim (2013) who asserted that interpersonal relationship was a stressor as the licensed addiction counsellors had limited time to interact and built a good relationship with colleagues due to workload. It was concluded that the counsellors in the current study had enjoyed social support from the addiction rehabilitation centres' workforce hence interpersonal demands became the least cause of occupational stress.

Since the causes of occupational stress may be inferred from the measure of cognitive processes and individual interpretation of the stressful events, it was concluded that there was a moderate to high occupational stress emanating from the above stress factors among rehabilitation counsellors. This situation raises concern over the respondents' effectiveness owing to the already documented consequences of high levels of occupational stress to the individual addiction counsellor, clients and the entire rehabilitation counselling centres. Causes of occupational stress were examined by demographic characteristics as stated by the objective and

hypothesis. This was done through descriptive statistics and inferential statistics by use of Two-Way ANOVA. The descriptive analyses were presented in Tables 16 to 21.

Table 16

Causes of Occupational Stress' Subscales by Age

	Work Dema		Clien Dema		Organisat Dema		Interper Demand	
Age	M	SD	M	SD	M	SD	M	SD
20- 25	4.04	1.61	4.25	1.81	3.29	1.91	2.43	1.87
26- 30	3.43	1.87	4.29	1.91	2.39	1.82	2.25	1.75
31-35	3.83	1.52	3.89	1.93	2.43	1.89	2.35	1.36
36-40	3.52	1.04	3.44	1.50	2.07	1.63	2.10	1.78
41-45	3.00	1.87	2.88	1.93	3.50	1.88	2.44	1.85
46-50	2.72	1.55	2.85	1.57	3.66	1.84	2.33	1.78
51-55	2.28	2.28	2.41	1.98	2.57	1.39	3.00	2.03
Above 55	2.50	1.35	2.71	2.02	2.82	1.50	2.01	2.12

The results on Table 16 shows that the respondents in the five age groups from 20 years to 45 years experienced higher level of occupational stress caused by workload demands than their counterparts in the age group of 46 to above 50 years. Clients' demands were more prevalent among the respondents in the age group 20-40 than their counterparts in the three age categories of 41-55. It can be assumed that these groups of respondents are the ones who first handle the clients before doing referrals to their senior most colleagues and that they meet with violent and aggressive clients with co-morbidity problems (Crim, 2013; Duraisingam *et.al.*, 2009). Respondents in the age category of 20-25 and 41–50 experienced organisational stress than their counterparts. Interpersonal demands were the least cause of occupational stress among the respondents.

Table 17
Causes of Occupational Stress' Subscales by Gender and Marital Status

	Work	kload	Clien	ts	Organisation	nal	Interper	sonal
	Dema	ands	Dema	nds	Dema	ands	Demand	<u>ls</u>
	M	SD	M	SD	M	SD	M	SD
Gender								
Female	3.01	1.79	3.26	1.12	2.50	0.70	2.15	1.75
Male	3.51	1.78	2.29	1.41	3.01	1.41	1.90	1.63
Marital Sta	tus							
Married	2.59	1.90	2.30	1.86	2.16	1.76	2.21	1.77
Single	2.36	1.92	2.48	1.97	2.38	1.92	1.89	1.63
Widowed	2.51	1.97	2.66	2.31	2.83	2.06	1.66	1.86
Divorced	2.75	1.91	2.16	1.89	2.91	1.88	1.66	1.86

Descriptive statistics for causes of occupational stress by gender was presented in Table 17. Male respondents experienced much higher organisational (M= 3.01, SD= 1.41) and workload related stress (M=3.51, SD= 1.78), than female respondents. The female respondents experienced much higher clients demands (M= 3.26, SD= 1.12) than their male counterparts. Both respondents scored low mean scores in interpersonal demands. The results suggest that the respondents have minimal interpersonal demands in their place of work. The findings differ with previous studies (Crim, 2013; Victoria, 2012; Rupert & Morgan, 2005; Layne, Hohenshill & Singh, 2004).

Table 18

Causes of Occupational Stress' Subscales by Educational Qualifications

	Work Dema		Client Deman		Organisa Dem	tional ands	Interpe Deman	
Education	M	SD	M	SD	M	SD	M	SD
PhD	3.38	0.84	2.10	1.68	2.67	1.19	1.72	1.31
Masters	3.45	0.64	2.41	1.41	1.81	0.26	1.41	0.49
Undergraduate	2.37	1.34	3.85	0.29	3.36	0.78	2.23	1.01
Higher Diploma	2.53	0.89	2.05	0.97	2.92	0.24	1.87	1.16
Diploma	3.15	1.67	3.74	1.45	2.18	0.97	2.66	0.67
Certificate	2.85	0.69	4.03	1.15	3.53	0.26	1.11	1.04
Form Four	2.91	1.67	2.58	1.18	2.76	0.33	1.30	0.58

Results of data analysis that was performed according to causes of occupational stress' subscales and the respondents' educational qualifications are shown in Table 18. Phd (M= 3.38, SD= 0.84), Masters (M= 3.45, SD= 0.64) and Diploma (M= 3.15, SD= 1.67) holders scored higher in workload demands while certificate (M= 4.03 SD= 1.15), undergraduate (M= 3.85, SD= 0.29), and diploma (M= 3.74, SD= 1.45) holders scored higher in clients demands. Undergraduate and certificate holders scored higher in organisational demands while all the respondents scored minimally in interpersonal demands. The results depicted that there was a difference between the causes of occupational stress and educational qualifications. The results imply that rehabilitation counsellors with different educational qualification responded differently to different causes of occupational stress. The result concurs with the finding of Layne (2001) who found out that educational qualification had a significant relationship with causes of occupational stress.

Table 19
Causes of Occupational Stress' Subscales by Experience

	1	Workload	Clie	ents	Organisat	ional	Interpe	rsonal
]	Demands	Dema	ands	Dema	ands	Demand	ls
Experience	M	SD	M	SD	M	SD	M	SD
Years								
1 – 10	3.33	0.86	2.95	1.16	2.69	1.46	2.66	1.37
11 - 20	3.47	1.26	3.38	1.07	2.05	0.98	3.18	1.11
21 - 30	2.20	1.62	3.00	1.56	3.91	1.29	2.70	1.33
Above 30	2.30	0.95	2.50	1.35	3.77	1.05	2.80	1.47

Experience is an important element in a rehabilitation counsellor's knowledge and performance. Years of practice are meant to present a variety of experiences to the counsellors. Respondents who had worked between 1- 20 years experienced stress emanating from workload demands while those who had worked between 11 - 30 years experienced higher stress emanating from clients demands. Those who had worked for 11 -20 years experienced stress emanating from interpersonal demands (M= 3.18, SD= 1.11) while those who had worked more than 21 years experienced organisational demands. Based on the findings presented on Table 19, results are inconsistent with the findings of related studies which found that addiction counsellors who had worked for many years experienced less occupational stress (Crim, 2013; Victoria, 2012; Duraisingam, Pidd & Roche, 2009; Layne, 2001). The reason was that as a person becomes more experienced in a field, the role burden usually get diluted because of their potentiality, increased capacity to analyse their roles due to the job clarity. Respondents who had worked for more than 30 years experienced stress emanating from organisational demands. The reason might be related to their participation in various occupational roles in the centre like administrative work, coordination between agencies and counselling.

Inferential statistics was used to test the second null hypothesis stated as follows:

HO₂: There is no statistically significant difference in the causes of occupational stress among rehabilitation counsellors based on demographic characteristics.

Table 20
Causes of Occupational Stress among Respondents Based on Demographic Characteristics

Socio-Demographic Characteristics	df	F	Sig.
Age	2	5.495	0.006
Gender	1	0.242	0.624
Marital status	1	0.757	0.388
Educational level	3	1.388	0.254
Experience	1	3.703	0.059

To determine whether there was any statistical significant difference, Two Way ANOVA was computed. Items that achieved p-values of up to 0.05 were considered to be significant while those greater than 0.05 were considered not to be significant. As shown in Table 20, Two Way ANOVA test was significant with respect to age (p<0.006). This indicates that the causes of occupational stress varied according to age. On the contrary, gender (p>0.624), marital status (p>0.388), educational level (p>0.254) and experience (p>0.059) did not affect differently causes of occupational stress. The inferential statistics on age concurs with descriptive statistics and other studies that occupational stress is experienced differently by different age groups.

4.5 Effects of Occupational Stress among Substance Abuse Rehabilitation Centres Based on Demographic Characteristics

The third research objective was on the effects of occupational stress among the drugs and substance abuse rehabilitation counsellors in the selected counties of Kenya. The means scores and standard deviations of the effects were calculated and the results were presented according to the sub scales of occupational strain in Table 21.

Table 21
Effects of Occupational Stress' Subscales

Subscales	Means	SD	Effect
Psychological Strain	2.62	1.14	Low
Behavioural Strain	3.05	0.90	Moderate
Physiological Strain	4.39	0.57	High

The findings revealed that the respondents experienced physiological strains (M=4.39, SD=0.57) which was rated as the highest effect of occupational stress. The finding is consistent with the results of other studies in the literature (Crim, 2013; Kaplan, 2007; Gachutha, 2006) which observed that counsellors experience physiological stress due to their nature of work. The findings were confirmed with the findings of the administrators who suggested that counsellors could be experiencing either behavioural or physiological strain because clinical supervision was taking care of psychological strain.

Psychological strain (2.62, SD=1.14) seems to be the least effect being experienced by the respondents. This finding does not support the previous findings (Duraisingam, Pidd & Roche, 2009; Long, 2008) which stated that addiction counsellors experience psychological strain more than physiological and behavioural strain. While additional research is expected, the findings suggest that the current drugs and substance abuse rehabilitation counsellors could be utilizing stress appraisal techniques that combat psychological strain.

The findings of this study are in agreement with results of other studies which stated that when the worker's emotional and physical resources are depleted, one is no longer able to be as supportive to the client as one is expected (Gachutha, 2006; Jackson, 2004; Layne, 2001). All these effects (strain) mentioned contribute to counsellor's inability to intervene productively in which it can result into negative outcomes to both the client and organization. These effects may hinder healthy therapeutic outcomes and may impair the practitioners' well-being. This calls for a serious address of the effects as it may be detrimental both to the individual and to

organization. Effects of stress was examined by demographic characteristics and presented in several tables.

Table 22
Effects of Occupational Stress' Subscales by Age

	Psych Effec	ological ts	Physic Effect	ological s	Behav Effect	vioural ts
Age	M	SD	M	SD	M	SD
Below 25	3.23	1.62	3.00	1.59	3.04	1.69
26 - 30	3.05	1.58	3.87	1.60	3.66	1.78
31 - 35	2.89	1.52	3.14	1.62	2.16	1.78
36 - 40	2.45	0.34	3.01	1.01	2.09	1.12
41 - 45	2.70	1.53	3.33	1.68	2.73	1.44
46 - 50	2.89	1.78	2.47	0.69	2.77	0.57
51 – 55	2.65	1.24	2.63	1.05	2.12	0.78
Above 56	2.00	1.41	2.01	1.31	1.50	0.70

According to the age category as shown in Table 22, the respondents who were 20-30 years old experienced high strain in all the three subscales than their counterparts who were above 30 years old. This could be explained by the fact that young and middle age group could be having many expectations and may want to seek excellence in their place of work but reality of the profession disillusions them. All respondents except those who are between 46 – above 56 reported high physiological strain. In overall, most respondents experienced physiological strain than the other subscales. The findings are in agreement with Gachutha (2006) which suggested that counsellors reported physiological strain than psychological and behavioural. It was concluded that most counsellors are aware of psychological and behavioural strain and might have applied coping strategies that combat the two subscales.

Table 23
Effects of Occupational Stress' Subscales by Gender and Marital Status

	•	sychological Effects		Physiological Effects		Behavioural Effects	
	M	SD	M	SD	M	SD	
Gender							
Female	2.98	1.56	3.29	1.92	2.94	1.58	
Male	2.83	1.55	3.64	1.90	2.77	1.46	
Marital Sta	tus						
Married	2.79	1.49	3.61	1.88	2.84	1.38	
Single	2.93	1.63	3.24	1/95	2.91	1.65	
Divorced	3.16	1.53	3.50	1.78	2.41	1.24	
Widowed	2.05	1.89	3.06	1.91	2.50	1.97	

Results on gender were examined according to effects of occupational stress and results were presented in Table 23. Results indicate that both gender experienced high physiological strain. Female scored high generally in all the subscales than their male counterparts. This result is consistent with the findings of Jackson (2004) and Layne (2001) who revealed that female scored hire in than their male counterparts. This could be attributed to the general view that female experience effects of occupational stress more than their male counterparts.

Table 23 marital section shows that all categories experienced physiological stress. Singles experienced psychological effects (M= 3.16, SD= 1.89) more than married, singles and divorced. Married (M=2.84, SD= 1.38) and single (M=2.91, SD= 1.65) category experienced behavioural stress. This can be attributed to spouse loss and increased responsibility. The finding is in contrast with the results of Victoria (2012) which found that married category experienced more stress than their counterparts.

Table 24

Effects of Occupational Stress' Subscales by Educational Qualifications

	Psych Effec	ological ts	Physi Effec	ological ts	Behav Effec	vioural ts
Qualifications	M	SD	M	SD	M	SD
Doctorate	1.76	1.12	2.05	1.81	1.81	1.60
Masters	2.78	1.39	3.35	1.10	2.55	0.56
Degree	2.82	1.51	3.76	1.10	2.85	1.54
Higher Dip.	2.73	1.67	2.60	1.99	2.86	1.51
Diploma	2.76	1.71	3.35	1.93	2.01	1.65
Certificate	3.76	1.71	3.76	1.93	3.02	1.65
Form four	3.95	1.13	3.57	0.75	2.95	1.16

Table 24 presents the findings of the effects of occupational stress and educational qualifications. All the respondents experienced higher physiological stress except PhD (M= 2.05, SD= 1.81) and higher diploma holders (M= 2.60, SD= 1.99). The form four leavers (M=3.61, SD=0.73) and certificate holders (M=3.76, SD=1.71) and form four (M= 3.95, SD= 1.13) experienced psychological strain while certificate level experienced behavioural strain. The findings were not in agreement with the results of other Studies which reported that effects of stress were high among the respondents regardless of qualifications (Crim, 2013; Knudsen *et. al.*, 2008). The current findings indicated that PhD holders experienced the least strain. A possible explanation could be that rehabilitation counsellors with PhD are in managerial position hence they do minimal face to face counselling.

Table 25
Effects of Occupational Stress' Subscales by Experience

	Psych Effec	ological ts	Physi Effec	ological ts	Behav Effec	vioural ts
Experience	M	SD	M	SD	M	SD
1 – 10	2.57	1.15	3.39	1.20	2.52	1.08
11 - 20	3.09	0.96	3.64	1.65	2.88	1.21
21 – 30	2.42	1.91	3.30	1.18	1.82	1.17
Above 30	1.98	1.56	2.46	1.91	1.82	1.51

This study reveals a significant relationship between the rehabilitation counsellors' experience and occupational stress as shown in Table 25. All the categories of experienced physiological stress except those who had worked for more than 30 years. Psychological stress was experienced by those who had worked between 11- 20 years. All the categories of experience had low mean scores in behavioural strain. The finding supports the results of Layne (2001) who concluded that strain decreases with experience. This means that the strain experienced in rehabilitation counsellors should decrease with an increase in the years of their counselling experience. The reason might be related to their professional role that at older age, the role burden usually is diluted because of their potentiality and increased capacity to analyse their role due to job clarity; thus, they could perform their roles better. Moreover, the older counsellors might be more experienced, adaptable to the environment and more ready to cope with stress in which it encourages P-E fit (Idris, 2009). Researches have also indicated that experience in counselling has significant effects on personal counselling efficacy, depersonalisation, and increased personal accomplishment (Crim, 2013; Victoria, 2012; Knudsen et. al., 2008). Further statistical analysis was done to establish whether there existed a statistically significant difference in the effects of occupational stress among rehabilitation counsellors based on demographic characteristics as stated in hypothesis 3:

HO3: There is no statistically significant difference in the effects of occupational stress among rehabilitation counsellors based on demographic characteristics.

In order to test the null hypothesis, inferential statistics, ANOVA was used. In this case, a Two-Way ANOVA was appropriate. This is because it is used when establishing the effect of more than one independent variable. It is possible to find out how a dependent variable is affected by more than one independent variable using a Two-Way ANOVA. The test was significant at 0.05 significant level. The results are presented in Table 26.

Table 26
Effects of Occupational Stress among Respondents Based on Demographic Characteristics

Socio-Demographic Characteristics	df	F	Sig.	
Age	4	5.691	0.001	
Gender	1	0.623	0.433	
Marital status	2	3.206	0.047	
Educational level	5	4.746	0.001	
Experience	1	0.140	0.289	

The scores of effects of occupational stress were transformed into composite mean using SPSS version 19 to make it possible for Two Way ANOVA to be used. The results presented in Table 26 reveals that Two Way ANOVA test was significant with respect to age (p<0.001), marital status (p<0.047) and educational level (p<0.001). This implies that there existed significant difference in the effects of occupational stress across age, marital status and educational level of the rehabilitation counsellors who participated in this study. This is in agreement with the results presented through the descriptive statistics. However, gender (p>0.433) and experience (p>0.289) do not affect the effects of occupational stress differently. This means that effects of occupational stress are felt by drugs and substance abuse counsellors regardless of their gender and experience.

Table 27
Rehabilitation Counsellors' Ratings on their Feelings about Work

Type of feeling	Frequency (f)	Percentage (%)
Satisfied	43	38.4
Intention to quit	32	28.6
Planning to look for another job	22	19.6
Actively looking for another job	15	13.4

Respondents were asked if they had ever received stress related treatment in order to establish the effect of occupational stress on individuals and results are presented in Table 27. Interestingly, 42 (47 %) indicated that they had received treatment for stress related problems. Out of the 42 (47%) respondents, (25%) received physiological treatment, (21.43%) received psychological treatment, (29.12%) received behavioural treatment and (30.35%) received multiple treatments. The results concurs with the findings of Layne (2001) which found out that 31% of the respondents had received stress related treatment. The findings of Layne (2001) however concluded that there was no significant correlation between strain (effect) and treatment. The number of rehabilitation counsellors who received stress related treatment in current study is significant and can affect the quality of counselling being offered to the clients.

The respondents were also asked about their feelings on their jobs and 43 (38.4%) indicated that they were satisfied with their jobs, 32 (28.6%) had an intention of quitting, 22 (19.6%) were planning to look for a job and 15 (13.4%) were actively looking for a job. This question was intended to measure turnover as an effect of occupational stress. The finding concurs with the findings of Layne (2001) who noted that most of the rehabilitation counsellors had intent of leaving or looking for another job. This was also supported by the findings of Gachutha (2006) who noted that when counsellors hit exhaustion stage the next option they have is to quit their current work. The results can be interpreted to mean that 61.6% were not satisfied with their current job and there is a likelihood of turnover in rehabilitation centres.

4.6 Coping Strategies Utilised by Substance Abuse Rehabilitation Counsellors

The fourth objective was on the coping strategies that were utilised by drugs and substance abuse rehabilitation counsellors. The amount of stressors unique to the rehabilitation counseling requires strategic planning and flexibility of coping strategies to manage stress. In order to function successfully rehabilitation counsellors must appraise or cope with various stressors, which clarify the need for intricate coping strategies while working in the rehabilitation centres. Transactional model suggest that appraisal or coping occurs when an individual perceives that a stressor is manageable and that new solutions are likely to be effective in modifying or appraising the problem (Folkman & Moskowitz, 2004). The survey instrument included items based on the ways of coping questionnaire. Respondents selected how often they had used the coping strategies listed to deal with the stressful events. The subscales in Table 28 give an indication as to what extent to which respondents employ various coping strategies ranging from low to high. Mean scores for coping strategies ranged from 2.43 (SD= 1.18) to 4.23 (SD=1.15) for the current study.

Table 28
Coping Strategies' Subscales Utilised by Respondents

Strategies	M	SD	Coping
Clinical supervision	4.23	1.15	High
Problem focussed	3.87	0.56	Moderate
Social- support	3.76	1.12	Moderate
Emotion focused	3.65	0.11	Moderate
Escape avoidance	2.43	1.18	Low

The findings presented in Table 28 on the coping strategies used by the respondents reveals that majority of the respondents engaged in clinical supervision (M = 4.67, SD = 1.17), social support (M = 3.76, SD = 1.12) and emotion focussed (M = 3.65, SD = 0.11). The finding concurs with other study findings (Crim, 2013; Victoria, 2012; Lent, 2011; Gnilka, 2010) who assert that the counsellors utilise a variety of coping strategies depending on the level of perceived stress. The finding of this study also concurs with the findings of Gachutha (2006) which found that

supervision was a strong moderator of stress and burnout among counsellors. Supervision involves job performance and emotional support, creating a 'safe space' to discuss emotionally challenging issues (Knudsen *et. al.*, 2008). Clinical supervision encourages counsellors to engage in self-reflection. It is concluded that rehabilitation counsellors in selected counties utilise supervision more than other coping strategies. It may be due to the training and socialisation into helping profession that encourages counsellors to seek supervision and engage in debriefing sessions in order to combat with either burnout or stress in their occupations. As rehabilitation counsellors engage in supervision, they get an opportunity to learn strategies that enable more effective intervention in future, and provide an opportunity of self-reflection. Supervisor and counsellor' relationship also works to enrich the counsellors' on going experience on the job, thus moderating or appraising sensitivities to perceived occupational stressors.

Social support was the second most utilised coping strategy in this study. Research on the role of social support in mitigating the negative impact of stressors on personal well-being has received a good attention and generally attests to the importance of this factor (Eunha, 2006). Receiving support from colleagues, co-workers, and supervisors reduces the stress associated with rehabilitation counselling. It encourages counsellors to find clarity and perspective with regard to a stressful situation by assisting the respondents to gain perspective and avoid feeling alone in the situation (Crim, 2013). The finding of workplace social support is consistent with workplace practices in which it emphasizes the role of interpersonal relationships between supervisors and subordinates. The current findings agree with Crim (2013) who concluded that there is a direct effect of social support in reducing occupational strain in the environment and enhance an individual's well-being. This is because people often need emotional and informational support in dealing with emerging issues in the workplace and especially unfamiliar tasks or situations. Therefore, strong social ties and support often assist rehabilitation counsellors in terms of avoiding conflict with their supervisors and co-workers. Thus, cooperation between supervisee and supervisors is an important factor that can increase job satisfaction and decreases occupational stress or turnover (Knudsen et. al., 2008; Gachutha, 2006). Although social support might be linked to the respondents' beneficial, it is likely to have a more positive impact when it is congruent with the individual's needs and desire (Lent, 2011).

Negative coping strategies such as Escape avoidance (M= 2.43, SD = 1.18) was the least utilized coping strategy in the present study. This finding is in line with Victoria (2012) who found that addiction counsellors utilised negative coping strategies minimally. Primary use of escape avoidance by some of the respondents may be a reflection of withdrawal from the stressors. Individuals who use escape avoidance may find a brief respite from stressful situations but continued use can lead to both mental health and physical ill health. Although the findings indicate that negative coping strategies were minimal, there should be a concern for the respondents who utilized them. While this study advances knowledge and fills the gap about the use of coping strategies, there is still a number of important areas to be explored in future research. Other measures of coping strategies need to be developed. One issue in particular is the level of specificity at which coping should be conceptualized and measured.

Although the respondents had high occupational stress, the better coping strategies employed might have reduced the effects of the stressors the participants experienced. This supports the present study's conceptual framework in which states that the extent to which occupational stressors induce stress will depend on coping strategies. The present findings also support the general transactional theory of Stress – Strain –Coping (Lazarus & Folkman, 1984). This appraisal model of stress notes that stress is a psychological state representing a difficult transaction between the person and one's environment. The outcome of a stressful transition is mediated by appraisal and coping.

This model assumes that not all individuals have the same reactions to the same potentially stressful situations and that while the work environment may be a source of physical and psychological stress, individual differences affect both levels of appraisal as well as abilities to engage in coping mechanisms.

Table 29
Coping Strategies by Age of the Respondents

	Clinic	cal	Probl	em	Emot	ion	Socia	l	Escap	e
	Super	rvision	Focus	ssed	Focus	ssed	Supp	ort	Avoid	lance
Age	M	SD	M	SD	M	SD	M	SD	M	SD
20 -25	4.26	1.54	4.58	1.61	3.44	1.87	3.97	0.54	3.73	1.12
26 -30	5.25	0.72	4.43	1.49	2.77	1.06	3.54	1.73	3.82	1.85
31 - 35	5.56	1.74	4.19	1.53	2.27	1.88	3.69	0.79	3.23	1.92
36 - 40	4.53	1.78	2.42	0.93	4.02	1.75	2.53	1.22	2.03	0.92
41 - 45	4.55	1.84	2.32	0.76	3.20	1.50	2.50	1.83	2.79	1.14
46 - 50	4.79	1.99	2.03	1.27	3.25	1.60	2.72	0.11	1.58	1.11
51 – 55	4.36	1.62	2.23	1.33	2.36	0.56	2.82	1.13	1.58	1.28
Above 55	3.36	1.09	3.77	1.06	2.13	0.39	2.59	0.34	1.23	0.44

Coping strategies were also assessed by demographic variables. Differences in the use of coping strategies were found with regard to the age of the respondents as presented in Table 30. All age groups scored high in clinical supervision, while problem focused, social support and escape avoidance were utilised by the age group between 20- 35 and those who were above 55. Emotion focused was utilised by the age categories between 20 - 25 and 36 - 40. This was not in line with the findings of Layne, Hohenshill and Singh (2004) whose findings concluded that age was not a significant predictor of coping strategies. The current finding indicates that older respondents had higher coping scores than younger ones. This can be concluded that younger respondents utilised the coping strategies than their older counterparts. Their younger counterparts might be learning to cope with the stressors and the environment, thus their ability to utilise almost all strategies.

Table 30
Coping Strategies by Gender and Marital Status

	Clinic	cal	Probl	em	Emot	ion	Socia	l	Avoid	lant
	Super	vision	Focus	Focussed		Focussed		ort	Coping	
	M	SD	M	SD	M	SD	M	SD	M	SD
Gender										
Female	4.30	1.96	2.64	1.39	3.73	1.03	3.76	1.95	1.78	1.98
Male	3.80	1.01	3.26	1.76	2.69	1.02	3.56	1.890	2.32	1.84
Marital Sta	tus									
Married	3.56	1.01	2.43	1.88	3.79	1.12	2.61	1.94	1.72	1.01
Singles	3.57	1.98	3.40	1.86	2.70	1.06	3.70	1.47	2.70	1.97
Divorced	3.41	1.92	4.16	1.99	2.25	1.76	2.83	1.74	1.88	1.51
Widowed	3.66	1.25	2.66	1.36	3.16	1.18	2.50	1.07	2.33	1.86

Results on gender and marital status about coping strategies were analysed and presented Table 30. In gender category, female utilised clinical supervision, emotion focused, and social support. Male respondents utilised supervision, problem focused and social support. Escape avoidance was the least utilised coping strategy among the respondents. The results in whether significant differences exist between female and male rehabilitation counsellors in their coping strategies has been debated in the literature over many years, without an definitive resolution. The findings of the current study concurs with the findings of Crim (2013) Layne, Hohenshill & Singh (2004) who did not find any significant differences between female and male in their coping strategies. It was concluded that women utilised emotion-focused and social support because the two coping strategies tend to regulate emotional responses to the stressful situation while Male utilised problem-focused because it attempts to manage or alter the problem causing the stress.

In the marital category, all respondents utilised clinical supervision while avoidant coping was the least utilised. Married preferred emotion focused while singles utilised problem focused and social support. Divorced scored high in problem focused while widows scored high in emotion focused. The findings differ with Jackson's (2004) who found that there was no significant

difference on how the counsellors felt regardless of their marital status. It was noted that the decision to employ a particular coping strategy was influenced by one's perceptions of personal control over the stressful situation. Where an individual perceives a stressful situation to be beyond their control, they were more likely to utilise emotion-focused coping strategies. Where the individual perceived an opportunity to alter the situation, problem-focused coping strategies was preferred.

Table 31
Coping Strategies by Educational Qualifications

	Clinic	cal	Probl	em	Emot	ion	Socia	l	Avoid	lant
	Super	vision	Focus	sed	Focus	sed	Supp	ort	Copin	ng
Qualification	M	SD	M	SD	M	SD	M	SD	M	SD
Doctorate	3.74	1.04	3.64	1.69	3.50	1.95	3.57	1.65	1.71	0.77
Masters	3.82	1.12	3.58	1.06	3.71	1.05	2.58	1.15	1.64	1.06
Degree	3.65	3.51	3.51	1.93	2.68	1.08	2.82	1.97	1.65	1.92
Diploma	3.41	1.93	3.47	1.84	4.00	1.12	3.82	1.06	2.64	1.02
Certificate	2.72	1.67	2.90	1.81	3.82	1.13	3.63	1.96	3.00	1.89
Form four	1.97	0.74	2.45	1.86	3.71	1.01	3.66	1.91	2.55	1.92

Coping strategies among rehabilitation counsellors and their qualifications were analysed and presented in Table 31. All education categories utilised clinical supervision and problem focused coping strategies except certificate and form four holders. Emotion focused was utilised by all categories except degree holders while social support was utilised by doctorate, diploma, certificate, and form four holders. Avoidant coping was utilised by certificate and form four holders. The reason why certificate holders utilised avoidant coping strategy could be attributed to them ignoring the issue of stress that often results in activities that aid in the denial of the problem. This finding is not consistent with the findings of Victoria (2004) and Jackson (2004) who did not find any significant associations between coping strategies and qualifications. The reason why the respondents in this study showed a difference might be that only trained, accredited and licensed counsellors are employed in rehabilitation centres in the West (Crim,

2013; Victoria, 2012) unlike the Kenyan situation in which counsellors with different level of qualification are recruited. It can also be suggested that the form four leavers who were likely to be in recovery from their own addiction might not be able to utilise fully positive coping strategies. This could be attributed to them not having gone through professional training as opposed to their counterparts. Although they bring their expertise into the profession, there is need for them to go through professional training that could assist in coping or appraising occupational stress. The present study suggests that different types of coping strategies have different effects on the stressors and stress levels, and their use buffers or moderates stressors.

Table 32
Coping Strategies by Experience

	Clinic	cal	Probl	em	Emot	ion	Socia	l	Escap	oe -
	Super	rvision	Focus	sed	Focus	sed	Supp	ort	Avoid	lance
Experience	M	SD	M	SD	M	SD	M	SD	M	SD
1-5	4.40	1.39	4.19	1.32	3.83	1.18	3.78	1.11	2.47	1.29
6 – 10	4.52	1.32	4.64	0.86	3.47	1.32	2.52	1.06	2.82	1.23
11 – 15	3.88	1.28	3.71	1.15	3.88	1.36	3.82	1.07	1.76	1.14
16 - 20	5.00	1.19	3.50	1.93	2.01	1.18	3.45	1.23	1.70	1.14
21 - 25	4.89	1.76	3.33	0.43	2.30	0.67	3.74	0.68	1.25	0.31
26 - 30	4.55	1.97	3.45	1.86	2.71	1.18	1.66	1.91	1.55	1.92
Above 30	3.56	0.45	3.96	1.62	2.97	1.68	2.75	1.44	1.26	1.19

Mean scores for coping strategies in relation to experience of the respondents were analysed and presented in Table 33. All the respondents presented higher mean scores in clinical supervision and problem focussed strategy. Emotion focussed strategy was utilised by those who had experience between 1-15 years, social support was utilised by those who had worked between 1-5 and 11-25 years. Escape avoidance was the least utilised. The findings are not in agreement with the findings of Layne, Hohenshill & Singh (2004) and Layne (2001) who stated that there were no significant differences between experience and coping strategies. The finding of this study could be interpreted to mean that more experienced respondents had learned stress coping

strategies in the course of their interaction with their workplace, thereby enabling them to effectively employ the coping strategies while dealing with the stressors.

Further statistical analysis was done to establish whether there existed a statistically significant difference in the coping strategies of occupational stress among rehabilitation counsellors based on demographic characteristics as stated in hypothesis 4:

HO4: There is no statistically significant difference in the coping strategies of occupational stress among rehabilitation counsellors based on demographic characteristics.

Table 33
Coping Strategies among Respondents Based on Demographic Characteristics

Socio-demographic characteristics	df	F	Sig.	
Age	1	9.712	0.264	
Gender	2	2.242	0.004	
Marital status	1	0.647	0.035	
Educational level	1	1.328	0.067	
Experience	3	2.703	0.012	

The results presented in Table reveals that The results presented in Table 26 reveals that Two Way ANOVA test was significant with respect to gender (p<0.004), marital status (p<0.035) and experience level (p<0.012). This implies that there existed significant difference in the coping strategies across gender, marital status and experience of the rehabilitation counsellors who participated in this study. This is in agreement with the results presented through the descriptive statistics. It is inconsistent with other studies with other studies which did not find any significant differences in marital status, gender and experience (Nabirye, 2012; Victoria, 2012).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The major concern of this study was to explore occupational stress and coping strategies of drugs and rehabilitation counsellors in selected counties in Kenya. The study adopted a mixed method research design. A total of 112 respondents were drawn from five counties in Kenya and 13 administrators were interviewed. In this study, a questionnaire was used to collect the needed quantitative data from drugs and substance abuse rehabilitation counsellors. In addition, an interview schedule was used to collect qualitative data from the administrators working in drugs and substance abuse rehabilitation centres. This chapter also contains summary of the findings, conclusions, recommendations and areas of further research.

5.2 Summary of the Findings

The following are summary of the findings of the study;

- (i) The results showed that drugs and substance abuse rehabilitation counsellors experienced moderate to high level of occupational stress. The results further showed that there existed significant difference in the level of occupational stress across age, marital status and educational level while gender and experience did not affect the level of occupational stress among the rehabilitation counsellors who participated in this study.
- (ii) Causes of occupational stress among the respondents were established and classified into four subscales namely workload, client, organizational and interpersonal demands. Rehabilitation counsellors' work related factors such as workload, clients and organizational demands emerged as the major causes of occupational stress while interpersonal demands were comparatively less stressful for the respondents. Results indicated that occupational stress was significant with respect to age showing that the causes of occupational stress were experienced differently by different age groups. On the contrary, gender, marital status, educational level and experience did not affect differently causes of occupational stress.
- (iii) Physiological and behavioural strain emerged as the highest effects of occupational stress while psychological strain was the least effect of occupational stress among the

respondents. There existed significant difference in the effects of occupational stress across gender, marital status and educational level of the rehabilitation counsellors. However, age and experience did not affect the effects of occupational stress differently. These show that effects of occupational stress was felt differently by different categories of gender, marital status and educational qualifications. While all felt the effects of occupational stress regardless of their age and experience.

(iv) The findings indicated that majority of the respondents engaged in clinical supervision, social support and self-care as coping strategies while positive reappraisal and escape avoidance were the least coping strategies utilised. There existed significant difference in the coping strategies across gender, marital status and experience of the drugs and substance abuse rehabilitation counsellors

5.3 Conclusions

Based on the findings of this study, the following conclusions about occupational stress and coping strategies among drugs and substance abuse rehabilitation counsellors in selected counties in Kenya were drawn:

- (i) Drugs and substance abuse rehabilitation counsellors experienced moderate to high level of occupational stress. This shows that there was considerable amount of occupational stress found among drugs and substance abuse rehabilitation counsellors
- (ii) The major causes of occupational stress among drugs and rehabilitation counsellors were workload, clients, organizational and interpersonal demands.
- (iii) The findings indicated that drugs and substance abuse rehabilitation counsellors experienced strain (effects of occupational stress) namely physiological, psychological and behavioural.
- (iv) Drugs and substance abuse rehabilitation counsellors utilised clinical supervision, social support, self-care, positive reappraisal while escape avoidance was least used.
- (v) From the findings of this study, significant differences were reported in the level, causes, effects of stress and coping strategies across the demographic characteristics.

5.4 Recommendations

Based on conclusions, the following recommendations were made;

- (i) The results of the study appear to indicate that drugs and substance abuse rehabilitation counsellors experience moderate to high occupational stress. This would imply that individuals and organisations are required to prevent occupational stress. This can be obtained when regular assessment of occupational stress level is conducted for prevention measures.
- (ii) Demographic characteristics influenced the level, causes, effects of occupational stress and coping strategies utilised by respondents. Drugs and substance abuse rehabilitation centres should attach greater importance to demographic characteristics when recruiting the drugs and substance abuse rehabilitation counsellors as the characteristics provides a good starting point for understanding and predicting how individuals will respond under different levels of occupational stress
- (iii) The findings of the study showed that clinical supervision and problem focused was the most utilised coping strategies among the drugs and substance abuse rehabilitation counsellors. There is need to strengthen these approaches in order to enhance a holistic development of the drugs and substance abuse rehabilitation counsellors. This can be done through organising workshops, seminars and conferences in which ideas on how to combat occupational stress will be addressed. This will also assist the drugs and substance abuse rehabilitation counsellors in keeping abreast of the new developments emerging in the field of rehabilitation counselling.
- (iv) There is also a need for the drugs and substance abuse rehabilitation centres to encourage and involve drugs and substance abuse rehabilitation counsellors in management decision making process especially in issues that are likely to negatively impact on their ability to perform optimally.

5.5 Suggestions for Further Research

From the findings of the study, further investigations can be conducted. Therefore the following are suggested for further research;

(i) The present study was conducted within five counties in Kenya. A similar study could be expanded to include other drugs and substance abuse rehabilitation centres in other counties and findings be compared.

- (ii) Studies similar to the present one may be undertaken, but with variables other than those in the study.
- (iii) A qualitative study could be carried out in order to establish occupational stress and coping strategies among drugs and substance abuse rehabilitation counsellors as qualitative method allows for the exploration of thought processes and interpretations of the participants in greater depth.
- (iv) A research can be conducted to cover other workforce in drugs and substance abuse rehabilitation centres

REFERENCES

- Aamodt, M. G. (2010). *Industrial/Organisational Psychology*. Belmont, CA: Wadsworth.
- Aloysius, A. (2006). A Study on Job Stress among Professionals Working with the Mentally Ill. Unpublished Masters Dissertation, Rajiv Gandhi University of Health Sciences.
- American Counselling Association (2005). ACA Code of Ethics. Alexandria, VA: Author.
- Brattberg, G. (2006). PSTD and ADHD: Underlying Factors in many Cases of Burnout. *Stress and Health* 22, 305-313.
- Bride, G. (2007). Prevalence of Secondary Traumatic Stress among Social Workers. *Social Work* 52, 63-70.
- Briggs, D. B., & Munley, P. H. (2008). Therapist Stress, Coping, Career Sustaining Behaviour and the Working Alliance. *Psychological Reports*, 103(2), 443-454.
- Broome, K. M., Knight, D. K., Edwards, J. C., & Flynn, P. M. (2009). Leadership, Burnout and Job Satisfaction in Outpatient Drug-Free Treatment Programs. *Journal of Substance Abuse Treatment*, 37, (2): 160-170.
- Cannon, W. (1935). *Stresses and Strains of Homeostasis*. In Layne, C.M. (2001). The Relationship of Occupational, Psychological Strain and Coping Resources to the Turnout Intentions of Rehabilitation Counsellor. Unpublished PhD dissertation, Virginia Polytechnic Institute and State University.
- Caulifield, N., Chang, D., Dollard, C. & Elshaug, C. (2004). A review of Occupational Stress Interventions in Australia. *International Journal of Stress Management*, 11, (2), 149-166.
- Cole, G. A. (2007). Organisational Behaviour; Theory and Practice. Thomson Learning: London.
- Cope, C. M. (2003). Occupational Stress, Strain and Coping in a Professional Accounting Organization. Unpublished Masters Dissertation, University of South Africa.
- Crim, D. (2013). A Phenomenological Study of Stress and Burnout Experienced by Licensed Alcohol and Drug counsellors. Education Doctoral Dissertations in Leadership. Paper 35.

- D'Aleo, N., Stebbins, P., Lowe, R., Lee, D. & Ham, D. (2007). Managing Workplace Stress: Psychosocial Hazard Risk Profiles in Public and Private Sector Australia. *Journal of Rehabilitation Counselling*, 15 (2), 68 87.
- Ducharme L. J., Knudsen, H. K. & Roman, P.M. (2008). Emotional exhaustion and turnover intention in human service occupations: The protective role of coworker support. *Sociological Spectrum*, 28 (1), 81–104.
- Duraisingam, V., Pidd, K., & Roche, A.M. (2009). The impact of work stress and job satisfaction on turnover intentions: A study of Australian specialist alcohol and other drug workers. *Drugs: education, prevention and policy, 16* (3), 217-23.
- Eunha, K. A. (2006). *Mental Health Practitioners in South Korea and United States: Occupational Stress, Theoretical Orientation and Psychological Interest.* Unpublished PhD Dissertation, Ohio State University.
- Folkman, S. & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, 55(1), 745-774.
- Gachutha, C. W. (2006). *The Role of Supervision in the Management of Counsellor Burnout*. (Unpublished PhD Thesis, University of South Africa.
- Garner, B. R., Knight, K. &Simpson, D. D. (2007). Burnout Among Corrections Based Drug Treatment Staff; Impact of Individual and Organizational Factors. *International Journal of Offender Therapy and Comparative Criminology*. 51(5): 510 522).
- Gladding, C. (2012). Counselling: A Comprehensive Profession (8thed.). Upper Saddle River, N.J: Prentice Hall.
- Gnilka, P. B. (2010). The Effects of Counsellor Trainee Stress and Coping Resources on the Working Alliance. Counselling *and Psychological Services Dissertations*. *Paper 47*. Retrieved on 6/12/2011 from archive.gsu.edu/cps-diss/47.
- Hart, C. (2004, July 8). How to keep stress at manageable levels. Nairobi: *Nation Media Group*. P. 4.
- Harwood, H. (2007). Don't Forget the Workplace. Psychiatric Services, 58, 191.
- Health and Safety Executive (2014). Stress-related and Psychological Disorders in Great Britain 2014. Retrieved from http://www.hse.gov.uk/copyright.htm

- Houtman, J., Jettinghoff, K. & Cedillo, L. (2007). Raising Awareness of Stress at Work in Developing Countries: a Modern Hazard in a Traditional Working Environment: Advice to Employers and Worker Representatives . Geneva: World Health Organization.
- Idris, M. K. (2009). Occupational Stress in Academic Life: a Study of Academics of Malasian Public Universities. Unpublished PhD Dissertation, Public University of Waikato.
- Jackson, A. D. (2004). A Survey of the Occupational Stress, Psychological Strain and Coping Resources of Licensed Professional Counsellors in Virginia: A Replication Study. Unpublished PhD Dissertation, Virginia Polytechnic Institute and State University.
- Jordan, L., Spangenberg, J.J., Watson, M.B. & Fouche, P. (2007). Emotional Stress and Coping strategies in South Africa Clinical and Counseling Psychologists. *South African Journal of Psychology*, 37 (4), 835-855.
- Kaplan L. (2003). Report for US Department of Health and Human Services. Substance Abuse and Mental Health Services Administration (SAMHSA); Substance abuse treatment workforce environmental scan.
- Kinman, G. & Jones, F. (2008). Effort Reward Imbalance, Over Commitment and Work life Conflict: Testing an expanded model. *Journal of Managerial Psychology*, 23(3), 236 251.
- Knudsen, H. K., Duchame, L.J. & Roman, P.M. (2008). Clinical Supervision, Emotional Exhaustion and Turnover Intention: A Study of Substance Abuse Counsellors in the Clinical Trials Networks of the National Institute on Drugs Abuse. *Journal of Substance Abuse Treatment*, 35 (4) 387 395.
- Knudsen H. K., Johnson J.A.& Roman P.M. (2003). Retaining counselling staff at substance abuse treatment centres: effects of management practices. *Journal of Substance Abuse Treatment*, 24,129–135.
- Kombo, D.K. & Tromp, D.L.A. (2006). *Proposal and Thesis Writing: An Introduction*. Nairobi: Paulines Publication Africa.
- Kortum, E., Leka, S. & Cox, T (2010) Psychosocial Risks and Work-Related Stress in Developing Countries: Health Impact, Priorities, Barriers and Solutions. *International Journal of Occupational Medicine and Environmental Health*, 23(3):225 238.

- Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities", *Educational and Psychological Measurement*, 30: 607-610.
- Kumary, A., & Baker, M. (2008). Stresses Reported by UK Trainee Counselling Psychologists. Counselling Psychology Quarterly, 21(1), 19-28.
- Lawson, G. (2007). Counsellor wellness and impairment: A national survey. *Journal of Humanistic Counselling, Education & Development*, 46(1), 20-34.
- Lawson, G., Venart, E and Hazier, R. J. (2007). Towards a Culture of Counsellor Wellness. *Journal of Human Counsellor Education Development.*, 46, 5 – 15.
- Layne, C.M. (2001). The Relationship of Occupational, Psychological Strain and Coping Resources to the Turnout Intentions of Rehabilitation Counsellor. Unpublished PhD dissertation, Virginia Polytechnic Institute and State University.
- Layne, C. M., Hohenshill, T. H. & Singh, K. (2004). The Relationship of Occupational, Psychological Strain and Coping Resources to the Turnout Intentions of Rehabilitation Counsellor. *Rehabilitation Counseling Bulletin*, 48, (1), 19-30.
- Lath, S.K., (2010). A study of Occupational Stress among Teachers. *International Journal of Education Administration*, 2 (2): 421 -431.
- Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, and Coping.* New York, NY: Springer Publications.
- Lent, J. (2011). Stressors and Stress Management of Counsellors; Findings From Interviews of Professional Counsellors. Retrieved from *com/vistas10/Article* 73 pdf.
- Long, S. (2008). Occupational Stress in Men and Women; a Comparative Study of Coping Resources. *Retrieved from http/hdl.handle.net/10210/1541*.
- Lloyd, C. & King, R. (2004). A survey of Burnout among Australian Mental Health Occupational Therapists and Social Workers. *Journal of Social Psychiatry Psychiatric Epidemiology*, 39, 752-757.
- Lloyd, C., McKenna, K., &King, R. (2004). Is Discrepancy Between Actual and Preferred Work Activities a Factor in Work-Related Stress for Mental Health Occupational Therapists and Social Workers? *British Journal of Occupational Therapy*, 67(8), 353-360.

- Martha, A.M. (2011). Occupational Stress for Group Care Personnel. *The International Child and Youth Care Networks Cyc-Oline*, January: 143.
- Marzabadi, E.A & Tarkhorani, H. (2007). Job Stress, Job Satisfaction and Mental Health. *Journal of Clinical and Diagnostic Research*, 1, 224 – 234.
- Matheny, K. B., Ashby, J. S., & Cupp, P. (2005). Gender Differences in Stress, Coping, And Illness among College Students. *Journal of Individual Psychology*, 61(4), 365-379.
- McLeod, J. (2003). An Introduction to Counselling (3rded). New York: Open University Press.
- Melgosa, J. (2006). Less Stress. Madrid: Editorial Safeliz.
- Meneze, M.M. (2005). The Impact of Stress on Productivity at Education Training and Development Practices: Sector Education and Training Authority.
- Miner, A. M. (2010). Burnout in Mental Health Professionals as Related to Self-Care. *School of Professional Psychology*. Paper 129.http://commons.pacificu.edu/spp/129
- Mugenda, O. M. & Mugenda, A. G. (2003). Research Methods: Quantitative and Qualitative Approaches. Nairobi: Acts press.
- Nabirye, R. C. (2010). Occupational Stress, Job Satisfaction, and Job Performance among Hospital Nurses in Kampala, Uganda. Unpublished PhD Dissertation, University of Alabama, Birmingham.
- Mulvey K. P., Hubbard, S. & Hayashi, S. (2003). A national study of the substance abuse treatment workforce. *Journal of Substance Abuse Treatment*. 24, 51–57.
- Occupational Safety & Health (Act, 2007). *Directorate of Occupational Safety and Health Services*. Retrieved from www.dosh.go.ke/index2on 12/07/2010.
- Okech, J. K. E. & Kimemia, M. (2012). Professional counselling in Kenya: History, Current Status and Future Trends and Developments. *Journal of Counselling & Development*, 90, (1), 107–112.
- Oser, C. A., Biebell, E. P., Pullen, E. & Harp, K. L. H. (2013). Causes, Consequences, and Prevention of Burnout among Substance Abuse Treatment Counsellors: A Rural versus Urban Comparison. *Journal of Psychoactive Drugs*, 45 (1), 17–27.

- Petrowski, K., Hessel, A., Eichenberg, C., Brahler, E. ((2014). Occupational stressors in practicing psychological psychotherapists. *Health*. Vol.6, No.5, 378-386.
- Rupert, P. A. & Morgan, D.J. (2005). Work Setting and Burnout among Professional Psychologists. *Professional Psychology: Research and Practice*, 36 (5), 544-550.
- Selye, H. (1956). The Stress of Life (revised ed.). New York: McGraw-Hill.
- Smith, P.L. (2009). Psychologist impairment: What is it, how can it be prevented, and what can be done to address it? *Clinical Psychology: Science and Practice*, 16, 1-15.
- Tziporah, R. & Pace, M. (2006). Burnout among Mental Health Professionals: Special Considerations for the Marriage and Family Therapist. *Journal of Marital and Family Therapy*, 32(1), 87-99.
- Ugoji, E. I. & Isele, G. (2009). Stress Management and Corporate Governance in Nigerian Organizations. *European Journal of Scientific Research*, 27 (3), 472-478.
- Victoria, Ho (2012). Exploring the Challenges and Stressors of Working as an Addiction Counsellor. Unpublished Master's Thesis, University of Ottawa, Canada.
- WHO (2007). Raising awareness of stress at work in developing countrie: A modern hazard in a traditional working environment: advice to employers and worker representatives (Protecting workers' health series; no. 6) Geneva: World Health Organization (WHO).
- WHO (2005). *Mental Health and Working Life*. WHO European Ministerial Conference on Mental Health. Retrieved on Aug/2/2010 from http://www.eurowho.int/document/mnh/ebrief06.pdf
- Wright, D. J. (2008). Comparing the Job Strain and Job Demands Control Support Models in Direct Care Disability Workers: Support for Support. *Journal of Occupational and Environmental Medicine*. 50 (3), 316 323.

APPENDIX A: OCCUPATIONAL STRESS SURVEY QUESTIONNAIRE

Dear Respondent,

My name is Alice Mutai and I am a PhD student at Egerton University, Njoro. The instrument below will assist the researcher in collecting data on her research entitle "Occupational stress: level, causes, effects and coping strategies based on demographic characteristics among substance abuse rehabilitation counsellors in selected counties, Kenya". You have been selected to be a participant in this study. No individual or institution will be identified in this study as your answers are confidential and will be coded by numbers.

Alice Mutai

<u>Se</u>

Plo

cti	on A: Background Inf	<u>cormatio</u>	<u>n</u>				
eas	e respond to all items	by TIC	KING	(√)			
1.	What is your current a	ige:					
	Below 25	()		41 -45	()		
	26 -30	()		51 -55	()		
	31 - 35	()		Above 56	()		
2.	Indicate your Gender:						
	Female()						
	Male ()						
3.	Current marital status	: Marrie	d ()	Divorced	()		
		Single	()	Widowed	()		
4.	Educational Qualifica	tions:	Docto	rate	()	Higher diplo	ma()
			Maste	r's Degree	()	Diploma	()
			Under	graduate Deg	gree ()	Certificate	()
5.	Duration of service as	a rehabi	ilitatio	n counsellor (Years):		
	1- 5	()		20 - 24	()		
	6 - 10	()		25 - 30	()		
	11 - 15	()		Above 30	()		
	16 - 20	()					

	Below 10 () 21	− 30	()			
	11-20 () Ab	ove 31	()			
7.	What is your average total number	r of client	's contact ho	ours per da	ay?	
		- 30	()			
	11–20 () Ab	oove 31	()			
Please	e rate your level of stress. 1. Very	y high, 2.	High, 3. Mo	derate, 4	. low, 5. No	stress.
8.	Have you ever received treatment	for stress-	related prob	olems?		
	() No () Yes					
9.	*if yes, please specify:					
	Psychological treatment ()					
	Physical treatment ()					
	Behavioral ()					
10. Pl	ease rate your feeling about your c	urrent wo	rking place:			
i.	I often think of quitting					
ii.	I plan to look for a new job with	n the next	twelve mon	iths		
iii.	I will actively look for a new job	outside re	habilitation	centres		
iv.	I am satisfied with my working e	environme	nt.			
Section	on B: Causes of Occupational Str	ess				
The s	tatements below are potential ca	uses of st	ress at worl	k. You ar	e required	to rate them
in ter	rms of the degree of stress in w	hich each	may place	on you.	Please ind	icate this by
tickin	$\log ()$ in the box;			•		
	ond using the following: 1. Always	2. Frequ	ently 3 .Som	etimes 4.	Seldom 5.	Never
Ser.	Items	Ratings				\Box
11	Excessive paper work or	Always	Frequently	Some	Seldom	Never
	documentation			times		
12	Working overtime					
13	Dealing with other departments					
13	/ Doctors/ nurses					
1.4						
14	Assignment of new or					

6. How many clients, on average, do you currently see per week (Caseload)?

	unfamiliar duties			
15	Fellow workers not doing their			
	work			
16	Inadequate support by job			
	supervisor			
17	Dealing with death/relapse/ suffering of the clients			
18	Meeting deadlines			
19	Performing tasks not in job			
	description			
20	Caseload is too overwhelming			
21	Assignment of increased			
	responsibility			
22	Issues dealing with			
	Confidentiality(when and			
	whom to report confidentiality			
	matters			
23	Dealing with crisis situation			
24	No change or slowness of			
	change in clients			
25	Insufficient personnel to handle			
	counselling			
26	Making critical on-the spot			
	decisions			
27	Personal insult from clients			
28	Lack of participation in policy-			
	making decisions			
29	Working with difficult/			
	unmotivated clients			
30	Lack of opportunity for		 	
	advancement			

31	Performing work not in job			
	description			
32	Lack of emotional support from			
	colleagues			
33	Frequent interruptions			
34	Work emphasizes feeling of			
	emptiness and/or, isolation			
35	No financial support for			
	attending conferences/			
	seminars/supervision			
36	Insufficient personal time			
	(coffee, breaks and lunch)			

Section C: Effects of Occupational Stress

Below are a number of statements relating to effects of occupational stress. Please $Tick(\sqrt{)}$ against each item how often you experience them.

Respond using the following: 1. Always 2. Frequently 3. Sometimes 4. Seldom 5. Never

Serial	Items	always	frequently	Some	Seldom	Never
				times		
37	Feel unable to cope with my					
	work					
38	Feel angry/fearful/anxious/					
	depressed about workload					
39	I find it difficult to control					
	emotions/ I cry easily					
40	I feel confused and/or, cannot					
	concentrate					
41	I experience indigestion and/or,					
	abdominal pain					
42	I have weight loss/ weight gain					

43	I have headaches/backaches	
44	I sweat a lot (without exercise)	
45	I have normal memory	
46	I often quarrel with people in	
	the place of work	
47	I have been withdrawing from	
	people lately	
48	I feel tired and lack of energy	
49	I have trouble falling asleep	
50	My blood pressure is average	
	and constant	
51	I always wake up tired and do	
	not feel like going to work	
52	I have little appetite	

Section D: Coping Strategies among Drugs and Substance Abuse Rehabilitation Counsellors

Tick the appropriate column of each question that represents your coping strategies of occupational stress at your workplace.

(1.) Not effective (2.) Slightly effective (3.) Effective (4.) Moderately effective (5.) Very effective

Serial	Items	Not	Slightly	effective	Moderately	Very
		effective	effective		effective	effective
54	Regular exercise such as					
	walking or jogging					
55	Talking about stressors					
	with fellow counsellor					
56	Engaging in hobby or non-					
	work related interests					
57	Taking part in physical					

	activities such as				
	gardening, house work				
58	Volunteering time to a				
	group organization, or				
	church activities				
59	Taking short vacations or				
	breaks from the counselling				
	environment				
60	Journaling or writing about				
	your stressors				
61	Spending time with or				
	talking to friends				
62	Criticizing/ or blaming				
	myself				
63	Praying or meditating about				
	the situation				
64	Using alcohol or other				
	drugs				
65	Eating a well- balanced diet				
66	Having enough sleep				
67	Using relaxation techniques				
68	Suppress emotions and try				
	not to let emotions show				
69	Seek social support				
70	Use distraction techniques				
71	Using clinical supervision				
72	Setting priorities and deal				
	with problems accordingly				
73	Attending personal therapy				
	and debriefing sessions				
		I	I	1	

APPENDIX B: INTERVIEW SCHEDULE FOR ADMINISTRATORS

- **1.** How many clients, on average, does the drugs and substance abuse rehabilitation centre admit?
- **2.** Approximately how many clients is a drugs and substance abuse rehabilitation counsellor assigned?
- **3.** What are the roles undertaken by drugs and substance abuse rehabilitation counsellors in your institutions?
- **4.** Are drugs and substance abuse rehabilitation counsellors assigned other tasks like decision making, paper work that are not counsellor based? Briefly explain.
- **5.** What are the causes of occupational stress among the drugs and substance abuse rehabilitation counsellors? Explain your answer in relation to duties and assignments given to drugs and substance abuse rehabilitation counsellors based on their demographic characteristics.
- **6.** Do drugs and substance abuse rehabilitation counsellors sometimes work overtime?
- **7.** What are the effects of occupational stress on drugs and substance abuse rehabilitation counsellors based on their demographic characteristics?
- **8.** Do drugs and substance abuse rehabilitation counsellors sometimes find it difficult to control emotions?
- **9.** What are the coping strategies that the drugs and substance abuse rehabilitation counsellors can utilize while at work based on their demographic characteristics?
- **10.** What has the drugs and abuse rehabilitation centre put in place to curb occupational stress in the work place?

Thank you for you cooperation.

APPENDIX C: TABLE FOR DETERMINING REQUIRED SAMPLE SIZE

N		. N		. 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

Note.—Nis population size. Sis sample size.

Source: Krejcie & Morgan, 1970

APPENDIX D: LETTER OF AUTHORITY FROM NACOSSTI

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471,2241349 254-020-310571,2213123,2219420 Fax: 254-020-318245,318249 when replying please quote secretary@ncst.go.ke

P.O. Box 30623-00100 NAIRCHEI-KENYA Website: move.ncst.go.ke

Our Ref:

Date:

NCST/RCD/14/012/1615

29th November 2012

Alice Chemutai Mutai Egerton University P.O.Box 536-20115 Egerton.

RE: RESEARCH AUTHORIZATION

Following your application dated 23rd November, 2012 for authority to carry out research on "Occupational stress and coping strategies among Drugs and Substance Abuse Rehabilitation Counsellors in Selected Counties in Kenya," I am pleased to inform you that you have been authorized to undertake research in Selected Counties for a period ending 31st December, 2013.

You are advised to report to the District Commissioners and the District Education Officers, Selected Counties before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

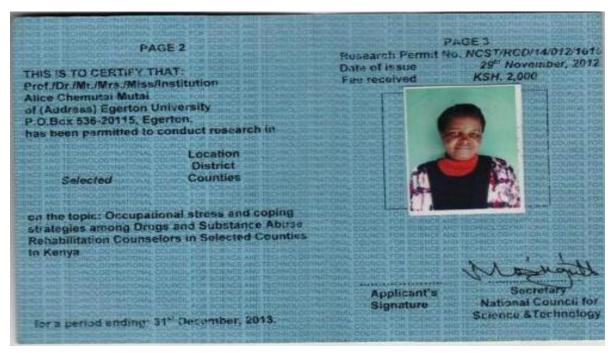
DR M.K. RUGUTT, PhD: HSQ. DEPUTY COUNCIL SECRETARY

Copy to:

The District Commissioners
The District Education Officers
Selected Counties.

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APPENDIX E: RESEARCH PERMIT



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