

**WORKING ENVIRONMENT AND EMPLOYEE PRODUCTIVITY AT MADHVAN
GROUP OF COMPANIES: A CASE OF KAKIRA SUGAR LIMITED**

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NOVEMBER, 2019

DECLARATION

I hereby declare that this dissertation titled “*Working Environment and Employee Productivity at Madhvan Group of Companies: A Case of Kakira Sugar Limited*”, is my own effort and has never been produced anywhere in Kyambogo University or any other institution of higher learning for any award.

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APPROVAL

This dissertation titled “*Working Environment and Employee Productivity at Madhvan Group of Companies: A Case of Kakira Sugar Limited*”, has been done under our supervision and has met the requirement of Kyambogo University and is now ready for submission.

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DEDICATION

This dissertation is dedicated to my Late Parents Augustine and Maria; my children, Catherine, Martha & Michael, my Norwegian Mother Birgitta Nordhus and Alice Stevens, for the love, encouragement and for the immense support that has lifted me high.

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ABBREVIATIONS AND ACRONYMS

ILO	:	International Labour Organization
IUCEA	:	Inter-University Council for East Africa
KORD	:	Kakira Out growers Rural Development Fund
KSL	:	Kakira Sugar Limited
NUPAWU	:	National Union of Plantation and Agricultural work
OAG	:	Office of the Auditor-General Health
OSHA	:	Occupational Safety, Health Act
PSHSA	:	Public Service Health and Safety Association
QWL	:	Quality Work Life
SPSS	:	Statistical Package Social Science
WHO	:	World Health Organizations
WHP	:	Workplace Health Promotion

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ABSTRACT

The current study sought to establish the relationship between working environment and employee productivity at Madhvan Group of Companies; a case of Kakira Sugar Limited located in Jinja District. The objectives of the study were to establish the relationship between physical work environment and employee productivity, to establish the relationship between psychological work environments and to establish the relationship between the quality of work-life and employee productivity. The study adopted a case study research design, where both qualitative and quantitate methods were adopted. Descriptive statistics and Pearson Correlation Coefficient were used to establish the relationship between the study variables. A total of 361 Managers and Employees who participated in the study were selected through purposive and simple random sampling techniques. Methods adopted for data collection were: self-administered questionnaires; interviews and documentary review. The analysis of the study established that there was no relationship between the physical work environment and employee productivity; The study rejected the hypothesis that there was a significant relationship between physical work environment and employee productivity. It was also established that there was a significant positive weak relationship between the psychological work environment and employee productivity. The study, therefore, concluded by accepting the hypothesis that there is a positive significant relationship between psychological work environment and employee productivity. The study also established that there was a significant positive weak relationship between quality work-life and employee productivity, thereby accepting the hypothesis that there is a positive significant relationship between quality work-life and employee productivity. The researcher recommended to the management of Kakira Sugar Limited to: enhance management support; improve job security of employees; involve employees in the decision-making processes; ensure that there is enhanced open and clear means of communication; increase job autonomy of work; ensure that there is fair and equitable compensation; increase Job rotation for skills development. The intervention would enhance a conducive working environment and increase employee productivity.

Keywords: Working environment, employee productivity, physical work environment, quality work-life, psychological work environment.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

This chapter presents the background of the study “working environment and employee productivity at Madhvan Group of Companies: a case of Kakira Sugar works”. The background of the study is comprised of the historical perspective, the theoretical review, the conceptual perspective and the contextual perspective. It also highlights the statement of the problem, purpose, research objectives and hypothesis, conceptual framework, scope, Justification and significance of the study.

1.1.1 Historical perspective

According to Brem (2013), it's stated that for the last 250 years, employee productivity is known to have played a big role in the development of nations. This author believes that firms can hardly prosper or overcome the challenges in the international context, without any Employee productivity and can hardly enjoy the huge benefits it comes with. Ferraro (2016) explains that `the world has become a global village, there is instant information flow unlike in the past, both local and international firms are facing a lot of challenges due to stiff competition and rapid changing technology, employees are reliably informed of their rights; all those conditions the firm have to swiftly adapt if they are to remain relevant at both national and international market or else they fall out of the race.

Bluma (2013) states that the working environment of an industrial setting was popularized in the German mining in 1900 by the hygiene movement which assessed the bodies of miners to find out the status of their work environment before the enforcement of the medical regulation of the mining workplace. The same author, quotes Lescohier (1923) who stated that the

alarming working environment instigated several studies to be conducted to establish the reasons for low productivity and the resultant effects on the firms.

Hasun (2005) adds that historically, the field of working environment especially industrial workplaces is a worldwide established subject some researchers termed as the ancient field of historical science whose investigation has been ongoing since the 1960s and 1979s. The same author further states that from the 1990s to date, the issue of work environment has changed due to the transformation in social environment, information technology, and that there are more flexible ways of organizing work process. In order to swiftly adjust to the volatile work environment, the United States of America had to devise ways to adjust to the changing environment to counteract competition, retain its competent human resources, embrace new technology and increase employee productivity. The government endorsed to enhance salaries, double fringe benefits, and improve the working environment which greatly improved the welfare of the workforce and as a result, there was increased productivity (US department of labour2001).

Raymond (2016) reported that there was a public outcry worldwide about alarming labor practices and undesirable working conditions in developing countries like Asian factories. This was also attested by the International Labor Organization who reported that nearly 9.5 million people work in “slave-like conditions” in Asia (ILO, 2005a). The examples cited included poor practices like wages below living wages, excessive hours and days worked per week, discrimination, verbal and physical abuse, suppression of trade unions, and preventable disasters that resulted in death. The Statistics that were presented on the World Day for safety and health at work on 28th April 2016 indicated that 2.3 million deaths were registered to have occurred per year because of due to occupational accidents or work-related diseases, more than 317 million accidents occur on the job annually, many of these results in extended absences from work (ILO, 2016).

Africa like many other countries in the world, have experienced great advancements in technology and digital innovations which have transformed working environment patterns, attained great economic opportunities but at the same time faced with challenges of economic and social inequalities and job insecurities (ILO, 2001). The same author explains that manufacturing companies are facing significant changes in work organization and labour relations; they are under greater pressure to meet the demands of modern working life; greater improvement in information technology have enhanced information flow to instant communication, and employees are aware of what happens in other organizations.

Semujju (2006) reported that Uganda's manufacturing companies have the worst working environment for workers. It was also reported that most workers in Uganda are underpaid and work under poor conditions, and workers' rights are not recognized. It was also indicated that the government had a shortage of government oversight of labor practices in Uganda in that there were only 44 Labor inspectors for all the 112 districts; and that most employers do not give employees written contracts of employment, resulting in a lack of job security and union representation (Danish Trade Union Council for International Development Cooperation, 2014).

The Auditor General's also reported that much as Uganda's economy has registered a number of achievements, the most sensitive the Occupational Safety and Health (OSH) policy, have not been adequately enforced by the responsible government ministries and that it's worse at the private sector. Further reported that there is persistent exposure to unhealthy working environments, faulty plants, and equipment, dangerous civil works and constructions leading which has long term negative effects to the employees and their families like fatal chronic diseases, disability and that surprisingly some employees lack awareness concerning their rights to a healthy and safe working environment (Office of Auditor General, 2016).

The government of Uganda through the Constitution of 1995 (as amended) provides for the right of employees to work under a healthy environment which is safe, secure, and satisfactory (article 40). Some of the rights highlighted include but not limited to equal pay, freedom to associate and collective bargaining and maternal protection at work (The Republic of Uganda, 1995).

In conclusion, therefore, firms ought to know that if they are to get the best from their employees in terms of increased productivity, their work environment should be conducive with minimum risks to their health. It is also imperative to note that creating a pleasant and productive work environment is a collective responsibility for policymakers (the government) to ensure effective labour inspection and compliance of the occupational health and safety of employees, employees, and employers.

1.1.2 Theoretical perspective

In an attempt to improve productivity of employees, companies have adopted various management theories like Human relations theory by Elton Mayo, Administrative theory by Henri Fayol, Theory X and Y by Douglas McGregor, the scientific management theory by F. W. Taylor, Bureaucratic theory by M. Weber and Maslow's Hierarchy of needs. However for the purpose of this study, the researcher adopted human relations theory by Elton Mayo, due to the similarities of the study the scholar conducted, with the variables under study that is "working environment and employee productivity".

Human Relations Theory

According to Onda (2016), the human relations school of thought by George Elton Mayo, developed the idea to conduct a series of study to tackle organizational motivation at the Hawthorne Works of the Western Electric Company in Chicago, in the early 1920s. The same

further puts it that the study sought to establish the conditions that would motivate employees to become productive. The study established that level of motivation was not largely influenced by working conditions other than employee's perception of feeling undervalued and that the appropriate management styles greatly affected employees commitment to the organization. The theory emphasized that the physical conditions and pay never influenced employee productivity but rather job security, recognition and the level of commitment an individual exerted on achieving organizational goals (Muldoon, 2017).

The theory pointed out the need to bring together the individual and the social relations into focus in attempt to offset the practice of employers of not recognizing worker's contribution to the development of the organizations (Tirintetaake, 2017). The theory therefore enriched this study because it promotes the idea that employee are human and they should be treated as a human being and therefore organization should promote working as a group, they should be respected and treated well in order to be motivated to exert more efforts to increase productivity for the development of the organization. It was therefore from this theory that the study borrowed its concepts of the study which included working environment that was viewed in terms of physical, psychological and quality of life working environment and employee productivity.

1.1.3 Conceptual Perspective

According to Edem (2017) environment is referred to as a place where a man spends most of his active life for survival or existence. The same author believes that when the environment is not conducive it may result in unhealthy feelings, which may influence a human sense, affect interpersonal relationships, reduce concentration rate, get low morale as well as making it hard for a man to easily survive thus becoming less productive. Therefore, an effective working environment is one that keeps the employee to feel pleasant at work, less stressed, and is focused to achieve organizational objectives alongside personal goals.

The working environment refers to all those things which the employees interact with while executing duties like tools, processes, structures, systems, which may influence productivity in a positive or negative way. Further gives an example of physical work environment to consist of physical setting like heat, equipment, characteristics of the job itself like workload, task complexity; broader organizational features like culture, history and even aspects of extra organizational setting, local labour markets conditions industry, work-home relationships, workload, task complexity amongst others (Awan, 2015).

The workplace environment has been a key influencing factor when it comes to satisfaction and productivity of the employee and emphasized that many times productivity can be determined by factors such as personalization, colour, privacy, interior painting, windows, clean indoor air, temperature, noise levels and accessibility (Shobe, 2018). Hanaysha (2016) supplements that the working environment can be both internal and external conditions that may influence the level of efforts applied towards work which can subsequently affect employee productivity. Further states that the physical work environment components include the tangible workplace environment that comprises of employee's working environments such as ventilation rates, access to natural light and acoustic environment, safe drinking water, ergonomic workstation designs, violence and aggression-free and that these conditions.

Lankeshwara (2016) opines that by having a proper workplace environment, it helps in reducing the number of absenteeism, error rate, increase morale and commitment to work, leading to an increased level of productivity at the workplace.

Pereira (2015) refers to productivity as the attainment of high output compared to the input invested. In the recent years, where there are high competition and volatile business environment, firms are investing a lot to cope with the changing business environment by ensuring that there is money value realized from the huge capital invested and that one of the

strategies is improving employee productivity (Hanaysha, 2016). In a research by Foldspang (2014) it was established that employees play a cardinal role in the success of the organization and that high productivity can lead to positive organizational outcomes. The same author opines the well-being and productivity of the employees largely depend on the state of wellbeing and a well-functioning work environment with minimum controlled occupational health hazards.

Therefore, it is so important to establish the most suitable factors that create a conducive working environment for all employees to enhance productivity like having a well-trained workforce, supportive managers, and motivated team with a positive attitude to work, innovative and healthy employees. Employees also have a collective responsibility to take precautionary measures to avoid risks. By doing all that, employees' state of wellbeing is improved, in return, they are focused, committed to their work, healthy and determined to work towards achieving organizational goals and objectives thus improved productivity.

1.1.4 Contextual Perspective

Kakira Sugar Limited (KSL) is one of the oldest companies, a subsidiary of the Madhvani Group of Companies, the largest conglomerate in Uganda, founded by Muljibhai Madhvan, an immigrant from the Indian subcontinent in the late 1920s (KSW, 2011). When Idi Amin expelled Asians in 1972, the proprietors of KSL were also affected leading to the collapse of the industry, who returned after the ousting of Iddi Amin 1979 Madhvan returned to rebuild the industry from shambles. It has grown rapidly over the last 25 years and now produces over 18000 tons of Sugar (a year) as Barungi reported (McCathy, 2015). It is also said to be the largest Sugar Manufacturer in Uganda, and the largest economy in East African Community with investments also in Rwanda, Southern Sudan, Tanzania, the Middle East, India and North America (Senalwa, 2015). It has built schools, accommodation, and hospitals to cater for staff

and their families. Kakira has also established Kakira Out Growers Rural Development Fund (KORD), an NGO that organizes workshops, offers loans and other services for its contractors which has reportedly improved people's lives and many in the community (McCathy, 2015). There is also a union National Union of Plantation and Agricultural Work (NUPAWU) that collectively negotiate for some employees at KSL.

KSL has been involved in expansion, diversification as a major determinant in employee engagement or disengagement (KSW, 2011). Besides sugar production, KSL also generates its own electricity from biogas, which became a key factor in raising the plant's internal capacity as well as contributing to the national grid capacity of 12MW. Kakira Sugar Limited has various types of employees namely: management staff, unionized workers and Casual labourers. Kakira Sugar's works reportedly launched a scholarship fund "Kakira Sugar Busoga Foundation (KSBF) to equip mainly biological children of employees of KSL with vocational skills together with the beneficiaries of registered out-growers and some of the youth in Busoga region (Kakira Sugar Limited, 2019).

Like any other industry Kakira has faced challenges, from emerging competitors whom it has to compete with for scarce resources; workers and farmers strikes (like the one of 2018), unstable workforce as reported in the management report of April 2019, fire outbreaks on both the plantation and building as reported by Sam Waswa (2014), labour disputes labour disputes (No.044 of 2017/Majidu Shire VS Kakira Sugar Limited, industrial courts) and at one point as Denis Edema (2017) reports KSL had threatened to lay off its 4000 of its 7500 workers, due to failure to break even. In a conference in Moscow held in October 2017, it was reported that working and living conditions at KSL were inhumane with no proper instruments of protection provided by the company (Martiniello, 2017).

In conclusion therefore if these conditions are not controlled may affect employees, physically, psychologically and the quality of work-life suffers; which may subsequently affect employee productivity leading to loss of the competitive advantage previously earned.

1.2 Statement of the problem

Firms today strongly rely on employee productivity for its development and that firms can hardly prosper or overcome challenges in the international context without employee productivity (Brem, 2013). An attractive and supportive working environment provide conditions that enable employees to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to generate the required output of goods and services, provide high-quality of goods and service in a bid to meet acceptable standards and meet the set organizational targets. Kakira Sugar Limited (KSL) acquired modern machinery to be able to produce enough sugar to meet high demand from the increased population and factories that use sugar as a bi-product from Uganda and East Africa. It has built schools, houses, and hospitals to cater for staff and their families (McCathy, 2015), established a scholarship fund for the beneficiaries of employees and its stakeholders supported by a union (NUPAWU) that collectively negotiate for the welfare of employees (Kakira Sugar Limited, 2019). However, for the last seven years, Kakira Sugar Limited has been experiencing challenges related to continuous deficiency in the output of goods and services rated at 50% (Annual Performance Management Report, 2017), there has a been a decline in meeting the required standards at a rate of 45% as indicated in the Customer Survey (December 2018) and that the rate at which the departments met set targets were undesirable by 40% (Annul Performance Management Report 2017). If such conditions are not checked may limit KSL from achieving its targets and objectives thus becoming competitively disadvantaged. It is upon that premise that the researcher was curious to establish the relationship between the working environment and employee productivity.

1.3 Purpose of the study

The purpose of the study was to establish the relationship between the working environment and employee productivity at Kakira Sugar Limited.

1.4 Specific Objectives

The study was guided by the following research objectives;

- i. To establish the relationship between Physical work environment and employee productivity at Kakira Sugar Limited
- ii. To examine the relationship between Psychological work environment and employee productivity at Kakira Sugar Limited
- iii. To assess the relationship between the Quality Work life and employee productivity at Kakira Sugar Limited

1.5 Hypothesis of the study

The study was guided by the following hypotheses:

H₁: There is a significant relationship between the Physical work environment and employee productivity at Kakira Sugar Limited.

H₂: There is a significant relationship between the Psychological Work environment and employee productivity.

H₃: There is a significant relationship between Quality Work life and Employee productivity.

1.6 Scope of the Study

1.6.1 Content Scope

The study was to establish the relationship between the working environment and employee productivity at Kakira Sugar Limited. The researcher focused on the working environment as the independent variable which was measured using the dimensions of the physical work environment, psychological work environment, and quality work life. The employee productivity is the independent variable which was measured in terms of output of goods and services, meeting the required standard and meeting the set standards

1.6.2 Geographical scope

The study was conducted from Kakira Sugar Limited which is located in the town of Kakira, approximately 100 kilometers (62 miles), by road, in Jinja, Eastern Uganda, along the Tororo-Malaba road highway. This case study was selected because of being an industrial and manufacturing setting with a wide range of activities and a large population which enabled the researcher to obtain useful and relevant data to achieve preset objectives.

1.6.3 Time scope

The study covered a period of 5 years from 2014-2019 for its literature review, and it was during this period that Kakira Sugar Limited had stabilized from the thwarts of the political instability following the expulsion of Asians by former president Iddi Amin. The researcher also considered the fact that the period of 5 years provided current information which provided the basis to make conclusions of the study. The study being of academic type, it was conducted within a period of 5 months to meet the required timeline set by the graduate school.

1.7 Justification of the Study

According to the literature reviewed, employees are motivated to work harder to achieve organisational objectives when in a conducive working environment. However, it has not been the case with Kakira Sugar despite of a lot of efforts too acquire modern machinery to supplement human capacity, to be able to produce enough sugar to meet high demand from the increased population and factories that use sugar as a bi-product from Uganda and East Africa; built schools, houses, and hospitals to cater for staff and their families (McCathy, 2015); established a scholarship fund for the beneficiaries of employees and its stakeholders supported by a union (NUPAWU) that collectively negotiate for the welfare of employees (Kakira Sugar Limited, 2019). Employee productivity at KSL has for the last seven years been unstable as depicted in continuous deficiency in the output of goods and services rated at 50% (Performance Management Report, 2017), there has a been a decline in meeting the required standards at a rate of 45% as indicated in the Customer Survey (December 2018) and that the rate at which the departments met set targets were undesirable by 40% (Performance Management Report 2017). The study was worth to be conducted to establish the relationship between working environment and employee productivity at Madhavan Group of companies: a case of Kakira Sugar Limited.

1.8 Significance of the study

The information generated from the study may help Management of Kakira Sugar Limited to appreciate that a conducive working environment is a prerequisite if its workforce is to be more productive and that it saves KSL from huge costs and expenses. Secondly, the findings of the study will raise awareness among the employees about their right to work in a safe and healthy environment as a fundamental human right. Information from the study might help the policymakers to appreciate that with the increased industrialization, there are many working environmental challenges that come with it; hence the need to develop national policies to

protect and increase the number of enforcement officers regularly inspect and enforce compliance with occupational safety and health standard. The findings of the study might contribute to the literature on employee productivity and the working environment. Finally, as an administrator, the findings obtained from the study will help the researcher to gain more knowledge on various environmental challenges that affect employees, and how they interlink to influence employee productivity.

1.9 Conceptual Framework

The conceptual framework as illustrated below indicated a diagrammatic representation of the linkage between the independent and dependent variables under study.

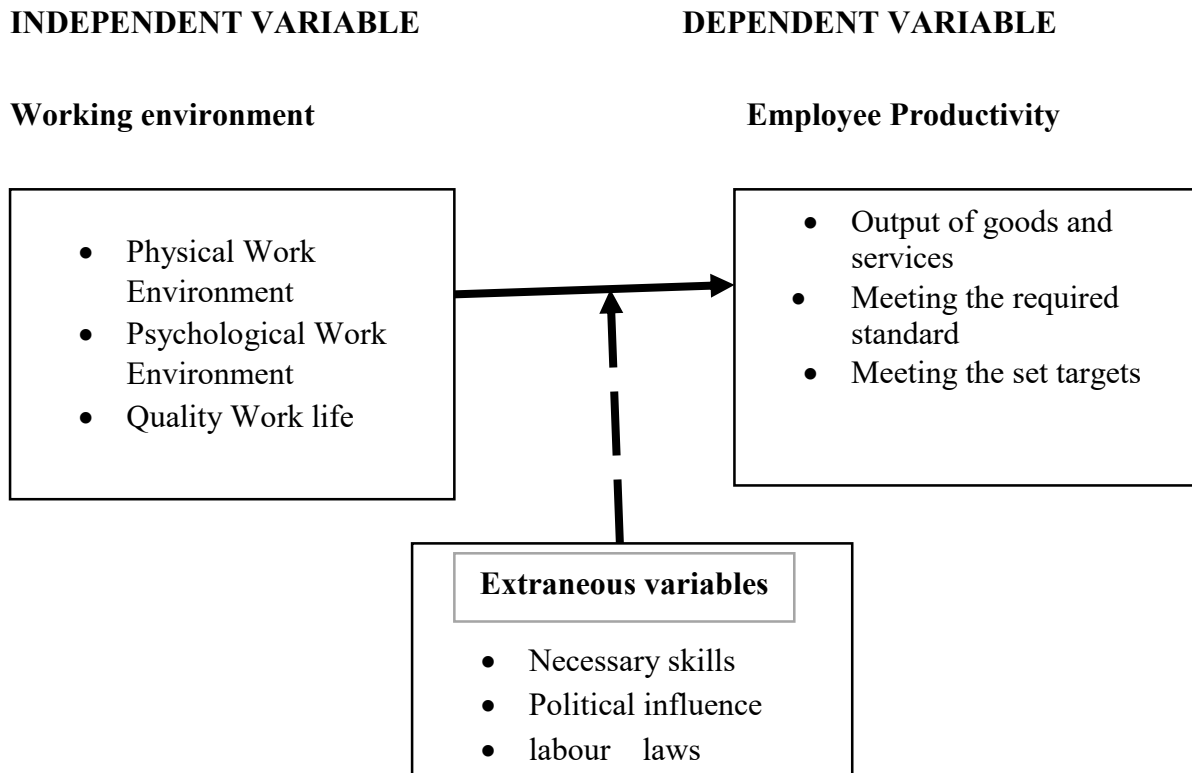


Figure 1: The conceptual framework of the working environment and employee productivity

Source: Shimawua, (2017) Modified by the researcher 2019

As indicated in the diagram, employee productivity is conceptualised to depend on the working environment. Therefore, the independent variable is work environment which was conceptualized along the dimensions of the physical work environment, and how it negatively or positively affects the psychological well-being and quality of work-life of employees and subsequently influence employee productivity. The dependent variable is the employee productivity which was conceptualized along the dimensions of the output of goods and services, meeting the required standard, and meeting the set targets

The framework also indicates that the relationships between working environment and employee productivity are influenced by intervening variables such as the necessary skills to do the job, the political influence which favours the investors (in the pretext of attracting investors) to the disadvantage of employees, and labour laws which provide for the welfare of employees and highlight the expectations of the employees to employers towards achieving organisational objectives.

1.10 Definition of key terms:

Psychological work environment: The psychological environment is, therefore, the set of those characteristics of the work environment that affect how the worker feels, thinks and behaves.

Quality of work-life refers to the favorableness or unfavourableness of a work environment for the people working in an organization.

Employee Productivity: Refers to the assessment of the efficiency of a worker or group of workers.

1.11 Organization of the report

The dissertation is structured in five chapters. Chapter one is the introduction of the research and explains what motivated the study. Chapter two consists of a related literature review. Chapter three addresses the methodology which consists of research design, study area, the population of the study, sampling design, sources of data, data collection procedure, Reliability and Validity of the instruments. Data analysis. Chapter four presents, and discusses the findings based on objectives. Chapter five, indicates the discussion, conclusion, recommendation to each objective and way forward.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter highlights what other scholars have written about the working environment and employee productivity. The researcher highlights one of the theories of motivation which was found to bring out well the concepts under study. It explores empirical literature from various scholars, regarding the relationship between the working environment which is measured in terms of the physical working environments, psychological factors, and quality work life. Employee productivity is measured in terms of output of goods and services, meeting set standards and set targets.

2.1 Theoretical Review

There are various management theories (**refer section 1.2.2 page 5**) which explains not only why people behave the way they do at their workplaces in terms of their efforts and the directions they are taking to achieve organizational objectives, but also describes what organizations can do to arouse peoples efforts and abilities in ways that will further the achievement of the organization's goals as well as satisfying employees' needs. However, for the purpose of this study, the researcher focused on one Human Relations Theory by Elton Mayo, which relates well with the variables study as explained below:

2.1.1 Human Relations Theory

The theory is traced from the Hawthorne Studies which were conducted in the 1920's at the Western Electric factory in Chicago during the industrial revolution by Elton Mayo and his accomplices Fritz Roethlisberger from Harvard University (Oswald, 2014).

Tirintetaake (2017) states that during the 20th Century, businesses faced a lot of economic challenges spearheaded by technological changes and competition which called for strategic interventions and focus on improved productivity for the development of the companies. The human relations theory therefore, held a belief that people desired to be part of a supportive team that recognized them as partners in the development and growth of the organisation.

According to Muldoon (2017), George Elton Mayo conducted a series of important experiments into organizational motivation to demonstrate the importance of people and not machines towards increased productivity. One of the first studies conducted assessed the effects lighting levels on the productivity of employees at Western Electric. Surprisingly, the study found out that even as lighting levels decreased, employee productivity continued to increase until the workers could no longer see, after which productivity naturally declined. A conclusion from the study was drawn that that lighting did not affect workers productivity, rather the researchers' presence had an impact on individuals being observed which changed their attitude to work and focus on increasing productivity not because there was any change in any variable such as working conditions or new machinery, but solely because of the attention they were getting (Önday, 2016).

In order to get a deeper insight on the impact of a variety of factors on productivity, other studies were conducted like the Relay Assembly Study which aimed at determining the influence of fatigue on worker productivity by evaluating the rest periods and hours. Some remarkable changes to the workers' environment, like lighting, bonuses, shortened workdays, periodic leave, pay rates, amongst others. The study established that the test period extended from an original testing time of a couple of months to more than two years, despite of what the experiments did, productivity increased. The researcher also established that there was improved physical and psychological health and the habit of absenteeism reduced during the period of study because of the introduced physical exercises.

Generally, Mayo's study concluded that commitment of employees towards achieving the organizational goals does not happen accidentally, but rather should be developed through using appropriate management styles. It was further concluded that demotivation tends to stem not from the actual work situation, but from the workers' feeling of not being recognized and valued for their contribution in the success of the organization. The study findings also concluded that recognition, job security and commitment to the organization have a greater influence on productivity than physical conditions and pay; upward communication (subordinate-supervisor) peer relationships, and informal organizations played a key role in determining increased employee productivity (McCarney, 2007).

In relation to the study organisations ought to appreciate that the world today is changing fast, businesses unpredictable and so with the working environments and needs of employees. If organizations have to remain competitive, they ought to keep alert, and cater for the changing environment by identifying different needs of employees, checking management styles, valuing workers and taking them as partners in the development and growth of the organisation.

2.2 Concept Review

2.2.1 Working environment

Swamy (2015) defined the work environment as a place of work where employees, professionally and socially interact with a number of both internal and external customers and will focus on achieving strategic objectives of the organization. Further explained that a healthy and safe working environment is one that promotes good health, good working relations, team spirit and continuity of services by employees. This was supported by Sandhya (2016) who attested that a healthy employee may prove instrumental to the organization by being innovative, working smart, achieving a desirable output of goods and services, meeting the required standard, and meeting set targets resulting in high productivity. Budie (2019)

contributed by stating that the conditions of a good working environment to consist of the safe physical and mental working environment, time for private life, providing reasonable working hours, setting realistic deadlines, giving ample time to change, support for self-development, sufficient resources to facilitate work, and information's related to work.

Hanaysha, (2016) stated that employees whose working environment is conducive will use their full potential to perform their work and that employees who are dissatisfied with their working environment, may be disengaged, get stressed, become demoralized, and subsequently their productivity levels may reduce affecting the whole organization. Awan (2015) highlighted some of the factors that qualify a working environment to be conducive as follows: supervisor support, good relation with co-workers, an opportunity for career growth, attractive and fast remuneration, recognition plans for exceeding targets, and adequate workload amongst others.

In conclusion, therefore, a poor working environment can be detrimental to the organization in many ways: it may be through an indirect cost such as increased medical bills, and compensation for damages on employees or may be indirect costs like labour turn over, disengagement, wastage of organizational resources, maligning the reputation of the organization, presenteeism, absenteeism as well as loss in productivity.

2.2.2 Employee productivity

According to Gopal (2017) employee productivity is how an employee produces the desired output of goods and services, meeting set standards and achieves set targets in the organization after a defined period of time. Further explains that it productivity is measured the level of the effectiveness and efficiency of the inputs employed in the organization to determine how it is generating expected output; and that gives a basis to the organization's management to make

necessary decision on which areas to invest in; maybe investing in better machinery or increasing the number of employees to increase productivity.

Lankeshwara (2016) in a study it was established that productivity varies with employee's demographic factors like age, marital status, and ethnicity. The study concluded that among all the demographic and socio-economic factors, attitudinal concern on job aids emerged as the most important factor for predicting the employee's performance and that job aids, as well as supervisor support, positively influenced the productivity of the employees whereas physical work environment was insignificant with the employee's productivity. Oswald et al (2015) discovered that employee productivity can be positively or negatively influenced by the level of employee commitment, job satisfaction, group cohesiveness and employee competency amongst others and; that efficiency may be achieved by promoting capacity building programs to enhance employees' skills.

Ehsan (2018) states that by having a proper workplace environment, it helps in reducing the number of absenteeism and thus can increase the employees' performance which will lead to increased productivity. Further stated that employers should always try to identify factors affecting employees' attitudes and behavior and find all ways possible to mitigate those factors for a conducive and serene work environment. Employee productivity can be evaluated by assessing if set targets are achieved on time, the ideal standards are met and if there is an increased output of goods and services compared to the input (Abdi, 2014). The same author suggested to the organizations, to provide a comfortable working environment to employees, where both individual goals and organizational goals are considered to enhance the productivity and well-being of their employees. Foldspang (2014) contributes by stating that the strategy to constantly improve the working environment can have positive effects on the organization's success.

In conclusion, organizations should always appreciate that employees are the heart of every organization since they can make the organization prosper or fail. Management should improve the style of administration and management, provide a conducive working environment, train and retrain its employees, develop and implement people strategies, as well as involving them in decision making.

2.2.3 Physical work environment and employee productivity

The physical working environment includes the overall health and safety of the employee including his/her welfare and wellbeing (Foldspang, 2014). The state of the physical working environment can make an employee feel comfortable or uncomfortable at the place of work. (Pandey, 2017). ILO (2016) explains that the appropriate physical working environment should be one that provides appropriate office layout, sufficient natural and artificial lighting, equipment, air quality, controlled noise, protected from hazardous substances, considering ergonomic aspects and eliminating stressing factors from work.

Shimawua (2017) established that if an employee is provided with a conducive working environment, it enhances their morale and is motivated to meet the set targets, to produce goods of quality, as well increased output of goods and services, execute their duties to achieve organizational objectives, commit more time to work, remain emotionally stable, reduce absenteeism, and improved team spirit. Akhatar (2014) identified a positive correlation between office layout and productivity, indicating that a more conducive layout leads to increased productivity. Sultan (2016) supplements and concurs with the above scholars, by highlighting the conditions necessary for a conducive working environment and the benefits they were to the employee and the organization as follows: maintenance of appropriate temperature and ventilation, benefit readers and prevents damage due to sensitive electronic

devices; sufficient natural and artificial light creates comfort, enhance concentration of employee as well as reducing error rate.

Asawo (2017) states that conducive physical workplace environment is necessary and important since it gives a pleasurable experience to employees, enables them to maximize their potential, manage their behavior and connects them physically, cognitively, emotionally to their work roles and ultimately builds up resistance to the thought of disengaging from the organization. The study further stated that the long-term cost benefits of a properly designed and user-friendly physical work environment are central to employee engagement and beneficial to the prosperity of an organization. Amofa (2016) opines that quality work environment should be a collective responsibility of both employees and employers, such that the user should take the initiative of first examining the suitability of the tools to use, the furniture, the ambiance of the workplace and report to the management for necessary action. The state of the physical work environment of employees' determines the level of commitment at work, the level of cohesiveness between management, colleagues and employees at work, the quality of service and well-being and; that it gives a clear picture of the direction the organization is taking either to prosperity or to failure (Akhtar, 2014).

Awan (2015) supplemented the above findings in a study carried out that incompatible workplace environment which consists of poorly designed workstations, unsuitable office furniture, lack of ventilation and insufficient safety measures at the workplaces, increase the risk of suffering from occupational diseases or disorders like stress, musculoskeletal disorders, cardiac arrests, loss of sleep, amongst others which may reduce employee productivity and conclude that a conducive working environment is helpful in increasing employees' level of productivity. Hassan (2015) concludes urging employers to provide the appropriate means of a good and pleasant working environment to employees if they are to make the organization achieve its goals and attain a competitive advantage. This is also supported by some studies

conducted which indicated that a pleasant working environment soothes peoples' minds and makes them feel energized, whereas a poorly designed environment brings negative feelings leading to low productivity (Saman, 2015).

In conclusion, therefore, the state of the physical work environment of employees' determines the level of commitment at work, the level of cohesiveness between management, colleagues and employees at work, the quality of service and well-being and; that it gives a clear picture the future direction of the organization.

2.2.4 The relationship between psychological working environment and employee productivity

ILO (2016) explains that work-related stress is mainly caused by work organization, work design and labour relations which was said to occur when job demands do not match or exceed the capabilities resources or needs of the worker or when the worker lacks the expertise to handle the job or cannot cope with the expectations of the organizational culture of an enterprise. ILO defined stress as a state of feeling tension, emotionally strained due to the imbalance between the perceived demands culminated with lack of resources and deficiency of skills to cope and meet job demands. Therefore, a healthy psychological work environment is where there is a balance between the demands and the availability of sufficient resources to do the job, good working relationships, supportive management, skilled enough to do the job and clear communication channels amongst others.

The American Psychological Association (2019) argues that organizations and employees have been faced with a lot of challenges due to a rapidly changing environment, which has come with a lot of pressure due to increased demands; on the part of the organization. Firms have to meet some obligations like taxes, have to adapt to the changing technology, competition for the scarce resources, comply to the demands for quality control hence left with no choice other

than putting in place control measures to move with the changing world like installing computer surveillance systems, reduce employee benefits, revise terms of employment from permanent and pensionable to short term contractual, fixed and nonrenewable contracts, downsizing and merging to cut costs (Young, 2019). All those changes combined with lack of privacy, overly authoritarian management, job insecurity, poor ventilation, poor temperature control may bring tension and uncertainty resulting in psychologically stressful to employees.

Abrams (2018) supplements that most times psychological work environments' challenges result from different causes like hostile physical conditions, unbearable indoor climate, fatigue, burnout, harassment and bullying, contaminated air, noise and doing repetitive work. Employees are supposed to identify, such issues related to the psychological work environment at an early stage by conducting workplace assessments to mitigate the possible negative effects of underestimating a healthy psychological work environment. Shobe (2018) and Dishit (2015), explains that the correct balancing of employee mental satisfaction to social economic and psychological effect allows the employee to become comfortable, focused to work with high spirits, and will exert much more effort to increase productivity.

Therefore, if employers are to get the best out of their employees, should support a healthy psychological work environment by ensuring that employees have a balance between the job demands and the skills possessed to meet the firms expectations, support from management, equal treatment, and avail necessary resources to do the job, implement internal transfers to break monotony, and promote capacity building programs to match with the changing technology. Contrary to that, there will be a likelihood of increased health risks like depression, increased error rate, diminishing return, stress, absenteeism, presenteeism, and dissatisfaction which may result in decreased productivity.

2.2.5 The relationship between Quality Work life and employee productivity

Quality of Work Life (QWL) refers to the hostility or friendliness of a job environment for the people working in an organization. Swamy (2015) defined Quality of Work Life (QWL) as a satisfaction an employee obtains when accorded an opportunity to balance between work organizational goals and personal needs. Further stated, that favorable working environment that supports and promotes satisfaction by providing employees with rewards, job security, and career growth opportunities. In other words, it is a value-based process that aims at meeting the two-way goals of improving the effectiveness of the organizations as well as the quality of life at work for employees. Horst (2014) argues that to current rapid changes in labour relations, organizations should appreciate the importance of Quality of Work-life and understand that productivity no longer means much more work only but also the quality of human life, and the way it affects the human productivity indirectly. Therefore, companies are called upon to devise stringent measures to intensify against increasing competitiveness in business, and adapt to new realities and needs to achieve the total quality. Further states that good management of QWL makes employees healthier, more committed living more, working and producing more, as well as reducing organizational costs and expenses incurred to treat the consequences of poor working conditions.

Swamy (2015) stated that deficiency of working conditions like, Job satisfaction, Job safety, and security, recognition for the job well done, acceptable organization culture, autonomy of work and adequate resources, good working relation and team spirit, training and development, compensation and rewards, balance between work and family can adversely affect the quality of work-life of employees, malign the organizations reputation, leading to decreased morale and productivity. Further explained that it can also directly affect the company's ability to serve its customers rendering it competitively disadvantaged. Therefore, QWL should regularly be assessed to ensure proper and effective allocation of resources to enhance the productivity and

stability of the workforce. Shimawua (2017), emphasizes that employers have to appreciate that much as employees have to dedicate most of their energy towards achieving organizational goals, they have to also keep a strong attachment to their family, achieve their development plans, and participate in cultural rituals, spiritual and friends' functions. Therefore, employers should ensure that employees are granted opportunities to balance work and personal life as well as having time to enjoy the fruits of their labour. By doing that employees' morale and creativity are enhanced and their state of mind is rejuvenated. Further stated that to counteract the unpredictable working environment with its technological changes, employers should develop and maintain capacity building programs to equip employees with relevant modern technology, acquire soft and hard skills to safeguard and increase the market share of the firm through increased productivity. Awan, (2015) supplemented the above author by highlighting some of the factors that influence the level of productivity as follows: supervisor support, relation with co-workers, training, and development, attractive and fast incentives and recognition plans and adequate workload.

QWL, therefore, is the art of recognizing people for the key role in ensuring that the organization achieve its goals by increasing output of goods and services, meeting the required standard and meeting the set targets through involving people in decision making, skilling them to adapt to the changing technology, involving them in problem-solving, availing the resources to do the job, allow them time off for their private life, and accord the possible autonomy to exercise their full potential in the organization. In conclusion, therefore, employers should appreciate that in this era of increased competition in business, coupled with rapid changes in technology, firms need to be flexible in their strategies to easily adapt new realities and achieve total quality. Proper management of QWL makes employees to be innovative, to have a healthy living, become loyal to the organization, reduce error rate,

properly utilize resources and work hard to increase output as well as saving costs and expenses of the organization.

2.3 Research Gap

The empirical studies reviewed, established that other scholars, concentrated mostly on physical environment and employee productivity, psychological environment and employee productivity and; Quality Work-Life and how it influences employee productivity but ignored the interlink of the three variables and how they influence employee's productivity either negatively or positively.

2.4 Conclusion

In this chapter, a review of the existing literature on the dependent and independent variables was carried out. During the review of the literature, the study considered a literature survey on the existing research that had been carried out. A literature review was linked to the problem under study which helped to give an in-depth understanding of both the dependent and independent variables. A review of literature on the various relationships between the dimensions of the working environment and employee productivity revealed that there is a linkage between physical and psychological work environment and quality of work-life. For instance, a poor physical environment would cause an unhealthy psychological working environment and also affect the quality of work-life which finally would influence the level of employee productivity at the workplace.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research methodology that was used to carry out the research. It consists of the following: Research design, study population, sample size and selection, sampling techniques and procedure, data collection methods, data collection instruments, quality control (validity and reliability), data collection procedure, data management, data analysis and measurement of the variables, ethical considerations and limitations to the study.

3.1 Research design

A case study research design was used to conduct the study with specific reference to Kakira Sugar Limited. According to Yin (2014), a case study is an indepth study of a specific research problem. The case study research design was adopted in this study for testing whether a specific theory and models actually applies to the phenomenon. The design was also deemed appropriate for this study because of its flexibility to use multiple methods to collect and analyse data and was found to be mutually informative. It was also relevant for data collection and analysis within the context of phenomenon.

Furthermore, the study adopted both quantitative and qualitative. A quantitative approach was preferred because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. The quantitative approach also enabled the study to work out the relationships between variables. The main benefit of a quantitative and qualitative approach was that it allowed the strengths and weaknesses of each variable (Sekaran, 2003). Descriptive statistics were used to summarise and describe the participant's responses regarding their degree of disagreement or agreement on the influence of the work

environment factors in employee productivity. Pearson Correlation Coefficient were used to establish the relationship between the study variables.

3.2 Population of the study

The study population comprised of employees from various departments of Kakira Sugar Limited who included the 54 heads of departments, 200 managers, 1630 supervisors, 2600 operations and 3016 casual labourers of Kakira Sugar Limited. The total population was thus 7500 (HR Department Report, 2017). This large population enabled the researcher to select heads of department, managers, supervisors, operations, and casual labourers to represent the entire population respondents and gather enough information concerning the study objectives.

The study population was the Employees and managers who were approximately 7500 in total (Kakira Sugar Works Staff List updated, 2018). Employees and managers were categorized by sectors: Heads of Department, Managers, Supervisors, Operations, and operation workers. The category of Employees and Managers are shown in Table 1.

Table 1: Employees and Managers of Kakira Sugar Works Limited

Category	Number of Employees and Managers
Heads of department	54
Managers	200
Supervisors	1630
Operations	2600
Operation workers	3016
Total	7500

Source: Kakira Sugar Limited Staff List, 2018)

3.3 Sample Size and Sampling design

From the study population of 7500 employees at KSL, the sample of 361 respondents was chosen using the formular of Yamane (1967) given below:

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{7500}{1+7500(.05)^2}$$

$$n = \frac{7500}{1+19.75}$$

$$n = \frac{7500}{20.75}$$

$$n = 361$$

Table 2: Study Population, Sample Size, and Sampling Techniques

Category	Study Population	Sample Size	Sampling Techniques
Head of departments	54	4	Purposive sampling
Managers	200	4	Purposive sampling
Supervisors	1630	75	Simple Random
Operations	2600	98	Simple Random
Casual workers	3016	192	Simple Random
Total	7500	361	

Source: *Kakira Sugar works staff list updated list, 2018.*

3.4 Sampling techniques

3.4.1 Simple random and Purposive sampling

Since the sample size is 361, out of the target population 7500, a simple random sample was adopted in order to give an equal chance for the individual sampled to participate in the study. The simple random sampling approach involved selecting respondents for structured interviews. Purposive sampling was also adopted to select the type of respondents considering the proficiency, the knowledge, recommendable experience, and hierarchy level of authority in the organization in order to obtain information of interest (Ilker Etikan, 2016).

3.5 Data Sources

3.5.1 Primary Data

Data was obtained from primary sources. Primary data was gathered from respondents by the use of both questionnaires and the interviews.

Primary data is factual, and first hand and is highly considered reliable and relevant to explain the position of study variables (Muratovski, 2016).

3.5.2 Secondary Data

The source of secondary data was collected from company reports, manuals, government publications, policy documents, articles, journals, and books. The secondary data was used to support the empirical findings of the study. The questionnaires were divided into various sections to capture the critical areas spelled out in the objectives for the study. This enabled the researcher to get an insight into how different scholars talked about the variables under study in order to make accurate comparisons and conclusions about the study. The secondary data enabled the researcher to get a deeper understanding of the problem, identify gaps and decide on which information to be collected (Ajayi, 2017).

3.6 Data collection methods

The researcher relied on questionnaire survey, interviews, and document review, to obtain data on the preset objectives as detailed below:

3.6.1 Questionnaire survey

The researcher used a self-administered questionnaire(SAQ) to aid the derivation of quantitative interpretation while examining the relationship between Working Environment and Employee Productivity at Kakira Sugar limited. The questionnaire was prioritized because it works best with standardized questions that can be interpreted in the same way by all respondents (Robson, 2002) cited in Saunders et al (2003). The questionnaires are techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order (de Vaus, 2002). There seems to be a consensus among researchers (Kakooza 2002; Leedy 1989; Hedrick 1993; Black, 1993) that the questionnaire and the interview guide/ schedule are the main instruments of data collection in the research of quantitative nature.

Self-administered questionnaires (SAQ) were distributed to Heads of the department, Managers Supervisors and casual workers, consisting of three main sections, Physical work environment Quality Work life and employee productivity at Kakira Sugar Limited.

The sections had questions based on a five-point Likert scale. The scale was as follows: 1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree. The questionnaire is given in Appendix I. All this was done to ensure that all the study objectives were taken into account.

The questionnaire survey method is a set of questions used to obtain information from a large group of people in a given study (Amin, 2005). The questionnaire was found to be an efficient data collection method, with advantages of the high probability of obtaining honest since the

respondents ample had time to reflect on answers to avoid hasty responses and thus enhance the validity (accuracy) of the responses (Mugenda, 2003). The questionnaire also permits anonymity and was considered best for sensitive or personal questions. The questionnaire method also helped to reduce the cost and expenses and enabled the researcher to get high responses. The questionnaire was used to collect data from the selected sample of respondents from KSL.

3.6.2 Interview

This is a method of data collection where the investigator gathers data through direct verbal interaction with participants (Amin, 2005). In-depth interviews were used to obtain data from key informants such as some senior management staff and supervisors of Kakira Sugar Limited among others and it was found to be more personal thus leaving room for clarification, . The researcher, therefore, used the interview to collect data from selected employees deemed knowledgeable according to the researcher's observation. Interviews were structured comprising issues on motivation, evaluation of performance, planning, organizing, controlling and sustainability of employee productivity of the staff of employees of KSL.

3.6.3 Documentary review

To obtain secondary data, the researcher reviewed Periodicals, Textbooks, Journals, Internet, Annual Performance Reports, Policy papers, and Customer Survey Reports to obtain information on the rate at which employees productivity was achieved using the dimensions of Output of goods and services, meeting the required standard, meeting the set targets and to get an insight on how other scholars have written about the study variables.

3.7 Data Collection Instruments

The instruments which were used in the study were questionnaires and interview guide as explained below.

3.7.1 Interview Guide

A semi-structured interview guide (See Appendix V) was designed and administered to key informants from KSL to capture in-depth qualitative data. This guide was intended to get management views and qualify some of the information obtained from other respondents regarding the prevailing Quality Work-life, psychological factors and physical work environment at Kakira Sugar Limited. According to Amin (2005), interviews have the advantage of generating more information through probing. In addition, interviews also allowed for clarification and capturing facial expressions of the interviewees as well as bring out perceptions, opinions, ideas of the respondents.

3.7.2 Questionnaire

A self administered structured questionnaire was designed to collect information during the study. The questions covered the various components of physical and psychological work environments, and quality work life and employee productivity. These were compared against employee productivity. The questionnaire contained the demographic characteristics such as gender, age, qualification and tenure of employment. The structured questionnaire was used to collect data from the identified respondents from Kakira Sugar Limited.

3.8 Data collection procedure

After the proposal defense and submission of the proposal to the Dean Graduate Studies, the researcher obtained an introductory letter from Kyambogo University which allowed the researcher to proceed to collect data and prepare the report thereafter. The researcher presented this letter to the management of Kakira Sugar Limited where the study was to be conducted for permission. Upon obtaining the letter of acceptance to conduct research at KSL, the researcher was given an appointment to be able to interact with employees when they are already informed

of the researchers presence; Then the researcher hand-delivered reliable and validated questionnaires to the respondents and the completed questionnaires were collected after agreed period of time by the respondents and the researcher. With regards to face to face interviews, the researcher contacted the key senior managers and provided them with a snapshot of the study and requested their consent to participate in the study.

3.9 Data Quality and control

To ensure data control and quality, the researcher ensured that acceptable levels of validity and reliability of the study were done through proper control of extraneous variable as expounded on the concepts below;

3.10 Validity and reliability of instruments

3.10.1 Validity

This study considered content validity according to Whirl (2002). Content validity concerns the idea that the research design fully addresses the objectives and hypotheses that have to be answered and achieved. The researcher adopted face validity where items which were included in the questionnaire from previous empirical studies that were found to explain clearly the construct variables well. For further analysis, a content validity test was conducted for the research variables to demonstrate convergent validity and was measured by content validity indices, experts were asked to rate each item on the questionnaire and interview guide whose average would yield computations of the content validity index that must be above 0.70 constructs that would show internal consistency significant levels exceeding 0.70 and above were considered to be valid.

$$\text{Content Validity Index (CVI)} = \frac{\text{Number of items declared valid} \times 100}{\text{Total number of items}}$$

In the content validity test, the validity of each item was evaluated on a scale for which 1 =strongly disagree, 2=disagree, 3= Neutral, 4= Agree, 5= strongly agree. Four experts evaluated the questionnaire and the findings are shown in table 3 below:

Table 3: Showing Content Validity Index (CVI)

Expert Content	Validity Index
Expert 1	0.849
Expert 2	0.982
Expert 3	0.830
Expert 4	0.936
Average	0.899

Source: Researcher 2019

As indicated in Table 3 above all CVI were above 0.80 indicating that the questions were relevant to the study variables. On average, the content validity index was 0.899 which is in agreement with Mugenda, (2003) who recommended that for an instrument to be valid, its content validity index has to be 0.8 and above.

3.10.2 Reliability of the instrument

The reliability of the questionnaire was assessed using Cronbach's Alpha level of significance because of its user-friendliness in terms of easy to calculate, and direct interpretation; it is less time consuming and requires one test administration which qualifies it to be an important tool for assessing internal consistency and reliability. Cronbach's Alpha coefficient was also used to test for internal consistency of the research variables and the reliability of the questionnaire because of its popularity and appropriateness in measuring reliability when making use of Likert scales.

According to the table below: Reliability generally increased when the correlation between variables increased. The more the value was closer to 1, the more reliable the instrument was in measuring variables. The reliability, therefore, was tested to reach an acceptable confident value of at least 0.70.

The formula for Cronbach's alpha:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Source: (Dennick, 2011)

Where:

N = the number of items.

$\bar{c}$ = average covariance between item-pairs.

$\bar{v}$ = average variance.

Table 4: Reliability Statistics

Dimensions	Cronbach's Alpha	No. items
Physical Work environment	0.683	4
Psychological work environment	0.784	6
Quality of Work Life	0.636	5
Employee productivity	0.675	4

Source: **Primary Data 2019**

According to the results of reliability statistics, Cronbach's Alpha value of each variable was very close to 0.7 or above. Therefore, it is possible to conclude that all the items chosen for further analysis were reliable to measure the explanatory variables (Physical Work

environment, Psychological work environment, and quality work environment and the dependent variable employee productivity.

3.11 Measurement of variables

The variables in the research were measured at the ordinal scale using a Five Point Likert scale and were used to measure data for all the above variables of the study. The five Point Likert scales were used because it is the most common and above all it assesses the strength of the respondents' feelings or attitude towards a subject. All the variables were measured using a five Likert scale ranging from 1 =strongly disagree, 2=disagree, 3= Neutral, 4= Agree, 5= strongly agree. (see appendix IV).

The physical working environments were measured using the following dimensions: the physical office environment layout of office space which generally comprises of furniture and spatial arrangements (Informal meeting areas, formal meeting areas, quiet areas, privacy, personal storage, general storage, work area – desk and circulation space), and comfort level which entails ventilation, heating, natural lighting, artificial lighting, decor, cleanliness, overall comfort, color productivity, noise, air quality and physical security. Psychological Work environment was measured using psychological health dimensions of workplace practices which are grouped into five categories: Employee involvement; Work-life balance; Employee growth & development; Health and safety and employee recognition as well as ambient features in office environments, such as lighting, temperature, existence of windows, free air movement which were said to influence employee's attitudes, well being, behaviors, satisfaction, morale, commitment, performance and productivity.

Quality Work life was measured using the dimension of factor analysis, work environment, Organization culture, and climate, Relation and co-operation, Training and development, Compensation and Rewards, Facilities, Job satisfaction and Job security, Autonomy of work

and Adequacy of resources. Employee Productivity was measured in terms of output of goods and services, meeting the required standard and meeting the set targets.

3.12 Data Preparation and Processing

Qualitative data were transcribed by typing the text from tape-recorded interviews, handwritten field notes, and memos into word processing documents. Meaningful segments were coded. Each interview was assigned a number or code. After completing the initial coding of qualitative data, a summary and reorganization of data were done. This was followed by searching for relationships in the data since there are no 'quick fix techniques in qualitative analysis (Pope, 1996). Data were directly entered into SPSS Window called the Data Editor using (version 17).

3.13 Methods of Analysing Quantitative Data

The quantitative approach to data analysis involved the presentation of the findings descriptively in the form of frequency tables with varying percentages. Descriptive statistics were used to describe the basic features of the data in a study and present quantitative descriptions in a manageable form. SPSS software version 17.0 was used to obtain inferential statistics, to reach conclusions that extend beyond the immediate data alone and to make inferences from the data to more general conditions (Cohen, 1998).

Pearson's Product Moment Coefficient was used to determine how strongly the scores of two variables are associated with each other in the following objectives: Pearson's Correlation Coefficient was used to test hypotheses that established a relationship between the physical work environment and employee productivity at Kakira Sugar limited. It was also used to test hypothesis 2 to establish a relationship between Psychological and employee productivity at Kakira Sugar limited. It was further used to test hypothesis three to establish the relationship between Quality Work life and employee productivity.

3.14 Analysis of Qualitative Data

The information generated from in-depth interviews was transcribed and summarised following developed themes and sub-themes related to the three specific objectives of the study. Thus, the material was subjected to thematic analysis to establish possible disparities and nuances in meaning. This enabled the researcher to compare the data across and discover connections between themes, which offered a reliable and elaborate interpretation of the research into the relationship between Working Environment and Employee productivity at Madhvan Group of Companies at Kakira Sugar Limited. Qualitative data were analyzed by the use of a thematic analysis approach dealing with data that involved the particular patterns of coding (Miles, 1994).

3.15 Ethical considerations

The principle underlying research ethics is paramount and concerns issues such as confidentiality, honesty, and respect for individual rights. Welman and Mitchell (2005) identify consent, right of privacy, protection from harm and deception as ethical problems that require serious consideration by social researchers. Ethical considerations were taken care of during field research. For instance, during the interview, the individual rights were taken care of by requesting appointments for the interview to be conducted. Furthermore, the issue of confidentiality was considered by assuring the interviewees that no recording whatsoever would be done; consent of the respondents was sought before distributing the questionnaires and right of privacy was considered by avoiding interviewing respondents outside the place of work.

3.16 Limitation of the study

Some employees working in the factory were too busy to participate in the study yet they are the most vulnerable who are in the real production area, where some smell and sounds of

rotating machines were heard and the researcher could have missed some key information on attitudes towards their working environment.

Most employees work on targets, hence spending with them a long time in the study would mean loss of their valuable time which would be unaccounted for which implied that little time would be allocated to the researcher to obtain the needed information which limited internalization of investigation to keep allocated time.

Timing of research was tricky since there was an influx of many students from universities for internships and research as well as supervisors which seemed to have caused inconvenience by taking most of KSL's working time.

3.17 Delimitations

The researcher used the right procedures to approach management to be allowed to conduct research at Kakira Sugar Limited.

The questionnaires were left with the respondents and picked after three days to allow ample time to internalize the questions as they fill.

Some respondents who were too busy and had useful information for the study were grouped among the interviewees.

The researcher also categorized respondents according to literacy levels and seniority to determine the appropriate method of obtaining data. This enabled the researcher to use questionnaires and interviews.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0. Introduction

This chapter presents analyses and interprets the study findings of the working environment and employee productivity at Madhvani Group of Companies, a case of Kakira Sugar Limited based on the information obtained from the study questionnaire and interviews. The presentation of these findings is divided into the following sub-sections based on the research objectives: To establish the relationship between Physical work environment and employee productivity, to establish the relationship between Psychological factors and employee productivity and to establish the relationship between the Quality Work life and employee productivity at Kakira Sugar Limited.

4.1 Background information of the respondents

The study respondents were particularly Heads of Departments, Managers, Supervisors, and casual workers of Kakira Sugar Limited. Their bio-data was captured as shown below;

4.1.1 Gender

In order to find the gender, the respondents were asked, to indicate in the questionnaires their gender as a view of the fact that the researcher wanted to assess the percentage of male and female respondents who participated in the study. Their responses are summarized as shown in Table 5 below:

Table 5: Distribution of respondents who participated in the study by gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	204	56.5	56.5	56.5
Female	157	43.5	43.5	100.0
Total	361	100.0	100.0	

Source: Primary data, June 2019

According to the findings in Table 5 above, it was revealed that the majority of the respondents who participated in the study were male (56.5%) compared to female respondents (43.5%). This was due to the reason that most of the work at Kakira Sugar Limited is generally for men. Women were involved more in administrative, supervision tasks, plantation, and cleaning (Kakira Sugar Limited, 2018).

4.1.2 Age

The respondents were also requested to fill in the questionnaires their age bracket to show their ages and the results were summarized as given in table 6 below:

Table 6: Distribution of respondents by age bracket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30 years	170	47.1	47.1	47.1
	31-40 years	113	31.3	31.3	78.4
	41-50 years	50	13.9	13.9	92.2
	51 years and above	28	7.8	7.8	100.0
	Total	361	100.0	100.0	

Source: Primary data, June 2019

Table 6 above shows that a cross-section of respondents with different age brackets was involved in the study. The majority of respondents were in the age brackets of 21-30 years (47.1%), followed by respondents who were at the age bracket of 31-40 years (31.3%). Respondents between 41-50 years were represented by 13.9% while the rest of the respondents were above 51 years and these were represented by 7.8%. This implies that the data provided was reliable since it was generated from different respondents with different age brackets.

4.1.3 Marital status

In order to know the marital status of the respondents, they were asked to fill in questionnaires their marital status and the results were summarized as in table 7 below:

Table 7: Distribution of respondents in their marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	98	27.1	27.1	27.1
	Married	197	54.6	54.6	81.7
	Separated/Divorced	15	4.2	4.2	85.9
	Widow	51	14.1	14.1	100.0
	Total	361	100.0	100.0	

Source: Primary data 2019

According to the data in Table 7 above, the majority of the respondents were married (54.6%), followed by those respondents who were single (27.1%). Though others were divorced (4.2%) and 14.1% of the respondents were widows.

4.1.4 Education level

In order to know the education level of the respondents, respondents were asked to fill in the questionnaires their education level and the results were summarized as in Table 8 below.

Table 8: Distribution of respondents who participated in the study by Education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certificate	111	30.7	30.7	30.7
	Diploma	115	31.9	31.9	62.6
	Bachelor's Degree	72	19.9	19.9	82.5
	Others	63	17.5	17.5	100.0
	Total	361	100.0	100.0	

Source: Primary data, June 2019

Table 8 above shows that majority of 31.9% of the respondents had attained a diploma as their highest level of education followed by 30.7% who had attained a certificate while the least 19.9% had attained bachelor's degree and 17.5 had attained other levels of education including postgraduates and master's degrees. This finding suggested that most of the work at Kakira Sugar Limited is generally performed by employees with diplomas and certificates. The respondents were therefore presumed to be literate enough to understand issues of the working environment and employee productivity.

4.1.5 Job category of respondents

In order to know the job category of the respondents, respondents were asked to fill in the questionnaires their positions and the results were summarized as in Table 9 below

Table 9: Job Category of respondents

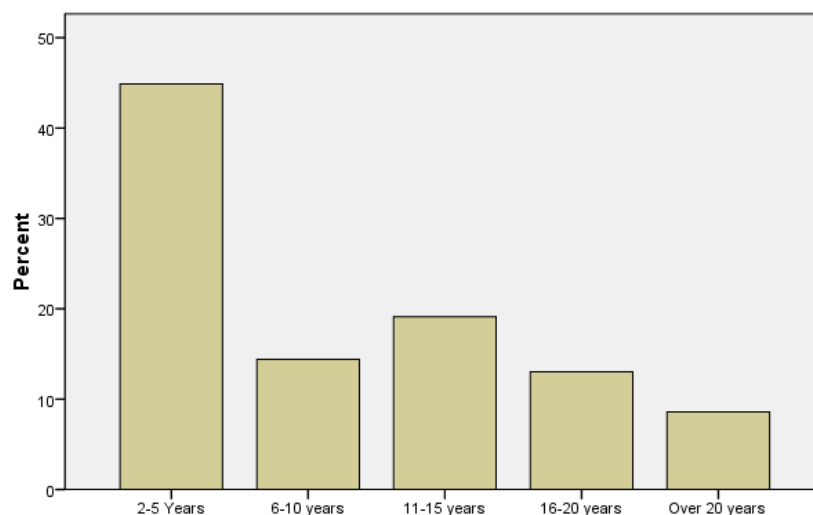
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Head of Department	19	5.3	5.3	5.3
	Manager	22	6.1	6.1	11.4
	Supervisor	59	16.3	16.3	27.7
	Casual workers	152	42.1	42.1	69.8
	Others	109	30.2	30.2	100.0
	Total	361	100.0	100.0	

Source: Primary data, June 2019

On the positions, the majority of 42.1% of the respondents were casual labourers followed by other categories of employees who were represented by 30.2% while 16.3% of the employees were supervisors. The least number of respondents 5.3% were heads of department mostly from the Factory, Agriculture, Health and safety, Projects and Administration while 6.1% of the respondents were managers. This finding suggested that the data was collected from respondents who had adequate knowledge of the working environment and employee

productivity and therefore presumed to have relevant information on the working environment and employee productivity.

A bar graph showing the number of years in service



Source: Primary Data, 2019

Figure 2: Number of years in service

Figure 3 above further shows that majority of 44.9% had worked with the Kakira Sugar Limited for a period ranging from 2-5 years while 19.1% had worked for at least 11-15 years, employees who had worked for a period of 6-10 years were 14.4% and the least percentage had worked with Kakira Sugar Limited for a period of over 20 years a finding which suggested that the respondents had attained adequate experience on working environment and employee productivity in the study area by virtue of their long experience.

4.2 Physical working environment at Kakira Sugar Limited

The first objective of this study was to examine the relationship between the physical working environment and employee productivity in Kakira Sugar Limited. To come up with realistic conclusions on this objective, the researcher asked respondents to do their self-rating on five items on satisfaction with physical working environment basing on Likert scale ranging from 1 representing Strongly Disagree, 2 for Disagree, 3 for not sure, 4 for Agree and 5 for Strongly Agree. The responses are summarized in Table 10 below:

Table 10: Descriptive Results for the physical working environment

Items	Mean	Std. Deviation
There is controlled Noise and air pollution in the organization	2.65	1.408
The furniture I use is suitable adjustable fits and supports my body	2.97	1.458
The physical working environment favour my productivity	3.13	1.370
There is regular training on occupational safety and health	2.83	1.274
GRAND MEANS	2.895	1.3775

Source: Primary data June 2019

Table 10 above shows that respondents agreed that the working environment favour their productivity with a Mean score of 3.13 and standard deviation of 1.37. The respondents also replied that noise and air pollutions are not controlled in the organization (Mean= 2.65, SD=1.408). Furthermore, respondents also revealed that the furniture they use is either not suitable or adjustable enough to support their bodies while at work registering a mean score of 2.97 and Standard deviation of 1.458. Results from table 10 also reveal that there is no regular training on occupational safety health hazards at Kakira Sugar Limited (Mean=2.83 and SD=1.24).

In an interview conducted with operations manager, he had this to say; KSL has in the past years embarked on establishing conducive physical working conditions as a way of increasing employee productivity but many issues have not been worked on like noise and contaminated air from the fumes and machines

4.2.1. Correlation analysis between physical working environment and employee productivity

To test if there was a relationship between physical working environment and employee productivity, a correlation analysis was conducted using Pearson's correlation coefficient and

significance at the 99 and 95 confidence limits (two-tailed levels) and the findings are presented in Table 11 below.

Table 11: Correlation Matrix between physical working environment and employee productivity

Correlations			
		Physical working environment	Employee productivity
	Pearson Correlation	1	.091
Physical working environment	Sig. (2-tailed)		.083
	N	361	361
	Pearson Correlation	.091	1
Employee productivity	Sig. (2-tailed)	.083	
	N	361	361

Source: Primary data

Table 11 above shows Pearson's correlation coefficient (r) of 0.091 and significance $P = 0.083$ between the physical working environment and employee productivity. This suggests that there was no relationship between the physical working environment and employee productivity. The managerial implication was that employee productivity at Kakira Sugar Limited does not depend on the physical working environment.

4.3 Psychological work environment and employee productivity

The second objective of the study was to establish the relationship between psychological work environment and employee productivity at Kakira Sugar Limited. To come up with realistic conclusions on this objective, the researcher asked respondents to do their self-rating on seven items on a psychological work environment basing on a Likert scale ranging from 1

representing Strongly Disagree, 2 for Disagree, 3 for not sure, 4 for Agree and 5 for Strongly Agree. The responses are summarized in Table 12 below:

Table 12: Descriptive Results for the psychological work environment

Items	Mean	SD
There is fair and equal treatment between employees	2.25	1.162
Team building workshops rejuvenate at this organization	2.17	1.431
Clear knowledge on goals motivates employees	2.28	1.206
I feel stressed working under pressure	3.11	1.342
Employee morale ranks highest on the administration agenda	2.92	1.213
My supervisors give me the autonomy to do work	2.85	1.279
GRAND MEANS	2.60	1.27

Source: Primary data, 2019

Table 12 above shows that the majority of the respondents disagreed that there is fair and equal treatment between all employees at Kakira Sugar Limited (Mean=2.25, SD=1.162). Respondents disagreed that team building workshops are aimed at rejuvenating the organization (Mean=2.17, SD=1.431). The findings also revealed that the majority of the respondents disagreed that clear knowledge of the goals and objectives of the organization motivates me to work hard (Mean=2.28). The findings in the table also revealed that respondents agreed that they were stressed working under pressure with mean score of 3.11. Furthermore, the findings also revealed that employee morale ranks highest on the administration agenda (mean 2.92, SD=1.213). Lastly, the results in the table revealed that they were not given autonomy by supervisors.

4.3.1. Correlation analysis between psychological work environment and employee productivity

To test if there was a relationship between psychological work environment and employee productivity a correlation analysis was conducted using Pearson's correlation coefficient and significance at the 99 and 95 confidence limits (two-tailed levels) and the findings are presented in table 13 below:

Table 13: Correlation Matrix between psychological work environment and employee productivity

		Psychological work environment	Employee productivity
Psychological work environment	Pearson Correlation	1	.355**
	Sig. (2-tailed)		.000
	N	361	361
Employee productivity	Pearson Correlation	.355**	1
	Sig. (2-tailed)	.000	
	N	361	361

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data

Table 13 above shows Pearson's correlation coefficient of 0.355** and significance level of 0.000 between the psychological work environment and employee productivity. The findings suggest that there was a significant weak positive relationship between the psychological work environment and employee productivity. The managerial implication was that employee productivity significantly depends on the efforts of the management to establish better psychological working conditions.

During the interview with some management staff, they indicated that;

Some employees lost body parts like arms, hands, fingers amputated by machines. However, management had tried the best to provide psychological relief by buying artificial hands and legs for those workers. In addition, the management also promoted some of the employees who had gone through such psychological stressful situations. These has helped the organization to achieve productivity from the workers.

4.4 Quality work life and employee productivity

The third objective of the study was to establish the relationship between quality work life and employee productivity at Kakira Sugar Limited. To come up with realistic conclusions on this objective, the researcher asked respondents to do their self-rating on six items on quality of work-life basing on a Likert scale ranging from 1 representing Strongly Disagree, 2 for Disagree, 3 for not sure, 4 for Agree and 5 for Strongly Agree. The responses are summarized in Table 14 below:

Table 14: Descriptive Results for Quality work life

Items	Mean	Std. Deviation
I am empowered to decide on the best possible ways to achieve the set target	2.76	1.166
Work-life balance	2.52	1.167
Conditions at my job allow me to be more productive	3.01	1.325
There is a strong sense of belongings in my organization	2.83	1.525
I feel uncomfortable with the job security provided	2.68	1.481
GRAND MEANS	2.76	1.33

Source: Primary data, 2019

Basing on the result from Table 14 above majority of the respondents disagreed with the item chosen for the study with mean scores being below the average implying there is no quality life at KSL. For instance, the majority of the respondents disagreed that they are not empowered to decide on the best possible ways to achieve set targets (Mean=2.76 and SD=1.166). It was also revealed that there was no work-life balance with a mean score of 2.52. With respect to whether conditions at work allow employees to be more productive, respondents fairly agreed (mean=3.01 and SD=1.325). Other issues considered for the study were; there is a strong sense of belonging in my organization which registered a mean score of 2.83 and lastly I feel uncomfortable with the job security provided with mean score of 2.68.

4.4.1. Correlation analysis between quality work life and employee productivity

To test if there was a relationship between quality work life and employee productivity a correlation analysis was conducted using Pearson's correlation coefficient and significance at the 99 and 95 confidence limits (two-tailed levels) and the findings are presented in Table 15 below.

Table 15: Correlation Matrix between quality work life and employee productivity
Correlations

Variables		Quality work-life	Employee productivity
Quality work-life	Pearson Correlation	1	.349**
	Sig. (2-tailed)		.000
	N	361	361
Employee productivity	Pearson Correlation	.349**	1
	Sig. (2-tailed)	.000	
	N	361	361

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data

Table 15 above shows Pearson's correlation coefficient $r = 0.349^{**}$ and significance $p = 0.000$ between Quality work-life and employee productivity. These findings, therefore, revealed that there was a significant positive weak relationship between Quality work life and employee productivity at KSL. The managerial implication was that employee productivity significantly depends on Quality work-life. This implies that any improvement in the psychological work environment causes a slight change in the work environment.

4.5 Employee productivity

To understand the employee productivity levels of Kakira Sugar Limited some issues were chosen for the study and responses were summarized in Table 16 below:

Table 16: Descriptive Results for employee productivity

Items	Mean	Std. Deviation
Each employee sets performance targets to be assessed	2.63	1.208
My organization provides feedback after performance evaluation	2.16	1.312
My organization has an assessment to measure employee productivity	2.22	1.244
My organization has a strategic plan	2.17	1.083
GRAND MEANS	2.295	1.21

Source: Primary data, 2019

Table 16 above revealed that the majority of the respondents disagreed that each employee is given the opportunity to set performance targets to be assessed (Mean=2.63, SD=1.208). It was also revealed in the findings that majority of the respondents disagreed that organization provides feedback after performance evaluation with mean=2.16 and SD=1.312. Furthermore, the findings revealed that respondents also disagreed that the organization has an assessment

to measure employee productivity (mean =2.22 and SD=1.244). Lastly with regard to whether the organization had a strategic plan, majority of the respondents disagreed (mean=2.17 and SD=1.083).

Some administrators at KSL stressed out during the interviews, that the assessment tool was only for management staff yet most practical work is done by the casual workers, operational and technical staff. This posed a risk of an institution having some employees who are mediocre and it would be a cost to the organization. One senior official, confirmed that only management staff were assessed, yet most practical work was done by the other category of staff. And that the majority of the employees were not aware of any strategic plan that they were using or basing to set performance targets.

4.6 Hypotheses Testing

The study predetermined hypotheses were:

The study hypothesized that there is a significant relationship between physical work environment and employee productivity. According to the P-value (0.083), I reject the null hypothesis in favour of alternative that there is independence between the two variables

The study hypothesized that there is a significant relationship between Psychological factors and employee productivity at Kakira Sugar Limited. According to the P-value (0.000), I accept the hypothesis since the P-value<0.05

The study hypothesized that there is a significant relationship between Quality Work life and employee productivity at Kakira Sugar Limited. According to the P-value (0.000), I accept the hypothesis since the P-value<0.05 and there is an association between the two variables

4.7 Regression results on the effect of the working environment on employee productivity

The data was tested for colineality, and also normality to determine whether it was a fit to carry out a multiple regression. Therefore a multiple regression analysis was conducted to obtain empirical statistics for determining the extent to which the Physical work environment,

Psychological work environment, and Quality Work-life influenced employee productivity at Kakira Sugar Works Limited and the multiple regression results are presented in Table 16 below.

Table 17: Model summary between Physical work environment, Psychological working environment, Quality Work life and employee productivity.

Model Summary							
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	F	Sig.
1	.519 ^a	.270	.263	.74143		43.926	0.000

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	.697	.177		3.945	.000
Physical work environment	-.199	.049	-.227	-4.045	.000
Psychological factors	.460	.055	.471	8.424	.000
Quality work life	.356	.046	.353	7.737	.000

Dependent Variable: Employee Productivity

b. Predictors: (constant), physical work environment, psychological work environment, and quality work-life

Source: Primary data 2019

Table 17 above shows a coefficient correlation of (R-square) of 0.270 which indicated that working environment accounts for 27% of employee productivity. The adjusted R- squared of

0.26.3 implied that 26.3% variations in employee productivity was explained by working environment. The results also indicated that the model fitted well the data ($f=43.926$, $\text{Sig.}=0.000$). It was observed that the psychological work environment was a good predictor of employee productivity with a β 0.471.

4.9 Conclusion

It is evident that the working environment and the working conditions play an important role in the employee's well-being and productivity. It has been established that the employees at Kakira Sugar Limited are exposed to stressful working conditions and their productivity is negatively affected. Therefore, there is an urgent need for the introduction of effective implementation of a better working environment to address the unhealthy and stressful situation of employees and to improve the employees productivity which will lead to the development of the company.

CHAPTER FIVE

SUMMARY, DISCUSSION OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

5.0 Introduction

This chapter presents the summary, discussions, conclusions, and recommendations of the study. It is subdivided into three sections. The first section is a summary of the study findings on the working environment and employee productivity. This is followed by a discussion of findings, conclusions, recommendations, limitations, contributions, and recommendations for further studies.

5.1 Summary of the Study Findings

This subsection presents the highlights on the study findings on the extent to which physical work environment, psychological work environment, and quality work-life influences employee productivity as found in the previous chapter.

5.1.1. The relationship between the physical work environment and employee productivity at Kakira Sugar Limited

The study found no relationship between physical work environment and employee productivity. The physical work environment was not a significant predictor of the variance in employee productivity at Kakira Sugar Limited. It was inferred that the physical working environment that entails lighting system, occupational health and safety, regular employee training, design of the working environment, better furniture and air quality had no relationship with employee productivity as stated by (Lankeshwara, 2016).

5.1.2. The relationship between psychological factors and employee productivity at Kakira Sugar Limited

The study found a significant positive weak relationship between psychological factors and employee productivity. Psychological working conditions were a significant predictor of the variance of employee productivity in Kakira Sugar Limited as reflected by the regression results in Table 17. The managerial implication was that employee productivity significantly depends on the working environment indicators. The study accepted the hypothesis that psychological factors significantly influence employee productivity.

5.1.3. The relationship between the Quality Work life and employee productivity at Kakira Sugar Works Limited

The study found a significant positive weak relationship between quality Work life and employee productivity. Quality Work-life although had a positive relationship with employee productivity, it was a significant predictor of the variance in employee productivity at Kakira Sugar Limited. The study, therefore, inferred that employee productivity significantly depends on quality work life. The study accepted the hypothesis that Quality Work-Life significantly influences employee productivity at Kakira Sugar Limited.

5.2 Discussion of the Study Findings

This subsection presents a discussion of the study findings on the extent to which physical working environment, psychological work environment, and quality work-life influences employee productivity in relation to the literature review.

5.2.1. Physical working environment and employee productivity

The study found out that there was relationship between physical working environment and employee productivity. The physical working environment of KSL composed of noise and air pollution, inappropriate natural light and limited workspace.

The study finding was in disagreement to the study by ILO (2016); Sultan (2016); who ascertained that the proper physical working environment should be one that provides appropriate, office layout, lighting, equipment, air quality, controlled noise levels, avoiding exposure to hazardous agents taking into account ergonomic aspects to limit workers' stress. The findings also were in disagreement with an empirical study by Akhatar (2014) who identified a positive correlation between office layout and productivity, indicating that a more conducive layout leads to increased productivity.

The study found there was no relationship between physical working environment and employee productivity. According to the Occupational Safety and Health Act (2006), which was pinned to the entrance of every building, KSL had the cardinal obligation to protect its employees from harmful physical working environment, and; the Constitution of the Republic of Uganda 1995 (as amended) also provides for the right of employees to work under a healthy environment which is safe, secure, and satisfactory (article 40) (The Republic of Uganda, 1995), which could have been the reason for the results in table 10 above.

Much as the study was not in agreement with the hypothesis that working environment had a significant relationship with employee productivity, failure to provide employees with a conducive working environment in terms of appropriate lighting, ventilation, ergonomic furniture, controlled noise, properly designed office layout and good sanitation, may lead to a long term negative effect to the health of employees which may lead to loss of life, brain disorder, incapacitated, vision and hearing impairment, diseases like cancer, respiratory diseases, cardiovascular and Musculoskeletal diseases and accidents. This may lead to loss of expertise, litigations, and increased costs and expenses in compensation and medical treatment.

This is supported by the findings from the interview with some manager who ascertained that there was high labour turnover every year, rated at 5% and on exit interviews employees claimed that they were uncomfortable with the noise, air pollution and doing repetitive work which had even affected their health. which in return had also led to loss of expertise and decline in productivity.

5.2.2. Psychological working environment and employee productivity

The study found out that there was a significant relationship between psychological environment and employee productivity. Furthermore, the study found out that workers at Kakira Sugar Limited feel stressed working under pressure. It was also found that employees are always on the pressure to meet deadlines, departmental managers and supervisors are given monthly targets of production and therefore much pressure is exerted on the subordinates in the operations departments. It was also found out that there isn't fair and equal treatment between all employees of the organization.

This is supported by other scholars such as Shobe (2018) together with ILO (2016) where it was noted that correct balancing of employee mental satisfaction to social economic and psychological effects allows for the employee to become comfortable and conducive to good spirits, motivation, high morale, leading to increased productivity.

The American Psychological Association also believes that a psychological healthy workplace fosters employee health and well-being while enhancing organizational performance and productivity in also concurs with the findings of the study. International Labour Organizations (2016) concurs with the findings of the study that there is a considerable impact of work-related stress which can severely impact employee's innovation towards meeting desired output of goods and services, meet required standards and and timely realization of set targets, which may lead to loss of business to competitors, loss of popularity and profits thus negatively affecting general productivity levels. Furthermore, states that besides the impact on workers'

health and wellbeing, a good psychosocial working environment reduces the rate of absenteeism as well as increases motivation, satisfaction, and commitment.

The conducive working environment is a right to all employees, since it determine the state of mind. If the psychological well being is compromised, the employees are prone to stress, dipression, fatigue, uncomfortable, they may become violent, which may lead to death, diseases like mental disability; absenteeism, less concentration, loss of focus on organizational goals and job dissatisfaction leading to an automatic discrease in employee productivity.

In an interview, some managers had this to say;

There were cases of employees who lost some of their body parts amputated by machines. This greatly affected employees psychologically haunted and reduced the capablility of the affected employees. Training on psychological stress management is mostly given to the management and administration team since they are the least numbers, compared to the other section of employees.

5.2.3. Quality Work life and employee productivity

The study findings revealed that there is not much-defined communication channels for employees, less clear path for career development, little or less cordial relationship between employees and their immediate supervisors at Kakira. Furthermore, employees at KSL are not empowered to decide on the best possible ways to achieve set target and findings also brought it clearly that conditions at work do not allow employees to become more productive. It was found out that work-life balance is abused at the organization. The study findings are contrary to the study by Horst (2014) who noted that due to rapid changes in labour relations, organizations should appreciate the importance of Quality of work-life and understand that productivity no longer means much more work only but also the quality of human life and the way it affects the human productivity indirectly. The same author further states that good management of QWL makes employees healthier, more committed to achieving organizational

objectives, working and producing more, as well as reducing organizational costs and expenses incurred to treat the consequences of poor working conditions.

The finding also indicated that there was a significant positive weak relationship between quality work life and employee productivity. This is in agreement with Swamy (2015) who concluded that Quality of work-life significantly and positively affect employee productivity and that organization culture and climate, relation and co-operation, training and development, compensation and rewards, job satisfaction and job security, autonomy of work and adequacy of resources play significant role in determining the level of employee satisfaction of the quality of work-life at the organization which in return directly affect company's ability to serve its customers.

Employees, have a purpose why they come to work, they have families, culture, religious and social obligations to meet. They also want to feel that their efforts are valued, and that they are part of the success of the organization. They need to change and rest from the same environment, they need to work in a secure and safe environment because they spend most of their active age, and time in organisations. Therefore, if employers, are to get the best out of theirs employees, they must ensure that employees are facilitated with work life balance to get time for their private life, they are secure and safe at the work place, and they have good working relations in a team.

5.3 Conclusions of the Study

This subsection presents the learning points of the study findings on the extent to which physical working environment, psychological work environment, quality work-life influenced employee productivity in relation to the study findings and the discussions above.

5.3.1. Physical working environment and employee productivity

The study found out that there is no relationship between physical work environment and employee productivity. It was ascertained and concluded that much as employee productivity at KSL does not highly depend on the physical working environment; failure of the organization to adequately design the working environment to the desirable level, failure to control noise and air pollutions, failure to provide comfortable furniture, as well as amending clear policies on occupational health and safety can have a long term negative effect on the health of employees, may increase their stress at work, thus lowering morale to work, affect quality of work-life and eventually lower productivity.

5.3.2. Psychological work environment and employee productivity

The study found out that there was a significant positive weak relationship between psychological work environment and employee productivity. The study therefore concluded by accepting the hypothesis that there was significant relationship between the psychological work environment and employee productivity. It was further ascertained that although the findings brought it clear that there is fair and equal treatment between all employees, employee morale ranked highest on the administration agenda, therefore KSL has to take the initiative to improve psychological work environment so as to reduce on costs and expenses that result from negative effects of resented working environment.

5.3.3. Quality work life and employee productivity

The study concluded by accepting the hypothesis that there is a significant relationship between quality work life and employee productivity. It was also concluded that quality work-life is a good predictor of employee productivity and KSL should keep in mind that by treating employees well, they end up with a first-class workforce that will, in turn, be superstar advocates for the business and demonstrate a good work ethic and great customer service thus increased productivity.

5.4 Recommendations of the Study

This subsection presents the recommendations of the study in relation to the psychological work environment, physical working environment, and quality work-life based on the study findings, discussions and conclusions.

5.4.1 Psychological work environment and employee productivity

Given the fact that there was a significant relationship between psychological working environment and employee productivity, the study recommends that Management of KSL should put in much effort to improve psychological work environment in an attempt to improve employee productivity through the following;

Enhanced management support: Employees should be supported by management by taking time to listen to them, be encouraged to perform better, show them that they are valuable and trusted, delegate them to expose them to growth, treat each other equally and fairly, and align them properly according to their capabilities and strength. Employers should always act fast to identify and remove obstacles and organize their employees' workload so they can concentrate on the finer points of their job.

Improved job security: All employees should be provided with contracts which stipulates clearly the terms and conditions of the job. This assures them of the availability of job, improves their psychological well being, arouse them to serve diligently, work productively and comfortably, retain its expertise, and work towards achieving organization objectives.

Involve employees in the decision-making processes: When employees are involved in decision making, they feel more valued, each one in the organization takes responsibility of the decisions made hence the blame game will be prevented, teamwork and cohesiveness is enhanced, employees understand that at the end of the day they are all working for one common goal. Therefore, will own the decision, dedicated, committed, towards successful

implementation of the decision made, thus producing greater results in both quality and in profits leading to increased productivity.

Open and clear means of communication: The management of KSL should ensure that the lines of communication are kept open and clear all the time. Owing to the fact that effective communication is one of the important tools in achieving productivity and maintaining strong working relationships at all levels of an organisation. It is through communication that organizational policies, goals and expectations are defined.

5.4.2 Quality of work-life and employee productivity

The study also found out a significant relationship between quality of work life and employee productivity and therefore this study recommends Management of KSL to put in place work-life balance programs, like Annual leave, days off and shift as well as accepting unions. The study further recommends that KSL should ensure that the following issues are put in place.

Autonomy of work: Reasonable autonomy should be improved since it enhances employees' intrinsic motivation, self efficacy and job satisfaction. Job autonomy also has a positive attribute for employees, managers, teams, and organizations as a whole thus improved work life balance, greater sense of team and organizational culture and greater productivity. Employee autonomy may foster engagement at work, improved workplace functions through the ideas and suggestions of employees, and relationships with a greater degree of trust between management and employees. is believed to minimize some of the relational barriers between superiors and subordinates and promotes a feeling of being trusted, and increased accountability. enhancing employees' intrinsic motivation and job satisfaction.

Fair and equitable compensation: The management of Kakira Sugar Limited should try to benchmark from other companies like Kinyara Sugar Factory, to be able to administer salary and bonuses in a fair and equitable manner; offering reasonably better rates of emoluments can

help employees to keep loyal and find worth in working for the company since they can be able to meet the standard of living and meet other personal obligations, will be motivated, committed to work, and innovative thus improved productivity.

Job rotation: Job rotation if well planned and executed can be a good strategy to strengthen the position of an organization and helps it to counteract uncertain and tentative external environmental threat by identifying suitable competences from within the organization, who can immediately close a gap identified and create a suitable and beneficial fit for continuous running of the organization. It settles employees to the right places where they can deliver the maximum desired results. This may result in employee increased satisfaction and reduces attrition rate.

5.3 Suggestions for further research

The study established that there was no relationship between physical working environment and employee productivity, the study therefore suggests that future studies should probe further into this variable given the fact that other earlier studies had established a positive relationships. This is because may be the study was subjected to some sampling errors.

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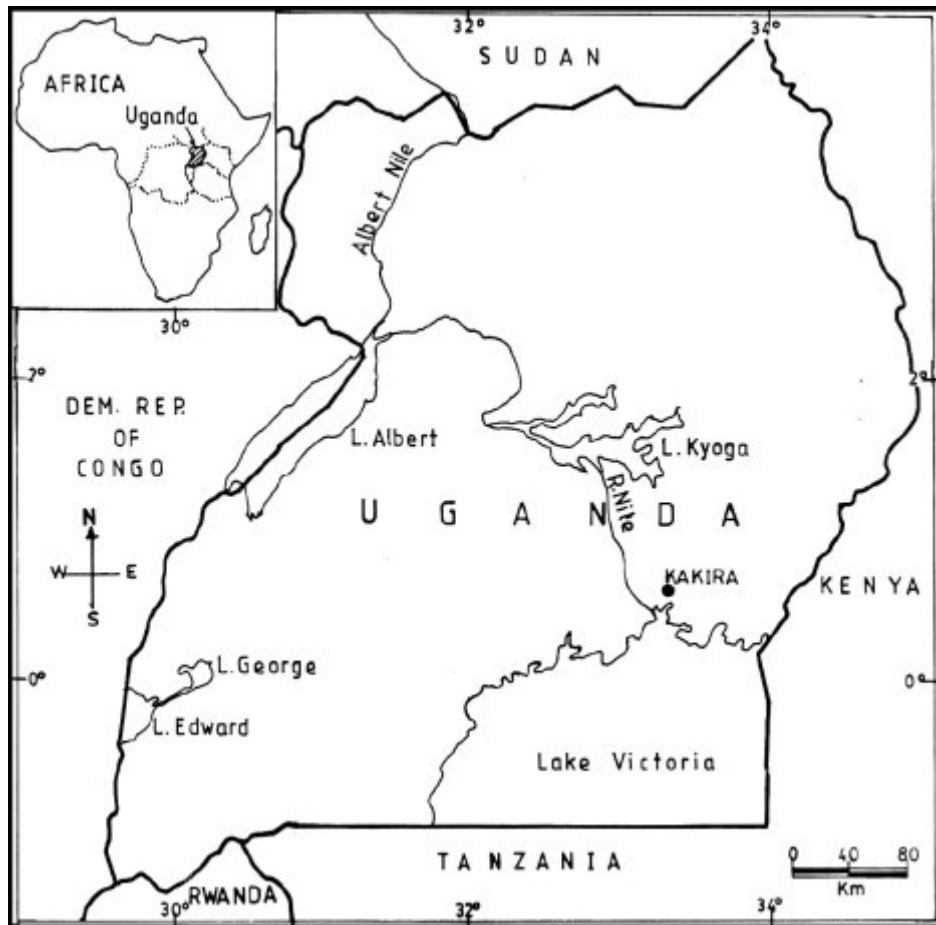
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APPENDICES

APPENDIX I: MAP SHOWING LOCATION OF KAKIRA SUGAR ESTATES



APPENDIX II: INTRODUCTORY LETTER FROM KYAMBOGO UNIVERSITY

**APPENDIX III: LETTER OF ACCEPTANCE TO CONDUCT RESEARCH FROM
KAKIRA SUGAR LIMITED**

APPENDIX IV: QUESTIONNAIRE

Dear respondent,

I am **IMMACULATE KEBIRUNGI** (17/U/14753/GMOP/PE), a graduate student at Kyambogo University pursuing a Master's Degree in Organization and Public Sector Management. Thank you for accepting to participate in the study. I intend to establish the relationship between the working environment and employee productivity at Kakira Sugar Works Limited. The information you provide will be treated with confidentiality and only used for academic purposes. Participation in this study is voluntary and will be highly appreciated.

Tick the right option or fill the right answers in the spaces provided.

SECTION A: Biodata

1. What is your age bracket?

☐	21-30 years	☐	41-50 Years
☐	31-40 years	☐	years & above

2. What is your Gender?

☐	Male
☐	Female

1. Tick the appropriate Marital Status you belong to:

☐	Single	☐	Widow	☐	Divorced
☐	Married	☐	Separated	☐	Others

2. What is your educational level?

☐	Certificate	☐	Diploma	☐	Bachelor's Degree
☐	Master's degree	☐	Others specify.....		

3. What is your Job category?

☐ Head of the
department

☐ Manager

☐ Supervisor

☐ Casual
Laborer

☐ Others
specify _____

4. Numbers of Service in the organization:

☐ 2-5 Years

☐ 6-10years

☐ 11-15 years

☐ 16-20
years

☐ Over 20 Years

SECTION B: SATISFACTION WITH PHYSICAL WORKING ENVIRONMENT

State the extent to which you either agree or disagree with the following statements.

Strongly disagree	disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

	The physical working environment favour my productivity	1	2	3	4	5
	The furniture I use is suitable, adjustable fits and supports my body	1	2	3	4	5
	There is ambient air which soothes me throughout the day	1	2	3	4	5
	There is controlled noise and air pollution in the organization	1	2	3	4	5
	The is regular training on Occupational Safety Health Hazards	1	2	3	4	5

SECTION C: PSYCHOLOGICAL WORK ENVIRONMENT

State whether you agree with the following statements.

Strongly disagree	disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

	There is fair and equal treatment between all employees	1	2	3	4	5
	Clear knowledge of the goals and objectives of the organization motivates me to work hard	1	2	3	4	5
	There are training opportunities for employees in the organization	1	2	3	4	5
	My supervisors give me the autonomy to do my work	1	2	3	4	5
	Teambuilding workshops rejuvenate at this organization	1	2	3	4	5
	Employee morale ranks highest on our administration's agenda.	1	2	3	4	5
	I feel stressed working under pressure	1	2	3	4	5

SECTION D: QUALITY WORK LIFE

To what extent do you agree with the following statements?

Strongly disagree	disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

1	I feel uncomfortable with the job security provided	1	2	3	4	5
2	There is a strong sense of belongingness in my organization	1	2	3	4	5
3	Conditions at my job allow me to be more productive	1	2	3	4	5
4	I am empowered to decide on the best possible ways to achieve the set target	1	2	3	4	5
5	Good welfare activities are provided by my organization	1	2	3	4	5
6	There is a work-life balance at this organization	1	2	3	4	5

SECTION E: EMPLOYEE PRODUCTIVITY

State whether you agree with the following statements.

Strongly disagree	disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

Meeting the required standards

	Each employee sets performance targets to be assessed after the end of the year.	1	2	3	4	5
	My organization provides feedback after performance evaluation.	1	2	3	4	5
The output of goods and Services						
	My organization has assessment tools to measure employee productivity	1	2	3	4	5
	Employees are satisfied with the performance measures in place	1	2	3	4	5
	My organization has a strategic plan it bases to guide the organization to allocate resources properly	1	2	3	4	5

APPENDIX V: INTERVIEW GUIDE TO THE MANAGERS

Dear respondent,

I am **IMMACULATE KEBIRUNGI** (17/U/14753/GMOP/PE), a graduate student at Kyambogo University pursuing a Master's Degree in Organization and Public Sector Management. I intend to establish the relationship between the working environment and employee productivity at Kakira Sugar Limited. You have been identified as key resource personnel to participate in this study. Your participation is however voluntary. Please be assured that the information you provide will be kept with great confidentiality. Thank you in advance.

Before I proceed with the interview, I would like to confirm whether you are willing to participate in the survey. Are you willing to participate? Can I proceed to ask you some questions? Yes.....No.....

Signature..... Date...../...../.....

Questions

1. How long have you been working in this organization?
2. How do you ensure your employees are productive?
3. Do you think your employees are motivated to be productive?
4. Do you involve your subordinates in decision making?
5. Do you have a policy on grievance handling?
6. How do you promote teamwork in this organization?
7. Are you satisfied with the performance measurement in your organization?
8. Do you give feedback to employees regarding their performance?
9. How appropriate is your organization's communication policy?
10. Do you think employees have the autonomy to perform their work?
11. Do you feel satisfied with the incentives the organization give employees?
12. Does the organization offer training opportunities to the employees for skills enhancement?
13. Do you have a compensation policy in case of accidents during the course of work?
14. Do you think employees have enough job security?