The Effect of Sleep quality on the Psychological wellbeing and Work performance of Employees

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Declaration

I, Niwemushabire .S. Hannah a third year student at Makerere University College of Humanities and Social Sciences pursuing a Bachelor's Degree in Industrial and Organizational Psychology, hereby declare that all information in this dissertation is my original work and has never been presented anywhere college, institute, organization for any academic award.

Signed……..... Date…9th November, 2022……

Niwemushabire .S. Hannah

Approval

I certify that this dissertation on Sleep quality, Psychological wellbeing and Work performance of Employees has been developed by Niwemushabire S. Hannah under my supervision and has been submitted for examination with the approval from my university research supervisor.

Signed..... Date.....09/11/2022.....

Dr. Baluku Martin

Supervisor

Dedication

I dedicate this work to my dear parents, for all the selfless support they have accorded to me throughout my education and my life journey.

Acknowledgement

I would like to thank the Almighty Lord for the gifts of knowledge, wisdom and understanding, strength, patience and perseverance He gave me throughout the period I spent carrying out this research.

I extend my appreciation and thanks to my parents for their endless support to me, their spiritual, physical, mental and financial support. They have been a pillar in my life and a major driving force for pushing me to achieve in all my academic endeavors. To Mr. &Mrs. Ahimbisibwe James.

To my supervisor Dr. Martin Baluku who with relentless support gave so much and kept inspiring me to work at a better life. He was such a source of true inspiration as well as great charisma. His guidance and advice carried me through all the stages of writing my project.

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Abstract

The study aimed at studying the relationship between sleep quality, psychological wellbeing and work performance of employees to establish the relationship between sleep quality, psychological wellbeing and work performance among employees. The study adopted a correlation study design. Simple random sampling technique was used to draw a sample of 87 respondents from the population. Data was collected from respondents using a self –administered questionnaire and through Statistical Package for Social Science (SPSS) data was analyzed. Descriptive statistics showed that majority were female 54% and were followed by males with 46% of the total population, majority were between 20-29 years,56%. Results from correlation further indicated that there was a significant positive relationship between sleep quality and psychological wellbeing, psychological wellbeing and work performance were significantly related and there is a significant relationship between sleep quality and work performance Thus, the findings of this study provide several recommendations to administrators and managers of the several organizations, private entities in designing policies and procedures that will be used as motivational guidelines for positive wellbeing and high employee performance. Since positive and happy people have better physical and mental outcomes and behavior and are resilient in the face of hardship.

Chapter One

Introduction

Background

As human beings we spend approximately a third of our lives asleep. Sleep like eating, drinking and breathing is vital for maintaining good mental health and physical health. Sleep is an essential and involuntary process without which normal functioning is distorted. It goes without saying that 'sleep is the best meditation'. The importance of sleep has increasingly been recognized in the field of work psychology (Barnes, 2012). Sleep is an actively regulated activity that allows for reorganization of neural activity (Hobson, 2005).

Sleep quality may be defined as an individual's self-satisfaction with all aspects of the sleep experience. Four items are generally assessed to measure sleep quality; sleep latency, sleep duration, wakefulness and sleep efficiency (Havey, 2008). Research indicates that adults should sleep seven to nine hours every night to function optimally at work (Suni, 2009). On the other hand, a lack of quality sleep may often be measured with an assessment of insomnia symptoms. Insomnia is a sleep disorder defined as dissatisfaction with sleep quality or sleep quantity associated with difficulty initiating sleep, maintaining sleep, or early morning awakenings with an inability to return to sleep (Association, 2013). Employees with a demanding job environment and who lack job support find an overwhelming time at work, hitting deadlines, being on time and also the need for extra income makes them work extended hours all of which affects their sleep cycle in response to demanding environmental conditions (Saper, 2005).

Employee psychological wellbeing is the core element of overall wellbeing and is connected to physical health, mental health, longer lives for individual employees. It is proposed that an individual experiences happiness when positive affect and satisfaction with life are both

high (Carruthers, 2004) People are happy when they subjectively believe themselves to be happy. According to (Diener, 2009), wellbeing as a subjective term, which describes people's happiness, the fulfillment of wishes, satisfaction, abilities and task accomplishments. It has also been defined as including hedonic (enjoyment, pleasure) and eudaimonic (meaning, fulfillment) happiness as well as resilience (Ryan, 2000). Individuals that are greatly satisfied with their work therefore depict a higher levels of optimism, self-esteem and increased motivation all of which are beneficial to the work place and performance at work (Wright, 2000).

Work place performance also known as job performance can be defined as individual behavior that generates value for the organization and contributes to the organizational goals (Campbell, 2015). There is a significant relationship between sleep quality, psychological wellbeing and work performance. The standard hours of work per week are 48 hours and 8 hours per day as of Ugandan law (Gazette, 2006). According to the Public Service Standing Orders, office hours are typically 8:00 a.m. to 5:00 p.m. According to recent research specific examples of job demands have been examined as correlates to workplace sleepiness. The factors include general job demands (Rotenberg, 2008) number of hours worked per week (BLAU, 2011) and job complexity (Zohar, 1999). These job demands may reduce the amount of time people have to sleep and also a disruption in circadian and homeostatic processes that regulate sleep by increasing people's need for sleep or causing sleep disrupting physiological changes, explaining why people often feel fatigued and at times doze off while undertaking their tasks. In regard to performance it's safe to say that a certain degree of pressure is necessary for creativity and performance at work, but too much pressure undermines individual psychological wellbeing. It is therefore imperative to understand that a healthy workforce signifies improved performance and is beneficial to both the employer and employee due to psychologically healthy and happy employees. Better sleep

reduces the likelihood of depression (Holsboer, 2001) and acute and chronic fatigue (Manderscheid RW, 2009).

Problem Statement

Due to our fast-paced world today, millions of people are chronically sleep deprived and are suffering the severe effects of getting low quality sleep. This in turn is a catalyst for so many sleep problems, diseases as well as workplace productivity issues. Studies have shown that just one night of sleep deprivation can make you as insulin resistant as a type-2 diabetic. Other studies show sleep deprivation encouraging cancer, depression and even heart disease. Lack of sleep also affects productivity, due to stress, less creativity and thus underperformance. Inadequate sleep therefore, results into poor psychological wellbeing and work performance of employees at work.

Purpose

To examine the relationship between sleep quality, psychological wellbeing and work performance of employees.

Objectives

1. To examine the relationship between sleep quality and the psychological wellbeing of employees
2. To assess the relationship of sleep quality and work performance of employees
3. To examine the relationship between psychological wellbeing and work performance of employees at that workplace.

Scope

Geographical Scope

The research was carried out in Kampala district which is in the central division. The Central division was chosen because it is the city center and has businesses from which policies can be developed, monitored and implemented.

Contextual Scope

The study focused on sleep quality, psychological wellbeing and work performance of employees in Kampala district having sleep quality as the independent variable and psychological wellbeing and work performance as mediator and dependent variables respectively.

Significance

The research may be of importance to various groups of people like to the current researcher, policy makers, future researchers and the management of businesses. This is discussed further as shown below;

The research may be of importance to me as a researcher because I hope to acquire research skills which I can apply to conduct research in other subjects. Skills like developing questionnaires, interacting with new people and get the necessary information and analyzing data.

The research may also help the management of businesses to discover the effect of sleep quality on psychological wellbeing and work performance. This may help them come up with better techniques of wellbeing which may result into improved work performance.

The research may also benefit the future researchers who may carry out research about the same topic of sleep quality on psychological and work performance and they may learn more about

sleep quality practices, factors affecting work performance and psychological wellbeing, the relationship between sleep quality and work performance and psychological wellbeing.

The study may benefit policy makers like the International Labor Organization, Workers' Union and other government organizations to come up with effective realistic policies of promoting employee wellbeing and work performance.

Conceptual Framework

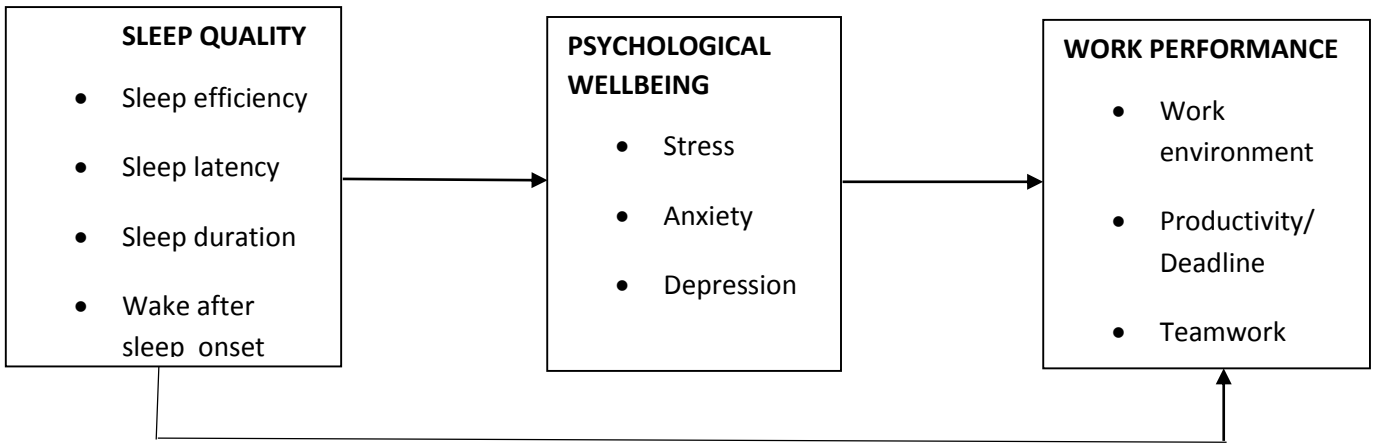

Figure 1: Conceptual framework showing the relationship between sleep quality, psychological wellbeing and work performance

The conceptual framework above presents sleep quality as an independent variable that affects psychological wellbeing and work performance of employees. Psychological wellbeing is the mediator variable that shows the relationship between sleep quality and work performance. Work performance is the dependent variable in whom there is a change as a result of sleep quality. Workers who report less sleep time are more likely to be depressed, moody and even anxious at the workplace and this also leads to low productivity, dissatisfaction and less engaged employees. Organizations that are vigilant about the true need of sleep for their workers and put up good

mechanisms to support them are more likely to experience better engaged workers and hence increased productivity.

Chapter Two

Literature Review

Introduction

This chapter encompasses a review of the literature that has been carefully explored by a number of researchers basing on sleep quality and psychological wellbeing, psychological wellbeing and work performance and sleep quality and psychological wellbeing.

Sleep Quality and Psychological Wellbeing

Sleep is an influential component of human health and effective daily functioning and yet is often undervalued in many organizations. Poor or inadequate sleep also has a negative impact on many longer-term factors relevant to organizational behavior and personal health including self-control and decision making (Hagger MS, 2014) subjective effort (Engle-Friedman, 2004), immunosuppression (Irwin, 2014) and a variety of performance measures (Lim J, 2010)

Furthermore, our endogenous circadian rhythms impact not only our sleep-wake cycle by encouraging us to sleep at night but also affect our daytime alertness and performance. The organization can also have an impact on our endogenous need for sleep and our circadian rhythms. When organizations create an environment that increases work requirements, this creates additional stress beyond simply the work demands for the employee's family including poor sleep and other social and health concerns (Mariappanadar, 2014) . Many organizational demands, such as shiftwork and travel challenge our circadian rhythms and create a sustained physiological drive for sleep.

Sleep scientists have found numerous links between sleep and health. Poor sleep over a longer period of time is related to increased risk of cardiovascular disease and diabetes (Chasens

ER, 2009) and a higher risk of developing dementia and Alzheimer's disease (Benedict C, 2015) Studies have also found increased mortality rates associated with shorter sleep periods (less than .5-4.5hours) or longer sleep periods (greater than 8hours) (Kripke DF, 2002) as well as with excessive daytime sleepiness (Empana, 2009). Moreover, shift workers have a higher risk factor for developing health issues. One review study concluded that shift workers, experience more severe gastrointestinal, neuro-psychological, and cardiovascular issues than non-shift workers (Costa, 1996).

Aside from its ties to physical health, sleep quality plays an important role in psychological wellbeing in later life. Research has repeatedly shown a positive relationship between good quality sleep and psychological wellbeing (Foley, 2004).In particular, Manichean, Keller, and Ware (2001) studied sleep in chronically ill adults and found that individuals who lacked sleep problems reported a better overall quality of life compared with those who had trouble sleeping or suffered from a sleep disorder.

Psychological Wellbeing and Work Performance

It is a no- brainer that workers with raised wellbeing perform better in their jobs than those with lower wellbeing. As many as 92% of Australasian employees in Fisher's (2003) study believed that a happy worker is likely to be a productive worker.

It has been well –known that employees who experience positive emotion at work demonstrate better work performance. This individual performance will lead to the organizational productivity. Therefore, it is important for any organization to ensure the employee's psychological well-being (PWB) by promoting and/or eliminating factors that may affect it. According to the Six-factor Model of Psychological Well-being developed by Carol Ryff, it determines six factors which contribute to an individual's psychological well-being, contentment,

and happiness. Psychological well-being consists of positive relationships with others, personal mastery, autonomy, a feeling of purpose and meaning in life, and personal growth and development. Psychological wellbeing is attained by achieving a state of balance affected by both challenging and rewarding life events.

According to (Diener, 2009)psychological wellbeing has two important facets. The first of these refers to the extent to which people experience positive emotions and feelings of happiness. Sometimes this aspect of psychological wellbeing is referred to as subjective wellbeing. The other is the meaning of purpose, so the two important ingredients in psychological wellbeing are the subjective happy feelings brought on by something we enjoy and the feeling that what we are doing with our lives has some meaning and purpose.

Employee wellbeing is greatly embedded in a system of social exchange among supervisors, subordinates, and coworkers (Kim, 2016), and for that reason is facilitated and constrained by support from supervisors and coworkers. It implies that employees' satisfaction with supervisors and colleagues allows them to obtain feelings of empathy, respect and trust (Haider, Fernandez-Ortiz, & de Pablos, 2017) which lead to greater psychological wellbeing (Kim et al., 2016).

The happy/productive worker hypothesis (Lucas & Diener, 2003) suggests that psychologically-well people perform better (Wright & Cropanzano, 2004).Organizations' ability in minimizing work-life conflicts enables them to create a positive psychological capital in their employees which enhances their creative performance (Hau, 2015).Positive emotions emerge from many internal and external forces, and one of them is work life balance (Pradhan, 2016). Psychological wellbeing is a direct response of a person's positive emotions emerging from a

person's work-life balance enhance his or her wellbeing which, in turn, improves that person's job performance.

The psychological wellbeing is highly embedded in positive attitudes and behaviors derived from satisfaction from coworkers. Higher satisfaction with coworkers may lead to positive feelings about that worker and vice versa. Research indicates that greater satisfaction with coworkers promotes positive attitude and behaviors in employees (Wilson, 2007), which result in positive thinking, optimism, and psychological wellbeing (Conversano ,2010).Previous research informs that satisfying relations at workplace predict quality of life and wellbeing (Baggio & Cortese, 2013). In line with Ryff (1989) and Ryff and Singer (2000) and self-determination theory (Ryan&Deci,2000), intimacy theory (Ryan, 2000) also suggests that meaningful and satisfying relationships with others predict human flourishing and psychological wellbeing (Ryan & Deci,2001).

Job performance can be revealed in how people relate with others and how they balance life and work. Work-life balance reflects person-environment (PE) fit with respect to work and family domains (Billsberry, 2010). Person environment-fit with respect to coworkers is what Kristof-Brown, Zimmerman, and Johnson (2005) call person group fit.

Influenced by emotions and feeling for example the frequency by which individuals experience pleasant or unpleasant moods in reaction to life circumstances. Until recently, the consensus in much research surrounding psychological wellbeing as a construct was that it was too been seen as "not stressed" or "not depressed" and therefore low scores on depression, anxiety, stressed or other negative attributes indicated higher psychological wellbeing. The recent change in thinking has seen the emergence of a more positive emphasis on this more dated approach(Libran,2006).With attention to positive aspects, psychological wellbeing indicates for

instance happiness or life satisfaction rather than the opposites of depression and anxiety".Ryff(1989) had indicated that positive aspects of wellbeing included at least six main variables: sense of autonomy, self-acceptance, purpose in life, positive relations with others, personal growth and environmental mastery. Psychological wellbeing is an aspect of psychological health. The psychological component of health, as conceptualized by Testa and Simonson (1996), reflect one's affective experiences which interact with associated cognitive states, processes and judgement about one's life, oneself and the future (Beck,1987). Both affect and cognition have been found to contribute to psychological wellbeing, which is an aspect of psychological health (Smith, 1999) and both affective and cognitive components. The chronic affective states include, depression, anxiety and fatigue. Depression is characterized by negative, low arousal affective experiences and negative thoughts about oneself and the future (Beck Brown, 1987). Anxiety is characterized by high arousal negative states accompanied by constant thoughts of danger and threat (Beck, 1987).Chronic fatigue is characterized by a lack of energy, vigor and vitality(Dishman, 2006).Life satisfaction refers to explicit cognitive evaluations of subjective wellbeing(Diener,1999).

There is evidence that poor psychological health contributes to cognitive deficits that are relevant for work performance. These include deficits in working, episodic, and autobiographical memory, recognition and recall learning and executive functioning(Austin, Mitchell,& Goodwin,2001).Irrelevant negative information is more likely to interfere with the working memory of depressed individuals(Joorman&Gotlib,2008),while negative affective states and poor psychological wellbeing result in memory that is biased towards negative events(Blaney,1986).Negative experiences that accompany depression and anxiety can also take cognitive responses away from work tasks by causing individuals to appraise their affective

situations, ruminate and attempt to regulate their emotions(Beal, 2005). The regulation of one's emotions may also inhibit one's ability to exert self-control on subsequent tasks(Muraven&Baumeister,2000). Fatigue, characterized by feeling tired, weak and lacking in vigor and energy (Sonnentag& Zijlstra,2006), is also associated with cognitive difficulties (Jones & Fletcher,1996) and may decrease with resources one has to devote to work. These cognitive abilities and resources are clearly important for task performance, but they are also relevant for contextual performance, which depends in part on one's available knowledge and skills (Dudley Cortina, 2008, Motowidlo, 1994).

Psychological health may also influence the motivation of employees to perform both task and contextual work behaviors. Affective states can influence self-efficacy judgement such that a positive mood symptomatic of good psychological health leads to more positive self-efficacy beliefs (James,1994).Positive affect has also been shown to increase task persistence through more positive valence, instrumentality and expectancy beliefs(Isen,2002), and through setting oneself higher goals(Judge,2005).

Field studies on work-specific affect have found it to be related to organizational citizenship behaviors (Lee & Allen, 2002), individual job performance (Taris, 2006: Moline, 2002) and Organizational performance (Schreurs, 2009).These results suggest that positive psychological health leads to high work motivation. Depression and anxiety are also associated with excessive cognitive appraisals of danger and decreased self-worth (Beck, 1987), which may lead to irrational choices and lower effort. Life satisfaction has also been shown to be highly related to core self-evaluations (Thoresen,2003), which are composed of state such as self-efficacy and locus of control that maybe associated with motivation(Isen,2002).Therefore it seems likely that psychological wellbeing influences performance through motivational mechanisms. We would

expect that these motivation-related constructs are important for both task (Thierry, 1996) and contextual (Hochwarter, 2008) performance

Sleep Quality and Work Performance

The quantity and quality of a person's sleep has major implications for cognitive performance (Lim, 2010) motor functioning (Durmer JS, 2005) mental health (Benca RM, 1992) and long-term physical health (W.Strine, 2005). Sleep is most frequently described as a state of immobility that consists of greatly diminished physical responsiveness and is more rapidly reversible than anesthesia or coma (Siegel, 2005). Although questions still exist about the function and mechanisms of sleep, sleep does appear to be an actively regulated activity that allows for reorganization of neural activity (Hobson, 2005).The prevailing theory of sleep regulation states that two processes play dominant roles in sleep regulation: sleep-dependent processes and sleep-independent processes (Borbély, 2009).

Sleep-dependent processes are homeostasis in nature and consist of a need to sleep that accumulates during prolonged wakefulness and is met during sleep. Sleep-independent regulating processes are circadian in nature and consist of internal bodily processes that regulate when a person feels sleepy. Relevant to occupational research, allostatic processes that regulate sleep may allow physiological adjustments that temporarily overwhelm homeostatic and circadian drives for sleep in response to demanding environmental conditions (Saper, 2005). Allostatis refers to physiological changes made to achieve homeostasis. An example of an allostatic process occurs when adrenaline or cortisol is produced by the body to promote adaptation to a stressor. Research regarding allostatic systems within the human body suggests that a variety of allostatic systems help people cope effectively with environmental stress. Nonetheless, these allostatic systems can

lead to disease or distress when they are overused or fail to shut off after exposure to a stressor (McEwen, 1998).

Sleep quality may often be measured with an assessment of insomnia symptoms; Insomnia is a categorical sleep disorder that is defined in the Diagnostic and Statistical Manual of Mental Disorders as dissatisfaction with sleep quality or sleep quantity associated with difficulty initiating sleep, maintaining sleep or early morning awakenings with an inability to return to sleep. (Association, 2013). Additional symptoms of insomnia include clinically significant distress or impairment in an important area of functioning, a problem frequency of at least three months, and difficulty despite adequate opportunity for sleep.

Workplace performance also known as Job performance provides an example of a set of outcomes that can be negatively predicted by workplace sleepiness.(Rosa,1991) and job demands (Gilboa, 2008) and positively predicted by support (Beehr, 2000) and job control (Bond, 2003).Although multiple models of job performance exist (Viswevaran 2000), a distinction between the two aspects of performance, task and contextual, is widely supported (Borman 1997). Task performance describes the effectiveness with which an individual performs activities that contribute to an organizations ethical core and contextual performance describes how effectively an individual contributes to the organizational environment that catalyzes the task activities. Organizational Citizenship Behavior or OCB represents a frequently measured example of contextual performance (Organ, 1997). OCB is often defined as behavior not directly recognized by formal reward systems that contribute to organizational effectiveness.

Cognitive deficits associated with sleepiness represent explanations for the effects of sleepiness on task performance. Across many studies, short-term sleep deprivation of one day in length has been found to dramatically reduce speed and accuracy scores on measures of simple

attention, complex attention, working memory, processing speed, short-term memory and reasoning (Lim J, 2010).The cognitive capabilities impaired by insufficient sleep overlap substantially with the abilities deemed fundamental by job analysts (Costanza, 1999). The theoretical importance of sleep to performance of cognitive tasks draws empirical support from meta-analytic findings showing sleep loss to greatly increase the risk of error for medical residents (Philibert, 2005). Although sleep related cognitive deficits represent a clear influence on task performance, several possible mechanisms have been proposed through which sleepiness may affect organizational citizenship behavior. Research suggests that impaired self-regulation can alter social decision-making in the workplace (Barnes, 2012). More recent findings show that losses in job satisfaction associated with sleepiness represent another mechanism that can explain the relationship between sleepiness and OCB performed towards the organization (Barnes, 2012).This indicates affective reactions associated with sleep have implications for explaining job performance outcomes.

Hypotheses

1. Sleep quality and psychological wellbeing are significantly related
2. Psychological wellbeing and work performance are significantly related
3. Sleep quality is significantly related to work performance

Chapter Three

Methodology

Research Design

This study adopted a correlational research to find out the relationship between Sleep quality, Psychological Wellbeing and Work performance.

Target Group

The population for this study consisted of employees working in different fields and work spaces in Uganda. It encompassed different adult groups including older working adults. These included both females and males.

Sample size

The study consisted of 87 respondents both male and female who were employees. A simple random technique was used to select respondents for participation, where a subset of individuals from a large population was chosen randomly and entirely by chance so that the probability of being chosen at any stage of the sampling process was the same for each individual.

Instruments and Measures

My study used a self –administered questionnaire. The questionnaire was divided into 4 sections. Section A included sleep quality items. Section B had psychological wellbeing items based on the Ryff's psychological-wellbeing scales. Section C included work performance items from scholarly articles and Section D included the respondents' background information items such as age, sex, gender, education level, tenure.

Procedure

The researcher obtained an introductory letter from school of psychology that acknowledged his intention to carry out the study. Once permission was granted, the researcher explained to the respondents the importance of the research before administering the questionnaire. Confidentiality and anonymity were assured to the respondents. Questionnaires were then administered, those filled immediately were collected and those not were collected at a later date. The researcher later collected the filled questionnaires and data analysis started. Finally, a report was made.

Ethical Consideration

At the onset of data collection, the researcher sought permission from the management of the selected organization to carry out the study. In addition, the researcher also sought for consent from the target respondents. The respondents were further assured for confidentiality of the information provided and that the study findings were to be used for academic purpose strictly.

Data Management

The study employed a 6-point Likert scale with 1 as never and 6 as always for sleep quality using the Pittsburg sleep quality index (Buysse, Reynolds, Monk, Berman, 1989). A 6-point Likert scale was used with 1 as strongly disagree and 6 as strongly agree for psychological wellbeing, (Ryff's Psychological wellbeing scales,1989). A 6-point Likert scale was used with 1 as Seldom and 6 as Always for Work performance.

Data Analysis

Data from the respondents was coded and analyzed using Statistical Package for Social Scientists (SPSS). Frequency tables were further generated to analyze the respondents 'bio data

and other information about the variables. Pearson's product correlation coefficient was used to establish the relationship between variables.

Anticipated Problems

The researcher encountered a problem of low responses from employees, in answering items in the questionnaires.

The researcher anticipated the respondents to be very busy thus limited time to respond to the questionnaires.

Chapter Four

Research and Interpretation

Introduction

This chapter covers the results of the data collected and the interpretation of the findings in relation to the hypotheses. Pearson Product Moment Correlation Coefficient was used to examine the relationship between sleep quality, psychological wellbeing and work performance among employees.

Respondents Background Information

The background information of the sample population of respondents was presented in terms of gender, age, years spent in the job, years spent in the organization, job title, position level, qualification as presented in the table below.

Table 1. Respondent Characteristics

Variable	Levels	Frequency	Percentage
Gender	Male	40	46.0
	Female	47	54.0
	Total	87	100.0
Age	20-29	49	56.3
	30-39	32	36.8
	40-49		6.9
	Total	87	100.0
Years spent in job	0-4	52	60.5
	5-9	24	27.9
	10-14	4	4.7
	15-19	4	4.7
	20-24	2	2.3
	Total	86	100.0
Years spent in the organisation	0-4	73	84.9
	5-9	10	11.6
	10-14	3	3.5
	Total	86	100.0
Job Title	Nursing Officer	62	71.3
	Application Specialist	3	3.4
	Education Officer	11	12.6
	Photographer	7	8.0
	Data Analyst	1	1.1
	Electrical Engineer	3	3.4
	Total	87	100.0
Position level	Top level Management	2	2.3
	Middle level management	13	14.9
	Lower level management	43	49.4
	Frontline supervisory job	12	13.8
	Has no supervisory tasks	17	19.5
	Total	87	100.0
Highest level of education/Qualification	Certificate	1	1.2
	Diploma	40	46.5
	Bachelor's Degree	40	46.5
	Post-graduate Diploma	3	2.3
	Master's Degree	3	3.5
	Total	87	100.0

Table 1 above shows that majority of the respondents were female (54.0%) and the least respondents were male with (46.0%). Majority of the respondents were relatively young employees aged 20-29 years (56.3%) and 30-39 years (36. 8%).Only 6.9% were aged above 40 years.

Most of the participants (59.8%) have been in the job for less than 5 years; and only 2.3% of the participants had been in the job for 20 years. Similarly,83.9% of the participants had been in their respective organizations for less than 5years and only 3.4% had been in the organization for 10 years and above.

Concerning the job titles,71.3% of the participants were nursing officers, 12.6% education officers, and only 1.1% data analyst. Results further show that majority of the respondents had a degree as their highest level of education as well as a diploma with 46.5%. The least number of respondents had a post graduate diploma with 2.3%.

Results in table 1 above, show that the majority of respondents were of lower level management (49.4%), followed by those with no supervisory tasks (19. 5%).The least number concerning level of management was that of top level management with a 2.3% percentage.

Table 2. Correlations among study variables

		1	2	3	4	5
1	Sleep quality	1				
2	Psychological wellbeing	.249*	1			
3	Work performance	.327**	.420**	1		
4	Task	.359**	.425**	.888**	1	
5	Contextual performance	.260*	.363**	.949**	.696**	1

*. Correlation is significant at the 0.05 level (2-tailed).

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

Hypothesis 1 stated that there was a significant relationship between sleep quality and psychological wellbeing among employees. Results in Table 2 confirms the hypothesis that there is a positive significant relationship between sleep quality and psychological wellbeing given that ($r = .25$, $p < 0.05$). Therefore, the hypothesis is confirmed.

Hypothesis 2 stated that there was a significant relationship between psychological wellbeing and work performance among employees. Results in Table 2 show that there was indeed a significant positive relationship between psychological wellbeing and work performance given that ($r = .42$, $p < 0.01$). Therefore, the hypothesis is retained.

Hypothesis 3 stated that there was a significant relationship between sleep quality and work performance among employees. Results in Table 2 show that there is indeed a significant positive relationship between sleep quality and work performance given that ($r = .33$, $p < 0.01$). Therefore, the hypothesis is confirmed.

Chapter Five

Discussion, Conclusions and Recommendations

Introduction

This chapter consists of discussions of the results from the study, conclusions drawn from the study and recommendations suggested according to the findings of the study. Discussions are from the findings made from the data presented and interpreted in chapter four. The conclusions and recommendations made are for future research and those involved in the teaching sector.

Sleep Quality and Psychological Wellbeing

As shown by the results there is a significant positive relationship between sleep quality and psychological wellbeing. This implied that a high level of sleep quality experienced by the employee consequently affected levels of psychological wellbeing of the employee. These results were found to be supported by the following body of literature.

Aside from its ties to physical health, sleep quality plays an important role in psychological wellbeing in later life. Research has repeatedly shown a positive relationship between good quality sleep and psychological wellbeing (Foley, 2004). In particular, Manichean, Keller, and Ware (2001) studied sleep in chronically ill adults and found that individuals who lacked sleep problems reported a better overall quality of life compared with those who had trouble sleeping or suffered from a sleep disorder.

The findings of the study also show that if sleep deprived, employees will suffer both physical and mental problems. A lack of sleep can have a significant impact on mental health, playing a role in depression, anxiety and moodiness. Although aspects of sleep duration may relate to affective consequences, a person’s typical sleep duration may also relate to the

eudaimonic facets of wellbeing. The eudaimonic model of psychological wellbeing relates to self-development and purposeful engagement (Ryff, 1989), indicating that psychological wellbeing reflects a value of continued personal striving that would necessitate energetic engagement enhanced by optimal sleep.

According to (Brim, 2004), dimensions of psychological wellbeing have been found to correlate with various demographic characteristics including age, sex, ethnicity and level of education attainment. Higher levels of psychological wellbeing were correlated with lower hostility, depression, anxiety and fewer physical symptoms as well as relaxation (Ruini, 2003). As at least as early as Benjamin Franklin, it has been believed that sleep is an important determinant of health, success and psychological wellbeing.

As the research indicates, the eudaimonic model of psychological wellbeing consists of six dimensions: self-acceptance, maintaining positive attitudes about oneself ;positive relations with others, the ability to sustain healthy social relationships; autonomy ,psychological independence; environmental mastery, the ability to create an environment consistent with one's needs; purpose in life, maintenance of a sense of direction and meaning; personal growth, or a desire for continued personal growth.

Indeed, the data collected suggests that optimal sleep has a significant important relationship to psychological wellbeing. Employees with optimal sleep reported fewer symptoms of anxiety and depression, they also reported higher levels environmental mastery, personal growth, positive relations with others and a greater purpose in life. According to (Zohar, 2005),he characterizes sleep as an energetic resource, places sleep within a self-regulatory framework that has direct relevance to the eudaimonic model of psychological wellbeing(Ryff, 1989).

It is not difficult to imagine that on a day to day basis, feeling well rested and energetic is related to accomplishing important personal goals, relates to a sense of mastery, self-actualization, better social relationships and a belief that there is purpose. Also other hedonic aspects of wellbeing like positive affect, mindfulness, affective complexity (Zautra, 2003), goal directedness and hope (Synder, 2005) indicate that sleep relates to functioning and is an important component of resilience enabling people traverse life's ups and downs with the required energy to meet demands along the way.

Psychological Wellbeing and Work performance

The study findings show that psychological wellbeing and work performance are positively related and have a significant relationship. This therefore implies that high levels of psychological wellbeing shall lead to high levels of work performance. The findings were found to be in line with:

There is evidence that psychological wellbeing is related to performance. Work performance can be defined in terms of whether employee behaviors contribute to organizational goals. This includes in-role performance, or those behaviors necessary for a person to fulfil their formal organizational role, usually stated in the job description. Employee wellbeing is greatly embedded in a system of social exchange among supervisors, subordinates, and coworkers (Kim, 2016), and for that reason is facilitated and constrained by support from supervisors and coworkers. It implies that employees' satisfaction with supervisors and colleagues allows them to obtain feelings of empathy, respect and trust (Haider, Fernandez-Ortiz, & de Pablos, 2017) which lead to greater psychological wellbeing (Kim et al., 2016).

The happy/productive worker hypothesis (Lucas & Diener, 2003) suggests that psychologically-well people perform better (Wright & Cropanzano, 2004). Organizations' ability

in minimizing work-life conflicts enables them to create a positive psychological capital in their employees which enhances their creative performance (Hau, 2015). Positive emotions emerge from many internal and external forces, and one of them is work life balance (Pradhan, 2016).

Wellbeing was found to be highly correlated with the employee's ability to perform well at their workplace. Employees with higher wellbeing were reported to be more productive and having better psychological and physical health compared to those with lower wellbeing. Employees showing a good wellbeing have proven to be more productive and able to promote organizational effectivity when compared to others who show a lower level of wellbeing (Diener, 2000).

The organizations' performance and productivity are tied to the performance of its employees (Shin, 2017). Much evidence has shown the value of employee performance (i.e. the measurable actions, behaviors and outcomes that employee engages in or bring about which are linked with and contribute to organizational goals (Viswesvaran, 2017) for organizational outcomes and success (Al Hammadi, 2019), which, in turn, has led scholars to seek to understand what drives employee performance. Personality traits (Tisu, 2020), job conditions and organizational characteristics (Diamantidis, 2019) have all been identified as critical antecedents of employee performance.

In his study on wellbeing of employees and its link with work, (Baptiste, 2008) found that HRM practices has a strong impact on wellbeing of employees at work and they tend to be more positive than negative. Wright and Cropanzano (2000) in their research on psychological wellbeing and job satisfaction as predictors of job performance found that psychological wellbeing was related to job performance.

Sleep Quality and Work performance

The results of the study show that sleep quality is significantly related to work performance. This implies that high levels of sleep quality experienced by the employee shall consequently affect levels of work performance. The researcher found that the following literature was in line with their findings;

According to (Krauss, Chen, DeArmond&Moorcraft's, 2003) model identified sleep as a variable that transmits the effects of individual and organizational antecedents to individual and organizational –level consequences. Mullins and colleagues (2014) argue that the effects of sleepiness on these outcomes are exerted through the physiological processes that are closely tied to sleep quality and sleep quantity.

Activities like information processing, suffers considerably as sleep deprivation increases (Hiesh&Tsai, 2009), which leads to reduced task performance (Dean, 2010) and increased work place accidents (Kling, McLeod&Koehoorn, 2010). Workers with sleep problems may intuitively recognize that their work productivity decreases due their disrupted sleep (e.g. absenteeism and reduction of labor efficiency). Poor sleep has been shown to increase turnover cognition (Rogers&Kelloway, 1997) and work-family conflict (Lallukka Rahkonen, 2010)

Sleep quality also has implications on the number of performance outcomes, such as task performance, contextual performance, and safety behavior. Affect and cognitive resources (Shockley&Rossi, 2012) have been frequently identified as predictors of task performance. For contextual performance like (organizational citizenship behaviors), impaired self-regulation (Barnes, 2012) and losses in job satisfaction associated with sleepiness (Barnes, 2013) have been identified as potential mechanisms to explain the effects of sleep. With respect to safety,

employees who lack motivation and have depleted cognitive resources are substantially more likely to experience accidents or injuries (Christian&Burke, 2009).

Conclusion

The study aimed at examining the relationship between sleep quality, psychological wellbeing and work performance among employees. Results of the study showed that sleep quality is positively related to psychological wellbeing. Sleep quality was also found to be positively related to work performance. Finally, psychological wellbeing was found to be positively related to work performance. This implied that for better psychological wellbeing and work performance, employees should have good sleep quality.

Recommendations

The following recommendations were made by the researcher with regards to the findings of the study;

Organizations should strive to look toward the implementation of flexi-hours of work. This in turn will help employees have adequate hours of sleep and thus increase their levels of productivity. Since has an optimal sleep quality has been shown to reduce levels of absenteeism and increase labor efficiency.

There should be provision of Employee Assistance Programs by offering work based educational programs that increase awareness of the detriments associated with long work hours and sleep problems as well as dedicating resources to treatments for sleep disorders in their employees. Reduced absenteeism, increased productivity and fewer occupational accidents are just a few of the potential benefits employers may realize from such programs. As the results of the study showed that where there is poor sleep quality is perceived stress.

Organizations should also consider providing psychological treatment including stimulus control therapy, relaxation training and cognitive-behavioral interventions. Through increasing focus on sleep measurement and intervention, organizations have the opportunity to be leaders in promoting a healthier, more satisfied and more productive society. This will ensure higher levels of employee engagement and increase organizational citizenship behaviors since the employees realize that the organization has their best interest in mind.

Policy makers like the International Labor Organization, Worker's Union and other government organizations should come up with effective realistic policies of promoting employee wellbeing and work performance.

Future research should take into consideration the timing in which data is collected from respondents. This implies that, if research covers a time period, then it's better to gather the information then. This is to do with the respondent's feelings and beliefs at the time.

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Appendices

Appendix I: Questionnaire

Dear participant, you are invited to participate in this study which focuses on the effects of sleep quality and psychological wellbeing on work performance of employees. Your participation will involve completing the survey questionnaire below. The questionnaire takes 10 - 20 minutes. Your responses will be kept anonymous and confidential. Work through the items below quickly. You should often go with your first instinctive response that comes to your mind when you read the item.

Sleep Quality

On a scale of 1 – 6, where 1 = never, 2 = seldom (occasionally), 3 = sometimes (several times per month), 4 = often (1–2 times per week), 5 = most of the times (3–4 times per week), and 6 = always (5 times or more per week; indicate how often have you been bothered by the following complaints during the past three months.

Have you been bothered by the following complaints during the past three months . . .		**1**	**2**	**3**	**4**	**5**	**6**
SQ1	felt sleepy during work						
SQ2	sleepy during leisure time						
SQ3	involuntary dozing off at work						
SQ4	involuntary dozing off during leisure time						
SQ5	need to fight sleep to stay awake						
SQ6	tired in the head during day time						
SQ7	difficulties falling asleep						

SQ8	repeated awakenings with difficulties falling asleep again						
SQ9	premature awakenings						
SQ10	disturbed/restless sleep						
SQ11	difficulties waking up						
SQ12	not well-rested on awakening						
SQ13	feelings of being exhausted at awakening						
SQ14	heavy snoring						

Psychological Wellbeing

On a scale of 1-6 where 1= 'Strongly Disagree and 6 = 'Strongly Agree'; indicate your level of agreement or disagreement with the following statements

No	**Statements**	**1**	**2**	**3**	**4**	**5**	**6**
PWB1	I tend to be influenced by people with strong opinions						
PWB2	I have confidence in my opinions, even if they are contrary to the general consensus						
PWB3	I judge myself by what I think is important, not by the values of what others think is important						
PWB4	In general, I feel I am in charge of the situation in which I live						
PWB5	The demands of everyday life often get me down						
PWB7	I think it is important to have new experience that						

	challenge how you think about yourself and the world						
PWB8	For me, life has been a continuous process of learning, changing, and growth						
PWB9	I gave up trying to make big improvements or changes in my life a long time ago						
PWB10	Maintaining close relationships has been difficult and frustrating for me						
PWB11	People would describe me as a giving person, willing to share my time with others						
PWB12	I have not experienced many warm and trusting relationships with others						
PWB13	I live life one day at a time and don't really think about the future						
PWB14	Some people wander aimlessly through life, but I am not one of them						
PWB15	I sometimes feel as if I've done all there is to do in life						
PWB16	When I look at the story of my life, I am pleased with how things have turned out						
PWB17	I like most aspects of my personality						
PWB18	In many ways, I feel disappointed about my achievements in life						

Work Performance

Task Performance

On a scale of 1-6 where 1= 'Seldom' and 6 = 'Always', indicate your level of engagement in the following,in the past 3 months

No	Statements	1	2	3	4	5	6
TP1	I managed to plan my work so that it was done on time						
TP2	My planning was optimal						
TP3	I kept in mind the results that I had to achieve in my work						
TP4	I was able to separate main issues from side issues at work						
TP5	I was able to perform my work well with minimal time and effort						
TP6	Collaboration with others was very productive						

Contextual performance and Counterproductive work behaviour

On a scale of 1-6 where 1= 'Seldom' and 6 = 'Always', indicate your level of engagement in the following,in the past three months

No	Statements	1	2	3	4	5	6
CP1	I took on extra responsibilities						
CP2	I started new tasks myself, when my old ones were finished						
CP3	I took on challenging work tasks, when available						
CP4	I worked at keeping my job knowledge up-to-date						

CP5	I worked at keeping my job skills up-to-date						
CP6	I came up with creative solutions to new problems						
CP7	I kept looking for new challenges in my job						
CP8	I actively participated in work meetings						
CWB1	I complained about unimportant matters at work						
CWB2	I made problems greater than they were at work						
CWB3	I focused on the negative aspects of a work situation, instead of on the positive aspects						
CWB4	I spoke with colleagues about the negative aspects of my work						
CWB5	I spoke with people from outside the organization about the negative aspects of my work						

Personal Information

1. Your age (in years): _____
2. Your gender: Male □ Female □
3. Years spent in your job: _____
4. Years spent in this organization: _____
5. Industry sector: what's the main business of the company (tick only one that is most appropriate)

a. _____ Academic or educational
b. _____ Health related
c. _____ Business or trade
I _____ Tourism
j. _____ Engineering
k. _____ Development consultancy

d. _____ ICT
e. _____ Banking/ financial services
f. _____ Legal
g. _____ Hotel or foods
h. _____ Transport
l. _____ Government work
m. _____ Politics
n. _____ Community/ social service
o. _____ NGO
p. _____ Other

6. Job title _____

7. Which of the following best describes your position in the organization? (tick the appropriate option)

a. _____ Owner of the company
b. _____ Top level management
c. _____ Middle level management
d. _____ Lower level management
e. _____ Front-line supervisory job
f. _____ Has no supervisory tasks

8. Highest level of education/ qualification:

Teaching Certificate □ Diploma □ Bachelor's Degree □ PGDE □ Master's Degree □ Ph.D. □

The End

Thank you for participating