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Effects of Stress on Job Performance among Police Officers: A Case of Migori County, Kenya

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Abstract:

Police officers experience stress characterized by long working hours, terrible accidents scenes, lack of privacy due to inadequate housing, poor communication procedures, inappropriate staff development procedures which results into devastating effects such as anxiety, depression and anger if not properly checked and handled. The purpose of this study was to determine the effects of stress on job performance of police officers in Migori County, Kenya. The specific objectives of the study were to determine; the effects of depression among police officers, effects of anxiety among police officers and effects of anger among police officers in Migori County Kenya. The study adopted both descriptive and correlation survey designs. The population of the study comprised eight Officers Commanding Police Division (OCPD) and District Administration Police Commander (DAPC), seven Officers Commanding Stations (OCS) and Divisional Administration Police Commander (Div. APC) and Junior Police Officers which totaled to 1030. Random sampling was used to select seven OCPDs, seven DAPC, six OCSs and six Div. APCs. Simple random sampling was used to select 309 Junior Police Officers. The instruments of data collection were questionnaires and interview schedule. Piloting was done in one police station in one police division to ascertain the instrument's reliability. Face validity of the instruments was ascertained by the supervisors from the college of human resource development of Jomo Kenyatta University of Agriculture and Technology. Data was analyzed using SPSS software which determined the effects of stress (depression, anxiety and anger) among police officers in Migori County. The findings were presented using pie charts, bar charts and frequency tables to show percentages of different variables. The findings of the research confirmed that effects of depression, anxiety, and anger existed among the police officers in the Migori County with effects of anger being the highest at 56.1%, depression 47.3% and anxiety at 41.7%. The study recommends the need for introduction of pre-traumatic scenes briefing, post traumatic stress counseling and debriefing, introduction of anger management skills, encouraging of senior officers to include junior officers in decision making and, advising on better stress copying styles by the officers. The findings of the study could be useful to stakeholders in improving measures to reduce stress among the police officers in order to improve police job performance in Migori County, by and large in the entire police services.

Keywords: Stress, depression, anxiety, anger, job performance

1. Introduction

1.1. Background to the Study

More than any other occupation, law enforcement is an emotionally and physically dangerous job. Police officers continually face the effects of murder, violence, accidents and disasters. Rotating shifts, long hours and exposure to life's tragedies exact a heavy toll on police officers and their families. The results are alarming: high divorce rates, suicide, domestic violence, heart attacks, cancer, depression and alcoholism. Law enforcement, the media, and the public foster the myth that police officers can experience trauma and violence without suffering any ill effects. Stress is taking its toll on police officers throughout the nation, though it is a problem that many departments are loath to talk about publicly.

Stress is an inevitable part of life of every individual, regardless of race or cultural background, and police officers are no exception (Hall, 2012). It can take toll on the police officers' physical health, emotional wellbeing, and personal and social development unless they learn to manage it appropriately (Griffin & Hepburn, 2005). Stein and Cutler (2002) define stress as a total response to ones environmental demands and pressures and theorize that stress is an avoidable part of life that everyone has to deal with. Stress arises

from an interaction between people and their environment, in particular when there is an imbalance between the person's perceptions of the demands being made of them by the situation and their ability to meet those demands (Richard, 2005). Regardless of the way stress is identified, the common ideology is that an individual who is experiencing stress will cope with that stress in a certain way based on how that particular individual interprets the stressor (White, 2008).

A report on the impact of stress on job performance of security officers indicates that there are several explanations for increased stress levels among police officers. First, officers have to make significant adjustments to the new work stations brought about by frequent transfers. Secondly, because of work pressure due to their small number, there is strain placed on interpersonal relationships. Third, housing arrangements and changes in lifestyle contribute to stress experienced and in addition, police officers experience stress related to the nature of work, support systems and ineffective coping styles (Hall, 2012).

In the recent past, a number of police officers have been shot and killed by their colleagues in unexplained circumstances. A police constable shot and killed his immediate senior and a colleague at Parklands Police Station before killing himself. In another incident, an administration, police officer shot and killed ten people including two of his colleagues in Kanyamkago towards the end of last year preceding the study, while a GSU officer killed his senior and a colleague after a disagreement in Kuria early this year (Masava, 2011). From the foregoing, it is clear that there are a series of stressful situations experienced by police officers at various levels is a function of the environment and yield corresponding outcomes. It is also clear that these police officers have used certain coping styles such as substance abuse that have not yielded positive results, and at the end they lacked job performance. The current study sought to establish the effects of stress and their relationship to job performance among police officers in Migori County Kenya.

1.2. Statement of the Problem

Of late, the police services have hit the news headlines in both the print and electronic media worldwide for all the wrong reasons ranging from corruption, extrajudicial killings and other social injustices. But it is the rate at which the police officers have hit the headlines by either blowing off their heads or committing other forms of suicide as a result of what is suspected to be uncontrolled effects of stress such as anxiety, depression and anger, that have not only left trail of destructions but also resulting to poor performance of police work, raising endless complaints by the public and Human Rights Organizations.

The Kenyan government boasts of mere police to civilian ratio of 1:1150, against the United Nations recommended 1:450, this means the available work force have to be overstretched beyond limits, this may consequently lead to depression and anger on little or no provocation among the police officers. According to crime data report contained in the annual police crime trends magazine released by the National police service for the year ending 2012, there was an upsurge in criminal activities such as murder, rape, robberies while the same study indicated down ward trends in the morale of police officers which is a major pointer to the poor performance in curbing these crimes. Migori County according to IPOA report on police living conditions released in early 2013, tops in squalid housing conditions with up to four families sharing one unit only separated with curtains. The constant barrage of stressors inherent with danger, and for police managers, the pressures of administration, can overwhelm even the strongest person. When officers lose the ability to cope in normal ways, they may turn to an ultimate solution to relieve the pressures of stress which in many cases has ended in bizarre incidents such as the following;

In September 2011, according to report obtained from a police occurrence book OB No 45/12/09/2011, a police officer in Rongo District shot his wife who is also a police officer dead before turning the muzzle to himself. Before this bizarre occurrence the officer was said to have kept to himself and avoided conversation with his workmates even when on duty. Another police officer attached to Kuria East District committed suicide by shooting himself immediately after returning from his duty shift after engaging in a quarrel with his boss (IPOA, 2013) The occurrence according to his colleagues the officer had written a resignation letter earlier on citing frustrations from his boss but was dissuaded against such an action. In another incident reported to Migori Police station in OB No 31/18/05/2012, an Administration Police (AP) officer in Migori District shot and wounded his girlfriend in a bar after what other revelers termed as light argument before turning the gun to himself. According to his colleagues the officer had been in low spirits after missing out in a promotion list, which he thought he deserved since he was the senior most. A week before that an officer aged 35 years from Kisii locked himself in his house before turning his G3 riffle on himself for unknown reasons (Ransley, 2009).

According to report released by Kenyan National Human Rights commission there has been increase of these incidents that are related to stress while the police performance has been waning year after year. In the view of the above it is only important that a research be conducted to establish if there is a relationship between these effects that lead to the incidents and job performance among police officers.

1.3. Objectives of the Study

The main objective of this study was to establish the effects of stress on job performance among police officers in Migori County, Kenya.

The specific objectives of the study were to:

- 1. Determine the effects of depression among police officers in their job performance in Kenya;
- 2. Determine the effects of anger among the police officers in their job performance in Kenya;
- 3. Determine the effects of anxiety among police officers in their job performance in Kenya;

2. Literature Review

2.1. Introduction

The literature on the effects of stress on job performance among the police officers was guided by Conservation of Resource Theory (CRT) while the literature was synthesized based on the study objectives which includes; effects of depression, anxiety and anger among police officers. Effects of depression, anxiety and anger were the independent variable while job performance as affected by stress was the dependent variable.

Conservation of Resource Theory (CRT) which explains the etiology of the effects of work related stress (Schaufeli et al., 1993). Conservation of Resource Theory is a general stress theory that helps delineate both why certain circumstances are stressful and the process of people's reactions to stressful circumstances (Hobfoll et al., 1995). According to Conservation of Resource Theory, an individual strive to obtain and maintain that which they value which is termed resources. When circumstances at work or otherwise threaten people's ability to obtain or maintain resources, stress ensues. Psychological stress often occurs when there is the threat of significant resource loss, actual resource loss or significant resource gain. Physical exhaustion or work overload (Shirm, 1989) is likely to make people feel insecure about their abilities to support the motivational process. Therefore, the greater salience of loss postulated by Conservation of Resource Theory is accentuated during periods of physical or psychological overload. The theory predicted that chronic, intermittent stress caused resource loss and eventually partially or fully depletes (Hobfoll et al, 1995).

2.2. Theoretical Literature

Popular approaches to the study of occupational stress; Lazarus (1991) Transactional Model, Hobfoll's (1989) Conservation of Resources Theory, the model of Effort-Reward Imbalance by Siegrist (2001), and the Demands Control model of job stress by Karasek (1979) and colleagues (Karasek & Theorell, 1990). Based upon Lazarus' (1991) belief in the primacy of cognition, the transactional model of stress posits that two processes (i.e., cognitive appraisal and coping) mediate between environmental stressors and resulting responses. Stress scholars have continued to use Lazarus' transactional model as their theoretical foundation in empirical studies (e.g., Dewe, Cox, & Ferguson, 1993; van Steenbergen, Ellemers, Haslam, & Urlings, 2008). According to the model, an event in the work environment engages the cognitive appraisal process, or primary appraisal. This consists of an evaluation of whether the event is a threat to the individual's well-being, or whether it can be dismissed as benign or perhaps challenging. If the individual perceives a threat to well-being, the secondary appraisal process is engaged to determine if anything can be done to handle the situation. In this secondary appraisal stage, individuals are said to evaluate their available options for coping with the stressor. The transactional model suggests that an imbalance of greater environmental demands than resources to cope with these demands produces strain.

2.2.1. Conservation Resource Theory (CRT)

According to Hobfoll's (1989) Conservation of Resources Theory (CRT), resources are the objects (e.g., home, vehicles), energies (e.g., money, time, credit), personal characteristics (e.g., self-esteem, mastery), and conditions (e.g., socioeconomic status, valued work role) that are valued by individuals. Stress is said to result from an actual or threatened net loss of resources, or from a lack of resource gain following the investment of resources. According to Schaufeli and Bakker (2004, p.296), a resource represents "physical, psychological, social, or organizational aspects of the job" that serve multiple purposes—one of which is to offset the effects of job demands. Theory and empirical work suggest that the effects of stressful situations may be buffered or attenuated if individuals perceive they possess the resources necessary to cope with the stressor (Hochwarter, Perrewé, Meurs, & Kacmar, 2007). Similar to the transactional model, COR theory implies that an imbalance of greater environmental demands than resources produces strain.

2.3. Empirical Literature

2.3.1. Stress

Stress refers to the pattern of specific and non-specific responses a person (police officers') makes to a stimulus event that disturbed its equilibrium and taxes or exceeds his or her ability to cope (Shin, Hin & Kin, 2007). It's the state or condition of strain and especially of intense strain. Stress is taking toll on police officers throughout the nation, though it's a problem the department loathes talking about publicly. The police are always the first to report on scenes of murder, rape, violent crimes and so forth. Higher levels of perceived stress have been correlated with increased feelings of anger and decreased likelihood of controlling their anger in the work environment (Winterowd et al. 2005). Increased perceived stress has also been shown to be positively correlated with symptoms of physical illness (Miczo et al. 2006). Gan et al. (2007) recently found that higher stress is related to lower police engagement.

However, reasonable amount of stress can help an individual increase his creativity and improve productivity. Thus, although stress brings negative effects when it's very high, positive effects can also be got like promotion and a more responsible position. In overall performance at work typically deteriorates when individuals experience protracted to exposure to high level of stress. In Philadelphia, officers with problems sometimes receive help from the Employee Assistance Program within the department. Their concerns range from stress on the job of personal dilemmas that sometimes become overwhelming.

Slate, Vogel, and Johnson (2001) that showed police officers who perceived they had important input into decisions experienced less occupational stress. Research by Lambert (2006) suggested a lack of participation in decision-making could be directly linked to the

amount of job stress experienced by correctional officers. Lambert's study found low job control, lack of communication, and procedural justice were all associated with upper levels of reported job stress. Lambert's research illustrated a lack of input into job procedures created stress, and ultimately lowered job satisfaction and organizational allegiance. From the Job-Demands Control (JDC) model, environmental restraints such as inability to control or make work-related decisions, etc..., stimulation could not be directed into a potent coping response. Thus, when strain went unresolved, it could collect and build-up, and culminate with an employee developing anxiety, depression, psychosomatic complaints and cardiovascular disease (Dollard, 2003). Cooper (2001) indicated that employee anxiety could be reduced if they had the authority to make decisions, and were afforded an opportunity to use a variety of skills to do their jobs.

Lombardo (1981), and Cheek and Miller (1983) contend the primary source of stress for police officers was directly related to how officers felt they were treated by administrations. As an umbrella term, "administrative" sources of stress encompassed vague guidelines for job performance, inadequate communications from management, rules constructed by people who are not familiar with the actual work setting, insufficient participation in decision making and inadequate administrative support. Concerns regarding family income and insufficient salary are among the top stressors experienced by police officers that affect their job performance (McConnachie, Ross, & Morrisson, 2004). Some common stressors that affects the performance of police officers include the transition from college, training, concerns (difficulty with material, lack of motivation), time pressures, financial concerns, family; social (loneliness), or developmental tasks of adulthood (moving from dependence to autonomy, establishing identity) (Hall, Chipperfield, Perry, Ruthig, & Goetz, 2006). Internal sources of stress result from our reactions to these demands and the demands we put on ourselves. For example, if you feel there are many demands, and not enough resources to cope then you may feel stressed. You may tell yourself "There's just too much to do." Our own wants, feelings and attitudes can also create stresses which in turn have effect on the job performance and thus an officer's sense of adequacy or confidence may also influence how they experience stress (Aherne, 2001).

Moderate level of stress is a normal phenomenon for police officers, if such officers are to excel in their job performance (Busari, and Uwakwe (2001). Longer serving police officers experience significantly greater average levels of stress (Hall, Chipperfield, Perry, Ruthig, & Goetz, 2006; Moffat, McConnachie, Ross, & Morrisson, 2004). This stress comes from various aspects of life including developmental and social changes, financial and accommodation problems, work demands, and the specific demands of job performance. Often the demands of work and personal needs collide, tipping the balance and resulting in disequilibrium and excessive stress (Michie, Glachan, & Bray, 2001 Busari 2000). In Kenya, a number of reasons have been advanced to explain these suicides in the disciplined forces, among them the rampant harassment of junior officers by their bosses as indicated in the Independent police oversight authority (IPOA, 2013). The high recruitment of police officers has led to inadequate facilities and overcrowding in accommodation spaces (Kagan & Baird, 2004; Okoth 2005). These led to low job performance and promote stress to the police officers due to reduction in the level of privacy and deprivation in putting up with one's family on one hand and an overwhelming population of culprits on the other hand. Based on the above information, there is need to carry out a study on the effect of stress on job performance of police officers in Migori County.

2.3.2. Depression

Depression is an inward expression of stress and is ranked among the top presenting concerns for police officers. This trend extends beyond officers who present themselves for therapy. However, a recent American Forces Health Association (2009) survey of 26,685 show that security officers from 40 stations in the United States (U.S.) found that 18.2% of police officers reported that they had been diagnosed with depression. In a separate sample of security officers, 19% reported feeling depressed and approximately 10% reported having a diagnosis of depression (Adams et al., 2008). Rates were nearly 50% in another study that measured depressive symptoms (Furr, Westefeld, McConnell, & Jenkins, 2001).

Depression affects a wide variety of outcomes in studies on police officers and is associated with poor job performance (Deroma, Leach, & Leverett, 2009), duty indecision (Rottinghaus, Jenkins, & Jantzer, 2009), and suicidal ideation (Singh & Joshi, 2008). Adams and colleagues also found an association between depression and acute infectious illness (ear infection and sinus infection) in police officers. The prevalence of depression and its deleterious effects on police force makes adequate diagnosis and treatment of depression imperative (Deroma, Leach, & Leverett, 2009).

Across many cultures, the prevalence for depression is higher for females than for males, with females nearly twice as likely to experience depressive symptoms (Kessler et al., 2003, 2005; Kuehner, 2003; Piccinelli & Wilkinson, 2000). Not only do females receive more diagnoses of depressive disorders, but they receive more prescribed medication for its treatment (Simoni-Wastila, 1998). Although depression is more common in women, its diagnosis and treatment may be more difficult in men. Men are likely to differ from women in their manners of experiencing and expressing depression (Addis, 2008), making diagnosis difficult for health care providers. Moreover, although females attempt suicide at rates twice that of males, suicide attempts by men in nearly all countries are much more likely to be deadly (Oquendo et al., 2001; World Health Organization, 2009). Even with such shocking statistics, males are less likely than females to pursue therapy (Addis & Mahalik, 2003).

In Kenya, high recruitment of police officers has led to inadequate facilities and overcrowding in accommodation spaces (Kagan & Baird, 2004; Okoth 2005). These led to depression among the police officers due to reduced privacy and deprivation in putting up with one's family on one hand and an overwhelming population of culprits on the other hand. There is therefore need to carry out a study to establish the effect of depression on job performance of police officers in Migori County.

2.3.3. Anxiety

Anxiety is a body reaction to the stress. Anxiety is not directly caused by stressors. Rather, it is an individual's reaction to the perception of stressors. Stressors are physical, emotional, or social stimuli that an individual face in daily life and may produce feeling of tension and strain (McKenzie, Pinger, & Kotecki, 2008).

In US, According to the 2008 National Health Assessment Survey nearly half (49%) of police officers recruits experienced "overwhelming anxiety" in the last year (American College Health Association, 2008). Unmanaged anxiety can increase risk for physical and mental health problems such as heart disease, depression and substance use in young adults (Buckner, Bonn-Miller, Zvolensky, & Schmidt, 2007). According to Kessler et al. (2005), the onset of mental illness often occurs during or shortly before college age and can be precipitated by the stress and anxiety of attending college, leaving home, building new relationships, and pressure to succeed (Kadison, 2004). According to Mahmoud (2011) in Kentucky, an assessment for anxiety, coping style, negative thinking, social support, life-satisfaction and demographics established that maladaptive coping and negative thinking were directly related to anxiety with negative thinking being the primary predictor of anxiety in this model.In Malaysia, a study on stress and job performance among employees revealed that stress factors such as anxiety, nutrition, not getting enough sleep or sleeping too much, social activities, finances, workloads and problems with relationship continue to pose major problems which affects their job performance (Kamarudin, Aris, MohdDaudi, SiongChoi & Intan, 2009).

2.3.4. Anger

According to Deroma, Leach and Leverett (2009) anger is an outward expression of stress. Numerous studies in America (Brown & Lee, 2005), Britain (Greenland & Brown, 2005; Huan, Yeo, Ang, & Chong, 2006) and Australia (Sonderegger & Barrett, 2004) established that foreigners suffer from loneliness due to homesickness, anxiety, depression and disorientation because of being far from home. The suffering is attributed to higher risk of psychological problems due to stress from the many adjustments they are required to make in their social and cultural lives when they enter a new society (Huan, et al; Lee & Bradley, 2005; Mortenson, 2006). According to Eckhardt et al. (2002) and Dye and Eckhardt (2000), different anger expression style are related to low job performance. Anger expression style reflects the way in which individuals express their angry feelings such as withholding them versus expressing them behaviorally. Eckhardt, et al. posits that violent individuals report higher levels of anger and possess a lower ability to calm angry feelings compared to nonviolent individuals. This reactivity can have an impact on job performance.

In Australia, Khawaja and Dempsey (2007) assessing psychological symptoms, over a given period of time, found that 42% of the respondents had frequent sleep disturbances that aligned with stressful life experience at the highest stress times of work performance. The sleep disturbances associated with work performance resulted in physical stress placed on the body and therefore the increased stressful experiences resulted from increased physical strain (Osiki and Busari 2002). In the past there were cases of officers who committed suicide because of in ability to cope with life stressors. In Kenya, an Administration Police (AP) officer in Migori District shot and wounded his girlfriend in a bar after what other revelers termed as light argument before turning the gun to himself. According to his colleagues the officer had been in low spirits after missing out in a promotion list which he thought he deserved since he was the senior most (Ransley, 2009). The foregoing studies have highlighted episodes of anger among the police officers and the present study will seek to establish the prevalence of anger among the police officers in Migori County in Kenya.

2.4. Job Performance

Job Performance is a measure of how well or poor ones carry out the delegated duties, it's used to gauge the individual employee's result against the desired results. Job performance determines whether the goals of an organization are consistently met in an efficient and effective manner. How well or poor an individual performs his duties are hinged on a number of factors which may include and not limited to living and working environment conditions, the right skills and tools for provision services, enumeration and motivational issues, promotional policies in an organization.

Performance can be rated using numerical (1, 2, 3) and alphabetical (a, b, c) rating scales which may be described as 1 or A=excellent, 2 or B=very good, 3 or C= fair. It is after the ratings that employees are categorized as super achievers and satisfactory workers. In the present study, job performance will be categorized into personal accomplishment, depersonalization and emotional exhaustion, which will be used as measures for job performance among police officer

2.5. Conceptual Framework

The study adopted the conceptual framework in the figure 1, which attempted to focus on the effects of stress and their relationship on the job performance of police officers in Migori County. The study postulated that the effects of stress have a direct bearing on job performance of police officers.

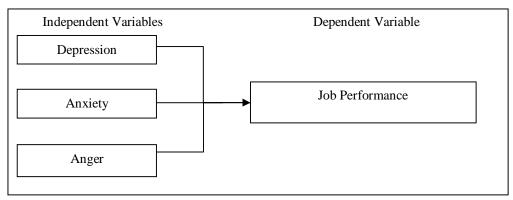


Figure 1: Conceptual framework

3. Research Methodology

3.1. Introduction

This chapter describes the procedures that were followed in conducting the study. It covered the research procedures and the techniques that were used in the study. It provided an explicit description of the research design, population sample size and the sampling procedures and the basis for planning, selecting and developing research instruments. Lastly it described the procedure for the applications of the instruments and the data analysis techniques to be employed.

3.2. Research Design

The study used both descriptive and correlation survey design. Frankel and Wallen (2000) describe descriptive survey as a method that involves seeking the opinion of a large group of people about a particular issue. Descriptive survey study is the best method for describing a population which is large enough to observe directly (Mugenda & Mugenda, 2003). According to Kothari (2005) descriptive design is concerned with describing, recording and analyzing conditions that exists or existed. Mugenda and Mugenda describe correlation as the degree to which variables in a study relate to each other. Descriptive design was used to establish the prevalence of depression, anxiety and anger among the police officers while correlation design was used to determine the effects of stress on job performance among police officers' in Migori County, Kenya. Information was obtained from a sample rather than an entire population at one point in time, which may range from one day to a few weeks. Surveys are only concerned with conditions or relationship that exist, opinions that are held, processes that are going on, effects that are evident or trends that are developing as harbored by the police officers, OCSs and OCPDs.

3.3. The Study Population

The population of the study comprised of 1030 police officers including, 7 officers commanding police divisions (OCPDs), 7 district administration police commanders (DAPC), 8 officers commanding police station (OCSs) and 8 divisional administration police commanders (Div. APC) in Migori County. The OCPDs and DAPCs participated in the study since they are in charge of the police divisions and districts respectively within the county. OCSs and Div. APCs participate in the study since they are the heads of police stations and AP divisions respectively. According to establishment report at Migori county commander's office, the total work force is 1030 police officers. A tenth of this population is equivalent to 103 was used in the pilot study. One third of the remaining population of 927 gives 309 was used for sampling.

S no.	Categories	Population	Sample Size	Percentage
		(f)	(n)	(%)
1	Police Stations	8	7	87.5
2	Police Officers	1030	309	30.0
3	OCSs	8	7	87.5
		0	,	
4	Div. APC	8	7	87.5
5	OCPDs	7	6	75.0
6	DAPC	7	6	75.0

Table 1: Sample Frame Source: Migori County Police Officer (2014)

3.4. Sample and Sampling Techniques

Stratified and simple random sampling techniques was used in the study. According to Nyinya (2007), a large sample size reduces the sampling error. Stratified sampling is a random sampling procedure used to select individuals with unique characteristics especially when the number to be sampled is small (Mugenda and Mugenda, 2003). Stratified sampling technique was therefore used to select police from different ranks. Simple random sampling technique was used to select 309 police officers from seven police stations

within Migori County. Simple random sampling is best used when the sample size is big and high level of accuracy is needed and therefore it is the most viable for use given the number of junior police officers to be sampled is large.

3.5. Instruments for Data Collection

Questionnaires with both open ended questions and closed ended questions were used in the study to collect data from the police officers. The questionnaire was divided into five (5) sections. Section A captured demographic information of the respondents such as age, gender, rank, work experience and qualifications. Section B dwelt on effects of depression in police job performance, section C covered effects of anxiety in police job performance, section D covered effects of anger in police job performance while section E was seeking information on effects of stress on police job performance. The questionnaires have been developed based on health questionnaire-9(PHQ-9) developed by Drs Robert H. Spitzer, Jane B.W Williams *et al* and from Web medical reference reviewed by Joseph Goldberg MD in February 08, 2014. A five point likert rating scale was employed to gauge how strongly respondents agreed or disagreed with a series of statements which is subsequently used to rate the effects.

3.6. Validity and Reliability of the Instruments

According to Mugenda and Mugenda (2003), validity is the accuracy and meaningfulness of inferences based on research results. It is the ability of the instrument to measure well what it purports to measure. Face Validity of the instruments was ascertained by pretesting and through the assistance of experts from the Department of Business Administration in the college of Human Resource Development Jomo Kenyatta University of Agriculture and Technology. Their suggestions and recommendations were used to improve on the instruments with a view to make it more valid. Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research yields consistent results after repeated trials. Kothari, (2004) observe that for research data to be reliable it must have the ability to consistently field the same results when repeated measurements are taken under the same conditions to test reliability of the instruments. Kasomo (2006) recommends a test of reliability of instruments in order to ensure dependability. In case the reliability is low, correction and modification is done to attain a Cronbach reliability of $\alpha = .7$ which is the minimum threshold for social sciences research. The study tested the reliability of the instruments through piloting which was done in one police station and one divisional administrative police station on 103 police officers (10%) in Migori County, Kenya (Mugenda & Mugenda, 2003).

3.7. Data Processing and Analysis

Data was processed using SPSS software, analysis and presentations used pie-charts, graphs and tables, as well as narrations to show and explain the effects of stress (depression, anxiety and depression) among the police officers in Migori County Kenya.

4. Data Analysis, Presentation and Interpretation

4.1. Introduction

This chapter contains data analysis, presentation and interpretation. In this chapter, an analysis of data collected through questionnaires is made. This qualitative section in a study that is mainly considered quantitative in nature was to provide more information on the effects of depression, anxiety and anger on police job performance. This assisted to understand and analyze quantitative data. A total number of 309 questionnaires were distributed and a feedback of 97% was given as only 300 questionnaires were returned.

4.2. Depression and Job Performance

The respondents were given range of questions which determines the existence of depression among them and its effects on job performance.

4.2.1. I Get carried off by My Thoughts While on Duty and Sometimes Get Absent Minded

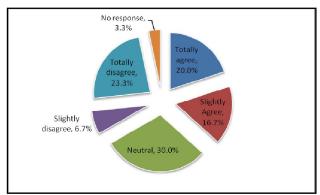


Figure 2: I get carried off by my thoughts while on duty and sometimes get absent minded

In the figure 2, the results show that; Question one which asked the respondents if they get carried off by their thoughts while on duty and sometimes get absent minded, 20% of them totally agreed, 16.7% slightly agreed, 23.3% totally disagreed, 6.7% slightly disagreed , 30% returned neutral while 3.3% did not give response. The respondents who agreed that they get carried off by their thoughts while on duty and get absent minded standing at 36.7% means lack of concentration on the part of the officers which does not auger well with the police duties which requires constant alertness for their effective job performance. This can also be a clear indication that the officers may be suffering from depression.

4.2.2. I Felt That I Had Nothing to Look Forward to

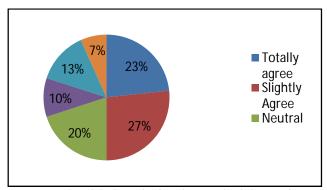


Figure 3: I felt that I had nothing to look forward to

In figure 3, the results show that; In question two which asked the respondents if they felt that they had nothing to look forward to, 23% totally agreed, 27% slightly agreed while 13% totally disagreed, 10% slightly disagreed, 20% were neutral while 7% did not respond. The respondents who agreed that they had nothing to look forward to were 50%, this constituting half of the respondents means there is a lot of pessimism among the police officers showing that they lacked the drive to effective performance as they may be attending their duties just for the sake of it.

4.2.3. Once in a While I Have Harbored the Thought of Hurting Myself or another Person

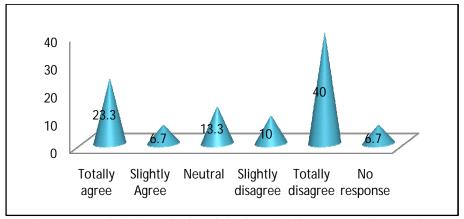


Figure 4: Once in a while I have harbored the thought of hurting myself or another person

In figure 4, the results show that; Question three which asked the respondents if Once in a while they have harbored the thought of hurting themselves or another person, 23.3% totally agreed, 6.7% slightly agreed, 10% slightly disagreed, 40% strongly disagreed, 13.3% remained neutral and 6.7% did not respond. The respondents who agreed that they had harbored the thought of hurting themselves standing at 30% means that the respondents are bitter with themselves due to unresolved issues. Contemplating to harm oneself or another definitely goes against the police motto of service with dignity and the respondents cannot be trusted with protection of life and property which is among their core functions. This may signal the source of current rampant suicides within the police and the extra judicial killings by members of the police services which they have been accused of by various human rights organizations. This feeling may also underline serious depression problem within the service.

4.2.4. I Have Trouble Falling or Staying Asleep Due to Previous Ugly Incidents at Work

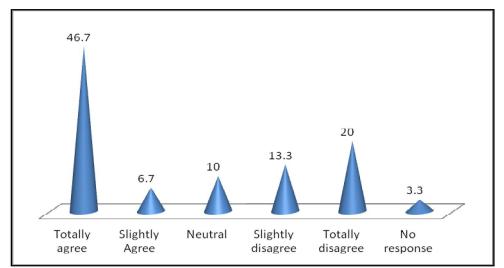


Figure 5: I have trouble falling or staying asleep due to previous ugly incidents at work

In figure 5, the results shows that; Question four which asked if the respondents have trouble falling or staying asleep due to previous ugly incidents at work, 46.7% totally, 6.7% slightly agreed, 20% totally disagreed, 13.3% slightly disagreed, 10% remained neutral while paltry 3.3% did not respond. This may mean that a big number of respondents suffer from insomnia which is inability to sleep well and as a result may not perform their jobs well as they may feel sleepy during the day.

This finding concurs with the findings in Australia by Khawaja and Dempsey (2007) when assessing psychological symptoms, over a given period of time which found that 42% of the respondents had frequent sleep disturbances that aligned with stressful life experience and that it seriously affected the respondents' job performance. Insomnia is among the indicators of depression in an individual.

4.2.5. I Was Unable to Become Enthusiastic about Anything

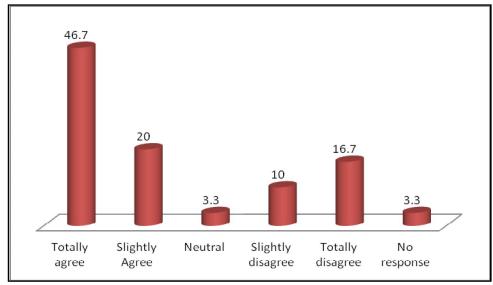


Figure 6: I was unable to become enthusiastic about anything.

In figure 6, the results shows that; In question five which asked if they were unable to become enthusiastic about anything, 46.7% totally agreed, 20% slightly agreed 16.7% totally disagreed, 10% slightly disagreed and paltry 3.3% each were either neutral or did not respond. The big percentage returning totally agree standing at 46.7% may be interpreted to mean that the said respondents lack the positive drive to creativity and innovation hence hampering their performance. This can be a major indicator of depression among the said respondents.

4.2.6. Once in a While I Have Felt That Life Is Meaningless after Missing out on a Promotion or Recommendation I Thought I Deserved

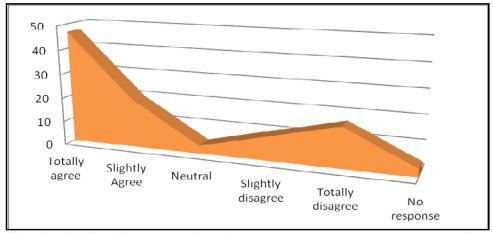


Figure 7: Once in a while I have felt that life is meaningless after missing out on a promotion or recommendation I thought I deserved

In figure 7, the results shows that; In question six which asked if the respondents have Once in a while they have felt that life is meaningless after missing out on a promotion or recommendation they thought they deserved 46.7% agreed while 43.3% did not agree, 6.7% did not respond and 3.3% were neutral. The respondents who agreed that they felt life is meaningless after missing out on a promotion they thought they deserved standing at 46.7% is a sign of hopelessness among the respondents which is an indicator of depression. A hopeless employee can not give good results in their performances.

4.3. Anxiety and Job Performance

The respondents were given range of questions which were to determine the existence of anxiety among them.

4.3.1. I Sometimes Feel Scared Without Any Good Reason and Have Difficulty to Relax

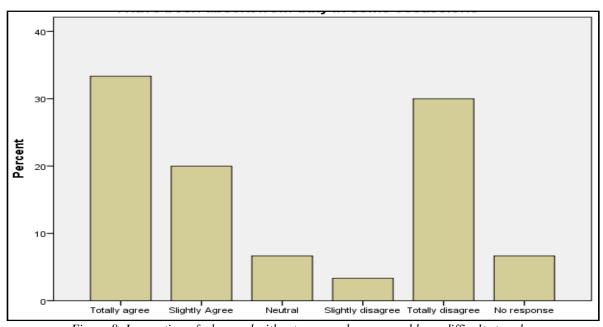


Figure 8: I some times feel scared without any good reason and have difficulty to relax

In figure 8, the results show that; Question one which asked the respondents if they sometimes feel scared without any good reason and have difficulty to relax 33.3% of them totally agreed, 20% slightly agreed, 30% totally disagreed, 3.3% slightly disagreed, 6.7% returned neutral while another 6.7% did not give response. The respondents who feel scared for no any good reason and have difficulty to relax agreeing at 53.3% paints a picture of officers not peace and at ease with themselves. This is an indication of anxiety among the police officers and not a good condition for positive performance.

4.3.2. I Was Aware of the Increased Action of My Heart in the Absence of Physical Exertion

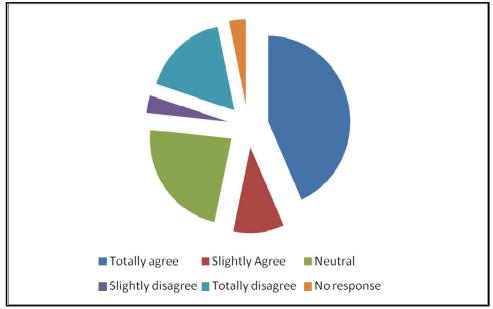


Figure 9: I was aware of the increased action of my heart in the absence of physical exertion.

In figure 9, the results show that; Question two which asked the respondents if they were aware of the increased action of their hearts in the absence of physical exertion, 43.3% totally agreed, 10% slightly agreed, 16.8% totally disagreed, 3.3% slightly disagreed, 23.3% were neutral while 3.3% did not respond. The respondents who agreed that they were aware of increased heart action in the absence of physical action at 53% paint a picture of officers who are at panic. Regular panicking is an indication of anxiety and also interferes with positive performance as the said employees lack the self confidence and the composure for effective job performance.

4.3.3. I Get Worried about Situations in Which I Might Panic and Make a Fool of Myself.

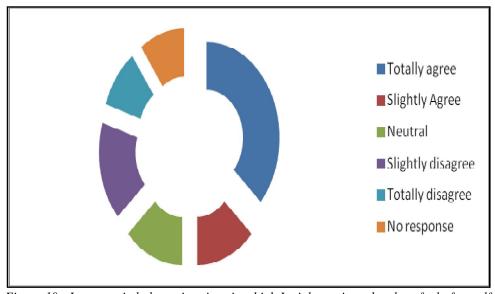


Figure 10: I get worried about situations in which I might panic and make a fool of myself.

In the figure 10, the results show that; Question three which asked the respondents if they get worried about situations in which they might panic and make a fool of themselves, 36.7% totally agreed, 13.3% slightly agreed, 10% totally disagreed, 16.7% slightly disagreed while, 13.3% returned neutral and 10% did not respond. The respondents who agreed that they get worried about situations in which they may panic and make fool of themselves stands at 50% an indication of anxiety among the respondents which may hamper their performance as constant worry interferes with positive performance.

4.3.4. I Experienced Breathing Difficulty and Sweaty Hands or Feet

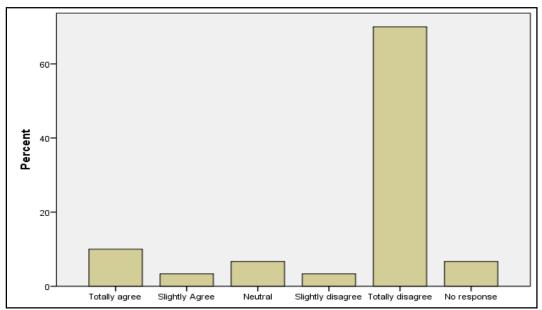


Figure 11: I experienced breathing difficulty and sweaty hands or feet

In figure 11, the results shows that; Question four which asked if the respondents have experienced breathing difficulty and sweaty hands or feet 10% totally agreed, 3.3% slightly agreed, 70% totally disagreed, 3.3% slightly disagreed' 6.7% remained neutral and 6.7% did not respond. The number of the respondents who did not agree that they experience breathing difficulty stood at 73.3%, this means that the majority of the officers does not experience these kind of reactions. It's important to note that with those who agree standing at 13.3% means that still some respondents suffer from this reaction meaning that they could be suffering from anxiety hence having problem in their performance

4.3.5. Sometimes I Have Feelings of Terror That Strike Suddenly

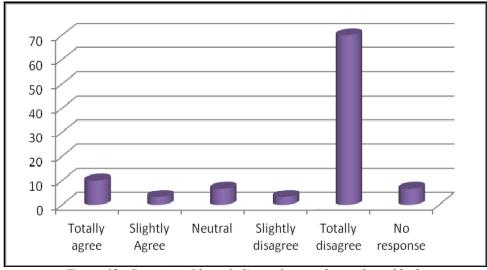


Figure 12: Sometimes I have feelings of terror that strike suddenly

In figure 12, the results show that; Question five which asked if they sometimes have feelings of terror that strike suddenly 10% totally agreed, 3.3% slightly agreed, 66.8% totally disagreed, 13.3% slightly disagreed while, 3.3% were neutral and 3.3% did not respond.

The respondents who disagreed that they sometimes have a feeling of terror that strikes suddenly stood at 80.1% meaning that the majority of officers do not suffer from this kind of experience. It is important to note with 13.3% agreeing that they have this kind of experience may mean that they suffer from anxiety related condition which may reduce their ability to perform.

4.3.6. I Was Aware of Dryness of My Mouth Especially When Agonizing over a Pending Unpredictable Situation

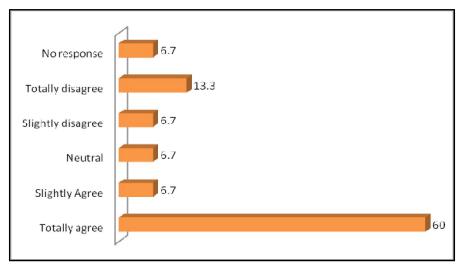


Figure 13: I was aware of dryness of my mouth especially when agonizing over a pending unpredictable situation

In figure 13, the results show that; In question six which asked if the respondents were aware of dryness of their mouths especially when agonizing over a pending unpredictable situation 60% totally agreed, 6.7% slightly agreed, 13.3% totally disagreed, 6.7% slightly disagreed, 6.7% did not respond and 6.7% were neutral. This in essence shows that there is high level of anxiety judging from the number of those returning positive from the question. This level of anxiety can easily curtail the performance of the respondents.

4.4. Anger and Job Performance

The respondents were given range of questions which were to determine the existence of anger among them. From the analysis, the following were observed;

4.4.1. I Experience Headache after Having a Serious Arguments

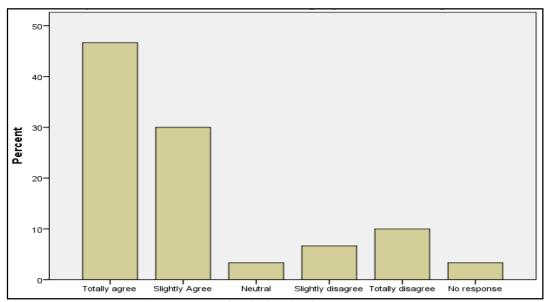


Figure 14: I experience headache after having a serious arguments

In figure 14, the results shows that; Question one which asked the respondents if they experience headache after having a serious arguments, 46.7% of them totally agreed, 30% slightly agreed, 10% totally disagreed, 6.7% slightly disagreed, 3.3% returned neutral while another 3.3% did not give response. The respondents who agreed that they suffer headache after having a serious arguments at 76.7% means that the majority of the police officers suffer from anger related condition and may not be able to control their anger easily. As much as the headache brings a medical condition which may hamper performance because of the discomfort, it may also explain the high level of self inflicted accidents among the police as they cannot control their anger.

4.4.2. When Annoyed (Angry) or After Having Serious Arguments I Lose Appetite

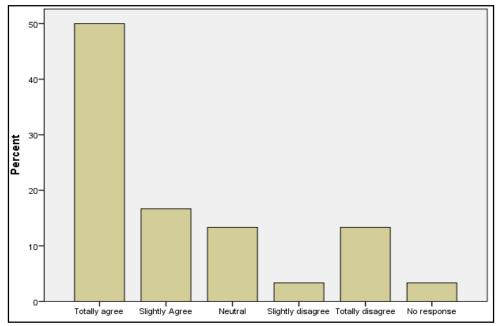


Figure 15: When annoyed (angry) or after having serious arguments I lose appetite

In figure 15 the results show that; Question two which asked the respondents if when annoyed (angry) or after having serious arguments they lose appetite, 50% totally agreed, 16.8% slightly agreed, 13.3% totally disagreed, 3.3% slightly disagreed, 13.3% were neutral while 3.3% did not respond. The respondents who agreed that when annoyed(angry) or after having serious arguments they lose appetite at 66.8% means that the majority of the respondents have a problem controlling their anger to an extent of losing appetite. Eating well is among the requirements of good performance as energy to perform work is driven from food.

4.4.3. When Frustrated, I Let My Irritation Show

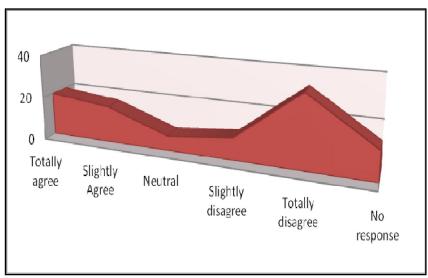


Figure 16: When frustrated, I let my irritation show.

In figure 16, the results show that; Question three which asked the respondents if, when frustrated, they let their irritation show, 20% totally agreed, 16.7% slightly agreed, 33.3% totally disagreed, 10% slightly disagreed, 6.7% returned neutral and 13.3% did not respond.

The respondents who agreed that when frustrated, they let their irritation show at 36.7% is a clear indication of inability to calmly control anger. This may scare away the public from approaching the police officers, which they always turn to for various services and as result the performance of the officers are affected.

4.4.4. When People Annoy Me, I May Tell Them What I Think of Them

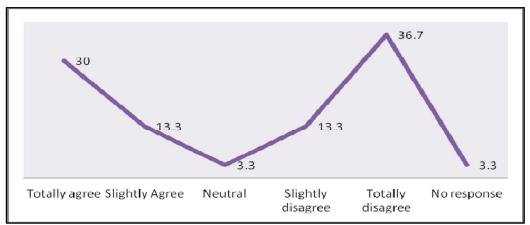


Figure 17: When people annoy me, I may tell them what I think of them

In figure 17, the results show that; Question four which asked if the respondents if, when people annoy them, they may tell them what they think of them, 30% totally agreed, 13.3%, slightly agreed, 36.7% totally disagreed,13.3% slightly disagreed, while 3.3% remained neutral and 3.3% did not respond. The respondents that agreed if people annoy them, they may tell them what they think of them at 43.3% means that the officers can easily get into verbal exchange which may further degenerate to a physical duel with a colleague, superior or even the members of public. This may interfere with his performance as most people may resolve to avoid him even during the course of his duties.

4.4.5. If I Have to Resort to Violence to Protect My Rights, I Will

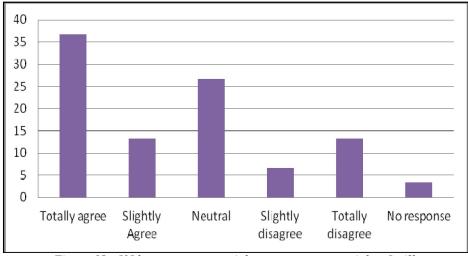


Figure 18: If I have to resort to violence to protect my rights, I will

In figure 18, the result show that; Question five which asked if they have to resort to violence to protect their rights, they will 36.7% totally agreed, 13.3% slightly agreed, 13.3% totally disagreed, 6.7% slightly disagreed, 26.7% were neutral and 3.3% did not respond. With many officers agreeing they may resort to violence to protect their rights at 50%, means that the officers lacks the attributes of alternative dispute resolving mechanisms. This may also explain extra judicial killings among the police, excessive use of force or meting out violence in the slightest provocation.

4.4.6. When Things Don't Go Their Way or Worried Over a Situation Can't Sleep at Night.

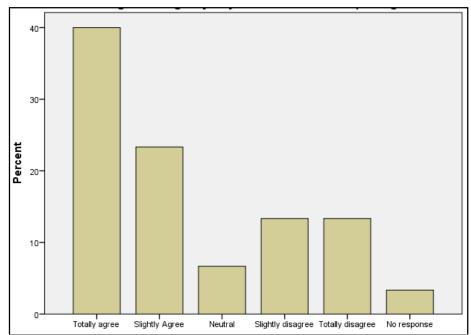


Figure 19: When things don't go their way or worried over a situation can't sleep at night.

In figure 19, the results show that; In question six which asked if the respondents if when things don't go their way or worried over a situation can't sleep at night 40% totally agreed, 23.3% slightly agreed, 13.3% totally disagreed, 13.3% slightly disagreed, 6.7% did not respond and 3.3% were neutral. Lack of sleep when one is under stress is referred as insomnia and therefore many of these officers may be suffering from insomnia. Suffering from insomnia may affect the performance of the officers when they are required to be on duty as they may tend to dose off at work.

5. Summary, Conclusions, and Recommendations

5.1. Introduction

This chapter contains summary of the findings, conclusions and recommendations on the research study and to provide a way forward. The study sought to determine the effects of stress namely; depression, anxiety, and anger on the police job performance.

5.2. Summary of Findings

In the view of data analysis and presentations, the findings of the research reveal that there exists effects of stress that may affect police job performance.

5.2.1. Effects of Depression on Job Performance

Most police officers were found to suffer from depression related effects with a resounding 47.3% in agreement that they suffer from depression related effects against 34.4% who did not agree. People who suffer from depression are normally low in esteem, can easily suffer from stress related illnesses such as heart ailments and be prone to self inflicted accidents. As is the case in other researches done earlier, depression affects a wide variety of outcomes in studies on police officers and is associated with poor job performance.

5.2.2. Effects of Anxiety on Police on Job Performance

Police officers were found to suffer from anxiety related effects with 41.7% in agreement against 40.6% who did not agree. People who suffer from anxiety lack the confidence to perform their duties as they are always not at ease. Unmanaged anxiety can also increase the risk for physical and mental health problems such as heart diseases, depression and substance use in young adults (Buckner, Bonn-Miller, Zvolensky, & Schmidt, 2007)

5.2.3. Effects of Anger on Job Performance

Police officers were found to suffer from anger related effects at 56.1% against those who did not agree at 28.9%. Notably the anger effect is the most prone stress effect having the highest number of respondents agreeing that they suffer from it as compared to depression and anxiety.

5.3. Conclusions

From the research findings it can be concluded that police officers from Migori County are affected by stress which leads to most of them suffering from depression, anxiety and anger. The effect that is mostly experienced by the police officers is anger with highest response at 56.1%.

Though much attention has not be given effects of stress on police job performance in the past by top police echelons and government, the findings in this research may be a wakeup call that effects of stress needs to be addressed if positive results in the police performance have to be achieved. It is also important to note that the conditions that bring about stress emanate from some things which may not go right either in the officers personal lives or in the line of duty.

The conclusion above is supported by the Effort-Reward Imbalance approach by Siegrist (2001). The ERI approach focuses on individual appraisals of social reciprocity and social exchange, characterized by mutual cooperative investments based on the norm of return expectancy where efforts are balanced by respective rewards. Failed reciprocity violates this norm and leads to strong negative emotions and sustained strain responses because it threatens the fundamental reciprocity/exchange principle. Further, the ERI model suggests that failed reciprocity (i.e., high efforts spent and low rewards received in turn) is likely to elicit recurrent negative emotions and sustained stress responses in exposed individuals.

5.4. Recommendations

The study recommends need for introduction of pre-traumatic scenes briefing, post traumatic stress counseling and debriefing- This will ensure officers are sensitized and counseled before and after visiting horrific scenes and incidents to avoid Post Traumatic Stress Disorders. This follows that many police officers in Migori county agree that they have feelings of terror that strike suddenly, get worried about situations in which they might panic at 50%, they have feeling of being scared for no good reason at 53.3%, they are unable to sleep due to previous ugly incidents, they get carried off by their thoughts while on duty and become absent minded. All these points that the police officers are ill prepared to handle the aftermath of theses horrific scenes which leads to traumatic stress.

The study recommends introduction of anger management either in the training curriculum or in organized seminars to help them deal with anger calmly. This follows that effects of anger is the highest among all the effects of stress standing at 51.6% compared to depression at 47.3% and anxiety at 41.7%.

The study recommends involvement of police officers in decision making regardless of their positions. Slate, Vogel, and Johnson (2001) that showed police officers who perceived they had important input into decisions experienced less occupational stress. Research by Lambert (2006) suggested a lack of participation in decision-making could be directly linked to the amount of job stress experienced by correctional officers. This recommendation is further supported by Cooper (2001) which indicated that employee anxiety could be reduced if they had the authority to make decisions, and were afforded an opportunity to use a variety of skills to do their jobs.

The study also recommends that the police officers should be advised on better stress copying styles such as seeking social support, acceptance, venting of emotions, time management, and advance planning. There is need to increase the number of police officers through large number recruitments so as to meet the UN recommended civilian to police ratio, this is necessitated by a big no number of officers sleeping on duty due to lack of enough rests standing at 53% from the sampled population.

5.5. Areas for further research

Further researches can be done to find out other effects which adversely affect the police job performance taking into consideration that it's not only depression, anger and anxiety which effects police job performance but also others such as equitable remuneration, equipments and tools, working conditions among others.

6. References

- i. Adams, T. B., Wharton, C. M., Quilter, L. & Hirsch, T. (2008). The association between mental health and acute infectious illness among a national sample of 18- to 24-yearold college trainees. Journal of American College Health, 56, 657-663.
- ii. Addis, M. E. (2008). Gender and depression in men. Clinical Psychology: Science and Practice, 15, 153-168.
- iii. Addis, M. E. & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. American Psychologist, 58, 5-14.
- iv. Addis, N. & Stephens, C. (2008). "An Evaluation of a Police Debriefing Programme:
- v. Outcomes for Police Officers Five Years after a Shooting." International Journal of Police Science and Management10:361–373.
- vi. Admiraal, W. F., Korthagen, F. A. J. & Wubbels, T. (2000). Effects of student teachers' coping behaviour. British Journal of Educational Psychology, 70(1), 33-52.
- vii. American College Health Association. (2008). The fall 2008 National College Health Assessment Report. Retrieved June 24, 2010 http://www.achancha. org/ docs /ACHANCHA_Reference_Group_ExecutiveSummary_Fall2008.pdf
- viii. American College Health Association. (2009). American college health association national college health assessment Spring 2008 reference group data report (Abridged): Journal of American College Health, 57, 477-488.
- ix. Anderson, G. S., Litzenberger, R. & Plecas, D. (2002). "Physical Evidence of Police Officer Stress." Policing: An International Journal of Police Strategies & Management 25 (2): 399–420.
- x. Anderson, W., Swenson, D. & Clay, D. (1995). Stress Management for Law Enforcement Officers. Englewood Cliffs, NJ: Prentice Hall.

- xi. Anshel, M. H. & Anderson, D. (2002). Coping with acute stress in sport: Linking athletes' coping style, coping strategies, affect, and motor performance. Anxiety, Stress, and Coping, 15, 193–209.
- xii. Anshel, M. H. & Si, G. (2008). Coping styles following acute stress in sport among elite Chinese athletes: A test of trait and transactional coping theories. Journal of Sport Behavior, 31(1), 3-21.
- xiii. Beaton, R. & Murphy, S. (1995). "Secondary Traumatic Stress in Crisis Workers: Research Implications." In Compassion Fatique, edited by Figley, C, 51–81. New York: Brunner Mazel.
- xiv. Blackmore, A., Tucker, B. & Jones, S. (2005). Development of the undergraduate sources of stress questionnaire. International Journal of Therapy and Rehabilitation, 12(3), 99-103.
- xv. Blalock, J. A. & Joiner, T. E. (2000). Interaction of cognitive avoidance coping and stress in predicting depression/anxiety. Cognitive Therapy and Research, 24, 47-65.
- xvi. Bouteyre, E., Maurel, M. & Bernaud, J. L. (2007). Daily hassles and depressive symptoms among police recruits in France: The role of coping and social support. Stress and Health: Journal of the International Society for the Investigation of Stress, 23(2), 93-99.
- xvii. Buckner, J., Bonn-Miller, M., Zvolensky, M. & Schmidt, N. (2007). Marijuana use motives and social anxiety among marijuana-using young adults. Addictive Behaviors, 32(10), 2238-2252.
- xviii. Burleson, B. R. & Mortenson, S. R. (2003). Explaining cultural differences in evaluations of emotional support behaviors: Exploring the mediating influences of value systems and interaction goals. Communication Research, 30, 113–146.
- xix. Busari, A. O. (2000) Stress Inoculation Training and Self Statement Monitoring Techniques in the reduction of Test Anxiety Among Adolescent Under Achievers in Ibadan Metropolis, Nigeria. An Unpublished Ph.D Thesis, University of Ibadan pp.309.
- xx. Busari, A. O. & Eniola, M. S. (2007). Effect of Stress Management Training on Self Image of Visually Impaired Individuals Essays in Education Online Journal, University of South Carolina Aiken 19, pp. 10-17.
- xxi. Cammann, C., Fichman, M., Jenkins, G. & Klesh, J. (1983). Assessing the attitudes and perceptions of organizational members. In S. Seashore, E. Lawler, P. Mirvis, and C. Cammann (Eds.), Assessing organizational change: A guide to methods, measures, and practices (pp. 71-138). New York: John Wiley.
- xxii. Crockett, L. J., Iturbide, M. I., Torres Stone, R. A., McGinley, M., Raffaelli, M. & Carlo, G. (2007). Acculturative stress, social support, and coping: Relations to psychological adjustment among Mexican American college Recruits. Cultural Diversity and Ethnic Minority Psychology, 13(4), 347-355.
- xxiii. Delprino, R. (2002). Work and family support services for correctional officers and their family members; a national survey. U.S. Department of Justice.
- xxiv. Deroma, V. M., Leach, J. B. & Leverett, J. P. (2009). The relationship between depression and college academic performance. College Student Journal, 43, 325-334.
- Dewe, P. & Cooper, C.L. (2007). "Coping Research and Measurement in the Context of Work Related Stress." In International Review of Industrial and Organizational Psychology 2007, vol. 22, edited by Hodgkinson, G.P., Ford, J.K., Hodgkinson, G.P. & Ford, J. K. 141–191. New York: John Wiley & Sons Ltd.
- xxvi. Dewe, P., Leiter, M. & Cox, T. (2000). Coping, health and organizations. London: Taylor and Francis.
- xxvii. Furr, S. R., Westefeld, J. S., McConnell, G. N., & Jenkins, J. M. (2001). Suicide and
- xxviii. depression among college trainees: A decade later. Professional Psychology: Research and Practice, 32, 97-100.
- xxix. Gazzaniga (Ed.), The cognitive neurosciences (pp. 93–104). Cambridge, MA: MIT Press.
- xxx. Greenland, K. & Brown, R.P. (2005). Acculturation and contact in Japanese studying in the United Kingdom. Journal of Social Psychology, 145, 373–389.
- xxxi. Huan, V.S., Yeo, L.S., Ang, R.P. & Chong, W.H. (2006). The influence of dispositional optimism and gender on adolescents' perception of academic stress. Adolescence, 41, 533–546.
- xxxii. Klarreich, S.H., Digiuseppe, R. & Dimattia, D. J. (1987). Cost effectiveness of an employee assistance program with rational-emotive therapy. Professional Psychology: Research and Practice, 18, 140-14.
- xxxiii. Lambert, E. & Hogan, N. (2009). Stressors and burnout among correctional staff. Corrections Compendium, 34, 16-23.
- xxxiv. Lambert, E., Paoline, E. A., Hogan, N. & Baker, D. N. (2007). Gender similarities and differences in correctional staff work attitudes and perceptions of the work environment. Western Criminology Review, 8 (1), 16-31.
- xxxv. Lee, S. & Bradley, K. D. (2005). General self-efficacy, assertiveness and religion/spirituality as predictors of acculturative stress among internationals. Paper presented at the Midwest Educational Research Association annual meeting, Colombus, OH.
- xxxvi. McKay, J., Niven, A. G., Lavallee, D. & White, A. (2008). Sources of strain among elite UK track athletes. The Sport Psychologist, 22, 143-163.
- xxxvii. McKenzie, J., Pinger, R. & Kotecki, J. (2008). An introduction to community health. Boston: Jones & Bartlett.
- xxxviii. Mahmoud, J.S. R. (2011) The Relationship of Anxiety, Coping, Thinking Style, Life Satisfaction, Social Support, and Selected Demographics among Young Adult College Students. Unpublished Doctoral Thesis, University of Kentucky.
- xxxix. Nicholls, A. R., Holt, N. L., Polman, R. & Bloomfield, J. (2006). Stressors, coping, and coping effectiveness among professional rugby union players. The Sport Psychologist, 20, 314-329.
 - xl. NIMH (National Institute of Mental Health). (2002). Mental Health and Mass Violence:

- xli. Evidence-Based Early Psychological Intervention for Victims/Survivors of Mass Violence. A Workshop to Reach Consensus on Best Practices. NIMH Publication No. 02-5138, Washington, D.C.: U.S. Government Printing Office.
- xlii. Noblet, A. J. & Gifford, S. M. (2002). The sources of stress experienced by professional Australian footballers. Journal of Applied Sport Psychology, 14, 1–13.
- xliii. O'Neil, J. W. & Steyn, B. J. (2007). Strategies used by South African non-elite athletes to cope with the environmental stressors associated with endurance events. South African Journal for Research in Sport, Physical Education and Recreation, 29(2), 99-107.
- xliv. Oquendo, M. A., Ellis, S. P., Greenwald, S., Malone, K. M., Weissman, M. M. & Mann, J.J. (2001). Ethnic and sex differences in suicide rates relative to major depression in the United States. The American Journal of Psychiatry, 158, 1652-1658.
- xlv. Patterson, G. T. (2001). "Reconceptualizing Traumatic Incidents Experienced by Law Enforcement Personnel." The Australasian Journal of Disaster and Trauma Studies. Retrieved from www.massey.ac.nz/~trauma/.