POOMS
MANAGEMENT

Volume 1 - Issue 1 - October, 2024

www.pooms.org/management

Articles

Exploring Bitcoin's Adoption & its Correlation with the Dollar, Gold & the Nasdaq Composite Index

See Page 38

Articles

The Role of Motivational Factors on Employees' Performance in Cameroon

See Page 63

Articles

The Impact of Work Shift on Job stressors & Burnout & their Effect on Employee Performance

See Page 119

Publication Regularity: Bi-Annually (April & October)

Inaugural Issue

VOLUME 01 | ISSUE 01

Table of *Contents*

From The Editor

This inaugural issue of POOMS Management heralds an exciting new chapter in the field of management. With a commitment to fostering rigorous & practitioner -relevant research, this journal aspires to bridge the gap between academic inquiry and practical application, contributing to the advancement of management science & practice. Our first issue features a diverse selection of articles that explore innovative perspectives & tackle pressing challenges within the domain of management.

Articles

Language

English

Journal Contact

POOMS Publishing
Stratworth Group LLC
30 N Gould St. STE 4000
Sheridan, WY 82801, USA.

Submission Inquiries
Phone: +1 (307) 218-9160
Email : submission@pooms.org

The Role of Green Human Resource Practices on Environmental Aesthetics in the Hotel Industry: A Case Study of *Protea Hotel Benin City Nigeria.*

Igwe Chimezie Leo[1], Asieh Akhlghimofrad[2]

Abstract

Green human resources management (GHRM) has proven its importance in most sectors of the economy globally both public and private. Its major impact is in the hospitality industry especially in hotels. In addition, the application of green human resources management practices is typical of an organization's environmental awareness and responsibilities. In accomplishing this task relevant stakeholders must put in concerted effort including time and resources to achieve the desired task. This research paper aims to analyze the role GHRM plays in environmental aesthetics in the Hotel industry. In understanding the impact, environmental sustainability, green recruitment and appraisal, green training and development, green business as well as green compensation and motivation were reviewed from related literature. The study revealed that green human resources management goes beyond environmental sustainability as its application in everyday life has reshaped consciousness of all which has further positively increased growth in other sectors of the economy.

Keywords: Green Human Resource Practice, Green Human Resource Management

Introduction

Most Businesses today traditionally believe that "going green" which entails a consideration of environmental challenges into business strategy is expensive. Irrespective of the cost implication of going Green, it is becoming clear, however, that not taking care of the environment will bring costs of its own, and that businesses that fail to go green will pay somehow for it in the future. (Van Der Zee, 2008). Going Green today is no longer under consideration but a process that the society strives to achieve to restore the natural ambience which over the years have been eroded by both industrial and human activity. Homes are going green, offices are going green, Parks are going green, institutions of learning are going green, restaurants are going green, Hotels are going green etc. Going green is now an everyday affair which contributes immensely to business growth because greening the environment attracts potential customers occasioned by the ambience it reflects.

Green Human Resource Management (GHRM) as a Human Resource Management (HRM) activity aims at improving on environmental outcomes. The core strategy of GHRM to provide the template to check environmental challenges societies tend to encounter. Business organizations around the globe make concerted effort to ensure staff imbibe workplace green behavior to help reduce factory and office emissions. Through greening the effects of global climate change brought about by workplace emission which further depletes the ozone layer, can be checked as well as introduction

Statement of the Problems

Environmental degradation has been a source of concern to most developing countries around the globe in recent years. Common amongst these environmental issues are air pollution, water pollution, land pollution, deforestation etc. These negative environmental activities have taken a serious toll on the natural ambience as well as natural habitat in most societies in these countries.

Prominent amongst sectors of the economy that contribute to these environmental degradation is the Hotel Industry. Hotels in most regions of developing countries consume so much energy like water, Electricity, coupled with emissions from electricity generating plants and as such the need to imbibe green practices cannot be overemphasized. (Kuo et al, 2019).

It is evident that most Hotels prior to the greening of our environment have been plagued by business downturn occasioned by lack of patronage from prospective customers that fashion general ambience before seeking for any reservation. This thesis is aimed at highlighting the importance of Greening in Hotel management and business growth.

Research questions

Prior to recent times now, the successes of organizations are measured by their annual profit declaration during Annual general meetings. The story is different today because most organizations target financial earnings through conversion of waste to reusable energies as well as other streams of income. Hence environmental management and sustainability more recently is the drive of most organizations today and this falls under the responsibility of Managers and employees. (Sobaih, 2019). The basic questions this thesis tends to answer are:

i.) Does Greening have any impact on environmental sustainability in Hotels?

ii.) Is there any positive relationship between GHRM and business growth in Hotels?

III) How well can the Practice of GHRM impact on staff Motivation?

Significance of the Study

Findings from this study will help to sensitize and reverberate the importance of keeping our environment green. It will not only assist Management of Hotels, but will also reposition the mindset of prospective Hoteliers. It would be agreed that our landscape has been reshaped over the years by the action of rain water, uneasy earth movement which is mainly caused by industrial activities, land pollution and the rest of it all. The attendant benefit of Green Human Resources practice cannot be overemphasized, hence Management of Hotels will cash in benefit of the findings to reposition their set goals.

Literature Review & Hypothesis Development

The Environment has finally been given a seat at the boardroom table. Companies around the globe that were known for exploitation activities that have a negative effect on the environment are joining the crusade, as they try to cope with the depth and speed of the upheaval environmental issues are having on their business. What you hear at boardroom meetings is “Let’s Go Green” (Phyper and Maclean, 2009).

The global goals of financial stability and economic growth must be embedded in a broader set of objectives that recognize the need to simultaneously reduce climate risks and stabilize communities in the increasingly difficult effort to secure human existence in the context of public and planetary health. The growing climate degradation with its attendant threats of pandemics(like the Covid-19) pose a monumental challenge that requires a concerted large-scale effort by humanity to reduce greenhouse gas emissions to net zero while protecting human communities, ecosystems and wildlife. Considering the status of our planet, it is evidently clear we cannot continue with our pattern of living, constantly and recklessly abusing our natural resources as if their supply is infinite. We collectively pollute the air, the waterways, and the earth beneath our feet, as if this will not have any consequences for natural environments that sustain us or for our own health (Savarimuthu et al, 2022).

Businesses are realizing more and more how crucial it is to monitor and regulate their economic, social, environmental, and organizational performance. Internal considerations, including a management commitment to sustainability, may be the driving force behind the implementation of a company strategy to integrate social, environmental, and economic aspects. The majority of sustainability initiatives are the result of outside forces like laws, market needs, competition, or pressure from non-governmental organizations (NGOs). Limits on greenhouse gas emissions, for instance, will have an impact on the cost of energy and the goods, services, and industries that use it. Executives should evaluate their company plans to see if there are opportunities in emerging global markets for capital, carbon, cutting-edge technologies, and low-GHG goods and services. (Epstein and Buhovac, 2014).

HUMAN RESOURCE MANAGEMENT

Organizations around the globe whether big or small depend on various capital to drive their business. Capital literally are inputs to a particular business from start up as well as all through the lifespan of the business. Capital can come in the form of cash, equipment, machines or consumables which helps to generate income for the business. The only capital that is peculiar to all businesses is the human capital. No matter the digitization of businesses, at some point people are needed to carry out a specific function or role. Hence human capital is defined as achieving organizational effectiveness through the use of people's skills, education, knowledge, expertise and abilities (Patterson, 2023).

GREEN HUMAN RESOURCE PRACTICES AMONGST HOTELS IN NIGERIA

Over the past decade, the impact from climate change and global warming has led to environmental degradation. This is because of the harmful activities conducted on the natural environment by employees and various organizations, of which the hotel industry is part of. The overconsumption of energy and water, and the use of products and materials which are considered harmful to the environment. Lack of effective waste disposal mechanisms, and the inability to recycle, are all harmful to the environment. Globally, the hotel industry is a major employer of labor, therefore, to help mitigate these harmful practices, there is the need for the hotel industry in Nigeria to adopt green human resource development (Green HRD) practices (Osolaseet al, 2022).

Green Investment

Green Investment relates to activities of Companies that aim to protect the environment through reduction of environmental pollution, reduction of carbon emission, the use of alternative sources of energy, and conserving natural resources while doing business. It is part of its corporate social responsibility (CSR). Green investment and environmental practices play a key role in many areas, so firms need to respond to the growing concerns and challenges of stakeholders (Chitimiea et al, 2021).

The main external factors influencing green investment are, government pressure, competitors' pressure, customers' pressure, and suppliers' pressure. The government has a particularly important role to play in influencing companies to implement green investment by regulating policies and rules that force companies to be proactive and grow in harmony with the environment.

Green Products

However, a variety of factors related to environmental awareness influence a consumer's inclination to buy green items. The value of preserving the environment and the cost of eco-friendly goods have not changed. While price is still a determining factor in the purchase of environmentally friendly goods, customers are eager to buy sustainable products as long as the price is in a fair and typical range. (Chen et al, 2018).

Presently the focus of research is on development and commercialization of battery- powered electric vehicles, hybrid electric vehicles, and fuel cell electric vehicles, together with internal combustion engine alternatives such as compressed natural gas vehicles and ethanol- and methanol-fueled vehicles. Solar powered electric mini buses were showcased in a documentary in the Northern Part of Nigeria recently. Some examples of green products include, Green Buildings, Green Lighting, and Green household appliances. Emerging green products include green leasing, which includes energy efficiency, green car leases, green mortgages, and green property leases; other examples include green securitization, which is the combination of several small-scale loans to draw

Green Compensation and Motivation

Green compensation strategy as a tool for environmental improvement is when an organization aligns its processes with the global GHRM strategies and practices. It is aimed at producing sound green workplace initiatives, lifestyle initiatives as well as help in the reduction of carbon emissions. Green remuneration is made up of both monetary and non-monetary rewards that support long-term business goals and encourage environmentally friendly employee behavior. (Ahakwa et al, 2021; Susanto et al, 2022).

Employees are rewarded for achieving green goals (green pay and rewards) and for giving exceptional workers the chance to mentor others and take part in the organization's environmental management (green involvement). These benefits can be monetary or non-monetary. Above all, these specific GHRM practices will help organizations to fully stimulate the willingness and competence of employees to participate in green advocacy. (Cheng et al, 2022). Employees would therefore adopt behaviors that align with the company's green strategies if greening is integrated into HR procedures and regulations. When a company offers incentives for cutting-edge ecological performance or initiatives, employees are motivated to participate in environmentally friendly endeavors. It indicates that a company values the green initiatives taken by its employees. (Hameed et al, 2022). Understanding how

ENVIRONMENT SUSTAINABILITY AND THE FUTURE OF GREEN HUMAN RESOURCE MANAGEMENT

The uncommon smell of natural freshness of the air around rural communities remains the thrust of GHRM in the urban communities that have been ravaged by industrial activities and carbon emissions. These emissions have become part of our daily living. All living things—plants, animals, and humans—are fed and nurtured by a healthy environment. Both green spaces and the blue ozone layer are necessary for human health. A clean and fresh environment benefits not just the food we eat but also the water we drink and the air we breathe.

Every essential component of the ecosystem is a gift from a planet in good condition and functioning. As humans spend more time in their natural habitat, we get healthier and feel better. The activities of humans most recently have impacted negatively on the natural ambience of our World today. In addition to changing the environment and our way of life, the 20th century brought about many technological advancements that improved human lives throughout the world. However, it also brought about an unprecedented increase in population, consumption, energy use, waste and pollution, and the conversion of uncultivated land to agricultural use. (Open Government Licence, 2018).

Conceptual review

Although GHRM is widely recognized as important from a sustainability standpoint, little study has looked at GHRM in the context of hotels. A decade ago, research on GHRM in the hotel business began to take shape. This advancement offers a chance to design a fresh framework (Susanto et al., 2022).

The Hospitality sector in Nigeria most especially Hotels needs some guidance on how to fully incorporate Green practice their processes of service delivery. The reason being that green human resource management as a key to sustaining environmental aesthetics is still at its lowest. In achieving this, support is needed from various stakeholders and government agencies (like, Nigerian Tourism Development Corporation) responsible for compliance to rules, regulations or policies of Hotel Management. Such bodies have legal barking to enforce green policy adherence in the Hotel industry, which can lead to better sustainable performance. So it implies that the Government, Hotel Management, and Employees all have a role to play in the GHRM.

Green performance management which is achieved through Training and Development, compensation, Appraisal etc, highlights issues that are related to GHRM has shown to be effective in achieving sustainability in several industries, such as manufacturing, sports, tourism and hotels. The campaign on GHRM has not fully been implemented in the hospitality industry especially hotels as hotel management is yet to fully incorporate these practices into their set goals (Al-Hosaini and Rashid, 2022).

In the context of the hotel business, "green human resource management" refers to the extreme caution with which hotel management introduces services and goods that are both environmentally friendly and safer for visitors. (Sobaih, 2019). Green human resource practices are practices carried out by hotel management that helps it drive environmental performance. Green Human resource Planning, Like budgetary planning, Hotels draw up plans in achieving their Green human resource goals. This could be forecasting the number of employees, experience or skills needed for achieving their corporate environmental initiatives/programs etc. Also Planning can reveal the type of GHRP to engage in as regions differ. (Lakshmi and Battu, 2018).

Green Job Design; This pertains to job descriptions having green initiative. In green job descriptions, environmental tasks are included to make each employee aware that the whole of environmental sustainability in hotels is achieved through teamwork. (Sobaih, 2019). Human Resource Management; This pertains to standard organizational practices that must be embedded in achieving GHRM goals. These HRM practices are key in driving environmental sustainability.

Green Recruitment, Training and development; Green recruitment, training, development, appraisals, rewards etc are key drivers of GHRM. Green recruitment pertains to basic green activity skills employees must possess to be engaged by the organization. Generally, induction programmes of newly employed are aimed at making them familiar with the hotel atmosphere. In creating environmental awareness among all hotel members in all management levels as well as to improve the required knowledge and skills it is imperative that management engages in green recruitment, training and development etc (Molina-Azorin et al, 2021; Sobaih, 2019).

Green Selection; In the selection process of applicants for vacant positions, some companies, and in our context hotels, consider candidates that are already aware of workplace green behavior. When interviewing candidates for selection in hotels, questions which borders on environmental friendliness are frequently asked which forms the basis for a good green selection practice. Organizations can adopt environmentally friendly people in addition to the normal selection criteria relating to the specific duties of the job being advertised. (Lakshmi & Battu, 2018). Green performance management; hotels undertake green performance management by monitoring its environmental protection activities by assigning environmental targets and responsibilities to employees as well as evaluating their performance. Feedback is regularly transmitted to employees. Results of environmental performance appraisals are considered carefully. These results determine employees' bonuses, promotions, and commitment. (Pham et al, 2022).

Green Investments; Green Investment relates to activities of companies that protect the environment via reduction of environmental pollution and introducing the use of alternative sources of energy, and conserving natural resources while doing business. This forms part of the organization's corporate social responsibility (CSR). Green investment as part of GHRM plays a key role in many areas, enabling firms to respond to the growing concerns and challenges of stakeholders (Chitimiea et al, 2021).

Green Product; Green products are products that by their design make use of recycling resources or materials that improves environmental impact as well as reduces toxic damage throughout the entire life of the product. Green products have little or no impact on the environment when compared to its available alternatives. Green businesses and sustainable industries: In the process of conducting business, green firms—also known as sustainable enterprises—seek to strike a balance between the profits generated from operations and the ongoing stability of the environment and its inhabitants. However, given the current assessment of the immediate threat posed by climate change to our world, the green business economy has grown significantly over the past ten years and is still growing today as it is welcomed by workers, customers, investors, and other stakeholders. (G. Nagashybayeva, 2020).

Environmental Sustainability; Sustainability is considered the sustained competitive advantage in the modern business environment. The hotel industry is making efforts to contribute its quota to sustainable development goals (SDGs) which they consider as part of its corporate social responsibility (CSR). Thus the industry is making an effort to provide the best competitive environment to its visitors and applying various best approaches to satisfying them which has led to an intense competition among the hotel industry chains. (Iftikhar et al, 2021).

Methodology

One must decide whether the study goal can be achieved through qualitative, quantitative, or even a combination of the two methodologies when choosing the research techniques. For a very long time, both scientific and social sciences have employed these techniques. Deductive reasoning is common in quantitative research, when scientists gather data on a sizable sample to validate their theoretical claims and hypotheses. Because accurate results from quantitative research can only be acquired with a sample that accurately represents the population under study, sample selection is a crucial component of the research process. However, these drawbacks are intended to be addressed by qualitative research methods, which concentrate on a qualitative understanding of phenomena by gathering and analyzing opinions, attitudes, and beliefs. These studies involve a small sample and a comprehensive and in-depth examination of the subject under consideration; representativeness is not an objective. (Boncz, 2013).

The core research objectives are:

- ❖ Green Human Resource Management has an impact on environmental sustainability in hotels
- ❖ There exist a relationship between GHRM and Business growth in hotels
- ❖ GHRM practice has a positive impact on Hotel Staff Motivation

The Survey technique via questionnaire administration is proposed for the study. The survey shall target permanent employees of Protea Hotels Benin, Management of Protea Hotel Benin, Some staff of the Ministry of Environment as well as other persons having direct (Other hotels staff) or indirect (visitors or customers to hotels)

The QUANTITATIVE approach to research writing is employed using structured questionnaires. Making use of this approach will provide richer and forensic insights to our various viewpoints. The approach will make an effort to simplify the subject while ensuring that respondents possess a deeper understanding of the concept of GHRM in relation to aesthetics in the hotel industry.

Proposed Measure of the Study

A 20-item questionnaire is proposed to investigate the role of Green Human Resource management Practice on Environmental Aesthetic in Hotel Industry, leveraging on green performance management.

- A 5-item scale was adopted for Green Business Growth
- A 5-item scale was adopted for Green Compensation/Motivation
- A 5-item scale was adopted for Environmental Sustainability.

Using the Likert Scale: 1 - Strongly Disagree, 2 - Disagree, 3- Mildly, 4- Agree and 5- Strongly Agree

The Research design

The survey research technique is proposed which will be conducted via questionnaire administration. The google questionnaire is proposed which entails that there will be a systematic gathering of information from respondents so as to understand and further predict some parts of the behavior of the population.

Population of the Study

All potential components, individuals, or observations connected to a certain phenomenon of the researcher's interest make up a population. (Asika, 2009).

These elements or subjects can be determined through observation or physically counting them. A population of 200 respondents is proposed which will be drawn from customers of hospitality industries, employees and management staff of Protea Hotel, Benin City, Staff of Ministry of Environment, and customers to other likely 5 star hotels in Benin city.

Sampling procedure

An exploratory survey will be conducted which points to the fact that the basic data and the facts are known and seeks to find out why things are as they are. How do people perceive or what is their attitude towards green human resource management practices? How do they view the quest for Environmental sustainability? Are employees keying in to the goals of greening in hotels? Is the hotel performance or growth achieved through the practice of GHRM? Is there any impact as a result of policies of the government?

In drawing samples for the study, according to Kumar (2005). the following principles must be considered.

1. Principle one: in a majority of cases of sampling there will be a difference between the sample statistics and the true population mean, which is attributable to the selection of the units in the sample.
2. Principle two: the greater the sample size the more accurate will be the estimate of the true population mean.
3. Principle three: the greater the difference in the variable under study in a population for a given sample size, the greater will be the difference between the sample statistics and the true population mean.

Sample Size

The sample size shall be the number of identified customers to hotels in Benin City with reference to Protea Hotels, any other five star hotel or luxury suite or apartments, Employees and management staff of Protea Hotels, Benin City, employees of Ministry of Environment and some other top government functionaries.. A sample size of 150 respondents is proposed. The sample size will be denoted by *(n)*

The best formula (Slovin;s Formula) for determining the sample size with a known population is given below

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

where,

n = Sample size to be determined

N = Population of the study (N= 200)

e = Significant or permissible error; in our case 0.04

n = 200 / (1 + 200* $0.04^{2)}$

n = 200 / (1 + 200*0.0016)

n = 200/ (1 + 0.32)

n = 200/ 1.32

n = 151.52

Hence for ease of dealing with whole numbers a sample size of 150 respondents were chosen as well as adopting Kumar's Principle two, the greater the sample size the more accurately the population mean being estimated.

Sampling method

This research work shall focus on the probability sampling method which uses stratified sampling procedure. It is an applied random sampling that groups the entire population into a definite characteristic called strata (Asika, 2009). Our strata for the purpose of this research study shall be:

(a) Identified customers to Protea Hotel Benin City (over 2 years patronage) as well as customers to other hotels in the category of Protea Hotel, Benin City

(b) Full and contract employees of Protea Hotel, Benin City

(c) Management Staff of Protea Hotel, Benin City

(d) Some Employees and top government officials from the Ministry of Environment and other Ministries, Department and Agencies staff

(e) Other respondents

This study shall have a sampling frame of 30 respondents for each stratum for a proper analysis of the stratum so listed. The sampling frame is a list identifying each respondent in a particular stratum from another in the study population. (Kumar, 2005).

Data Sources

Primary source of data collection shall be via google questionnaire administration which shall cut across the respondents of the strata so listed in 3.6 above. Secondary sources of data shall be restricted to reviewed literature.

Research Instrument

A pre-designed or structured google questionnaire is proposed in collection of data for the purpose of this study. The choice of using the questionnaire for the purpose of this study is as a result of the unique characteristics it possesses. Some key attributes of the questionnaire includes:

Purpose: the purpose of this survey is to produce quantitative descriptions of some aspects of the study population. Our subject of interest here are Customers to Hotels (with reference to Protea Hotel, Benin City), Staff and Management of Protea Hotels Benin City, Employees from the Ministry of Environment etc.

Procedure: the main way of collecting information is sharing the google form to identified hoteliers, employees of Protea Hotel Benin City, other Hotel staff in the Category of Protea Hotel, employees of the Ministry of Environment, other government policy makers, and other respondents knowledgeable in green human resource management.

Analysis: information is generally collected about only a fraction of the study population, but it is collected in such a way as to be able to take a broader view of the whole population. (*Principle two*; Kumar).

Data Analysis methods

The survey techniques shall make use of simple percentage frequencies hence the chi-square **($X^{2)}$** non-parametric test tool is proposed. The data for the study shall be analyzed using the descriptive and inferential statistics.

The chi-square (X^2) is thus proposed for testing the relevant hypothesis of this study. Consequently the SPSS (Statistical Package for Social Science) shall be employed for analyzing the data collected.

Chi-Square (X^2) was used to determine the significance between the observed frequency and expected frequencies in the data set.

Cronbach's Alpha was employed to measure the relationship between the various categories of the research questions. It actually shows the internal consistency of the questions set

The P-values show statistical significance and an acceptable p-value rejects the null hypothesis at $P \leq 0.05$.

Results & Findings

In this chapter the entire survey which was encapsulated by the questionnaire is analyzed which includes demographics as well as responses from respondents with respect to addressing the research questions.

This research study tends to establish the overarching role of GHRM in environmental aesthetics in the hotel industry. Protea Hotel Benin, City Nigeria was the focus of the study. The Hotel which has branches in all major cities in Nigeria was chosen as it represents an epitome of green human resource management in the hospitality industry in Nigeria.

Outside the demographics, the questions were structured in sections as follows for ease of the analysis of data collection,

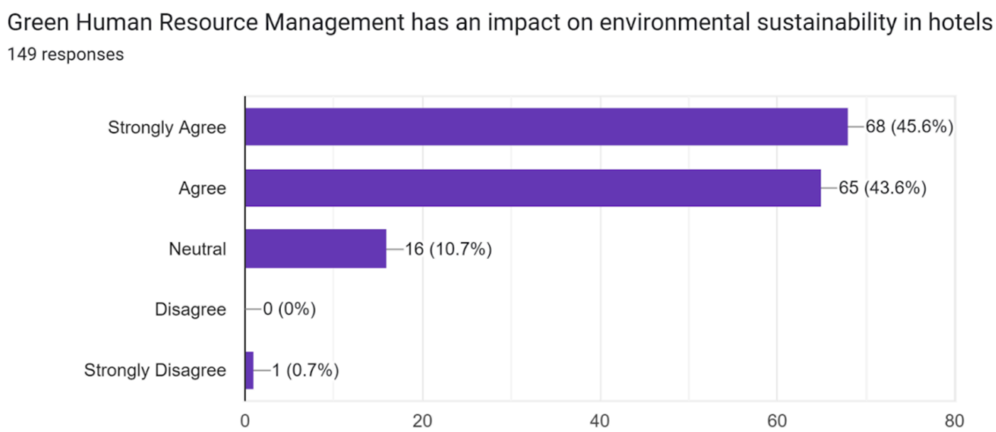
Knowledge about Green Human Resource Management .... (7)

The research objectives... (4)

We shall restrict our analysis of the responses to the demographics, knowledge about Green Human Resource practices as well as the research objectives

Analysis of Data on Research Hypothesis

On the research hypothesis the following analysis were carried out:

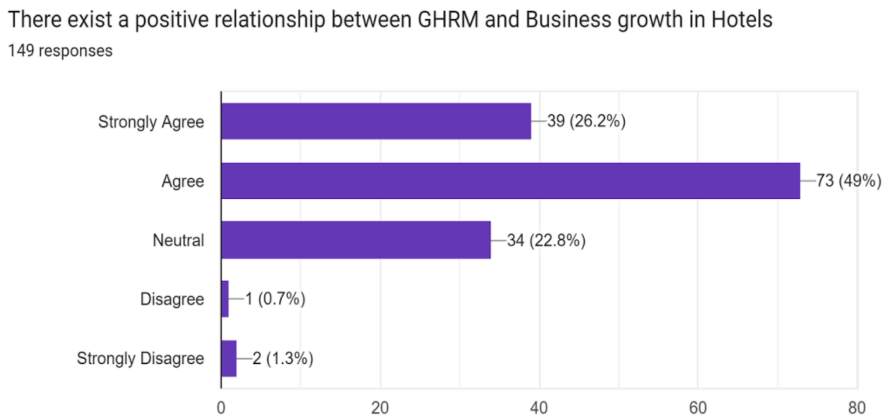


H1: Green Human Resource Management has an impact on environmental sustainability in Hotels

	Frequency	Percent (%)	Valid Percent	Cumm. Percent
SA	68	45.6	46	46
A	65	43.6	44	44
N	15	10.1	10	10
D	0	0	0	0
SD	1	0.7	0	0
Total	**149**	**100**	**100**	**100**

Table 4.16

On the impact of GHRM on environmental sustainability, 68 respondents representing 46% strongly agreed, 65 respondents which makes up 44% of the total respondents agreed, 15 respondents which is 10% were indifferent while a negligible 1 respondent and no respondent strongly disagreed and disagreed respectively.



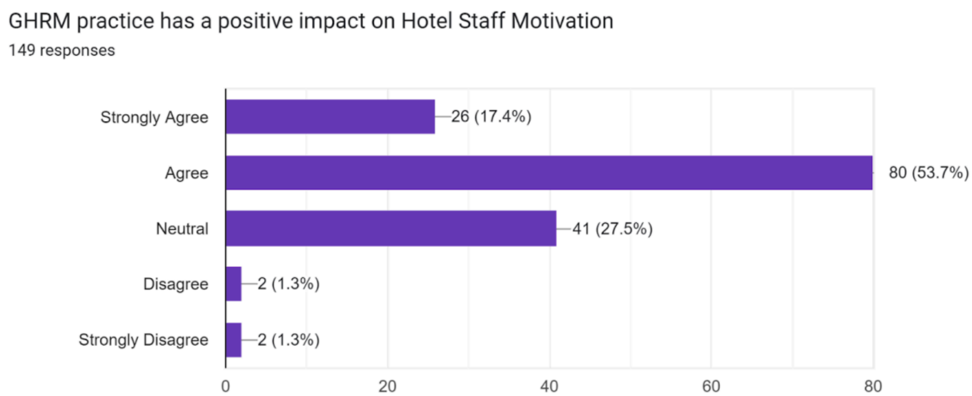
H2: There exist a positive relationship between GHRM and Business growth in Hotels

	Frequency	Percent (%)	Valid Percent	Cumm. Percent
SA	39	26.2	26	26
A	73	49	49	49
N	34	22.8	23	23
D	1	0.7	1	1
SD	2	1.3	1	1
Total	**149**	**100**	**100**	**100**

Table 4.17

39 respondents from the entire survey representing 26% strongly agreed that a positive relationship exists between GHRM and business growth.73 of them representing 49% agreed, 34 representing 23%

were indifferent while a negligible 1% each made up of 1 and 2 respondents respectively disagreed and strongly disagreed.



H3: GHRM practice has a positive impact on Hotel Staff Motivation

	Frequency	Percent (%)	Valid Percent	Cumm. Percent
SA	26	17.4	17	17
A	80	53.7	54	54
N	40	26.9	27	27
D	1	0.7	1	1
SD	2	1.3	1	1
Total	**149**	**100**	**100**	**100**

Table 4.18

Of the 149 respondents that participated in the survey, 26 representing 17% Strongly agreed that GHRM has a positive relationship with Hotel staff motivation, 80 representing 54% Agreed, 40 of them representing 27% where indifferent, 1 representing 1% disagreed while 2 respondents representing about 1% strongly disagreed.

Analysis and Results

The 149 respondents indicated their perception and level of agreement with questions related to the role of green human resource practices on environmental aesthetics in the hotel industry. The dependent variables are environmental sustainability, Business growth and Employee motivation measured against the independent variable, GHRM practices. The responses on the research hypothesis were rated with the 5-point likert scale from Strongly Agree- (5) to Strongly Disagree- (1).

Hypothesis Testing

$\mathbf{H_{ES}}$ = Green Human Resource Management has an impact on Environmental Sustainability

H_0 = Null hypothesis; GHRM has no impact on Environmental Sustainability

H_1 = Alternative hypothesis; GHRM has an impact on Environmental Sustainability

Observed Frequency (O)	68	65	15	0	1
Expected frequency (E)	44.3	72.7	29.7	0.7	1.7

Table 4.19

$$\chi^2 = \Sigma \frac{(O-E)^2}{E} \quad \text{.............................. EQ1}$$

Using the formula

$X^2 = (561.69)/44.3 + (59.29)/72.7 + (216.09)/29.7 + (0.49)/0.7 + (0.49)/1.7$

$X^2 = 12.68 + 0.82 + 7.28 + 0.7 + 0.29 = \mathbf{21.77}$

From the value gotten at df =(r-1)*(c-1) = 4 and 0.04 significant error from the chi-square distribution table is 10.026,

Since $\chi^2 \geq 10.026$ we reject the null hypothesis.

H_{BG} = There exist a positive relationship between between GHRM and Business Growth

H_0 = Null hypothesis; there is no relationship between GHRM and Business Growth

H_1 = Alternative hypothesis; There exist a positive relationship between GHRM and Business Growth

Observed Frequency (O)	39	73	34	1	2
Expected frequency (E)	44.3	72.7	29.7	0.7	1.7

Table 4.20

Applying EQ1 above

X^2 = (28.09)/44.3 + (0.09)/72.7 + (18.49)/29.7 + (0.09)/0.7 + (0.09)/1.7

X^2 = 0.63 + 0.001 + 0.62 + 0.13 + 0.05 = **1.431**

Since $\chi^2 \geq 10.026$ is false from the above it implies that there is no relationship between GHRM and business growth in hotels.

H_{SM} = GHRM has a positive impact on hotel staff motivation and Business Growth

H_0 = Null hypothesis; there is no relationship between GHRM and hotel staff motivation

H_1 = Alternative hypothesis; There exist a positive relationship between GHRM and hotel staff motivation

Observed Frequency (O)	26	80	40	1	2
Expected frequency (E)	44.3	72.7	29.7	0.7	1.7

Table 4.21

Applying EQ1 above

$X^2 = (334.89)/44.3 + (53.29)/72.7 + (106.09)/29.7 + (0.09)/0.7 + (0.09)/1.7$

$X^2 = 7.56 + 0.73 + 3.57 + 0.13 + 0.05 =$ **12.04**

Since $\chi^2 \geq 10.026$ is true from the above it implies that there exists a positive relationship between GHRM and hotel staff motivation.

Discussions

Explanation of Result

On Environmental Sustainability , the result obtained from the hypothesis testing clearly reveals that Management of Protea Hotel, Benin City are keen about the aesthetics of the hotel as efforts are channeled towards ensuring that GHRM practices are implemented from top to bottom. It implies that the management of Protea hotel Benin City invests so much in improving Employee Green Behavior in the hotel.

Conversely the GHRM practice is yet to translate to business profitability owing to the fact that, overhead cost of the application of GHRM practices outweighs the business opportunity or patronage. It is also not out of place to infer that customers sometimes find it an extra burden in adhering to simple laid down hotel green behavior, which include, proper waste management, room ethics, usage of appliances etc. They see it as an inconvenience adhering to these practices and prefer to visit hotels where these practices are downplayed. This seriously has affected the profitability of Protea Hotel, Benin City.

On the relationship between GHRM and Hotel employee motivation, it is evident that staff of Protea Hotel Benin City are being motivated by adoption of the hotel's green culture which would have been handed down during scheduled green training and development and as such now forms part of their attitudes.

Cronbach's Alpha for Reliability and Validity of GHRM

The Cronbach's alpha formula is given below as

$$\alpha = \frac{n}{n-1}\left(\frac{S^2_{vT} - \sum^{n} S^2_{vi}}{S^2_{vT}}\right) \text{ .... EQ2}$$

α = Cronbach's alpha

n = number of items in the scale

S_{vi} = variance of sum of each item

S_{vT} = variance of sum total of all items

Converting the Likert Scale items we have

SA= 5, A= 4, N = 3, D = 2 and SD = 1

Using our Test hypothesis as the independent variables for the 149 respondents

For $\mathbf{H_{ES}}$ = **GHRM** has an impact on environmental sustainability its variance via excel calculation gives **0.44694**

For $\mathbf{H_{BG}}$ = **GHRM** has an impact on Business growth of Hotels, its variance via excel calculation gives **0.587792**

For $\mathbf{H_{EM}}$ = **GHRM** has an impact on Hotel employee motivation, its variance via excel calculation gives **0.54943**

From the datasets from numerical value computation of the LIKERT scale, the Variance of the sum total of all observable items within the data set is given as

S^2_{vT} = **2.98812**

For each of the item scale, the Cronbach's alpha is given thus, using EQ2 above
$\mathbf{H_{ES}}$, α = 149/ 148 ((2.98812 - 0.44694)/2.98812)

= 1.007 (2.54118/2.98812)

= 1.007(0.85042)

α = **0.856**

$\mathbf{H_{BG}}$, α = 149/ 148 ((2.98812 - 0.58779)/2.98812)

= 1.007 (2.40033/2.98812)

= 1.007(0.80329)

α = **0.809**

$\mathbf{H_{EM}}$, α = 149/ 148 ((2.98812 - 0.54943)/2.98812)

= 1.007 (2.43869/2.98812)

= 1.007(0.81613)

α = **0.822**

Now calculating the **Cronbach's alpha coefficient** for reliability amongst the three item scale, we have,

α = 1.5 *(2.98812 - Sum $S^2_{v(i1,i2,i3)}$) / 2.98812

= 1.5* (2.98812 - (0.44694 + 0.58779 + 0.54943)) / 2.98812

= 1.5* (2.98812 - 1.58416)/2.98812

= 1,5* (1.40396/2.98812)

= 1.5*0.46985

= 0.705 ≈ 0.71

Cronbach's alpha coefficient is approximately **0.71** which represents the internal consistency.

Cronbach's alpha Coefficient Table for Green Human Resource Management

Independent Variables	Number of items	Crobach's alpha	Acceptability
$H_{Env.Sust}$	149	0.856	0.856>0.71 Acceptable
$H_{Bus.Growth}$	149	0.809	0.809>0.71 Acceptable
$H_{Emp.Mot}$	149	0.822	0.822>0.71 Acceptable

Table 4.22

4.9 Calculating the P- value for the Role of GHRM on Environmental Aesthetics in the Hotel industry

GHRM HAS AN IMPACT ON ENVIRONMENTAL SUSTAINABILITY

Observed Freq	68	65	15	0	1

Expected Freq	44.3	72.2	29.7	0.7	1.7
No. Of Rows	2				
No. Of Column	5				
Deg. Of freedom	4				
X^2 Test Statistic	21.77				
P- value	0.0002226915564				

Table 4.23

GHRM HAS AN IMPACT ON BUSINESS GROWTH

Observed Freq	39	73	34	1	2
Expected Freq	44.3	72.2	29.7	0.7	1.7
No. Of Rows	2				
No. Of Column	5				
Deg. Of freedom	4				
X^2 Test Statistic	1.431				
P-value	0.8387895681				

Table 4.24

GHRM HAS AN IMPACT ON HOTEL EMPLOYEE MOTIVATION

Observed Freq	26	80	40	1	2
Expected Freq	44.3	72.2	29.7	0.7	1.7
No. Of Rows	2				
No. Of Column	5				
Deg. Of freedom	4				
X^2 Test Statistic	12.04				
P-value	0.01705628056				

Table 4.25

From the tables above, it is reflective that GHRM impacts on Environmental sustainability and Hotel employee motivation with both having 0.00022 and 0.017056 values respectively which conforms with the acceptability rule of P-values I.e P >0.05.

Just like the chi-square test, GHRM does not significantly impact on Business Growth in Hotels which is clearly illustrated by its p-value (0.83879>0.05).

TABULAR REPRESENTATION OF ALL RESULTS

	X^2	Decision	α= Cronbach	Decision	P= Value	Decision < 0.05
H_{ES}	21.77	Reject H_0	0.856	Accept	0.0002226915564	**Significant**
H_{BG}	1.431	Accept H_0	0.809	Accept	0.8387895681	**Not. Significant**

H_{EM}	12.04	Reject H_0	0.822	Accept	0.01705628056	**Significant**

Table 4.26

Conclusions

This study explored the role of GHRM on environmental aesthetics in the hotel industry with reference to Protea Hotel, Benin City, Nigeria. From the research it was observed that hotel employees, Management staff, Staff of government agencies charged with responsibility of environmental maintenance as well as other individuals shared their perception of green human resource management practices. The study also reveals that a good number of visitors to hotels had little or no knowledge on the concept of greening. Also knowledge acquired on GHRM were through handbills and inscriptions on strategic places within the hotel complex. However, most of the staff lacked the required green skills, competencies, behaviors, attitudes, ethics, knowledge, education, and abilities to put into practice what is written on the handbills. To implement GHRM among employees in the Nigeria hotel industry, employees should constantly be trained and retrained in application of green practices.

It will enable employees to become knowledgeable on how to practically get involved in the implementation of GHRM, and not just merely reading it on paper.

The study outcome can therefore provide assistance for human resource executives, managers, practitioners, and organizational leaders in the hotel industry, on the approach to take towards the greening of its employees. Green training and development will help to improve its green human capital scorecard. (Osolase, 2022).

Bibliography

Ahakwa, I., Yang, J., Agba Tackie, E., & Asamany, M. (2021). Green Human Resource Management Practices and Environmental Performance in Ghana: The Role of Green Innovation. SEISENSE Journal of Management, 4(4), 100–119. https://doi.org/10.33215/sjom.v4i4.704 [Accessed Online]

Al-Hosaini A.E.Y and Rashid, N.A.B (2022). Conceptual Framework of Sustainable Green Human Resource Management (SGHRM) and its Effect on Sustainability in Green Building. *Journal of Tianjin University Science and Technology Vol: 55* Issue: 04:2022. Doi: 10.17605/OSF.IO/5DRXF [Accessed Online]

Al-Shammari, A.A; S. Aishammarei; N. Nawaz; M. Tayyab (2022). Green Human Resource Management and Sustainable Performance With the Mediating Role of Green Innovation: A Perspective of New Era Technologies. Frontiers in Environmental Science. Vol 10(1) 10.3389/fenvs.2022.901235, 1-12. https://doi.org/10.3389/fenvs.2022.90123 [Accessed Online]

Alkhodary, D. (2022). The Relationship Between Green Human Resources Management and Companies Wellbeing; A Study on Jordanian Companies; *Academy of Accounting and Financial Studies Journal.* Volume 26, Issue 1, 2022

Asika, N. (2009). *Research Methodology in the Behavioural Sciences;* Lagos: Longman Nigeria Plc

Bolorundoro, M., Akpa, V.O, Akinlabi, H.B and Magaji, N. (2022). Effect of Green Human Resource Management Practices and Green Work Life Balance on Operational Efficiency in Selected

Hospitality Firms in Lagos and Ogun States, Nigeria. *European Journal of Business and Innovation Research.* Vol.10, No.4, pp. 1-14, 2022. https://www.eajournals.org [Accessed Online]

Boncz, I. (2013) Introduction to Research Methodology, European Social Fund. Hungary [Accessed Online]

Cheema, S. and Javed, S (2017). The effects of Corporate Social Responsibility Toward Green Human Resource Management: The Mediating Role of Sustainable Environment. *Cheema & Javed, Cogent Business & Management* (2017), 4:1310012.http://dx.doi.org/10.1080/23311975.2017.1310012 [Accessed Online]

Chen, S., Chen, H. H., Zhang, K. Q., & Xu, X. long. (2018). A Comprehensive Theoretical Framework for Examining Learning Effects in Green and Conventionally Managed Hotels. *Journal of Cleaner Production,* 174, 1392–1399. https://doi.org/10.1016/j.jclepro.2017.10.321 [Accessed Online]

Cheng, Y.; Liu, H.; Yuan, Y.;Zhang, Z.; Zhao, J. (2022). What Makes Employees Green Advocates?: Exploring the Effects of Green Human Resource Management. *International Journal of Environmental Research and Public Health* 2022, 19, 1807. https://doi.org/10.3390/ijerph19031807 [Accessed Online]

Chitimiea, A.; M. Minciu; A.M Manta; C.N Ciocoiu (2021). The Drivers of Green Investment: A Bibliometric and Systematic Review. Vol 13, 3507. https://doi.org/10.3390/su13063507 [Accessed Online]

Diri, T.V and Elisha, O.D (2021). Green Human Resource Management: A Catalyst for Environmental Sustainability in Nigeria. *Journal of Global Ecology and Environment,*. Vol.11, No.3, pp. 9-27, 2021 [Accessed Online]

Dwivedi, R.K., Pandey, M., Vashisht, A., Pandey, D.K and Kumar, D (2022). Assessing Behavioral Intention Toward Green Hotels During COVID-19 Pandemic: The Moderating Role of Environmental Concern. *Journal of Tourism.* pp. 1-17, Emerald Publishing Limited DOI 10.1108/JTF-05-2021-0116 [Accessed Online]

Epstein, M.J and Buhovac, A.R (2014). Making Sustainability Work; Best Practices in Managing and Measuring Corporate Social, Environmental, and Economic impact. 2nd Ed. San Francisco, USA: Greenleaf Publishing [Accessed Online]

Fapohunda,T.M., Genty, K. I, and Olanipekun, L. O (2021). Green Training and Development Practices on Environmental Sustainability: Evidence from WAMCO PLC. *Journal of Educational Management & Social Sciences (JEMSS)* Vol 2, No. 1, 2021, Pp, 1 – 19, https://doi.org/10.48112/jemss.v2i1.139 [Accessed Online]

Farid, M. and El-Sawalhy, H. (2016). Green Human Resource Management in Hotels: Awareness and Implementation. *Journal of Association of Arab University Tourism and Hospitality* 2016, 13, 125–134. [Accessed Online]

Figueiredo, J.N and Guillen, M.F (2012). Green Products; Perspectives on Innovation and Adoption. Milton Park, Abingdon: CRC Press [Accessed Online]

Gberevbie, M. A. C., Adeniji, A. A., Oyewunmi, O. A., Onayemi, O. O., Ajalie, S. N. and Omotola, A. G.. (2022). Environmentally Sustainable Practices in the Hospitality Industry: Does Green

Recruitment Increase Employees' Pro-environmental Behaviour? *International Journal of Economics and Management Systems,* 7, 135-148 [Accessed Online]

Hameed R, Mahmood A and Shoaib M (2022). The Role of Green Human Resource Practices in Fostering Green Corporate Social Responsibility. Frontiers. Psychology. 13:792343. doi: 10.3389/fpsyg.2022.792343 [Accessed Online]

Hayes, M. and Jafri, W. (2020). Green Finance: Emergence of New Green Products to Fund Decarbonization. KPMG *International Cooperative.* [Accessed Online]

Ikhide, J.E, Ogunmokun, O.A & Chen, T. (2023): Restraints and Enablers of Green Initiative-taking among Hospitality Employees: A Mixed-methods Approach, *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2023.2201411, https://doi.org/10.1080/09669582.2023.2201411 [Accessed Online]

Inderst, G.; Kaminker, C.; and Stewart, F. (2012). Defining and Measuring Green Investments: Implications for Institutional Investors and Asset Allocations. In OECD *Working Papers on Finance, Insurance and Private Pensions;* OECD Publishing: Paris, France, 2012; p. 24. [Accessed Online]

Iftikhar, U., Zaman, K., Rehmani, M., Ghias, W. and Islam, T (2021). Impact of Green Human Resource Management on Service Recovery: Mediating Role of Environmental Commitment and Moderation of Transformational Leadership, Frontiers in Psychology Volume 12 - 2021 https://doi.org/10.3389/fpsyg.2021.710050 [Accessed Online]

Jamil. S., Zaman, S.I; Kayikci, Y. and Khan S.A (2023). The Role of Green Recruitment on Organizational Sustainability Performance: A Study within the Context of Green Human

Resource Management (Sustainability **2023**, *15*(21), 15567; https://doi.org/10.3390/su152115567) [Accessed Online]

Jayasinghe, E.J; Maheepala, S.S; Wijekoon, P.C (2021). Green Productivity and Cleaner Production; A Guidebook for Sustainability. Milton Park, Abingdon: CRC Press [Accessed Online]

Keenan, T. (2015). Human Resource Management; *Edinburgh Business School.* Heriot-Watt University, Edinburgh. United Kingdom. [Accessed Online]

Khatter, A.; White, L.; Pyke, J. and McGrath, M. (2021). Stakeholders' Influence onEnvironmental Sustainability in the Australian Hotel Industry. *Sustainability* 2021, 13, 1351. https://doi.org/10.3390/su13031351 [Accessed Online]

Kumar, R., (2005). *Research Methodology.* (2nd ed). London: Sage Publications

Kuo, Y.; Khan, T.I; Islam, S.U; Abdullah, F.Z; Pradana, M; Kaewsaeng-on, R. (2022). Impact of Green HRM Practices on Environmental Performance: The Mediating Role of Green Innovation: Vol 13(1) 10.3389/fpsyg.2022.916723, 1-11. https://doi.org/10.3389/fpsyg.2022.916723 [Accessed Online]

Lakshmi, P.V and B attu, N. (2018). A Study on Green HRM - An Emerging Trend in HR Practices. *International Journal of Management (IJM).* Volume 9, Issue 3, May–June 2018, pp. 74–82, http://iaeme.com/Home/issue/IJM [Accessed Online]

Leke, J.O and Leke, E.N (2019). Environmental Sustainability and Development in Nigeria: Beyond the Rhetoric of Governance. *International Journal of Development and Management Review* (INJODEMAR) Vol. 14 No.1 Pp. 25-37, https://www.ajol.ifo [Accessed Online]

Melia, D. and L. Robinson (2010). Towards Performance Measurements in Hotels; an Incremental Approach, Dublin: Arrow@TU Dubkin [Accessed Online]

Mid-Term Review of the Eleventh Malaysia Plan (2016-2020). Enhancing Environmental Sustainability Through Green Growth: New Priorities and Emphases. https://ekonomi.gov.my [Accessed Online]

Molina-Azorin, J.F, López-Gamero, M.D, Tarí, J.J, Pereira-Moliner, J. and Pertusa-Ortega, E.M (2021). Environmental Management, Human Resource Management and Green Human Resource Management: A LiteratureReview. https://doi.org/10.3390/admsci11020048 [Accessed Online]

Montt, G., Fraga, F. and Harsdorff, M. (2018). The Future of Work in a Changing Natural Environment: Climate Change, Degradation and Sustainability, *International Labour Organization Research Paper Series.* [Accessed Online]

Nagashybayeva, B. (2020). Green Businesses; Sources of Information: Business and Management, Corporations, Environment and Natural Resources. https://guides.loc.gov/green-businesses [Accessed Online]

Olaiya, O.T and Olaosebikan, J.S (2022). Green Training and Development: Mediating Role of Employee Pro-environmental Behaviour in Achieving Environmental Sustainability in a Selected Manufacturing Company in Nigeria. Vol. 17 (10) doi 10.5281/zenodo.7253635

Open Government Licence (2018). A Green Future: Our 25 Year Plan to Improve the Environment, Crown copyright 2018, The National Archives, Kew, London TW9 4DU, https://nationalarchives.gov.uk/doc/open-government-licence/version/3 [Accessed Online]

Osolase, E.H; R.B Rasdi; Z. Mansor (2022). Exploring the Awareness of Green Human Resource Development Practices Among Hotel Industry Employees in Lagos State, Nigeria: A Preliminary Study. Vol. 12, No. 4, 2022, Pg. 34 – 45 http://dx.doi.org/10.6007/IJARBSS/v12-i4/12913 [Accessed Online]

Oyebanji, I.J.; Adeniyi, B.; Khobai, H. and Le Roux, P (2017). Green Growth and Environmental Sustainability in Nigeria. *International Journal of Energy Economics and Policy,* 2017, 7(4), 216-223. https:www.econjournals.com [Accessed Online]

Patterson, D. (2023). Human Resource Management, 3rd Ed. Fanshawe College Pressbooks, London. [Accessed Online]

Pham, T.N., Vo-Thanh, T. and Tuckova, Z. (2022). Green Human Resource Management in Hotels in Developing Countries: A Practices- and Benefits-Related Conceptual Framework https://doi.org/10.1007/978-981-19-2408-8_7 [Accessed Online]

Phyper, J and P. Maclean (2009). Good to Green; Managing Business Risks and Opportunities in the Age of Environmental Awareness. Ontario, Canada. Wiley [Online]

Renwick, D. (2018). Contemporary Developments in Green Human Resource Management Research; Towards Sustainability in Action? Milton Park, Abingdon: New York. Routledge [Accessed Online]

Riffat, S., Powell, R. and Aydin, D (2016). Future Cities and Environmental Sustainability. *A Springer Open Journal.* Vol.2 (1) *DOI* 10.1186/s40984-016-0014-2. [Accessed Online]

Salama, W.M.E. & Mansour, H. (2022). The Impact of Covid-19 Pandemic on Green Hotel Management. African Journal of Hospitality, Tourism and Leisure, 11(2):440-456. DOI: https://doi.org/10.46222/ajhtl.19770720.235 [Accessed Online]

Savarimuthu, X.; Rao, U.; Reynolds, M.F(2022). Go Green For Environmental Sustainability; An Interdisciplinary Exploration of Theory and Applications. Milton Park, Abingdon. CRC Press [Accessed Online]

Shafiuddin, M. (2019). Modern Recruitment Techniques in Human Resource Management. *Social science and Humanities Journal*, sshj -Vol-03, issue-02, 2019. Pp. 837-847 http://sshj.in/index.php/sshj [Accessed Online]

Shah, S; Venkatramanan,V and Prasad, R. (2019). Sustainable Green Technologies for Environmental Management. Singapore, Springer [Accessed Online]

Skripak. S.J (2016). Fundamentals of Business; Managing Human Resources. Pamplin College of Business. *Saylor's Foundation.* http://www.saylor.org/site/textbooks/Exploring%20Business.docx [Accessed Online]

Sobaih, A.E, (2019). Green Human Resource Management in Egyptian Hotels; Practices and Barriers. *International Academic Journal Faculty of Tourism and Hotels.* Volume 5, No, 1 2019 [Accessed Online]

Susanto, E., Rofaida, R. and Senen, S.H (2022). Green Human Resources Management in Hospitality Industries: A Systematic Literature Review. Vol (5) Issue 4, 2022. DOI: 10.46827/ejhrms.v5i4.1212 [Accessed Online]

Vadatti, S. and S. Vadatti (2018). Identifying the Obstacles to Green Human Resource Management Practices in Iran. *International Journal of Human. Capital Urban Management*. 3(1): 9-18, Winter 2018 DOI: 10.22034/ijhcum.2018.03.01.002 [Accessed Online]

Van Der Zee, B. (2008). Green Business; Sustainability-Resources-People-Planet-Profit. NY, USA. DK Publishing [Accessed Online]

World Economic Forum (2023). Winning in Green Markets: Scaling Products for a Net Zero World. White paper. https://www3.weforum.org [Accessed Online]

Exploring Bitcoin's Adoption and its Correlation with the US Dollar, Gold and the Nasdaq Composite Index: A *Comprehensive Analysis.*

Godspower Eseoghene Onovughe[1], Joshua Sopuru[2]

Abstract

This study explores the complex link between Bitcoin, the US Dollar (USD), Gold (XAU) and the Nasdaq Composite Index. It examines how correlations and potential dependencies change over time using extensive statistical and econometric approaches. Our examination starts by looking at how Bitcoin changed from being a specialized digital asset to what it is today—a widely used financial tool. By contrasting them with conventional fiat currencies like the USD, we examine its volatility, liquidity, and market capitalization characteristics. In addition, we evaluate Bitcoin's function in the larger financial environment as a value store and a speculative asset. We now examine the interactions between Bitcoin, the US dollar, Gold and the Nasdaq Composite Index, concentrating on their correlations and probable causative connections. To understand the fundamental causes of these correlations, we investigate the effects of macroeconomic variables, regulatory changes, and investor sentiment on them. Our research suggests that there are numerous and dynamic correlations between Bitcoin, the US dollar, Gold and the Nasdaq that change over time in response to shifting market dynamics. The relationship between Bitcoin and conventional financial instruments like the USD, XAU and the Nasdaq remains a crucial subject of inquiry and exploration as it continues to develop and be accepted in mainstream finance. In summary, this study offers important new understandings of the complex relationship between Bitcoin, the US Dollar, Gold and the Nasdaq Composite Index.

Keywords: Bitcoin, cryptocurrency, global acceptance, digital economy, exchange rates, global indices.

Introduction

The first decentralized cryptocurrency, Bitcoin, has drawn a lot of interest as a potential disruptor of the financial industry. Understanding Bitcoin's future trajectory and acceptance trends is increasingly important as it continues to develop. This section provides a thorough overview on the investigation into Bitcoin's adoption and future, highlighting significant elements, trends, and contributions to the field of research.

Bitcoin's Birth

In a whitepaper published in 2008, an unidentified person or group going by the name Satoshi Nakamoto described bitcoin. It is based on a decentralized technology called block-chain that enables peer-to-peer transactions that are safe, transparent, and possible without the use of middlemen like banks. The emergence of bitcoin posed a threat to established financial institutions and may have provided advantages including financial inclusion, cheaper transactions, and censorship resistance.
Adoption of Bitcoin is driven by a number of factors. According to Glaser et al. (2014), users' intentions to embrace Bitcoin are motivated by both asset- and currency-related factors. For example, users may want to use Bitcoin as a hedge against traditional currencies. Convenience, security, transaction costs, regulatory environment, and perceived benefits are identified by Kamps et al. (2020) as significant variables affecting adoption. To estimate the likely adoption trends of Bitcoin, it is crucial to comprehend these elements.

Adoption Trends and Patterns: The adoption of bitcoin has shown a variety of trends and patterns. According to Yermack (2015), economic considerations have an impact on how widely Bitcoin is adopted, with higher adoption rates being seen in nations that are experiencing inflation or currency instability. According to Kamps et al. (2020), there is a direct link between a nation's level of technological advancement and its adoption of Bitcoin. Additionally, businesses and financial institutions are incorporating Bitcoin more frequently, demonstrating a rising understanding and acceptance of the currency.

Technological Advancements and Challenges: Both of these factors are crucial in determining how widely Bitcoin will be adopted in the future. The restricted capacity for transaction processing has made the scalability of the Bitcoin network a constant source of worry. To address scalability difficulties and boost transaction efficiency, researchers are looking into options like the Lightning Network. Additionally, there is continuous study and development in the fields of block-chain privacy, Bitcoin wallet security, and energy usage related to mining.

Legal and Regulatory Considerations: The regulatory environment governing Bitcoin is changing, causing difficulties and uncertainty. The relevance of regulatory frameworks is emphasized by Glaser et al. (2014) in addressing issues with money laundering, consumer protection, and financial stability. The adoption of Bitcoin may be strongly impacted by regulatory changes since they minimize perceived risks and encourage institutional involvement (Hayes, 2015).

Socioeconomic Implications: The acceptance of bitcoin in the future will have socioeconomic effects. In particular in areas with limited access to conventional banking services, Yermack (2015) emphasizes the potential advantages of Bitcoin in facilitating financial inclusion and lowering transaction costs. However, issues like income disparity, privacy, and the effects of mining on the environment have also come up. A multifaceted examination taking into account technology breakthroughs, legislative developments, user behavior, and socioeconomic aspects is necessary to comprehend the future of Bitcoin and its adoption.

Statement of Problem

Bitcoin, the world's first decentralized digital currency, has received a lot of attention and been met with both enthusiasm and doubt. Despite the increased interest in Bitcoin over the last few years, it still faces many issues that prevent it from becoming a widely accepted form of payment. Knowing what these obstacles are is essential for overcoming them and encouraging people to use Bitcoin more often. These obstacles include:

Price fluctuation: Since its debut, Bitcoin has experienced severe price fluctuation, which may prevent widespread acceptance as a reliable medium of exchange and store of wealth. For price volatility to be long-lasting and widely accepted, it is crucial to understand its causes and potential remedies.

Regulatory Landscape: The regulatory environment governing Bitcoin is complicated and frequently fragmented, with many nations and jurisdictions taking different methods. The absence of regulatory clarity makes it difficult for investors, firms, and users to make decisions, which limits the adoption of Bitcoin and its incorporation into conventional financial systems.

Scalability and Transaction Speed: The block-chain technology that underpins Bitcoin faces difficulties with regard to scalability and transaction speed. Scalability problems develop as the number of users and transactions on the Bitcoin network rises, leading to longer confirmation times and higher transaction fees. The potential of Bitcoin as a widely utilized payment method is constrained by these drawbacks.

Privacy and Security Issues: Since Bitcoin is a decentralized digital currency, it is vulnerable to fraud, hacking, and security breaches. As block-chain transactions are visible to the public and thus able to be tracked, privacy issues also surface. Forging confidence among users and promoting wider adoption, it is essential to address these security and privacy concerns.

Energy Consumption and Environmental Impact: Bitcoin mining, which encrypts the network and validates transactions, consumes a lot of processing power. Concerns regarding sustainability and Bitcoin's compatibility with international efforts to tackle climate change are raised by the environmental impact of bitcoin mining, particularly its carbon footprint.

Research Questions

The purpose of this paper is to provide answers to some of the often asked issues regarding the uptake and application of bitcoin and other financial assets.

1. What factors are impacting the use of Bitcoin as a means of trade and a store of value?
2. How does the regulatory landscape affect the uptake and application of Bitcoin in various nations
3. Is there any correlation between bitcoin and the Us Dollar?
4. Is there any correlation between Bitcoin and the Nasdaq

Objectives of Study

The following are my main goals for my research study on time series analysis for forecasting: In order to achieve the best results, these goals must be taken into account.

1. To investigate how cryptocurrency volatility influences its value
2. Examining the correlation between Bitcoin and the Nasdaq
3. Examine the correlation between the US Dollar Index and Bitcoin
4. Predict bitcoin prices using time series analysis

Significance of Study

Understanding the potential effects of this decentralized digital currency for many stakeholders, including people, businesses, financial institutions, and regulators, requires a thorough grasp of the future and adoption of Bitcoin. This study can shed light on the following topics by analyzing the variables affecting adoption and predicting Bitcoin's course in the future:

Financial Innovation and Disruption: Bitcoin poses a threat to established banking and payment systems and is a disruptive force in the financial sector. The potential transformation of the financial infrastructure, including the creation of decentralized finance (DeFi) and the integration of cryptocurrencies into traditional banking and payment systems, can be better understood by understanding its future and adoption.

Investment and Asset Class: Both institutional and individual investors are showing interest in bitcoin since it has emerged as a reliable investment asset. Investigating its potential as a tool for portfolio diversification, its long-term value proposition, and its incorporation into investing strategies might offer insights into its future and acceptance.

Technological Developments: Block-chain technology, which is the foundation of Bitcoin and has uses outside of cryptocurrencies, has advanced considerably. Exploring the possibilities of block-chain technology in fields like smart contracts, supply chain management , and identity verification will help block-chain technology.

Regulation and Policy Considerations: The development and adoption of Bitcoin have consequences for both regulation and policy. Understanding its trajectory can assist decision-makers in creating the right laws and regulations that encourage innovation while addressing issues with monetary stability, consumer protection, and illegal activity.

Impact on Socioeconomic Dynamics: Financial Inclusion, Wealth Distribution, and Privacy are only a few socioeconomic dynamics that are affected by the future and adoption of Bitcoin. Examining these factors can help to address societal concerns and optimize beneficial effects by revealing the potential advantages and difficulties of widespread adoption.

Literature Review & Hypothesis Development

Financial intermediaries like banks or credit card firms have typically handled digital payments, preventing the problem of duplicate spending. Due to the lack of transparency in online transactions, it is possible for someone to engage in double spending. Financial intermediaries typically charge a fee from the transactions they handle in return for preventing duplicate spending. This comfort results from the intermediaries' ability to prevent double spending, which they achieve by checking the parties (such as the buyer and seller) involved in each transaction and keeping a record of every transaction.

The Bitcoin proposal was made in 2008 by an unidentified programmer using the moniker Satoshi Nakamoto. The goal of this study was to propose a form of money that would eliminate double spending without obviating the need for a central authority like the US government or financial intermediaries. The framework was given the name Bitcoin, and the name of the money was bitcoin. Instead of relying on centralized authorities to execute transactions, Nakamoto envisaged that Bitcoin would be powered by technically proficient people (miners). Transactions would be refused if there were any attempts to deceive this community of users. Decentralized because no central authority might impose fees or regulate how transactions are carried out. In essence, conducting business online would be simpler, more affordable, and faster.

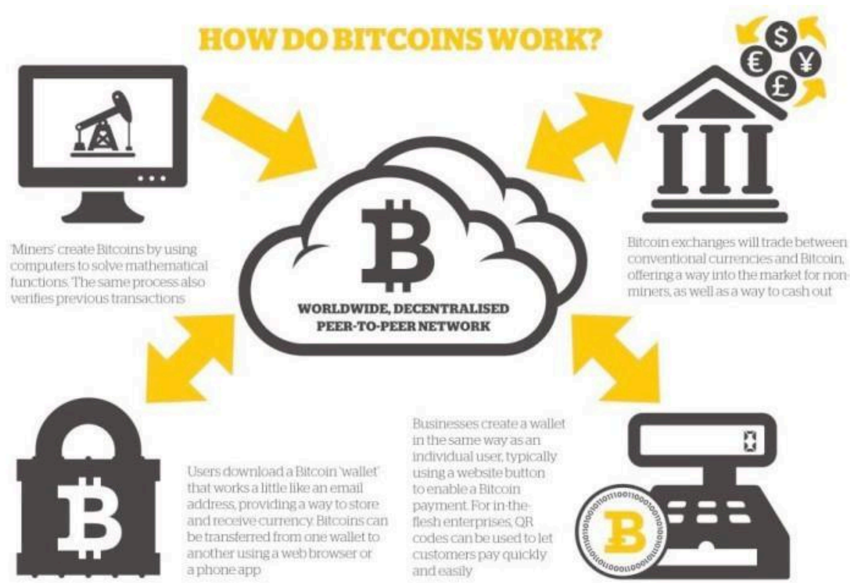
Users, miners, and the block-chain, which all work together to allow transactions, are the three primary elements of Bitcoin. By sending a message to the Bitcoin infrastructure, users can transfer money, and that message will then be disseminated to miners along with the associated transaction. For the purpose of confirming users and their transactions, miners provide their processing power. By using their computational power, miners update the Block-Chain with that transaction.

There have been numerous scholarly articles written about Bitcoin as a result of the quick rise in Bitcoin's popularity and the surge in the number of block chain wallets. According to the three fundamental purposes of money—as a store of value, a medium of exchange, and a unit of account—Yermack (2013) investigated whether Bitcoin should be regarded as a form of money. Compared to other frequently used currencies, Bitcoin has far higher volatility. The value of Bitcoin as a means of exchange and a unit of account is likewise weakened. Yermack further noted that there is essentially no correlation between the daily exchange rate of Bitcoin with respect to the US dollar and the exchange rates of the dollar with regard to the British pound, Swiss franc, euro, yen, and gold.

How Bitcoin Works

Public Key Encryption (PKE) is a technique employed by Bitcoin. Users have a public key and a private key when using PKE. Private keys are known to and accessed exclusively by the user, whereas public keys are open to everyone. For instance, when sending a message, a user encrypts it with their public key to render it unreadable to prying eyes. When a message is received, the recipient uses their own private key to decode it and restore it to its original form. A private key in Bitcoin is essentially a mechanism to conceal transactions from unauthorized third parties (Nakamoto, S. 2008.)

The private key adds a signature to the transaction, which is really a mathematical formula, to confirm the origin and destination of the bitcoin as well as its value. By using the public key and the math used to encrypt it, miners may decipher this signature. By needing a tremendous amount of processing power to answer especially difficult mathematical functions, this eliminates the issue of duplicate expenditure.



How BlockChain Works

Block-chain technology is the underlying technology behind cryptocurrencies like Bitcoin. It is a decentralized, transparent, and immutable digital ledger that records transactions across multiple computers (nodes) in a network. Here's a simplified explanation of how block-chain works

(Nakamoto, S. 2008):

Distributed Network: A block-chain operates on a network of computers (nodes) connected through a peer-to-peer network. Each node maintains a copy of the entire block-chain, ensuring that no single entity has control over the entire network.

Blocks and Transactions: Transactions are grouped together in blocks. Each block contains a list of transactions, along with a unique identifier called a hash. The hash is generated through a cryptographic algorithm, and it acts as a digital fingerprint for the block.

Consensus Mechanism: The block-chain network employs a consensus mechanism to validate and agree upon the contents of each block. The most common consensus mechanism used in public block-chains is Proof-of-Work (POW), where miners compete to solve complex mathematical problems. The first miner to solve the problem adds a new block to the chain, and the other nodes verify and agree on its validity.

Linking Blocks: Each new block in the block-chain contains a reference to the hash of the previous block, creating a chronological chain of blocks. This linkage ensures that the blocks are tamper-resistant since any alteration in a previous block would require changing all subsequent blocks as well.

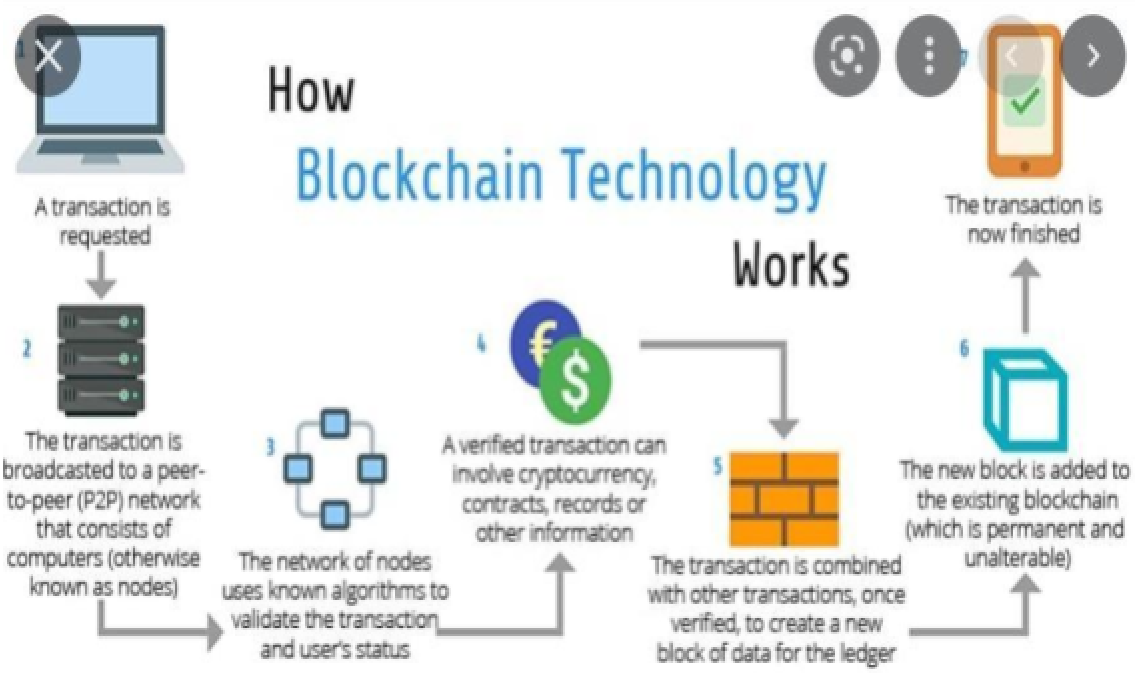
Decentralization and Security: Because the block-chain operates on a distributed network, it is highly resistant to censorship, tampering, and single points of failure. To compromise the block-chain's security, an attacker would need to control a majority of the network's computational power, which becomes increasingly difficult as the network grows.

Consensus Verification: Once a block is added to the block-chain, the other nodes in the network validate and verify its contents. They check the cryptographic signatures, ensure that the transactions are valid and adhere to the predefined rules of the block- chain protocol.

Immutable and Transparent: Once a block is added to the block-chain, it becomes nearly impossible to alter its contents. This immutability ensures the integrity and trustworthiness of the recorded transactions. Additionally, the block-chain is transparent, allowing anyone to view the transaction history, enhancing accountability and auditability.

Smart Contracts (in some block-chains): Smart contracts are self-executing contracts with predefined rules and conditions encoded on the block-chain. They automatically execute and enforce the terms of the agreement when the specified conditions are met. Smart contracts enable the creation of decentralized applications (DApps) and facilitate complex transactions without intermediaries.

Forks and Consensus Updates: Occasionally, block-chain networks may experience forks, which occur when there is a disagreement among network participants about the valid state of the block-chain. Forks can be temporary (soft forks) or permanent (hard forks), resulting in the creation of new branches or even new cryptocurrencies. Consensus updates may also occur to improve the block-chain's scalability, security, or functionality.



Private and Public Block-chains

Block-chain technology can be implemented in both public and private settings. Public block-chains, like Bitcoin and Ethereum, are open to anyone and allow for decentralized participation. Private block-chains are restricted to a specific group of participants, often within organizations, and provide more control over access and governance.

Block-chain technology extends beyond cryptocurrencies and has the potential to revolutionize various industries, including finance, supply chain management, healthcare, and more. Its transparency, security, and decentralization offer new opportunities for trust, efficiency, and innovation.

Motivations for Bitcoin Investment

Both individuals and corporate organizations have disparate reasons for wanting to invest in Bitcoin. First off, digital currency is a veritable means of wealth creation and thus, many people are spurred on to invest in it. However, this study will pinpoint a few motives that have driven people to investing in Bitcoin.

Bitcoin is inherently a transformational technology: Bitcoin has made the impossible very possible especially by dispensing with intermediaries in financial transactions. People are now seeing the possibility of digital currency and the ease it will engender in the future; hence, there are more and more investments in Bitcoin as the years roll by.

Bitcoin is a stable store of value: Unlike fiat money which is subject to government rule and whatnot and can be devalued, Bitcoin cannot be devalued by the sheer whim of the government. Bitcoin also has a limited Supply, 21 million Bitcoins at a time, supported by a complex mathematical algorithm hence it cannot be devalued.

It is good for speculative trading: A study of block-chain activity has shown that exchange trade is the most rampant use of cryptocurrencies and not ordinary trades and purchases

Difficulties Businesses Face in Adopting Bitcoin as A Form of Payment

Keeping up with rapid changes in Bitcoin technology and regulations can be irksome and burdensome. Many businesses are not entirely apprised of the way and manner in which Bitcoin operates and hence cannot keep up with the rapid changes. Besides, businesses may be too busy dealing with other aspects of their businesses which they consider more salient and might not be in tune with the rapid changes in Bitcoin technology or even the regulations and businesses may be adversely affected in the long-term; hence, businesses shy away from the adoption of Bitcoin as a form of payment.

Secondly, holding on to Bitcoin in the course of your business may result in financial loss owing to the volatility of the cryptocurrency. You may have to dispense with it or sell it off at a very low price and it will result in humongous business loss. In the long run, trust in Bitcoin might even be depleted. Hence, businesses are tardy or rather circumspect about Adopting Bitcoin as a form of payment.

You could also be faced with the herculean task of implementation in your business, especially in large organizations where everyone has a voice or where there is massive representation of the several arms of the organization in the board of directors or in the leadership circle as the case may be. Implementation becomes difficult since not everyone will buy into accepting Bitcoin as a means of trade or payment owing to its volatility. You may even be faced with the more daunting challenge of tax preparation and managing customer returns.

Another major obstacle to the adoption of Bitcoin as a form of payment is the issue of irreversibility and this is compounded by the unavailability of third parties which can easily affect a reversal if necessary. Once a transaction is confirmed in the block chain, it is irreversible.

Methodology

The goal of the current study is to investigate the effects of both positive and negative shocks that occurred in Bitcoin, a virtual currency that served as a model for other cryptocurrencies, on other macroeconomic variables and global indices. Since Bitcoin currency has the largest market share in the cryptocurrency marketplaces, our study is mostly focused on Bitcoin values (BTC/USD). The earlier study demonstrates that different stock market indices and the price of Bitcoin were compared. The majority of the studies, however, rule out the impact of commodity prices. Based on this conclusion, this study examines the price of gold (Gold, 1 troy ounce), the value of the US dollar (USD, 1 US dollar), the price of 1 (1, per barrel), as well as the NASDAQ Index and the BIST 100 Index, which are capitalization-weighted indices made up of national market companies other than investment trusts.

Research Design

This study is centered around finding out the correlation between Bitcoin, Gold, Us dollar and Nasdaq. The causation relationships between Bitcoin and the exchange rate, commodities, and global indices are therefore investigated. The dataset has a monthly frequency and spans from 14.06.2018 to 14.06.2023. Prior to analysis, the natural logarithm of the data was collected. By using the natural logarithm, the scale impact between variables is intended to be eliminated. By carrying out some scientific data tests such as ADF (Augmented Fuller) test and Granger Causality Test, we will be able to check for correlation among the assets.

In order to forecast future bitcoin prices, I used time series analysis using E-views as my preferred software. With the ARMA Model and finding the AR, we can be able to forecast future prices of the data(Bitcoin). Time series analysis is a method that is frequently used to examine and forecast the behavior of financial data. It is feasible to create precise forecasts that can help investors, traders, and policymakers make educated decisions by using this method on historical Bitcoin price data.

The steps taken for this research are listed below:

Data gathering: Gathering trustworthy and precise historical Bitcoin price data is the initial step in this research design. I acquired this from https://www.investing.com/

Data preprocessing and preparation: After data has been gathered, it must be processed and made ready for analysis. This involves dealing with missing values, eliminating outliers, and making sure the data is formatted properly for time series analysis. Using data transformation functions and strategies like interpolation or imputation, this is possible with E-Views.

Time Series Analysis: At the heart of the research plan is the use of E-Views to model, predict, and carry out all required tests for Bitcoin using time series analysis techniques.

Evaluation and Validation of the Forecasting Model: It is crucial to assess and validate the forecasting model's performance to assure its reliability. This can be accomplished by contrasting the predictions with real Bitcoin price data for a given time frame. Utilize the right measures to gauge prediction accuracy, and run statistical analyses to determine the importance of forecast inaccuracies.

Reporting and Interpretation: here, I briefly discuss the analysis's findings, taking into account the model selection procedure, the outcomes of the estimation, the precision of the forecast, and any noteworthy revelations. Interpret the predictions and explain the ramifications for traders, investors, and policymakers.

Data Gathering: for gathering Bitcoin 5 year price data, I used the Microsoft Excel App to gather and compile the price data I got from https://www.investing.com/By putting data in tabular format, it is easy to navigate through historical bitcoin price data.

Data format: After gathering Bitcoin price data, in order for the forecasting software(E-views) to read data, the excel file has to be converted and exported in a CSV file format.

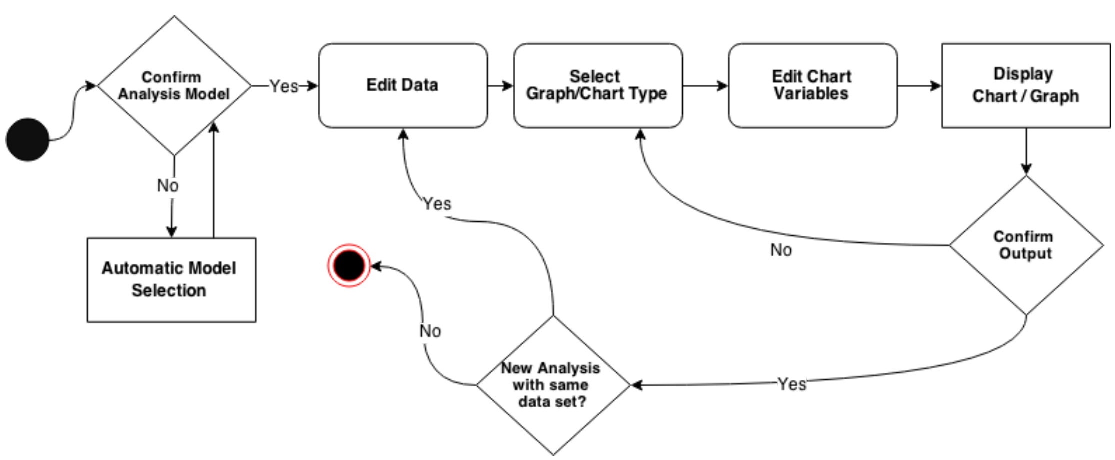
Description of Tool

E-Views is a popular software package used for econometric analysis. It was originally developed by Quantitative Micro Software (QMS) and is now owned by IHS Markit. E-Views stands for "Econometric Views," and is used by economists, researchers, and data analysts to analyze data and build econometric models.

E-Views is designed to provide a user-friendly interface for analyzing time-series data, cross- sectional data, and panel data. It has a wide range of features for data management, analysis, and presentation. Some of the key features of E-Views include:

Data Handling: E-Views provides a user-friendly interface for importing, managing, and manipulating various types of data, including time series data, cross-sectional data, panel data, and structured databases. It supports a wide range of data formats, including Excel, CSV, databases, and its own native file format.

Time Series Analysis: E-Views specializes in time series analysis and offers a comprehensive set of tools for exploring and analyzing time series data. It provides functionalities for data transformation, filtering, aggregation, and smoothing. It supports various time series models, including autoregressive integrated moving average (ARIMA), vector autoregression (VAR), and error correction models (ECM).



Results, Discussion & Conclusion

Bitcoin and other cryptocurrencies are a growing phenomena that are growing rapidly every day. Bitcoin differs from other cryptocurrencies in terms of the volume of daily transactions and market capitalization in direct proportion to its acceptance among a growing number of cryptocurrencies in the financial market and the number of its users. The occurrence of significant volatility is frequently correlated with Bitcoin owners actively participating in the currency's economy, and the price of bitcoin has consistently shown strong volatility. Users and the academic research community both have growing interest in Bitcoin markets. Therefore, Bitcoin is the most popular and extensively used cryptocurrency in the world, and due to its use, mining, severe volatility, and qualities as well as the fact that bitcoin gained popularity and became known to a larger audience, its dynamics have been a contentious matter.

The unique aspect of this study is that we believe it is the first to use the Granger (1969) asymmetric causality test to analyze the correlations between Bitcoin price and commodities market, exchange rate, and global indexes. This study aims to investigate the effects of Bitcoin, a virtual currency, on other commodity prices and worldwide markets as a result of its growing use as a decentralized payment method and treatment as an investment instrument. In this regard, the study's literary contribution consists of illuminating the connection between commodity prices and global indexes that may influence the choices made by Bitcoin investors in worldwide marketplaces.

It may be inferred that a sizable portion of NASDAQ market investors are knowledgeable about the Bitcoin market, closely monitor technological advancements, and have a keen interest in user- friendly computer programs. On the other hand, there is no causal link between the NASDAQ Index and the price of Bitcoin. The final outcome shows that there is no one-way relationship between Bitcoin and the NASDAQ Index. However, it has been noted that there are no causal relationships between Bitcoin , gold, the US dollar, that would allow for negative to positive or positive to negative shocks. Furthermore, macro-financial changes do not appear to have a big impact on the value of the Bitcoin currency. Currently, a number of nations have issued advisories stating that Bitcoin is unsafe, lacks legal tender, and does not adhere to the rules of electronic money. As a result, some nations have entirely or partially outlawed the usage of Bitcoin. However, it is anticipated that Bitcoin will eventually have some relationships with the currency exchange rates, commodity markets, global indices, and other global indicators. Along with being recognized as a cryptocurrency, Bitcoin is also accepted as a digital currency and is allowed for use by nations in the real economy, under the supervision of central banks.

When all of the study's findings are analyzed, it becomes clear that Bitcoin investors have an impact on the NASDAQ Index. Additionally, it is discovered that one of the factors influencing the NASDAQ market's volatility is the Bitcoin currency. As a result, it is advised that investors who actively participate in the NASDAQ market regularly monitor Bitcoin prices. Looking ahead, we anticipate Bitcoin to keep progressing toward becoming a widely recognized form of money.

It is predicted that cryptocurrencies like bitcoin and others will eventually supplant both old and new payment systems. This study has a number of restrictions because it frequently only considers a relationship in terms of a select few variables. Future research in this area should concentrate on the connections between cryptocurrencies, particularly the connections between Bitcoin and other financial instruments, global indicators, and national exchanges, as well as the connections between Bitcoin exchanges and the connections between Bitcoin and other currencies.

The value of cryptocurrencies can be significantly impacted by their volatility. Investing in cryptocurrencies can be challenging when the market is turbulent, since prices can change quickly and unexpectedly.

In contrast, when the market is steady, investors can be more inclined to invest in digital currencies because they perceive a lower level of risk. In either case, it's critical for investors to comprehend how volatility affects markets so they can choose their assets wisely.

The acceptance of cryptocurrencies as a payment method by more people, especially by big businesses, will determine their destiny. This adoption will be made feasible by the continuing improvement of the reputation of digital currencies as a medium of exchange, as well as their long- term stability, liquidity, and value retention. Although there are routes for growth for adoption into popular usage, the predicted future still carries a certain amount of uncertainty.

Governmental attitudes toward digital currencies do pose a significant danger, especially in light of prospective bans due to the challenges of regulation and price volatility.

The acceptance of cryptocurrencies as a payment method by more people, especially by big businesses, will determine their destiny. This acceptance will be achievable thanks to the digital currency industry's continuously enhanced repute.

The system provided in this thesis can be expanded to handle enormous quantities of time series because managing massive data is outside the scope of this thesis. Due to the rapid rate of data growth across all fields, this will be especially crucial in the future. With the use of some econometric software such as E-views, correlation, prediction and causal tests have made analyzing data less of a hassle.

Time series analysis can shed light on the price volatility of bitcoin. It may show periods of high volatility, marked by significant price fluctuations, as well as periods of low volatility, signifying a rather stable market environment. Risk management and investment decision-making may benefit from this information.

Time series analysis can identify autocorrelation, which is the association between historical and present-day Bitcoin prices. It might reveal lag effects, where prices in the past have a big impact on prices in the future. Building predictive models and predicting future Bitcoin values can both benefit from this information.

The creation of forecasting models for Bitcoin values is made possible by time series analysis. Forecasting models can be created to predict future price movements by examining historical pricing data and spotting patterns, trends, and linkages. Traditional methods like ARIMA, exponential smoothing, or more sophisticated methods like machine learning algorithms may be used in these models. Time series analysis entails assessing the precision and dependability of forecasting models. Statistical metrics like Mean Absolute Error (MAE), Root Mean Square Error (RMSE), or Mean Absolute Percentage Error (MAPE) are frequently used in this evaluation to compare the predicted costs with the actual prices. It aids in evaluating the models' efficacy and applicability for predicting Bitcoin values.

When examining the relationship between Bitcoin and other assets like the US Dollar Index, the NASDAQ, and gold, investors can observe that most of the time, market speculation on these assets is based on general econometric characteristics. When investors detect fear or uncertainty in the market, they frequently move their money from riskier assets like Bitcoin to more stable ones like Gold or the NASDAQ. This leads to a bubble in the financial markets, which in turn increases the volatility of these assets.

Bibliography

Andreas M. Antonopoulos' "Mastering Bitcoin: Unlocking Digital Cryptocurrencies"; Paul Vigna and Michael J. Casey's "The Age of Cryptocurrency: How Bitcoin and the Block- chain Are Challenging the Global Economic Order"

Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfelders "Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction"

Antonopoulos, A. M. (2014), Mastering Bitcoin: Unlocking Digital Crypto-Currencies, Sebastopol: O'Reilly Media Inc.

Atik, M., Kose, Y., Yilmaz B. and Saglam, F. (2015), Crypto currency: Bitcoin and effects on exchange rates, The Journal of Faculty of Economics and Administrative Sciences, 6(11), pp. 247-261.

Baek, C. and Elbeck, M. (2015), Bitcoins as an investment or speculative vehicle? A first look, Applied Economics Letters, 22(1), pp. 30-34.

Bariviera, A. F., Basgall, M. J., Hasperué, W., Naiouf, M., & Serrano, P. (2017). Some stylized facts of the Bitcoin market. Physica A: Statistical Mechanics and its Applications, 484, 82-90.

Bartos, J. (2015), Does Bitcoin follow the hypothesis of an efficient market?. International Journal of Economic Sciences, 4(2), pp. 10-23.

Baur, D. G., & Dimpfl, T. (2018). Bitcoin, gold, and the US dollar: A replication and extension. Finance Research Letters, 25, 103-110.

Baur, G. D., Lee, D. A. and Hong, K. (2017), Bitcoin: Medium of exchange or speculative assets?, Journal of International Financial Markets, Institutions and Money, 54, 177-189 (retrieved from: https://ssrn.com/abstract=2561183).

bayesian structural time series (retrieved from:https://arxiv.org/abs/1706.01437)

Bhardwaj, R., Rachcha, A. and Desai, R. (2017), Online secure payment system using steganography and cryptography, International Journal on Recent and Innovation, Trends in Computing and Communication, 5(12), pp. 33-36.

Bitcoin—asset or currency? Revealing users' hidden intentions. ECIS 2014 Proceedings, 70, Bjerg, O. (2016), How is Bitcoin money?, Theory, Culture & Society, 33(1), pp. 53-72.

Book of Satoshi: The Collected Writings of Bitcoin Creator Satoshi Nakamoto" edited by Phil Champagne

Bouoiyour, J. and Selmi, R. (2015), What does Bitcoin look like?, Annals of Economics and Finance, 16(2), pp. 449-492.

Bouoiyour, J., Selmi, R., Tiwari, A. and Olayeni, O. (2016), What drives Bitcoin price?

Bouri, E., Molnár, P., Azzi, G., Roubaud, D. and Hagfors, L. I. (2017), On the hedge and safe haven properties of Bitcoin: Is it really more than a diversifier?, Finance Research Letters, 20, pp. 192-198.

Box, G. E., Jenkins, G. M., Reinsel, G. C., & Ljung, G. M. (2015). Time series analysis: forecasting and control. John Wiley & Sons.

Brandvold, M., Molnar, P., Vagstad, K. and Valstad, O. C. A. (2015), Price discovery on Bitcoin exchanges. Journal of International Financial Markets Institutions and Money, 36(C), pp. 18-35.

Briere, M., Oosterlinck, K. and Szafarz, A. (2015), Virtual currency, tangible return: Portfolio diversification with Bitcoin, Journal of Asset Management, 16(6), pp. 365-373.

Carian, P., Rajcaniova, M. and Kancs, A. (2016), The economics of Bitcoin price formation, Applied Economics, 48(19), pp. 1799-1815.

Chen, Y.W. and Vivek, K.P. (2014), The Value of Bitcoin in Enhancing the Efficiency of an Investor's Portfolio, Journal of Financial Planning, 27(9), pp. 44-52.

Chiu, J. and Koeppl, T. (2017), The Economics of Cryptocurrencies-Bitcoin and Beyond, Queen's Economics Department Working Paper, No. 1389, Ontario (retrieved1799-from: http://qed.econ.queensu.ca/working_papers/papers/qed_wp_1389.pdf).

Cryptoassets: The Innovative Investor's Guide to Bitcoin and Beyond" by Chris Burniske and Jack Tatar - Bitcoin: The Ultimate Guide to the World of Bitcoin, Bitcoin Mining, Bitcoin Investing, Block-chain Technology, Cryptocurrency" by Ikuya Takashima - "The

decentralized digital currencies. IEEE Communications Surveys & Tutorials, 18(3), 2084- 2123.

Dickey, D. A. and Fuller, W. A. (1979), Distribution of the estimators for autoregressive ti series with a unit root, Journal of the American Statistical Association, 74(366), pp.427– 431.

Dickey, D. A. and Fuller, W. A. (1981), Likelihood ratio statistics for autoregressive time series with a unit root, Econometrica, 49(4), pp. 1057-1072.

Dirican, C. and Canoz, I. (2017), The relationship between Bitcoin prices and major world stock indices: An analysis with ARDL model approach, Journal of Economics Finance and Accounting, 4(4), pp. 377-392.

Dwyer, G. P. (2015), The economics of bitcoin and similar private digital currencies, Journal of Financial Stability, 17(C), pp. 81-91.

Dyhrberg, A. H. (2015), Hedging capabilities of Bitcoin. Is it the virtual gold?, Finance Research Letters, 16(C), pp. 139-144.

Dyhrberg, A. H. (2016), Bitcoin, gold and the dollar-a GARCH volatility analysis, Finance Research Letters, 16, pp. 85-92.

Economics Bulletin, 36(2), pp. 843-850.

Edwards, C. (2015), News: Bitcoin price crash finds new victims, Engineering & Technology, 12(2), pp. 19-19.

Eswara, M. (2017), Cryptocurrency gyration and Bitcoin volatility, International Journal of Business and Administration Research Review, 3(8), pp. 187-195.

European Central Bank (1969), Virtual Currency Schemes, Germany (retrieved from: http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf).

Georgoula, I., Pournarakis, D., Bilanakos, C., Sotiropoulos, N. D. and Giaglis, M. G. (2015), using time-series and sentiment analysis to detect the determinants of Bitcoin prices, MCIS 2015 Proceedings 20, Samos, 3-5 October (retrieved from: http://aisel.aisnet.org/mcis2015/20)

Giungato, P., Rana, R., Tarabella, A. and Tricase, C. (2017), Current trends in sustainability of Bitcoins and related block-chain technology, Sustainability, 9(12), pp. 1- 11.

Glaser, F., Zimmermann, K., Haferkorn, M., Weber, M. C. and Siering, M. (2014), Bitcoinasset or currency? Revealing users' hidden intentions, in: Avital, M., Leimeister,

Granger, A. (1969), Asymmetric causality tests with an application, Empirical Economics, 43(1), pp. 447-456.

Gulec, O. M., Cevik, E. and Bahadır, N. (2018), Investigation of the association between Bitcoin and financial indicators, Journal of the Faculty of Economics Administrative Sciences, 7(2), pp. 18-37.

Hacker, R. S. and Granger, A. (2006), Tests for causality between integrated variables using asymptotic and bootstrap distributions: theory and application, Applied Economics, 38(13), pp. 1489-1500.

Hayes, A. S. (2015). Cryptocurrency value formation: An empirical study leading to a cost of production model for valuing bitcoin. Telematics and Informatics, 32(4), 716-726.

Hyndman, R. J., & Athanasopoulos, G. (2018). Forecasting: principles and practice (2nd ed.). OTexts.

Icellioglu, C. S. and Ozturk, M. B. E. (2017), In search of the relationship between Bitcoin and selected exchange rates: Johansen test and granger causality test for the period 2013- 2017, Maliyeve Finans Yazıları, 109, pp. 51-70.

Indra, D. (1992), Pengantaruang dan perbankan, Jakarta: PT RinekaCipta. Investopedia Database (2018), Investing: Financial analysis,what is NASDAQ Index (retrieved from: https://www.investopedia.com/terms/s/sp500.asp).

Jin, L. S. and Masih, M. (2017), Exploring Portfolio Diversification Opportunities in Islamic Capital Markets through Bitcoin: Evidence from MGARCH-DCC and Wavelet Approaches, MPRAPap No.79752 (retrieved from:https://mpra.ub.unimuenchen.de/79752/1/MPRA_paper_79752.pdf).

Kajtazi, A. and Moro, A. (2017), Bitcoin, portfolio diversification and Chinese financial

Kamps, J., Brandvold, M., & Molnár, P. (2020). Bitcoin adoption: A systematic literature review. International Journal of Financial Studies, 8(2), 25.

Katsiampa, P. (2017), Volatility estimation for Bitcoin: A comparison of GARCH models, Economics Letter, 158, pp. 3-6

Kocoglu, S., Cevik, Y. E. and Tanrıoven, C. (2016), Efficiency, liquidity and volatility of Bitcoin markets, Journal of Business Research Turk, 8(2), pp. 77-97.

Kristoufek, L. (2015), What are the main drivers of the Bitcoin price? Evidence from wavelet coherence analysis, PLoS ONE, 10(4), pp. 1-15.

Kurihara, Y. and Fukushima, A. (2017), The market efficiency of Bitcoin: A monthly anomaly perspective, Journal of Applied Finance & Banking, 7(3), pp. 57-64.

M. and Schultze, U. (eds), Proceedings of the European conference on information

Makridakis, S., Spiliotis, E., & Assimakopoulos, V. (2018). Statistical and Machine Learning forecasting methods: Concerns and ways forward. PloS one, 13(3), e0194889.

markets (retrieved from: https://ssrn.com/abstract=3062064).

Moore, T., & Christin, N. (2013). Beware the middleman: Empirical analysis of Bitcoin- exchange risk. Financial Cryptography and Data Security, 25-33.

Murphy, E. V., Murphy, M. M. and Seitzinger, M. V. (2015), Bitcoin: Questions, answers and analysis of legal issues, Congressional Research Service (retrieved from:https://fas.org/sgp/crs/misc/R43339.pdf).

Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. Retrieved from https://bitcoin.org/bitcoin.pdf

Nathaniel Popper-T's book "Digital Gold: Bitcoin and the Inside Story of the Misfits and Millionaires Trying to Reinvent Money"

Nurhisam, L. (2017), Bitcoin: Islamic law perspective, Qudus International Journal of Islamic Studies, 5(2), pp. 85-100.

Öztürk, N. and Koç, A. (2006), Elektronik para, diğer para türleriyle karşilaştirilmasi ve olasi etkileri, Sosyal Ekonomik Araştırmalar Dergisi, 6(11), pp. 207-243 (retrieved f from http://dergipark.gov.tr/susead/issue/28430/302840).

Prices for bitcoin (BTC), https://www.coindesk.com/price/bitcoin

R. S. Tsay (2010). "Financial Time Series Analysis." (2006) Wiley Shumway, R. H., and Stoffer, D. S. The Use of Time Series Analysis

Reiff, N (2022) The Environmental Effect of Cryptocurrency (Retrieved from: https://www.investopedia.com/tech/whats-environmental-impact-cryptocurrency/)

Rogojanu, A. and Badea, L. (2014), The issue of competing currencies: Case study-Bitcoin, Theoretical and Applied Economics, 21(1), pp. 103-114

Sovbetov, Y. (2018), Factors influencing cryptocurrency prices: Evidence from Bitcoin, Ethereum, Dash, Litcoin, and Monero, Journal of Economics and Financial Analysis, 2(2), pp. 1-27.

Szetela, B., Mentel, G. and Gędek,S. (2016), Dependency analysis between Bitcoin and selected global currencies, Dynamic Econometric Models, 16(1), pp. 133-144.

Toda, H. Y. and Yamamoto, T. (1995), Statistical inference in vector autoregressions with possibly integrated processes, Journal of Econometrics, 66(1-2), pp. 225-250.

Tschorsch, F., & Scheuermann, B. (2016). Bitcoin and beyond: A technical survey

Van, W. D. (2013), What Can Be Expected from the BitCoin?, Erasmus Rotterdam University Working Paper (retrieved from https://thesis.eur.nl/pub/14100/FinalversionThesis-Dennis-van-Wijk.pd).

VIX past information, Vix historical data may be found at http://www.cboe.com/products/vix-index-volatility/vix-options-and-futures/vix-index/

Vyas, C. A. and Lunagaria, M. (2014), Security concerns and issues for Bitcoin, IJCA Proceedings on National Conference cum Workshop on Bioinformatics and Computational Biology, 2, pp. 10-12.

Wei, W. W. (2006). Time series analysis: univariate and multivariate methods. Pearson Education.

Yermack, D. (2013), Is Bitcoin a real currency? An Economic Appraisal, National Bureau of Economic Research Working Paper, 19747, pp. 1-22.

Yermack, D. (2015). Is Bitcoin a real currency? An economic appraisal. Handbook of digital currency, 31-43.

Zeren, F. and Koc, M. (2014), The nexus between energy consumption and finance development with asymmetric causality test: new evidence from newly industrialized countries, International Journal of Energy Economics and Policy, 4(1), pp. 83-91.

The Role of Motivational Factors on Employees' Performance: The Case of *University of Buea Cameroon.*

Nsah Veronica Yurikah[1], Hasan Yousef Aljuhmani[2]

Abstract

Motivating employees to take action and keeping them committed is crucial to organizational success. Limited focus on motivational factors in the educational sector in Cameroon as compared to other sectors has resulted to enormous teacher shortage which served as catalyst for the study. The welfare of employees is a concern for the majority of organizations, if not all, in the twenty-first century. In order for employees to enjoy their work, have a sense of purpose, take pride in what they do, and perform to their full capacity, management must foster a pleasant working atmosphere. The study investigated the role of motivational factors on employees' performance at the University of Buea (UB). A descriptive research design was employed in the study, while data obtained during the investigation was analyzed utilizing Multiple Correspondence Analyses to construct the scores with the help of Excel 2016 and SPSS Version 20. A convenience sampling technique with the help of structured questionnaires was used for data collection. Questionnaires were randomly administered to 150 respondents. The study's result established that the work condition, payment, promotion, job security and training significantly influenced employee productivity in the University of Buea. This depicts that better management of these factors will lead to an increase in employee performance.

Keywords: Motivational Factors, Employees' Performance, Buea University

Introduction

Dynamics which influence a people's inclination, strength, as well as perseverance in purposeful conduct are known as their motivation. The course that individuals concentrate their attention on is referred to as purpose. People may choose where to focus their effort, as seen by this feeling of effort direction (Boamah, 2014). To put it another way, motivation is goal-oriented. People are encouraged to strive for a variety of goals, such as being on time for work, finishing a job several hours before kickoff, and many others. The degree of effort devoted towards objectives constitutes a vital component in regards to motivation, labeled intensity. For instance, 2 workers could be directed to complete their job a few hours earlier (direction), however only one of them exerts the necessary amount of effort (intensity) to do so. Moreover, concentration refers to how hard you work to accomplish a task. Similarly, persistence, relates to keeping up the effort over an extended period of phase. Workers persevere till they achieve named objectives or quit prior to doing so. (Aworemi et al., 2011)

Keeping the work force satisfied is core or cornerstone regarding organizational success and growth. Employees' satisfaction is likened to numerous elements, one can point out the aspect of employees' motivation as a leeway to satisfaction and performance thus, it is vital for any institution or organization aiming to be distinct among its kind to assess as well as enhance motivational factors within its operational sphere.

Academic institutions share in the same light as motivated instructors are bound to instill students with knowledge than less motivated ones thus, this study would assess the role of motivational factors on employees performance in the university of Buea and propose meaningful recommendations that would serve as a boaster to institutions and researchers willing to investigate further in the same subject matter.

According to Aarabi & Akeel, (2013), staff need motivation because they don't feel particularly inspired to perform. With much inquisitiveness we'd focus on exploring the relationship involving institutional incentive (motivational factors) variables including compensation, along with job stability, advancement, and freedom, a welcoming workplace culture, training, as well as job involvement. As a result, we assess enthusiasm (staff motivation) in light of work productivity. Numerous studies have found that there are both shared as well as unique features in the study of motivation. The goal of this study is to gain a better knowledge of the elements that affect personnel motivation and how they affect work performance in general at Buea University in Cameroon. Our driving force in this study concentrates on investigating the elements influencing workers' motivation. Nevertheless, the study's focus is just on estimating with certitude motivating variables in regards to the University of Buea staff members. Haven investigated the subject of motivation generally in diverse economies, industries and sectors, our study would address the role of motivational factors in the context of Cameroon and Buea University in particular.

Research questions

Our core research question was; do motivational factors affect employees' performance in the University of Buea?

Specific research questions

Does a payment affect employees' performance in the University of Buea?

Does job security affect employees' performance in the University of Buea?

Does promotion affect employees' performance in the University of Buea?

Does working conditions affect employees' performance in the University of Buea?

Does training affect employees' performance in the University of Buea?

Research Objective

Having embarked to trace the role of motivational factors on employees' performance in the University of Buea, we set some objectives, and our major objective was to evaluate the role of motivational factors on employees' performance in the University of Buea.

Specific objectives

To assess the effect of payment on employees' performance in the University of Buea.

To assess the effect of job security on employees' performance in the University of Buea.

To assess the effect of promotion on employees' performance in the University of Buea.

To assess the effect of working conditions on employees' performance in the University of Buea.

To assess the effect of training on employees' performance in the University of Buea.

This study is significant since it could shed light mostly on motivating elements that hold a significant influence with respect to instructors' performance among public as well as non-state owned institutions (schools). In order to strengthen the educational system, this study may aid in improving the quality of education through enforcement of effective motivational factors capable of boasting staff performance.

The study could also serve as a basis for setting better policies within the education sector in Cameroon; the government would be able to identify boasters in regards to employees' containment and performance drawing from the study results. Another benefit in respect to this study may incline towards researchers seeking more within the area of the study's subject matter.

Literature Review & Hypothesis Development

Process theories of motivation

There exist a collection of beliefs (theories) on how to stay inspired in the workplace that look for connections between the environmental conditions that go into enthusiasm (motivation) as well as necessary behaviors to affect those actions. These theories are the equity theory of Adams (1963, 1965) and the Vroom expectancy theory (1964).

Although equity and expectancy theories are complementary concepts in comprehending employees' commitment (motivation) as dynamic capabilities motivational theory, they are frequently shown in isolation as separate and independent viewpoints.

Based on Adams(1963, 1965), his claim was that people have access to a number of interactive and reasoning approaches to lessen the depressive symptoms brought on by feelings of unfairness. Despite Adams claimed that the technique that is also picked will be the most useful, behavioral approach somehow doesn't anticipate whichever one will prove most effective. (Stecher. M. D & Rosse. J. G, 2007)

Adams developed the equity theory as a suitable method for successful monitoring; hence it is yet another crucial strategy for guaranteeing motivation of employees. If the corporate incentive program is genuine, employees are likely to have confidence in it. This approach makes the assumption of individuals desire to somehow be given special or fair treatment and therefore that they frequently assess their accomplishments and incentives in comparison to what others have accomplished.

The expectation theory of 1964 which was the brainchild of Harold Vroom is a psychological development method of incentive (motivation) built on the premise that human beings have great ability in respect to weighing expenses (cost) as well as advantages when deciding between several options. Expectancy theory is thus beneficial in explaining ways human beings choose convenience (utility maximizing) alternatives to lessen feelings on perceived injustice as well as in comprehending implementations regarding procedural theories overall in line with motivation of employees as a whole.

According to Vroom, an individual will indeed be driven to put up a high degree of effort if they feel this would result in some kind of a favorable evaluation (performance appraisal), accompanied with subsequent organizational benefits like bonuses, pay increases, as well as promotions which would subsequently meet individual aspirations. It essentially implies that individuals make decisions that is, becomes motivated by estimating the extent they might gain out of something, whether probably their efforts would result in them earning rewards, but also the amount which different employees in comparable situations had gotten. (Boamah, R. 2014)

Maslow Hierarchy of Needs

There are a collection of beliefs (Theories) on how to motivate individuals in the workplace which place a strong emphasis on the requirements of the personnel themselves. Needs refers to the vital component of survival including wellbeing, and indeed the intensity of human's requirements determines their drive. In 1946, Maslow proposed that there is a hierarchical order of significance which groups people's needs into a variety of categories, which is typically represented by a pyramid. (Wahba & Bridwell 1976)

Empirical review

According to Habanik & Gullerova (2018) every company needs to encourage motivation. Workers are usually eager to increase their productivity, particularly whenever their efforts are valued as well as acknowledged. Therefore, it is really essential for supervisors to be able to inspire its employees, which necessitates understanding the motivational process. Supervisor must understand what drives employees, along with individual demands, passions, ideals, with their goals as well. Different people have different internal and external motivations, but in practice, all personnel really like to serve for expanding companies, get compensated accordingly, as well as the chance to advance their careers.

Based on Seniwoliba & Nchorbono (2013), the ability of a person to perform at work is greatly influenced by incentives. With the absent of incentive, employees might not provide their best effort. Guaranteeing that work is performed by staff is indeed the supervisor's responsibility. Workers empowerment largely is unrelated with the management's engagement. Employee's motivation can help employees to achieve what is required from them by an organization.

Elements of employees' motivation

Motivation

According to Kumari et al., motivation is a strategy which inspires workers to take action in order to accomplished company objectives. Workers inspiration arises from both internal and external causes. External incentives (motivation) are influenced by variables around work environment, whereas internal motivation comes from inside and drives individuals to perform better. Workers who receive generous compensation also believe they are valued by their employer. When company treats workers well and shows appreciation for his or her efforts, the employee will strive as hard as possible and meet his or her goals. Lack of a compensation and encouragement scheme lowers employee satisfaction.

Gachengo & Wekesa (2017) states that incentives (motivation) describes the level of preparedness an institution has to accomplish a certain objective which entails identifying the type with location of said variables causing that level of preparedness. It also has to deal with both the factors which keep and change the path, nature, and level of behavior. Worker inspiration refers to the multifaceted impulses, demands, and pressures, besides additional systems that initiate and sustain particular behavior aimed at achieving individual objectives.

According to Srivastava & Wekesa (2012) motivation what motivates individuals to exert sincere strength and drive toward something they doing to accomplish.

Motivational factors

According to Gupta & Subramanian (2014) numerous elements constituting motivational factors influence employees' motivation, we chose five elements within these as bases of our study, they include; Salary, job security including Friendly environment, Training and Development together with Promotion.

Salary

Payment (money) has indeed been mentioned as a motivating element, according to Gupta & Subramanian (2014). This is frequently regarded as a sign of achievement and connected to ease and safety. Although payment may have a significant influence on staff productivity, management can utilize it as a tactic, which is seen as a benefit. A fundamental tool that needs to be employed in organizations is incentive. Understanding that salaries together with outcomes are directly correlated thus, workers needs to encouragement via pay that is, commensurate toward the work they put into their jobs. Regardless of the other significant variables, earning a good pay constitutes one of the main ones.

Promotion

Gupta & Subramanian stated that providing chances along their occupations, granting workers greater duties or even additional powers, promotions are among the important effective strategies of keeping staff engaged. Considering an option to raise the pay remuneration is one way to put it into practice. Promotes aid by placing employees in positions more suited to their skills and provide a means for outstanding employees to advance swiftly.

Training and development

Development and training is the process of integrating new professional knowledge with pre-existing knowledge and skills in order to constantly increase staff productivity. Numerous advantages of professional coaching are widely known. Through organizational analysis, performance review, and job evaluation, the first step in coaching must be the identification of the training needs. When it is decided that training is necessary, instruction programs are developed. A set of metrics is developed to monitor the improvements brought about through cooperation.

Friendly environment

A nice working condition is one of the aspects which affect individuals since it has been demonstrated to possess a significant effect on workers ability to do their jobs in organizations. If they are under pressure, a lot of people are prone to change employment. Workers are more likely to dedicate to doing their responsibilities and obligations properly in a friendly workplace setting. In the same way, appreciation between coworkers as well as management would help to create a positive working atmosphere, serving as a motivator in regards to personnel in workplaces. It therefore implies supervisors should take steps to establish and execute programs that might build a pleasant work environment in order to encourage the employees if the work environment looks stressful. Because of this, management ought to contribute positively to the development of a peaceful environment. By planning activities like rest breaks, anniversary or wedding anniversary celebrations, and holidays, they may generate this kind of mood. These initiatives may serve as a catalyst for employees' motivation.

Job security

According to scientific research, job security as a motivating influence positively correlates with employee productivity. The investigation found that work safety significantly affects staff productivity and that less job security lowers employee motivation. Gupta & Subramanian studies looking into the consequences of both being employed and losing it show that staff attitudes deteriorate as when they begin to fear losing their jobs. Accordingly, studies on the topic indicate that the stability gives employees great drive and influences various motivational factors.

Hypothesis

H1:Payment positively and significantly affects employees' performance in the University of Buea

H2: Job security positively and significantly affects employees' performance in the University of Buea

H3: Promotion positively and significantly affects employees' performance in the University of Buea

H4: Working conditions positively and significantly affect employees' performance in the University of Buea

H5: Training positively and significantly affects employees' performance in the University of Buea

Methodology

The method employed in this work is a descriptive survey, purposely to identify significant links regarding motivational factors and employees' performance at Buea University. The data realized from the field was analyzed by effectively employing (SPSS version 20) to be able to effectively describe current research areas and clearly spell out the reason behind utilization of descriptive research. In order to analyze the relationship involving independent variables (motivational factors) and its effect on the dependent variable (employees' performance), a causal design would be used. Descriptive study focuses on acquiring data in respect to current situations that arise in order to describe but also analyze them. This phase of the research methodology includes accurate analysis, evaluation, comparability, pattern as well as association discovery, which is more than just gathering and summarizing data evidence. (Jolongbayan A., 2019)

Research strategy

A strategy is crucial in research, it can be considered in a broad sense, as a set of vital plans of action that are used to accomplish an objective. Consequently, one way to think of a research strategy is as a blueprint that describes the manner in which a researcher seeks or intends to approach solving a particular research problem. Your theory and following method selection for gathering and analyzing data are connected methodologically by this. There are three widely used approaches: mixed methodology, qualitative research, and quantitative research. An important component of the data collecting and processing processes in quantitative research is quantification. The standards and procedures of the instinctual theoretical method as well as positivistic, distinctively have been embedded, along with the fact that it encompasses a perspective that views society as somewhat an exterior, objective truth. This even involves deductive reasoning in respect to intersection of research and theory, with the pronunciation positioned upon this investigation of theories.

Source and data collection tools

In order to navigate successfully through this work, a blend of primary and secondary sources would be consulted. Primary data would be acquired directly from the staff of the said institution (Buea University (UB)) with use of questionnaires that took a form of five point Likert scale ranging from strongly agree to strongly disagree. Vital information from relevant articles would serve as bases for secondary data.

Primary sources

Primary data is described as being evidence which has been independently collected via direct observations, data repositories, the outcomes of surveys and interviews, as well as case studies that have been put together. If information has been obtained based on one's reasoning but also perceived to convey a position that is crucial to that person's unique argument, it is considered primary. The investigator got in touch with both instructors as well as non-teaching employees at (Buea University (UB)) to guarantee the collection of accurate and trustworthy data were gathered. (Sauders & Thomhill, 2009)

Secondary data

Secondary information as utilized in this research work encompasses thoughts gathered from the views of other authors to purposefully and logically incorporate them to realize the study objective. Publications, online searches, papers, and journals were just a few of the independent sources of data that the researcher examined for the work. The researcher was able to understand how essential ideas have been described as well as quantified by many others, along with how the current study endeavor relates to earlier works, with the use of available secondary information. Referring to information which was also gathered by a person in addition to that of the institution is secondary in nature. The field of study of the most cutting-edge methodology is shown by this data source. Furthermore, it creates a certain type of study vacuum which the researcher must complete. These supplemental sources of information might include both internal as well as external relevant information and could deal with a variety of topics. (Sileyew K. J. 2019)

Population

Haven stated the various faculties and schools making up the University of Buea, our population of target for this work cover just the staff serving within the confines of the seven faculties of the said institution excluding a teacher training arm of the said institution. Prior to the civil war breaking out in the two English-speaking areas of Cameroon, the University of Buea employed three hundred (300) regular as well as two hundred (200) part-time teaching staff members. The adverse effect of the crisis in English regions of Cameroon had its take on educational institution, instructors became instrument of target and those who could not stand the challenging situation migrated to safer regions limiting the staff strength of the said institution to about 200 regular instructors thus the population for this study constitutes current regular staff of Buea University constituting a total of about 200 personnel. Population as specified in a research work is typically described as "all the members of any well-defined class of people, events, or objects." A population is an entire set encompassing persons or item that contains all conceivable inhabitants of that classification. It depicts an exhaustive comprehensive identification technique where every component is touched. The benefit of this idea is that the outcomes are accurate (Salaria, 2012)

Sample size

Selecting respondents from within a mass or larger group known as population, valuable for obtaining information suitable enough to address study requirements by the researcher, is designated as sampling Bhardwaj, P. (2019). This study adopted a sample of 150 respondents constituting permanent staff of Buea University (UB) particularly those serving within the limits of the seven faculties.

Sampling technique, justification

One way to think of the sampling procedure is as a way to collect data from a subset consisting of a unique group (population), such when utilizing survey questionnaires. In comparison, a sample is thought of as a chosen subset of individuals drawn out of a size greater (inhabitants or population) by a researcher in order to gather information and draw an adequate solution. Sampling is the process of selecting a representative size (sample) from the studied mass (population) in order to examine the chosen's characteristics and draw conclusions about the mass in general. Instituting a sample consisting of the personnel at Buea University is one of the sampling techniques used in this study to gauge perspectives. The two main types of sampling probabilistic techniques as well as non-probability methods—must be clearly stated. This research work therefore employed a non-probabilistic method (Cooper and Schindler 2008). With respect to this investigation, a practicable (convenient) as well as comprehensive sampling process was used to collect the sample. The advantages of sampling versus collecting information from across the multiverse are clear. It would be exceedingly difficult to test, examine, and compile replies from targeted participants to searches involving hundreds and thousands of possible data sources. Even if it were possible, however, the cost and other factors needed to complete such a difficult undertaking may limit its success hence, when gathering information from the employees at Buea University, a convenience sample strategy was used.

Research instruments

This study utilized one major research instrument that is questionnaires consisting of close ended questions.

Questionnaires

In order to navigate successfully through this work, a blend of sources were consulted; including primary but also secondary ones. Initial (primary data) was acquired directly from staff of the said institution with use of questionnaires that took a form of five point Likert scale ranging from strongly agree to strongly disagree. Using a defined set of questions that are sent to people or organizations, questionnaires are a sort of survey technique that allows for accurate comparison as well as contrasting various responses. (Trochim, 2006). With appropriate organization, questionnaires may produce very valuable information, have a significant number of respondents, and guarantee confidentiality, which among other benefits encourages greater truthful as well as open responses unlike, say, consultations (interviews). Hence, prejudice may be lessened. There are several benefits connected with questionnaires, including the possibility of reaching a wide range of people, decrees expenses compared to interviews, but also decreased potential for bias on the other hand, The researcher typically may have no notion if indeed the participants in regards to the questionnaire was intended actually completed it out themselves; in the event of misunderstandings induced either by questionnaire, researchers wouldn't be present to clarify or clarify the doubt; there's not much freedom on the side of the respondents to present his\her personal viewpoint in an event of any problem; but also questionnaires, like some of the other instruments for collecting data, have some drawbacks. For instance, they are inappropriate in respect to participants with inadequate reading skills, and blurred vision. However, with successful organization plus execution, questionnaires might improve participation rates which may be relatively low. Conscription bias may occur in the absence of thorough preparation for the administration of questionnaires. (Marshall, 2005). The Questionnaire employed in this research study was structured in several sections the primary segment (section A) consisting information regarding population of concern (Buea University staff) while the subsequent section (section B - F) took into account employees' motivation influences (independent variable), aspects regarding employees' performance which is the dependable variable of our study were addressed in the last section (section G). The research instrument (questionnaire) utilized for this study was therefore structured into three (3) areas including subsections in a five (5) point Likert scale format.

Variables on which data is gathered including measurements

The primary variables making up this research work and as well setting a core or solid foundation on which this study is built include; motivational factors (independent variable) as well as employees' performance which is the dependable variable. The explanation of the independent variable was simplified by five (5) associate elements, that is, working conditions together with job security, training, including payment and promotion. Our area of focus was therefore backed by the works of (Boamah, 2014), (Aworemi et al., 2011), (Aarabi & Akeel, 2013), (Stecher. M. D & Rosse. J. G, 2007), (Habanik & Gullerova, 2018), (Seniwoliba & Nchorbono, 2013), (Kumari et al., 2021), and (Re'em, Y., 2011). Assessing a parameter involves identifying the identifiers or scales of measurement as well as choosing multiple paradigms of a feature in the scenario under study. Taking into consideration the scales that are utilized to appraise the indicators are represented by the paradigms in respect to this situation. Therefore, this properly articulates the scope in regards to this survey work as well as how measurements were employed to realize it. The ordinal together with nominal, including the range, and ratio scales are among the 4 important ones that are available with regard data measurement. In order to measure qualitative research, we can utilize nominal and regular scales, while ratios as well as interval measures are used to assess quantitative data. Given that Likert scale is by nature ordinary, this study uses an ordinary scale. To find any ceilings, restrictions, or flaws in the research tool, it is crucial to do a pretest of the data collection instruments (questionnaire). Before beginning data collecting, this enables the study instrument to be revised. To eliminate contradiction in language as well as in evaluation, we pre-test our research instrument to gauge how well participants understood the questions. To achieve this purpose, our measurement tool (questionnaire) was pre-tested on eight chosen members of the Buea University personnel whose' comments were pivotal, in regards to instrument appraisal

Based on Taherdoost, (2016) the extent that an academic investigator accurately assesses whatever they were attempting to investigate is the definition of validity in characterization. Instrumentation validity is thus defined as the ability to assess whatever the tool is designed to assess. Have we assessed what we embark to asses or planned to investigate, summarize the term validity. In essence, validity specifies effectiveness of the tool (questionnaire) from the perspective of acquiring data suitable for realizing the investigator's objective. The (instrument) questionnaire's soundness was increased by the advisor's inspections as well as recommendations. Using eight participants picked at random from the overall populace, the survey equipment was pre-tested prior to administration of questionnaires for obtaining field data.

Results & Findings

This chapter is going to focus on presentation and analysis of the finding of the study. Descriptive statistics as well as relationship (correlation) assessment connecting the variables are used to show as well as analyze the data respectively. According to the precise study aims and assumptions (hypothesis) outlined in the first chapter, findings are reported and discussed as they are examined. The opinions of respondents will be presented by frequency tables, pie and bar charts. A total of 150(one hundred fifty) questionnaires were administered 144 (one hundred and forty four) questionnaires realized 140(one hundred and forty) questionnaires were suitable for analysis, giving a response rate of 93.3%

Demographic Characteristics of Respondents

Table 1 4.1: Distribution of respondent by gender

Gender	Frequency	Percentage
Male	98	70
Female	42	30
Total	**140**	**100**

Source: *Computed by author, field data 2023*

The findings showed that the majority of the respondents 98(70%) were men and the remaining 42(30%) were females. The institution was made of more male staff than female staff.

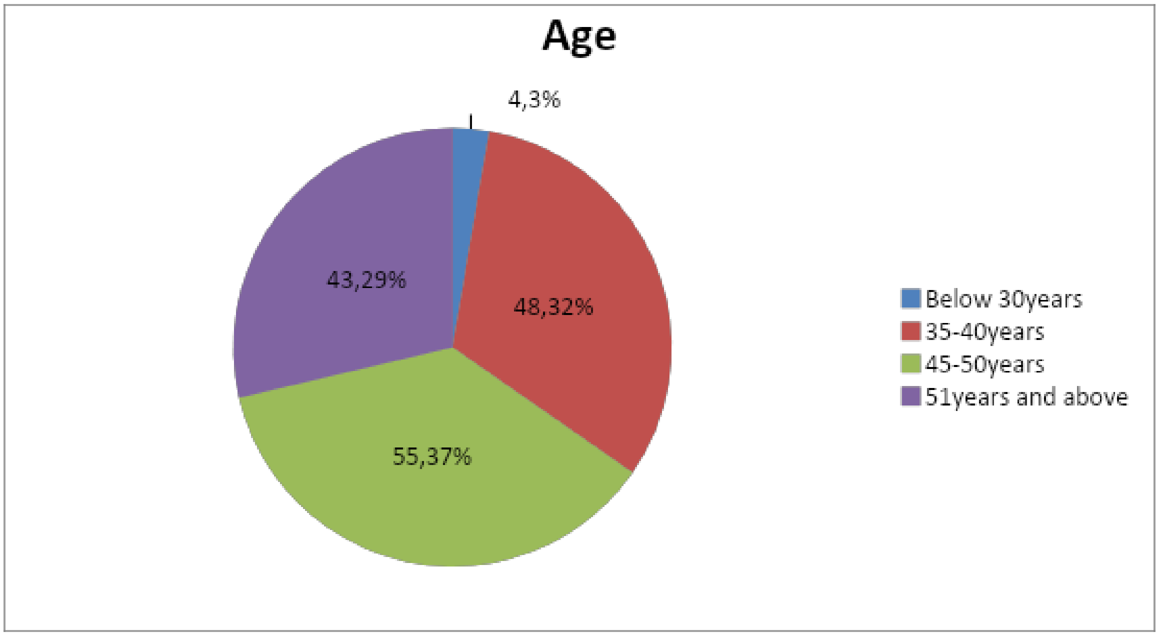


Figure 5 4.1: Dissemination of respondent according to age

Source: *Computed by author, field data 2023*

Based on the revelation as illustrated in the preceding figure 4(3%) of the respondents were below 30 years, 48(32%) of the respondents were within the age range of 35-40 years, 55(36%) were in the age range 45-50 years making up the majority of the population, and finally 55(29%) was occupied by those falling within 51 age range.

Table 4.2: Distribution of respondent by work nature

Job Nature	Frequency	Percentage
Lecturer	54	38.57
Administrator	15	10.71
Security	31	22.14

Others	40	28.57
Total	**140**	**100**

Source; *author's data 2023*

Our findings identified that considerably 54(38.57%) respondents were lecturers making up majority of the respondents, followed by 40(28.57%) Others who were cooking staff, documentation staff and many others, 31(22.14%) were security personnel and finally 15(10.71%) were Administrators.

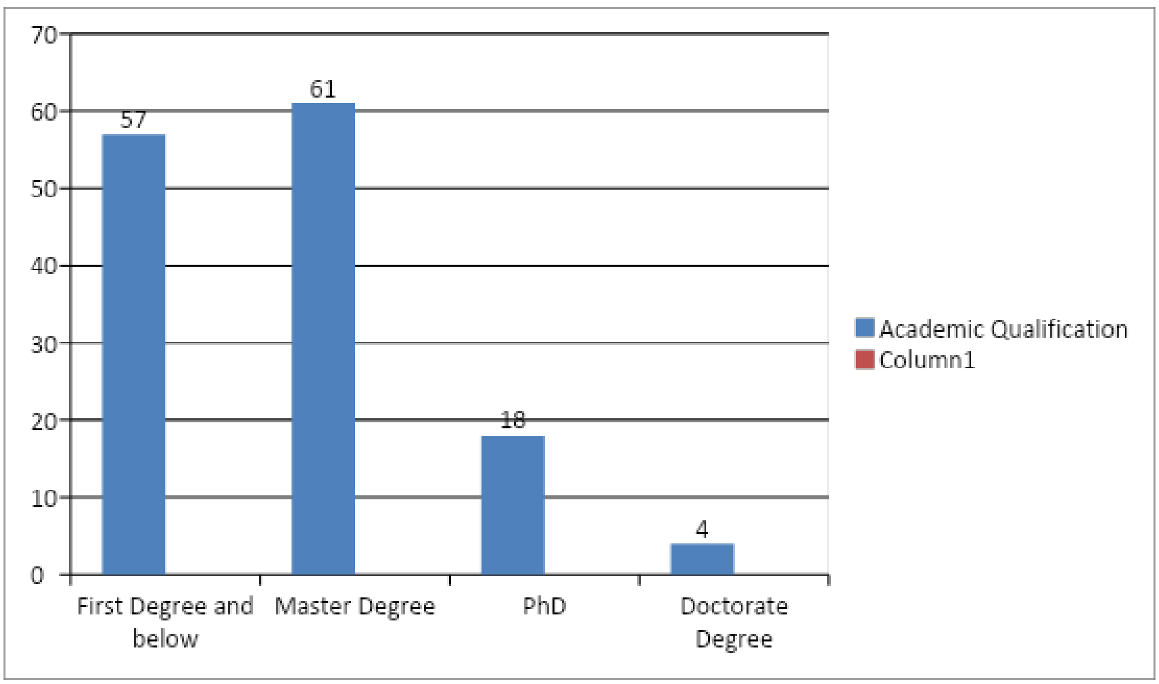


Figure 4.4: Dissemination of respondent by academic qualification

Source: Derived from author's field data 2023

Similarly as reviled in presiding figure above 61(43.57%) of contributors, education backing happen to be a master degree, afterwards 57(40.7%) indicated first degree as their uppermost educational achievement and below, 18(12.86%) had PhD as highest qualification and finally 4(2.86%) had a Doctorate Degree as their highest qualification.

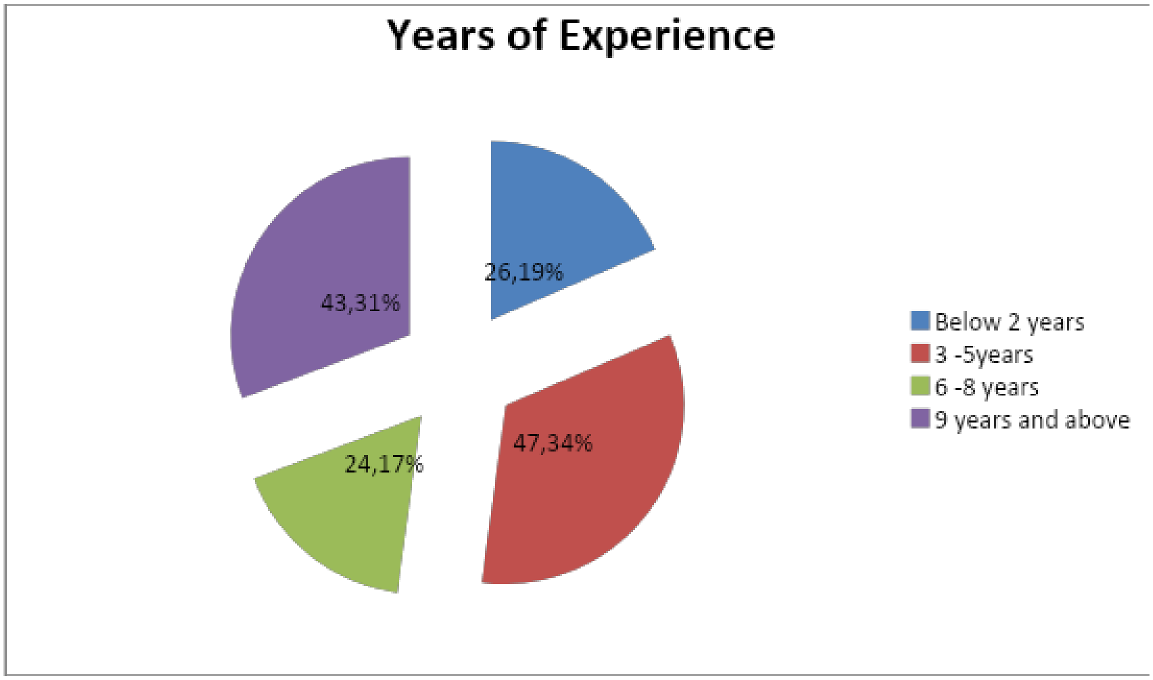


Figure 7 4.3: Distribution of respondent by academic qualification

Source: *Computed by author, field data (2023)*

From the data collected 26(19%) have worked for 2 years and below, 47(33%) had worked for 3-5 years, 24(17%) had worked for 6-8 years and 47(33%) had worked for 9 years and above. Almost fifty percent of employees had a minimum of six years in regards to experience. Allocating these individuals was due to the fact that, because of their competence, they had extensive understanding on the topic in question.

Reliability test

To determine the validity in regards to this investigation's tools in light with autonomous as well as reliant variables, the researcher conducted pilot test.

Cronbach alpha coefficient has been established for autonomous or explanatory variable "The impact of motivation on employees' performance" which is studied through five (5) dimensions.

According to the study's outcome, job security had a Cronbach Alpha coefficient of 0.768, while training had a Cronbach Alpha coefficient of 0.854, in the same light; working conditions revealed a significant coefficient of 0.814. Whereas 0.874 was realized for promotion, finally, a cronbach coefficient of 0.891 was recorded in regards to payment. According to Cronbach (1951), all the variables had cronbach alpha coefficients that were higher than the cutoff point of 0.7, rendering the instruments dependable for the study.

For the dependent variable, employee productivity, which was examined using nine items, a cronbach alpha coefficient was also calculated. Nine questions were used to study the variable "Employee Performance". On them, we ran internal consistency analysis, and our results were adequate. Considering 0.7 as adequately representing the "appropriate" cutoff, thus a significant cronbach coefficient of 0.912 was realized

Index construction: outcome from multiple correspondence analysis

Considering the indiscriminate character with respect to instrument utilized to create the indexes, several correspondence analyses are performed to create six indexes. The 6 indexes derived employing MCA. Two axes have been established in regards to the six indices, according to the MCA results. There were two dimensions with combined principle inertia of 0.016754, whose influence is calculated at 80.5%, while the first dimension with 0.008742 principal inertia influence 19.5% in regards to Work condition Index. Thus, the Working Condition index is predicted from two dimensions. Payment index, Training Index, Job security, promotion and employee performance were also constructed with two dimensions.

The findings reveal that there is considerable variety in the values of the working condition index, with the mean value being 0.089281 and the standard deviation being 1.072033. The range of training index values is 0.083369 to 1.317359. Additionally, the Job Security mean is 0.112018, recording a standard deviation of 1.456921 as well as a minimum value of 0.034245 to 1.345623, maximum value. Finally, the mean and standard deviation of Employee Satisfaction index, Payment index, Job Security was also conducted.

In order to assess whether there is multicollinearity in the model, we did a correlation analysis in regard to the estimate of the model parameters to see if there is substantial correlation among independent variables. Pairwise correlation pairwise correlation for different variables is shown in Table 4.13.

Pairwise Correlation Matrix

The Pearson correlation test is to show how related the variables are to each other and how correct the independent variables can be used to explain the dependent variable. It is used in this study to show how Job Security, Payment, Promotion, Training, and working conditions are related to each other and the degree to which they influence employee satisfaction. Findings show that there is a significant connection between the independent variables, with all correlation coefficients over 0.6. Therefore, it was necessary to conduct a multicollinearity test in order to confirm that the model is free of multicollinearity. Furthermore, the illustration of VIF, that is, variance inflation factor outcome in regards to multicollinearity.

Variance Inflation Factor and Tolerance was used by the researcher to confirm the existence of multicollinearity. A tolerance number around 1 indicates little multicollinearity, whereas a tolerance value near 0 indicates potential danger from multicollinearity. The VIF demonstrates how much multicollinearity is inflating the variance of coefficient estimation. Theoretically, a VIF of between 5 and 10 is ideal. According to the study's findings, multicollinearity among explanatory variables is not a concern. The corresponding regression coefficients are therefore accurately assessed and trustworthy.

A total of 150 (one hundred fifty) questionnaires were administered 144 (one hundred and forty four) questionnaires realized 140 (one hundred and forty) questionnaires were suitable for analysis, giving a response rate of 93.3%.

Data analysis results revealed that the work condition index's coefficient is favorably 0.16841, indicating a favorable influence of a good work condition on employees' performance at the University of Buea thus an increase in work condition for a unity for instance, would trigger a rise in Work condition index by 0.16841 units every other thing remained the same, at a significant level of 1% as the probability value (0.004). Thus there is a significant effect of work conditions on employee performance in the University of Buea.

Similarly, promotion showed that promotion's coefficient index was revealed to be 0.207241, which indicates that work promotion favorably correlates with workers' productivity. Accordingly, a one-unit rise in the employee performance index will, otherwise equal, result in a 0.207241-unit increase in the promotion index. It should be highlighted that this result has statistical significance because the probability value of the variable (0.004) is less than 0.1. Promotion has a favorable, considerable impact on staff performance at the University of Buea.

Additional 0.157225 is the Training Index Coefficient. Accordingly, a one-unit rise in respect to training index will result in a 0.157225-unit rise in staff member's Performance Index, other things being equal. It should be highlighted that this result has statistical significance because the estimated likelihood (probability value) given by the variable (0.002) is below the threshold of 0.1. In the University of Buea, training has a favorable, considerable impact on staff performance.

Additionally, the job security index coefficient is 0.260147. Accordingly, a one-unit rise in regards to Job Security Index will, otherwise unchanged, result in a 0.260147-unit increase in the Employee Performance Index. As the estimated likelihood with respect to the variable (0.000) is less than 0.1, it should be highlighted that this result is statistically significant. As a result, job security has a favorable, considerable impact on staff performance at the University of Buea.

Last but not least, the Payment index coefficient is 0.102145. Accordingly, a one-unit rise in the Payment Index will result in a 0.102145-unit increase in the Employee Performance Index, other things being equal. It should be highlighted that this result has statistical significance because the estimated likelihood (probability value) of the variable (0.001) is below 0.1. As a result, the University of Buea has observed a favorable, substantial influence of payment on employee performance.

Regarding the reliability of the findings, the modified R square value demonstrates that a fluctuation in the entire model's variables together, may account for as much as 52 percent of the variation in the employee performance index. Additionally, the likelihood of the Fischer statistic (Prob>F=0.000) is less than 1%, making the model globally significant at 1%. Thus, work condition, payment, training, promotion, job security in the University of Buea jointly and significantly explain employees' performance, As a result, there is a considerable connection between employee performance and motivational elements

Discussions

Based on OLS estimation for Work Conditions, the results indicate that there exist a substantial as well favorable impact of work Conditions on employees' productivity in the University of Buea. This outcome is consistent with a priori expectations therefore allows for acceptance of the study's initial hypothesis, which says that work conditions significantly affects employee productivity in university of Buea. This study is in line with that of Boroujeni & Hosseinipour, (2020) who found out work environments had a positive moderating effect on the relationship between comfort and productivity.

Also the estimation from OLS above shows that Promotion significantly influences employees' Performance in the University of Buea. The results are consistent with the findings obtained by Malik, Danish, and Munir (2012), who conducted an empirical investigation into the effects of compensation and career advancement on employees' performance in Pakistani institutions of higher learning. They concluded that promotion had a positive and substantial impact on employee performance. This outcome supports the second hypothesis and is consistent with a priori expectations.

In line with the prior expectation the results indicate that there is a positive and significant effect of training on employee performance in the University of Buea. This result permits us to accept hypothesis three of our study which states that training significantly affects employees' Productivity in university of Buea. The results are in alignment with the findings reported by Guest (2016), who investigated the effects of training and development initiatives on employees' performance and discovered that instruction and job expansion significantly improve students' understanding, aptitude, and capability, which in turn boosts staff performance at work.

In line with the prior expectation the results indicate that there is a positive and significant effect of payment on employee performance in the University of Buea. This result permits us to accept the fourth hypothesis of the study which states that payment significantly affects employees' Productivity in university of Buea,. The findings are in agreement with those of Rizwan et al (2010) who found out from his study that reward is the most important element to eliminate employees for paying their best efforts to generate the innovation and the new ideas increase the company performance financially and non-financially.

Finally the results indicated that there is a positive and significant effect of job security on employee performance in the University of Buea. This result permits us to accept the fifth hypothesis of the study which states that payment significantly affects employees' Productivity in university of Buea; the findings are in agreement with those of the research piloted on job stability, motivation, as well as performance of librarians in Ghana's public universities conducted by Lamptey, Lamptey, and Atwini in 2013. According to the survey, most librarians in Ghana's public universities have high levels of motivation, which have a favorable impact on the majority of them. That is, both internal and extrinsic motivational elements for librarians at Ghana's public universities.

Conclusions

The core objective of this study was to investigate the extent to which motivation influences employee performance in the University of Buea. Descriptive statistics with the aid of charts and tables of frequencies and percentages were used to analyze the data. Results from this methodological approach indicate that there is a positive and significant effect of work conditions, job security, payment, training and promotion on employee performance. Conclusively, there is a significant effect of motivation on employee performance.

References

Aarabi, M. S., Subramaniam, I. D., & Akeel, A. B. A. A. B. (2013). Relationship between motivational factors and job performance of employees in the Malaysian service industry. *Asian Social Science*, *9*(9), 301.

Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, *14*(5), 12-16.

Aworemi, J. R., Abdul-Azeez, I. A., & Durowoju, S. T. (2011). An empirical study of the motivational factors of employees in Nigeria. *International journal of economics and finance*, *3*(5), 227-233.

Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, *5*(3), 157.

Boamah, R. (2014). *The effect of motivation on employees' performance: empirical evidence from the Brong Ahafo Education Directorate* (Doctoral dissertation).

Gachengo, V., & Wekesa, S. (2017). Influence of motivation on employee performance: a case of national bank of Kenya. *International Journal of Business, Management and Social Research*, *3*(2), 179-185.

Gambrel, P. A., & Cianci, R. (2003). Maslow's hierarchy of needs: Does it apply in a collectivist culture. *Journal of Applied Management and Entrepreneurship*, *8*(2), 143.

Gupta, B., & Subramanian, J. (2014). Factors affecting motivation among employees in consultancy companies. *International Journal of Engineering Science Invention*, *3*(11), 59-66.

Habánik, J., Martošová, A., & Gullerová, M. (2018). Motivation of public sector employees. *Social & Economic Revue*, *16*(4), 79-85.

Jolongbayan, A. (2019). Information and Communications Technology (ICT) Integration to Social Studies instruction in Secondary Schools Area II, Division of Batangas. *Ascendens Asia Journal of Multidisciplinary Research Abstracts*, *3*(2E).

Kumari, K., Barkat Ali, S., & Abbas, J. (2021). Examining the role of motivation and reward in employees’ job performance through mediating effect of job satisfaction: an empirical evidence. *International Journal of Organizational Leadership*, *10*(4), 401-420.

Marshall, G. (2005). The purpose, design and administration of a questionnaire for data collection. *Radiography*, *11*(2), 131-136.

Nunes, B., Alamino, R. C., Shaw, D., & Bennett, D. (2016). Modelling sustainability performance to achieve absolute reductions in socio-ecological systems. *Journal of Cleaner Production*, *132*, 32-44

Peterson, S. J., & Luthans, F. (2016). The impact of financial and nonfinancial incentives on business-unit outcomes over time. *Journal of Applied Psychology, 91*(1), 156-165

Re'em, Y. (2011). *Motivating public sector employees* (No. 60). Berlin: Hertie School of Governance.

Rizwan Q.D and Ali U (2010). Impact of reward and recognition on job satisfaction and motivation. An empirical study from Pakistan. International journal of business and management.

Salaria, N. (2012). Meaning of the term descriptive survey research method. *International journal of transformations in business management*, *1*(6), 1-7.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

Seniwoliba, A. J., & Nchorbono, A. D. (2013). Examining the role of motivation on employee performance in the public sector in Ghana.

Sileyew, K. J. (2019). *Research design and methodology* (pp. 1-12). Rijeka: IntechOpen

Srivastava, S. K., & Barmola, K. C. (2012). Role of motivation in higher productivity. *Management Insight*, *7*(1).

Stecher, M. D., & Rosse, J. G. (2007). Understanding reactions to workplace injustice through process theories of motivation: A teaching module and simulation. *Journal of Management Education*, *31*(6), 777-796.

Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research (August 10, 2016)*.

Trochim, W. M. (2006). Qualitative measures. *Research measures knowledge base*, *361*(1), 2-16.

Wahba, M. A., & Bridwell, L. G. (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational behavior and human performance*, *15*(2), 212-240.

The Influence of Employment Status & Demographic Variables on Stress and Anxiety among *Cypriot Women.*

Aslıhan Tınastepe[1], Gabriel Nweke[2]

Abstract

The current study aimed to examine attachment working and non working women ın TRNC and perceived stress level, perceived anxiety level according to some demographic variables. A total of 400 working and non-working women participated from Kyrenia of TRNC in 2019 in the study. The ‘' Perceived Stress Scale" was used to determine the level of stress and The‘' Beck Anxiety Inventory" was used to determine the level of anxiety. In statistical analysis of the data gathered in the study Independent T-tests were utilized. The findings of this study supported the literatüre that working women report higher rates of stress compared to non working women. As a result of the study, the data showed a statistically significant difference in the level of stress between working and non working women according to education qualification and age group variables($p < 0.05$). The study also showed that experiences related to stress and anxiety levels were associated with age,educational level and financial status in both working and non-working women Finally, it is possible to mention that the perceived stress level and anxiety level of working and nonworking women are different according to the demographic variables.

Keywords: Anxiety, Beck Anxiety Inventory, Stress, Working Women, Non working Women

Introduction

There is a significant difference in the level of stress between working and nonworking women. There is a discrimination among working women and nonworking women or age groups regarding level of anxiety, level of stress and its consequences. Thus, there is a need for more research that should focus on experiences related to the level of the stress and anxiety in both working women and nonworking women.

The working woman is expected to fulfill several responsibilities towards their families and communities, due to the gender roles imposed on her. Therefore, the working woman has more responsibilities due to the social roles defined for her because she is a woman and this situation brings many problems. To clean the house, maintain order and ensure general maintenance of the house are the roles of women, (Lopata, 1987).

It is emphasized that women's participation in working life brings some problems. The International Labor Organization (ILO) identified three main issues facing women in working life: gender-based discrimination in remuneration; and employing women with the lowest wages (Çağlayan and Etiler, 2009). Particularly in our country, the problems faced by women in working life are based on a number of problems in the economic, social and cultural structure of the society.

The participation of women in business life has been the result of complex and multidimensional interactions for social, political and economic reasons. Formerly, the woman was more likely to look after children at home and do housework as the man worked to make money and to earn money for the family. Then, women began to work by gaining their economic freedom. In addition to these burdens of women who assume the household chores and childcare in our country, the burden has been increasing with their starting to work outside the home. In this sense, anxiety and stress levels can be expected to be higher in working women. However, in the studies conducted in different countries, the findings show otherwise. It was found that women with low socioeconomic status working in a job benefits from a protective psychological effect.

It has been argued that depressive symptoms and psychological stress are higher in women who do not work. The fact that middle-aged women work in a paid job has a positive effect on their mood. Similarly, marital harmony was also found to be better in married women than working women. Stress is a phenomenon that has been studied by many disciplines such as medicine, engineering, organizational psychology, and organizational behavior, and was found in human life since ancient times. People's concerns to find food, shelter and survival in the early ages have been replaced today by an effort to adapt to social life in the rapidly changing world in parallel with the developments in technology (Büyükbeşe, et al., 2011). It is summarized by (Güler et al., 2001) as "In short, while the human brain adapts to the rapidly changing and developing problems of the age, the human body lags behind in this matter and continues to use the chain of reaction developed and brought through the history of life." The concept of stress was first used in physics and later in psychology. While physicist Robert Hook used the concept of stress in the 17th century to explain the relationship between the elastic object and the force applied to it, another physicist Thomas Young used it as a force or resistance within the substance itself (Bakan, 2001; Baki, 2011:). Selye (1974) one of the first researchers on the subject of stress defines stress as "non-specific response of the body to any external influence". Lazarus defines stress as "It is an event that creates a distressing result for all human beings and animals and significantly affects behaviors". (Güler et al., 2001) Today, stress is often considered as a force that unfavorably affects life, and it is defined as physical and psychological strain that occurs in people, forces them to deviate from their normal daily lives, and is caused by an event or situation on people (Uysal, 2008). It is related to the effect of a change in the environment in which the person lives or changing the environment in which the person lives his / her life; and the individual's current conditions and work conditions because it affects him by the body by activating a number of special biochemical secretions to adapt to changing new conditions in order to adapt to mental and physical metabolism can also be defined as the situation (Eren, 2010) . Women did not work much in the past, but women's employment rate has increased recently. In the Turkish Republic of Northern Cyprus, women make up 46% of the population and 35% of the working population. According to 2017 data of the State Planning Organization (SPO), 35.5 % or 43,060 people out of 120,999 people working in total are women; 77,938 or 64.42 % of the working population is composed of men. The unemployment rate among women is 7.8%. According to the research conducted by the state planning organization in 2017, the classification of men and women by occupations is as follows.

	Female Population	Male Population
Teacher	67,8%	% 32,2

Police	5.8%	
Civil service officer	43.2%	%

Table 1: According to SPO population analyze

As per the data of SPO, in 2013, total employment was 97867 and 63865 of them were men and 34000 were women. Given these figures, the rate of women in total employment was 34.7% .In 2014, the total number was increased to 103,149, composed of 68,708 men and 34,442 women. The proportion of women in employment in 2014 is 33.3. According to the SPO data in 2015, 72,303 of 112,811 employees are men and 40,508 are women and the rate of women is seen as 35.9 % . In 2016, where total employment was 118387; 75490 of them were men and 42897 were women. In 2016, the rate of women in employment was 36.2 %. In 2017, 77938 out of 120999 employed were men and 43060 were women and the rate of women was calculated as 35.5 %. On the other hand, in 2014, 40 out of 152 senior managers, in other words 26.3 %, were women; 112 people or 73.7 % of them were men. In 2015, the number of senior executives was 152, while the number of women increased by 4 to 44 and the rate increased to 28.9 %. In 2016, only 49 of 161 senior executives were women, while the rate was 30.4%. According to the data in 2017, 50 of the 158 senior executives were women, and the rate of women was 31.6%. male; 45.9% of which is 171073 women. According to SPO's projection, the de-jure population in the country in 2018 is 372486 and 54.1% of which is 201.441 males; 45.9%, or 171073 were women. As the projection of the SPO is considered, 69,163 people were in Kyrenia, composed of 36,762 men, and 32,999 women.

Stress is a concept that many individuals use intensively in their daily lives. For several reasons, individuals feel under pressure and are often depressed under such pressure. They are hampered by different reasons when striving to succeed or meet their needs. These reasons may be individual problems as well as environmental problems. Examples of these reasons are the anxiety of individuals living in big cities catching up to work, worrying about job search for young people, and the tasks assigned to them regardless of the age of primary school students. In addition, each individual's level of resistance to stress varies depending on their individual qualities. In this study, it was aimed to investigate the perception of stress and anxiety among working and non-working women according to some socio-demographic variables.

Literature Review & Hypothesis Development

Concept of Stress

There are many studies studying stress. Research on the concept of stress in the literature reveals that the word first appeared in the field of physics and was used in various fields over time. The concept of stress is commonly used in behavioral sciences and psychology. Stress, which has become one of the most encountered words in daily life, is expressed as tension and pressure on the individual. Every change in an individual's life leads to stress, either positively or negatively. Selye (1956) stated that there are many mixed definitions for the concept of stress, so it would be better to state clearly what stress is not. Selye, stress the concept of nervous tension, the result is not an unclear damage, he explained. Stress is the result of interaction with the individual and the environment. Stress is what drives motivated emotions more. In the event of stress, a specific threat exists, and the threat is detected. This is in a way related to expectations, constraints and opportunities.

In addition, stress affects all living things and is not a controllable development under normal circumstances. (Soysal, 2009). When the definitions related to stress are taken into consideration, the main features of stress are listed as follows; Stress occurs as a result of the interaction of the individual and the external environment / environment. There is a threat element in stress. The severity of this situation depends on the individual's point of view. Stress can affect many parts of living things, not just one point. Stress is not an emotion that can be controlled in various ways. Therefore, physiological changes that occur due to stress cannot be initiated by the person's own will and cannot be prevented by their own will (Eşsizoğlu, 2015, Ceylan, 2005).

Phases of Stress

The organism, which is faced with stress due to the difficulty and threat of its physical and mental limits, has to adapt to the new situation and to restore the deteriorated balance in order to preserve its vitality and maintain its existence. The reaction of the organism to stress in order to maintain its deteriorating balance and to survive is called the General Harmonization Indicator ". This process consists of three stages: alarm stage, resistance stage and extinction stage (Baltaş and Baltaş, 2004).

Alarm Phase; this is the period when the external stimulus is perceived as a danger by the organism. When the organism perceives the danger, it starts to show signs of shock, the heart becomes as if it will stop, the blood pressure and body temperature decrease called "dizzying of hands and feet" occurs and the organism enters the control phase. During the contra-shock period; the organism makes active physiological interventions to deal with the threatening situation. This is the period when the organism decides "run or fight" (Güler et al., 2001). Resistance Phase is the period in which the organism struggles to resist stress and spends all its efforts to restore the deteriorating balance (Eren, 2010). At this stage; if the organism can adapt to the source of stress, it regains its lost energy and tries to compensate for the damage to the organism during the stress process. If this is achieved, the parasympathetic nervous system is activated in the body to regulate heart rate, blood pressure and respiration, and reduce muscle tension (Baki, 2011). Exhaustion Phase; If the stressful event is very intense and prolonged, the exhaustion process starts if the adaptation and resistance energy of the organism cannot cope with stress. Each organism's ability to cope with stress and adaptation is different and although sleep and rest may help to repair some body, this stage is a period in which the body is susceptible to diseases; stresses that cannot be copied and persist can leave irreversible traces in the organism. This destruction in the organism is defined as "adaptation disease and may result in bodily exhaustion and death (Baltaş and Baltaş, 2004).

Negative and Positive Stress

Stress should not always be considered as a dangerous situation that should be avoided. Sometimes, the situation they experience in relation to the goals they want to achieve in their lives such as promotion, being successful, getting married, being a parent, can be handled in the negative stress category in terms of positive stress, losing one family, losing their job, not being promoted and failing. While achieving the goals of positive stress in the individual creates a motivating, motivating effect, negative stress creates an effect that jeopardizes mental and physical health (Solmus, 2004). Although stress is a phenomenon that threatens the health of the person; There is also a stress threshold and positive stress level. This positive level of stress, which varies from person to person, is an important factor in revealing the potential within the individual and if this positive level is exceeded, it may be the cause of physical and psychological disorders (Bayram, 2006). Stress is a part of life, and every moment of life, there is some amount in every life. The emergence of stress as a problem that threatens the individual; too much or too little, the features that make up the stress, how the individual perceives and evaluates stress, the potential and resources to cope with the stress factor varies (İlgar, 2001).

Sources of Stress

Individual Stress Sources

Many studies examining the relationship between stress and personality have emphasized that understanding the personality traits of individuals is of primary importance in understanding stress (Güler et al., 2007). Because it is not possible for every human being to perceive all incidents in the same way, it is a fact that every stimulus and stress source will not create stress in everyone, and even if it does, the intensity of this stress will not be the same for everyone. For this reason, it can be expected that the stress experienced in working life will show individual differences and even each profession has its own sources of stress (Torun, 1996: 44; Solmuş, 2004).

Personality Characteristics

Some personality structures have an excessive sensitivity to stress sources and therefore are affected more quickly and negatively from stress. Conversely, some personality structures are more resistant to stress sources and may even see stress as an important factor in success (Baytar, 2010).

Age and Gender

As people perceive and interpret the developments in their lives and their environment at different ages, age is one of the important individual reasons that affect stress. Therefore, it is seen that the events causing stress on the individual differ in different periods of life. With increasing age in humans, changes that cause physical and mental regression and which cannot be compensated are observed. In today's rapidly changing and developing world, it is seen that even in many fields of work known as the specialty of men, women work. In fact, many women are in executive positions in working life. These women are faced with stress factors faced by men in business life, as well as living in a patriarchal society and as a result of being in male-dominated organizations are faced with a number of extra stress factors (Özbay, 2007). To list the sources of stress that women encounter more than men in working life; gender discrimination, sexual harassment, violence, responsibilities and roles in family life and the conflict of responsibilities and roles brought by business life (Soysal, 2009). In the studies related to the stress level experienced by female employees in our country; it is seen that female employees experience more stress to male ratios, tend to hide their stressful work situations by avoiding sharing them, behave like not wanting anyone to know their troubles and trying not to mention any of them (Solmuş, 2004). Many studies, even if they are doing the same job, women are more stressed than men and men have experienced more emotional burnout than men in the business life (Arı and Bal: 2008).

Family Life

Family is a social institution in which individuals spend most of their daily lives and arrange their male-female relationships between married spouses, relationships between them and their children and among children, and to provide physical, psychosocial needs of these family members. Family members defined in these three relations (women-men, children-parents, siblings) problems, disagreements, communication problems affect the whole family as well as individuals negatively (Eroglu, 2006). Especially in large families; intergenerational conflicts, the elderly do not want to accept the fact that young people grow up and become adults, the young people think that they have the right to decide on their lives, the tensions between the brothers, the problems experienced between married siblings, their spouses and their children, the whole family and the family can be overshadowed. cause great tension. In addition, the presence of an elderly or sick individual in the family brings with it the financial and moral sacrifice of the person taking care of this individual and this situation causes them to feel that they limit their lives because of the sense of responsibility they feel for their caregivers. (Baltaş and Baltaş, 2004). An important part of the stress factors in family life is due to the unmet needs of individuals in the family. For example; the lack of sexual satisfaction of any of the spouses, the lack of food and shelter to meet the minimum level of economic deprivation, daily life pleasures, lifestyles, life-related views, attitudes and opinions, etc. are large differences. it causes unrest in the family and stress of family members (Eroglu, 2006).

Organizational Stress Sources

Throughout history, people have understood the importance of cooperating to achieve some goals, achieving their goals, joining forces, and realize that if they act together, they can do more than they can do alone, and this awareness has led people to be organized and organized. Today, organizations in which they are involved. Therefore, changes in the organization affect the level people spend most of their time in organizations and as a result of this, they interact with the stress experienced by the person (Güler et al., 2001). The person in an organization cannot be isolated from the external environment while working in the organization, and from the effects of working conditions in the workplace, from business relations and thoughts about work (Kırel, 1999). Individuals are surrounded by pressures on the business itself, its role within the organization, its relationship with the internal and external environment, and career development. The individual may be under intense stress due to these pressures.

Results of Stress for Individual

There are several consequences on the interaction between the stress factors and the individual's reactions to them, forcing the person and damaging the mental and physical health. In our study, the results of stress on individuals will be examined under four headings: physiological, psychological, cognitive and behavioral outcomes.

Physiological Consequences

Some physiological changes occur in the organism that encounters a harmful agent. Accordingly, some of the physiological consequences of stress and tension in the organism are as follows; palpitations due to high blood pressure, dryness in the throat and mouth, dizziness, excessive fatigue, involuntary tremor and nervous tics, severe startle even in the smallest voice, high-pitched laughter, instant stuttering and speech difficulties, tooth grinding, nail eating, short the need to go to the toilet with diarrhea or constipation, nausea or cramps, migraine-like headaches, muscles, neck and back pain due to tension, painful and irregular menstruation, loss of appetite or excessive appetite (Eroglu, 2010) .

Psychological Consequences

Stress inducing events and conditions have physiological as well as psychological consequences on individuals. The sense of self-incrimination and inadequacy that arises as a result of the stress experienced by the individual will affect the perception structure of the individual and will result in the secret loading of the organism which he sees as the cause of his frustrations. Thus, the sources of stress that cannot be copied will generate an attack of energy and will force the internal body to initiate the process of self-destruction of the organism. This situation may cause the individual to be aggressive towards the objects and objects around him or her, and may lead him / her to go into depression and even to commit suicide (Eroğlu, 2010).

Cognitive Consequences

Stress can have cognitive consequences such as having difficulty in making decisions even on a simple subject, not being able to concentrate on the work done, increasing forgetfulness, confusion, weakening in memory, daydreaming in daily life, decreasing the ability to analyze and synthesizing, and losing sense of humor (Büyükbese, 2011).

Behavioral Consequences

Behavioral consequences of stress on individuals include, in particular, use of cigarettes, alcohol, various stimulants and even drugs, excessive eating and deterioration in sleep order (Okutan and Tengilimoglu, 2002). Likewise, in individuals who are exposed to intense stress, success level falls, not coming to work or coming late, not being able to concentrate and as a result of accidents, communication difficulties and aggressive behaviors towards the environment and other individuals can be observed (İlgar, 2001). In addition, introversion, insomnia, desire for constant sleep during the day, anorexia or increased appetite, temporary speech difficulties and stuttering, excessive indulgence of certain objects or behaviors, and clumsiness are among the behavioral consequences caused by stress (Soysal, 2009).

Anxiety Disorder

Anxiety is a state of mind. It is a state of tension against danger as well as an emotional response that is more common than usual (Goldstein, Baker and Jamison, 1986). They are spontaneous emotional, behavioral and physical symptoms that occur when any dangerous situation is encountered. Anxiety is generally defined as a state of uncertain cause, fear and anxiety (Beck, 2008). It is known that anxiety, which is a normal feeling, should have biological reactions that occur in dangerous or negative situations that people encounter in their normal lives. This biological mechanism is of great importance for the survival of individuals. In dangerous situations, individuals become anxious and anxious when trying to find a solution. In fact, this is normal, normal. One of the reasons for anxiety is uncertainty. The uncertainty of the future will be given, examples can be given (Cüceloğlu, 2003). In order to distinguish fear from anxiety, it is important to know that there is a clear, known cause of fear; and the disappearance of this cause, which causes fear, destroys fear; and it allows the person who encounters this situation to calm down. Anxiety is not like eliminating the cause of anxiety and removing fear; because the anxiety is independent of the object or object. Because the lack of persistence lasts long and is not affected by external factors (Crooks and Stein, 1991). Anxiety disorder is a common problem in children and adolescents (Berstein and Layne, 2007).

Status of Working Women in TRNC and the World

In the TRNC, women's active participation in working life began in the 1980s. The service sector, which started to develop in this period, created new job opportunities for women. However, it is seen that the industrial sector has not been able to offer employment at the same rate in the 1980s in response to the demands of women for work. In the 1990s, it was seen that only one quarter of women participated in employment. In the 2000s; The female labor force participation rate, which was 27.1% in 2001, decreased to 23.6% in 2007, but after that year it showed small increases, 24.5% in 2008, 26% in 2009 and 27.6% in 2010. In 2011, it was 28.8%, in 2012 it was 29.5% and in 2013 it was 30.8%. (Labor Force of Non-Institutional Population by Years and Gender, DPO, 2014). In 2010 women's labor force participation rate was 40% in Cyprus and 27.6% in Turkey, the average rate in 27 countries of the European Union was 66.1% in the same year, while the rate in OECD countries was 60.8%. According to these data, it is seen that TRNC is at the bottom of OECD countries in terms of female labor force participation rates.

Problems encountered by women in business life

Increasing women's participation in working life brings positive and negative aspects and many discussions and comments. Especially women who are forced to participate in working life due to economic reasons are faced with huge responsibilities and problems due to difficulties of working life and social pressures and extra tasks which are supposed to be fulfilled by them as housewife and mother (Kocacık and Gökkaya, 2012). In this study, the problems faced by women in working life will be examined under two headings: problems encountered in family life and problems faced in business life.

Housework and Child Care

The first role attributed to women by traditional social thought is the role of motherhood. The role of motherhood includes the birth, upbringing, upbringing and education of the child in accordance with community norms. The role of women in the house is to clean the house, maintain order and ensure general maintenance of the house (Lopata, 1987).

There is a significant relationship between marital status of women and preference of working life when social roles are so prominent and traditional point of view is dominant. With the effect of the learned behaviors, marriage and becoming a mother are the primary choices among women. Working is often preferred only for economic reasons and most of the time it is not considered a career. The main reason for this is that girls are encouraged to marry and raise children from a younger age, and boys are socialized to work and have a career (Uşen & Delen, 2011). Most of the time, the child care service takes a large part of the income earned by women in working life, so it is not a preferable option for women to participate in working life instead of being a housewife. In a study, the most important reason for working women to leave the job with 69.5% is to raise children, housework and the care of the spouse (Sandikcioglu, 1998).

Problems Faced by Women in Business Life

It is emphasized hereinabove that women's participation in working life brings some problems. The International Labor Organization (ILO) identified three main issues facing women in working life: glass ceiling; gender-based discrimination in remuneration; and employing women with the lowest wages (Çağlayan and Etiler, 2009). Particularly in our country, the problems faced by women in working life are based on a number of problems in the economic, social and cultural structure of the society. These shortcomings stem from "gender discrimination" which is still of importance in society (Susam, 2013). The problems women face in business are lack of education and vocational training, gender-based discrimination, discrimination in compensation, sexual harassment and discrimination in promotion.

Methodology

Relational Screening model was used to investigate the attachment styles, stress levels, coping methods and demographic characteristics of the university students. In the studies carried out according to the screening model, researchers primarily create hypotheses in order to find answers to the research questions; in addition, in the studies carried out according to the screening model, the characteristics of the individuals included in the study are examined in the light of some socio-demographic variables (age, marital status, economic status and working status, etc.). In this study, perceived stress levels and perceived anxiety levels of women living in Kyrenia were examined in the light of some sociodemographic variables, and also, the relationships between variables were investigated.

This was a quantitative research that was based on two research designs: Independent T-Test and Mann Whitney U Test. SPSS software was used to do all the analysis. The consistency between the scales were estimated using Cronbach's alphas.

The research was conducted on following pattern:

Figure 2 research pattern

Population and Sample

The population of the study includes Cypriot women living in Kyrenia, TRNC.

The sample group consisted of 400 employed and unemployed Cypriot women selected randomly from various regions of Kyrenia. Random selection method is also known in the literature as a simple random method, in which individuals who make up the universe are randomly selected without being subjected to any criteria. Therefore, in the random selection method, the probability that each individual constituting the population is included in the research is equal to each other (Can, 2014). As it is known, it is determined that at least 384 people should be included in the sampling team when the number of individuals in the population is up to 1 000 000 in the studies that should be formed in the 95% confidence interval (Can, 2014: 28). In this context, it is seen that the sample group included in the research is sufficient to obtain reliable study findings.

Data collection Tools

In this section, information is given on the personal information form used in the data collection phase of the research and the data collection scales. Surveys were used to collect data from the participants at various times throughout my study. Participants filled in a number of quantitative questionnaires based on self-reporting with no specific order. A demographic questionnaire was given first and then the study questionnaires were given. The consent form explained the purpose of study and the procedures necessary to debrief. Following are the tools that were used to assess anxiety and stress level.

Personal Information Form

There is an individual information form developed by the researcher to determine the demographic characteristics of the women in the study. It was aimed to obtain information about the age, education, social class levels and working status of the women participating in the research and their interest in the research subject (Appendix A).

Perceived Stress Scale

Perceived Stress Scale (PSS) was used to determine the stress levels of the women in the study (Appendix B). Perceived Stress Scale was developed by Cohen, Kamarck and Mermelstein (1983). Perceived Stress Scale, which includes a total of 14 items, is planned to determine the amount of stress perceived by some individuals in their life situations. The scale is defined as a 5-point Likert-type scale ranging from "Never (0)" to "Very often" (4). 7 of the items on the scale given with positive meaning are calculated as points on the opposite side. Standardization works for implementation of the scale in the studies carried out in Turkey were developed by Baltas et al (1998).

Beck Anxiety Inventory

Beck anxiety stress inventor was used to determine the anxiety levels of the women in the study (Appendix C). Beck Anxiety Inventory: Beck Anxiety Inventory was developed by Beck, Epstein, Brown and Steer in 1988. The inventory is developed to determine the frequency and magnitude of the anxiety symptoms experienced by the individuals. The highest score that one may get from the Inventory composed of 21 items is 63. The validation and reliability of the Inventory in Turkey was carried out by Ulusoy, Şahin and Erkman (1998). Ulusoy et al. found the Cronbach Alpha internal consistency reliability of the Inventor as 0,93.

Results & Findings

Demographic Characteristics

The data was analyzed by removing multivariate and univariate outliers, the final sample involved in the study consisted of 200 working and 200 nonworking women from Kyrenia . The working women participants ranged from 18-65 inches with mean value 3,29 and standard deviation of 1,36. The non-working women participants ranged from 18-65 inches with mean value 2,34 and standard deviation 1,28.

There is a significant difference in level of stress between working women (mean value 43.89 and standard deviation value 4.53) and non-working women (mean value 26.93 and standard deviation value 5,32). T(398) =34,32 PL.001. There is also a significant difference in the level of anxiety of working women (mean value 37,05 and standard deviation value 5,24.) and non-working women (mean value 41,59 and standard deviation value 3,98). T(398) = -9,74 PL.001.

The height of female participations ranges from 46-65 inches with mean value 1.00 and standard deviation value ,001. The lowest of female participants ranges from 18-25 inches with mean value 17.78 and standard deviation 0.410.

Table 3 mean (M) Percent (P) and standard deviation (SD) values for year inches

	M	SD	P
18-25	1.78	,41	21.1
26-30	1.54	,50	22.4
31-35	1.47	,50	29.1
36-40	1.11	,31	11.2
41-46	1.47	,50	11.9
46-65	1.00	0,01	3,8
Total	1.500	0,500	

AGE AND STRESS LEVEL

AGE	Mean	N	Std. Deviation
18-25 years	29,9176	85	10,10447
26-30 years	34,9222	90	9,50722
31-35 years	37,4786	117	8,46758
36-40 years	41,8444	45	7,12536
41-46 years	34,5208	48	11,33060
46 -65 years	36,8000	15	4,50714

Total	35,4075	400	9,82383

Table:4

As seen in the table above It is stated that the age group experiencing the least stress is between 18 and 25 years old. On the other hand, 36-40 years of age are stated to be the most stressed age group.

AGE AND ANXIETY LEVEL

Age	Mean	N	Std. Deviation
18-25 years	39,7882	85	4,49098
26-30 years	41,0889	90	3,71346
31-35 years	39,4103	117	5,13130
36-40 years	37,0444	45	4,97245
41-46 years	39,7292	48	6,46345
46 yaş ve üstü	30,8000	15	1,32017
Total	39,3175	400	5,17432

Table 5

As seen in the table above ıt ıs stated that the age group experiencing the least anxiety is between 46-65 years old. On the other hand, 26-30 years of age stated to be the most anxious age group.

ACADEMIC QUALIFICATION AND STRESS LEVEL

Academic Qualification	Mean	N	Std. Deviation

Primary school	32,1698	106	9,27513
Secondary school	34,6116	121	8,61914
University	37,9480	173	10,30199
Total	35,4075	400	9,82383

Table 6

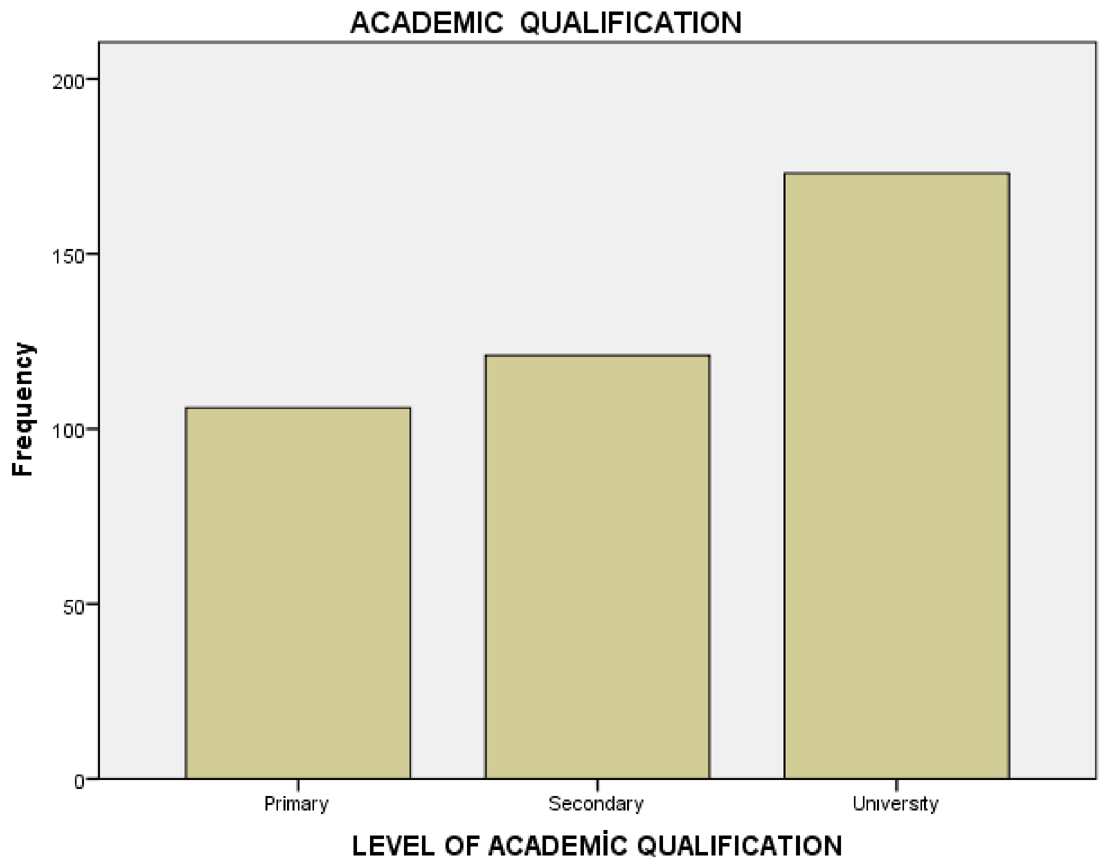
As seen in the table above it has been observed that those with primary school graduates are less stressed. (mean 32,16 standard deviation 9,27) On the other hand, it has been observed that those with a university degree are more stressed. (mean 37,94 standard deviation 10,30)

ACADEMIC QUALIFICATION AND ANXIETY LEVEL

ACADEMIC QUALIFICATION	Mean	N	Std. Deviation
Primary school	40,9434	106	4,17437
Secondary school	38,5868	121	4,47525
University	38,8324	173	5,93773
Total	39,3175	400	5,17432

Table7

As seen in the table above it has been observed that those with secondary school graduates are less anxious (mean 38,58 standard deviation 4,47). On the other hand, it has been observed that those with a primary school degree are more anxious (mean 40,94 standard deviation 4,17).



From Figure 3, it can be seen that 26.4% of the respondents were Basic Education Certificate Holders, 30,1% held Senior Secondary Certificate, 43% held Certificates from the Universities

Analyzing stress level

When participants' responses were examined, the working women stress level is higher than unworking women. (Mean 43,89 – standard deviation 4,53). It was determined that working women had more stress. Most participants stated that they were stressed about this question; In the last month, how often have you found that you could not cope with all the things that you had to do? (mean 4,87 standard deviation 0,47). Non-working women stated that they are less stressful in this question. In the last month, how often have you felt nervous and "stressed"? . (mean 1,90 standard deviation 0,67). On the other hand, stress levels of working women are higher than non-working women (mean 3,53 standard deviation 0,53). However, working women participation has less stress than working women in these questions. In the last month, how often have you found that you could not cope with all the things that you had to do? (mean 2.80 standard deviation 0.84).

Analyzing anxiety level

When participants' responses were examined, the non-working women's anxiety level was higher than working women. (Mean 41,59– standard deviation 3,98). It was determined that non-working women had more anxiety than working women. Most participants stated that they were anxious about this question; feeling hot (mean 2,38 standard deviation 1,08). At the same time, the non-working women feel more anxiety than working women in this question; Face flushed (mean 2,22 standard deviation 0,61). Other results, the working woman has more anxiety in these questions (Feeling hot, Unable to relax, Fear of worst happening, Dizzy or lightheaded) .

Working Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	full time	200	49,8	50,0	50,0
	housewife	178	44,3	44,5	94,5
	Retired	22	5,5	5,5	100,0
	Total	400	99,5	100,0	
Total		400	100,0		

Table 8 , it can be seen that 49,8% of the participants worked as full time, 44,3% were as a housewife, 5,5% participants were retired.

How many years have you worked?

		Frequency	Percent	Valid percent	Cumulative Percent
Valid	1 month-5 years	132	32,8	33,0	33,0
	6-11 years	160	39,8	40,0	73,0
	12-17 years	90	22,4	22,5	95,5
	18-23 years	3	,7	,8	96,3
	24 years+	15	3,7	3,8	100,0

	Total	400	99,5	100,0
Total		402	100,0	

Table 9, it can be seen that 32,8% of the participants work between 1 months-5 years, 39,8% of the participants work between 6-11 years.

Working hours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7 saat	110	27,4	27,5	27,5
	8 saat	125	31,1	31,3	58,8
	9 saat	125	31,1	31,3	90,0
	10 saat ve üzeri	40	10,0	10,0	100,0
	Total	400	99,5	100,0	
Total		402	100,0		

Table 10

As seen in the table above it has been observed that 27,4% participation work 7 hours ,31,1% participation work 8 hours, 31,1% participation work 9 hours and 10% participation work 10 hours a day.

Demographic Characteristics

The data was analyzed by removing multivariate and univariate outliers, the final sample involved in the study consisted of 200 working and 200 nonworking women from Kyrenia . The working women participants ranged from 18-65 inches with mean value 3,29 and standard deviation of 1,36. The non-working women participants ranged from 18-65 inches with mean value 2,34 and standard deviation 1,28.

There is a significant difference in level of stress between working women (mean value 43.89 and standard deviation value 4.53) and non-working women (mean value 26.93 and standard deviation value 5,32). T(398) =34,32 PL.001. There is also a significant difference in the level of anxiety of working women (mean value 37,05 and standard deviation value 5,24.) and non-working women (mean value 41,59 and standard deviation value 3,98). T(398) = -9,74 PL.001.

The height of female participations ranges from 46-65 inches with mean value 1.00 and standard deviation value ,001. The lowest of female participants ranges from 18-25 inches with mean value 17.78 and standard deviation 0.410.

Table 3 mean (M) Percent (P) and standard deviation (SD) values for year inches

	M	SD	P
18-25	1.78	,41	21.1
26-30	1.54	,50	22.4
31-35	1.47	,50	29.1
36-40	1.11	,31	11.2
41-46	1.47	,50	11.9
46-65	1.00	0,01	3,8
Total	1.500	0,500	

AGE AND STRESS LEVEL

AGE	Mean	N	Std. Deviation
18-25 years	29,9176	85	10,10447
26-30 years	34,9222	90	9,50722
31-35 years	37,4786	117	8,46758
36-40 years	41,8444	45	7,12536
41-46 years	34,5208	48	11,33060
46 -65 years	36,8000	15	4,50714
Total	35,4075	400	9,82383

Table:4

As seen in the table above It is stated that the age group experiencing the least stress is between 18 and 25 years old. On the other hand, 36-40 years of age are stated to be the most stressed age group.

AGE AND ANXIETY LEVEL

Age	Mean	N	Std. Deviation
18-25 years	39,7882	85	4,49098
26-30 years	41,0889	90	3,71346
31-35 years	39,4103	117	5,13130
36-40 years	37,0444	45	4,97245
41-46 years	39,7292	48	6,46345
46 yaş ve üstü	30,8000	15	1,32017
Total	39,3175	400	5,17432

Table 5

As seen in the table above ıt ıs stated that the age group experiencing the least anxiety is between 46-65 years old. On the other hand, 26-30 years of age stated to be the most anxious age group.

ACADEMIC QUALIFICATION AND STRESS LEVEL

Academic Qualification	Mean	N	Std. Deviation
Primary school	32,1698	106	9,27513
Secondary school	34,6116	121	8,61914
Unıversity	37,9480	173	10,30199
Total	35,4075	400	9,82383

Table 6

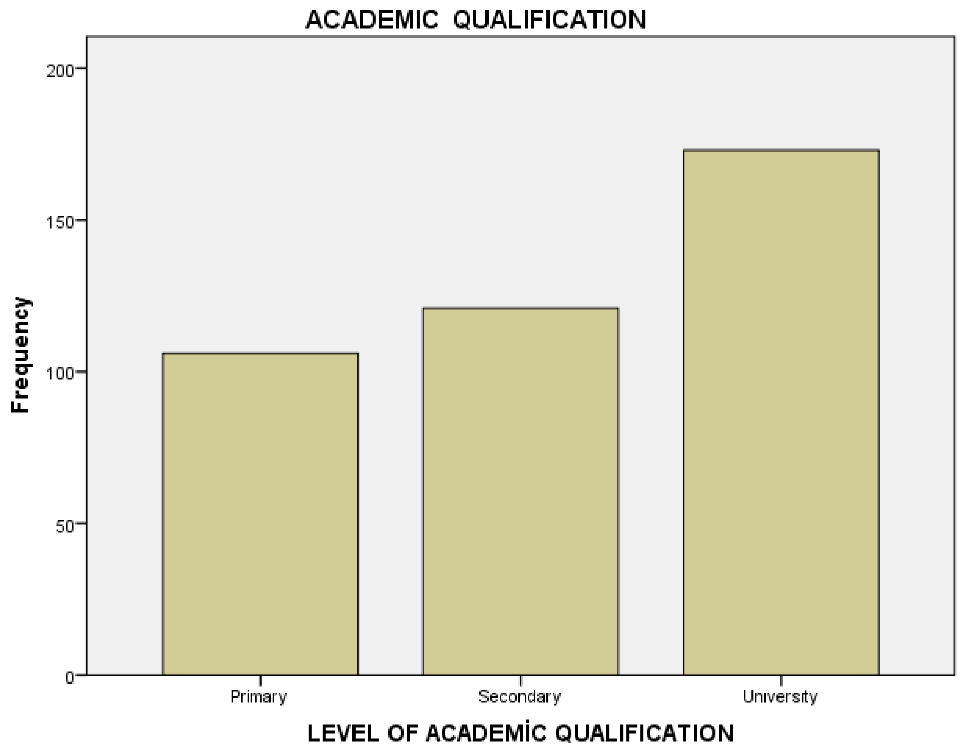
As seen in the table above it has been observed that those with primary school graduates are less stressed. (mean 32,16 standard deviation 9,27) On the other hand, it has been observed that those with a university degree are more stressed. (mean 37,94 standard deviation 10,30)

ACADEMIC QUALIFICATION AND ANXIETY LEVEL

ACADEMIC QUALIFICATION	Mean	N	Std. Deviation
Primary school	40,9434	106	4,17437
Secondary school	38,5868	121	4,47525
Unıversıty	38,8324	173	5,93773
Total	39,3175	400	5,17432

Table7

As seen in the table above it has been observed that those with secondary school graduates are less anxious (mean 38,58 standard deviation 4,47). On the other hand, it has been observed that those with a primary school degree are more anxious (mean 40,94 standard deviation 4,17).



From Figure 3, it can be seen that 26.4% of the respondents were Basic Education Certificate Holders, 30,1% held Senior Secondary Certificate, 43% held Certificates from the Universities

Analyze stress level

When participants' responses were examined, the working women stress level is higher than unworking women. (Mean 43,89 – standard deviation 4,53). It was determined that working women had more stress. Most participants stated that they were stressed about this question; In the last month, how often have you found that you could not cope with all the things that you had to do? (mean 4,87 standard deviation 0,47). Non-working women stated that they are less stressful in this question. In the last month, how often have you felt nervous and "stressed"? . (mean 1,90 standard deviation 0,67). On the other hand, stress levels of working women are higher than non-working women (mean 3,53 standard deviation 0,53). However, working women participation has less stress than working women in these questions. In the last month, how often have you found that you could not cope with all the things that you had to do? (mean 2.80 standard deviation 0.84).

Analyze anxiety level

When participants' responses were examined, the non-working women's anxiety level was higher than working women. (Mean 41,59– standard deviation 3,98). It was determined that non-working women had more anxiety than working women. Most participants stated that they were anxious about this question; feeling hot (mean 2,38 standard deviation 1,08). At the same time, the non-working women feel more anxiety than working women in this question; Face flushed (mean 2,22 standard deviation 0,61). Other results, the working woman has more anxiety in these questions (Feeling hot, Unable to relax, Fear of worst happening, Dizzy or lightheaded) .

Working Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	full time	200	49,8	50,0	50,0
	housewife	178	44,3	44,5	94,5
	Retired	22	5,5	5,5	100,0
	Total	400	99,5	100,0	
Total		400	100,0		

Table 8 , it can be seen that 49,8% of the participants worked as full time, 44,3% were as a housewife, 5,5% participants were retired.

How many years have you worked?

		Frequency	Percent	Valid percent	Cumulative Percent
Valid	1 month-5 years	132	32,8	33,0	33,0
	6-11 years	160	39,8	40,0	73,0
	12-17 years	90	22,4	22,5	95,5
	18-23 years	3	,7	,8	96,3
	24 years+	15	3,7	3,8	100,0
	Total	400	99,5	100,0	
Total		402	100,0		

Table 9, it can be seen that 32,8% of the participants work between 1 months-5 years, 39,8% of the participants work between 6-11 years.

Working hours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7 saat	110	27,4	27,5	27,5
	8 saat	125	31,1	31,3	58,8
	9 saat	125	31,1	31,3	90,0
	10 saat ve üzeri	40	10,0	10,0	100,0
	Total	400	99,5	100,0	
Total		402	100,0		

Table 10

As seen in the table above it has been observed that 27,4% participation work 7 hours ,31,1% participation work 8 hours, 31,1% participation work 9 hours and 10% participation work 10 hours a day.

Discussions

In summary, the following results were obtained from the study: First, there is a significant difference in the level of stress between working and non-working women with working women feeling stress more than non-working women. Secondly, there are significant differences in the level of anxiety between working and non-working women with non-working women feeling anxiety more than working women. Thirdly, most participants stated that they were stressed about this question: 'In the last month, how often have you found that you could not cope with all the things that you had to do?' (mean 4,87 standard deviation 0,47).

Working women participation has less stress than working women in these questions. In the last month, how often have you found that you could not cope with all the things that you had to do?

(mean 2.80 standard deviation 0.84). Similarly, most participants stated that they were anxious about this question: feeling hot (mean 2,38 standard deviation 1,08). The working woman has more anxiety in these questions (Feeling hot, Unable to relax, Fear of worst happening, Dizzy or lightheaded) .
The height of female participations ranges from 46-65 inches with mean value 1.00 and standard deviation value ,001. The lowest of female participants ranges from 18-25 inches with mean value 17.78 and standard deviation 0.410. 26.4% of the respondents were Basic Education Certificate Holders, 30,1% held Senior Secondary Certificate, 43% held Certificates from the Universities

Conclusions

In the current research, a consistent correlation was found between stress and anxiety among the working women and nonworking women samples. The study also highlights the importance of including working and nonworking women in research regarding stress and anxiety. The key finding from results was the lack of correlation between stress and anxiety among the working and nonworking women. Moreover, it was shown from results that one of the strongest predictors of stress and anxiety level is age among working and nonworking women.

Work roles on household roles with intense participation of women in business life is also included. As a result of this, both women and the traditional in the family she is expected to be quite good at her job as well as doing the role of mother and woman. It is inevitable that women will have high levels of anxiety and stress as a result of this condition.

The purpose of this study due to the social roles of women undertake challenges between working-not working women sitting in a frame stress-to examine the relationship between anxiety levels and the lower dimensions of stress and anxiety levels relative to the demographic status of women.

Research in the Kyrenia District of TRNC was made up of over 400 women who worked and did not work. Results of the research: There is a difference between stress status between working and non-working women. Working women have had higher levels of stress. There is also a difference between working and nonworking women. However, non-working women have had higher levels of anxiety. Even if a woman works at home if she works, she is exposed to stress and anxiety. This situation causes internal conflicts and social oppression. It is possible to say that it is.

There is no difference between women's age and their anxiety and stress levels. Single women have more emotional burnout levels than married ones. A significant difference between women's education levels and burnout levels is that there are no differences. These results show what is very clear. In society every woman of all places of age suffer burnout and their causes are many.

References

Baltaş, A., & Baltaş, Z. (2004). Stres ve başa çıkma yolları (22. baskı). İstanbul: Remzi Kitapevi.

Bakan, D. (2001). Slaughter of the Innocents: A Study of the Battered Child Phenomenon. Journal of Social Distress and the Homeless, 10, 147-216.

Baki, S. (2011). Hastane çalışma koşullarının alt işveren çalışanlarında oluşturduğu stres ve etkileri (Master's thesis).

Büyükbeşe, T., & Erşahan, B. (2011, June). The relationship between employees' education level and organizational commitment: an empirical study. In International Conference on Management Proceeding.

Çağlayan, Ç., & Etiler, N. (2009). TÜRKİYE'DE KADIN İŞÇİLERİN MESLEKSEL SAĞLIĞI. TTB Mesleki Sağlık ve Güvenlik Dergisi, 9(33), 23-31.

Eren, A. (2010). Consonance and dissonance between Turkish prospective teachers' values and practices: conceptions about teaching, learning, and assessment. Australian Journal of Teacher Education (Online), 35(3), 27-48.

Guzel, R., Kozanoglu, E., Guler-Uysal, F., Soyupak, S. Ü. R. E. Y. Y. A., & Sarpel, T. (2001). Vitamin D status and bone mineral density of veiled and unveiled Turkish women. Journal of women's health & gender-based medicine, 10(8), 765-770.

İlgar, Ö. (2001). Örgütsel stresin çalışan kadınlar üzerindeki etkileri ve stresle başa çıkma yolları (Master's thesis, Marmara Universitesi (Turkey)).

Lopata, H. Z. (1987). Widows: The Middle East, Asia, and the Pacific (Vol. 1). Durham: Duke University Press.

Selye, H. (1956). What is stress. Metabolism, 5(5), 525-530.

Selye, H. (1974). Stress without distress. New American Library, 14.

Soysal, A. (2009). Farkli sektörlerde çalişan işgörenlerde örgütsel stres kaynaklari: Kahramanmaraş ve Gaziantep'te bir araştirma. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 14(2), 333-359.

Uysal, H. H. (2008). Tracing the culture behind writing: Rhetorical patterns and bidirectional transfer in L1 and L2 essays of Turkish writers in relation to educational context. Journal of Second language writing, 17(3), 183-207.

The Impact of Work Shift on Job stressors & Burnout and their Subsequent Effect on Employee Performance: The Case of *Konak Hospital.*

Hilal Kubra[1], Gabriel Nweke[2]

Abstract

The current thesis explores the effect of occupational stress and work related burnout among Konak hospital staff. A sample of different working groups were collected to understand the nature of occupational stress and burnout. The Maslach Burnout Inventory (1981) listed three subscale of burnout as emotional exhaustion,demoralization and not being able to have personal accomplishment. The present study addresses the contributing factors of occupational stress and work-related burnout among Konak Staff+ Hospital. And the results obtained show that minimal work related stress were found among Konak Hospital Staff and also the level of burnout is lower. The study also analyzed various dependent and independent variables that can result in stressful conditions among health care workers. This study also strikes a balance between pragmatic and theoretical implications.

Keywords: Kol

Introduction

Occupational stress is present in both health and non-health organizations but not all stress is negative or bad. Selye 1976, conceptualized two classes of stress; desirable and undesirable stress. Desirable is pleasing, pleasurable or least ambitious and can yield explicit effects such as output maximization with creativity. Ironically, life becomes stressful without positive chemotaxis. On the other hand, distress is apparent when someone considers self as having no energy to adjust to uncomfortable activity, such as 'stress.' Perhaps, stress might lead to decrease in overall health welfare. Meanwhile, individual reactions to stress vary but everyone manifests a level of response even physiologically, when seriously attacked by a stressor, there is rapid increase in the heart rate, and some others experience stomach ache or headache.

Burnout can be described as continuous, dismissive, occupation related cognitive state in an individual that is principally known by exhaustion, however, it is related to distress, decreased in strength, lack of will and desire, transformation of character malfunction and job related attitude. The development of this psychopath situation still stands unknown for a long time. Burnout, a clear appearance of occupation related stress, is an outcome of the relationship between situational variables, dispositional traits and behaviors (such as coping) one of the forefront burnout researchers detailed that "is currently acknowledged as a noteworthy social and individual issue" (p. 19). The Maslach Burnout Inventory (Maslach and Jackson, 1981) gave the three dimensions of burnout as 'depersonalization', 'lack of personal achievement' and 'emotional exhaustion.' The three dimensions of Burnout have been reported among various health workers/practitioners which have established contact with emotional charge people.

Statement of the Problem

Healthcare workers sustain work-related stress as a result of organizational factors, imbalance needs, skills and social support at work. This condition can lead to deterioration of life quality, low service provision, burnout or psychosomatic diseases (Weinberg 2000). The physical, psychological and emotional demands of health care staff at hospitals exposes the workers to enormous degrees of stress. There is evidence of stress influence, which is observed as job dissatisfaction, absenteeism, low morale, psychological issues, illness, low productivity anxiety, depression and burnout. Despite the extreme influence related to occupational stress on individuals and their job characteristics, most health workplaces including Konak Hospital have not provided adequate measures to control occupational stress that negatively affect efficiency and productivity due to the nature of work. In order to drastically reduce the psychological and social support impact, programs and intervention activities need to be designed for health care workers. This intervention program should either be directed at risk factors or individual people in the workplace by increasing worker's ability to cope with stress or create a suitable work environment.

In brief, the most concern problem put into consideration is "Which perspective of stressful events is common within health care workers in Konak Hospital" The proposed question resulted base on statement that the identification of stress sources will provides significant information to channel necessary policies and procedures to reduce the influence of stressors among health care workers.

Christo and Pienaar (2006), additionally contended that the reasons for work related stress incorporate those fired from their jobs and loss in benefit of security, drawn out stretches time of sitting too much at work or been obese, absence of settled life, multifaceted nature of redundancy and lack of empowerment, deficient of capital and equipment likewise result to occupational stress. In a nutshell, Johnson (2001) expatiate on the need to determine stress sources through interventions by determining the sources or sign of stress, showing the probable causes for the symptoms and possible solution on how to treat the symptom.

Thus, this research work will illustrate the effects of occupational stress and work related burnout among health care workers at Konak Hospital. To better explain the cause of the discourse we streamline the subject matter to Konak Hospital. Although, health workers experienced stress in various ways and the possible outcome include unusual and dysfunctional attitude at work, poor mental and physical behavior. Work stress could affect Konak Hospital staff through various indicators including inadequate supervisor support, burnout, performance impairment and productivity, fear of job security among staff, reduced commitment to work, increased complaints from patients, mistakes among health professionals that may cause damage to the hospital's image. Job related stress is problematic in health care organizations and it stands as a concern which importantly is to identify the source of the stress with respect to work effectiveness among the staff of Konak Hospital. In spite of the realization that psychologists put forward an important way in dealing and managing stress in a workplace, many health care workers still go through stress, including psychologists, which may negatively influence their output efficiency. For clarification regarding occupation stress:

1. The terms for various types of stress, such as; work related stress, work stress, occupational stress, work stress and job stress are utilize intermixed within the course of study

2. Stress originating from work explains a kind of disturbances which lead to sickness or illness. Categorization of stress sickness or injury varies, depending on various disciplines of study. In some countries stress is seen as a disease.

Research Questions

This study seeks to provide solutions to these specific research questions, For the purpose of clarification.

Question 1. Does job specific stressor have significant effects among Konak Hospital Staff?

Question 2. Does burnout dimension have significant effects on Konak Hospital Staff?

Question 3. Does gender, age and professional have significant effects specific job stress and burnout dimensions

Question 4. Does work shift and hours contribute to specific job stress (HSPI) and burnout dimensions?

Objectives of the Study

The study is to ascertain if there are specific relations between occupational stress and burnout dimension. And also to validate whether the relationship between specific job stress and burnout dimensions cut across professional roles, gender and age further examine the effects of stress on worker's effectiveness in their job. According to Michie 2003, the levels of psychological problems may be more in ratio in healthcare than in non-healthcare staff. Hence, the goal of the study is to determine prevalence and severity in occupational stress within health care workers in Konak Hospital and also, to establish source of stress whether it is a job-specific or generic role stressor. Subsequently, make findings on the existence of physical and health status of the healthcare workers. The data required for the cross-sectional study will be obtained through a questionnaire, a standardized instrument, Maslach Burnout Inventory (1981) as well as a scaled list of Health Stress Inventory, to be completed by health practitioners in Konak Hospital.

Significance of the Study

Worthy to know, Stress management is significant to healthcare organizations for standard functioning so as to reach maximum productivity level. In Turkey, attention given to occupational stress among health practitioners is not really at a full capacity.

Therefore, the role of stress among health care workers needs to be studied. In this regard it will help the government and private health care to be cognizant of the need to create a platform to help health professionals manage their stress. Thus, it is important for health care authorities to understand the stress factors within the healthcare system and how it influences employees because by investigating these stressors enable policy authority to integrate and carry out strategies to tackle stress management among medical and paramedical professions (Sheehan and Hasselt, 2003). Identifying the relationship between the type of stress affecting job satisfaction and burnout levels of health workers give a chance for healthcare managers to influence organizational ethics positively and also assume best operational practices that will better improve the organization effectiveness. This study will always also trigger positive responses in many healthcare organizations as they see its importance.

Literature Review & Hypothesis Development

Theoretical Framework and Approaches to Stress

For the theoretical framework of this chapter, Spielberger State-Trait (STP) model of occupational anxiety and Kahn and Byosiere‟s (1992) stress development model in organizations are utilized and was developed by Spielberger, Vagg, and Wasala (2003).

Based on STP model, anxiety is gestated as a mind boggling process with three essential parts: (I) stress sources in workplace (II) worker's observation and evaluation of a specific stressor, and (III) the passionate responses stimulated when stressor seen as debilitating (Spielberger et al., 2003). The brain body uplifted from either physical or mental job demands is seen as occupational stress when the heightening of a stressor is effected as tragic development that prompts outrage and tension. Autonomic sensory systems which may respond to the threatening evaluations, with Serious and constant appraisal result in both physical and mental strain, which may prompt antagonistic practices (Spielberger et al., 2003). The use of the STP model of word related anxiety showed by (Botha and Pinear; 2006) in estimating occupational effect of a stressful activities as: Workers evaluate their work organization in terms of seriousness and incessant event of a particular job demands with weight and the level of bolster gave by manager and different representatives, as well as additionally hierarchical features; for example, strategies and techniques. Neglecting to consider the continuous event of a particular stressor into record may add to misrepresenting or underrating the impacts of upsetting circumstances (p.76). In the nut shell, Botha and Pinear established the need to consider both level and recurrence of anxiety occurrence and also, support mechanisms, for adequate estimation of employee's work environment. Under the assumption of the STP model, this study agrees that occupational stress can be broadly divided into two types in healthcare organizations. Organization policies, lack of trust in health managements, lack of mutual agreements among employees reflect the organizational aspect (Zhao, 2002).

The second type reflect work nature and attributes of health care specialists such as tiredness, high turnover, night shift, workload; distressing workplaces (e.g. Emergency unit); of sickness; and clashes with colleagues or patients, dealing with deadly sickness, physical threats by mental patients and other unseen issues. Meanwhile, organizational factors have been noted as most striking among the two types (Bronkhorst, 2014; Kop and Euwema, 2001).

Another theoretical base for this study is Kahn and Byosiere‟s (1992) procedure of anxiety improvement in the workplace. They hypothesized a cursory series of the correlation among stressors, response to stretch, and the impact of anxiety in anxiety formative procedure process (Fig2). They conceptualize the wellspring of stressors in authoritative exercises as mental and, physiological (i.e., work fulfillment, depression) and behavioral reactions to stress; and the results of anxiety in health and disease related issues (i.e., heart attack, burnout, lessened focus), decreased performance in other life parts, and reduced hierarchical execution (i.e., turnover, non-attendance).

Methodology

Research Sample and Population

Population of a research is defined as a large group of interest for which a research is applicable and relevant (Furlong et al., 2000). According to Leedy (1993), convenience sampling is chosen according to its availability. This research utilizes convenience sampling. This sampling technique can, however, exhibit various research issues with no falsification being illustrative of the entire populace. Hussey et al., (1997) stressed that the predisposition may happen if samples are picked intentionally by an individual as this may prompt preferential treatment. With a specific end goal to maintain a strategic distance from conceivable issues. The staff of Konak Hospital constitute the objective populace for this research.

Sample Size Determination

A sample size of 100 out of 103 health care staff was selected for this study. It's the only practical strategy for data collection because of the large population. Sample size can be determined by using Yamane 's (1967) simplified formula, it is defined as;

n = N/1 + N(e)2

Data Collection

Research depends on the quality of facts. If research relies on analysis of incorrect data, it deprives the body of knowledge and misinterpretation of concept is ascertained thus an excellent research design and a representative sample are not sufficient. Therefore, using appropriate and accurate instruments for collecting data cannot be abandoned and is of utmost priority (Struwig et al., 2004).

Data Collection Method

The list of registered staff members was collected from the record keeping department and the name selected came from the first three. Subsequently, other respondents were determined by the difference of three. Questionnaires were personally distributed to the respondents at their various offices around 9a.m and were thoroughly explained for further independent views and clarification. After lunch time 1pm, the answered questionnaires were collected. According to Sekaran (2003), questionnaire is a written formulated set of unanswered questions to which the subjects record their opinions and views, in most cases these answers have rather closely defined alternatives.

Questionnaires may be employed depending on the information the researcher desires.

Research Instruments

Questionnaires designed for the respondents were divided into two sections in order to capture the line of focus spelt out for this study. The Burnout Inventory- Maslach and

Jackson (1981) and Health Professions Stress Inventory (Wolfgang. 1988) questionnaires.

Maslach Burnout Inventory (MBI)

Burnout is defined as a prolonged response of exposure to occupational stress which negatively affects the individuals, the organizations, and the healthcare service recipients (Maslach and Leiter, 2008). The 22 items of the questionnaire are grouped into three scales: Emotional Exhaustion measures emotional overextended or exhaustion by individual tasks. Depersonalization is seen as an impersonal response toward individuals.

Personal Accomplishment examined competence, feeling and successful achievement. 22 item questionnaire which list various situations that healthcare workers might encounter.

Each item was scored from one (never) to six (everyday)

Health Profession Stress Inventory

The instrument used in this study is Health Professions Stress developed by Alan P. Wolfgang (1988). This questionnaire was developed basically for the health profession and the essence is to understand the implication of source of stress among health professionals. This is a 31 item inventory which lists situations which may be encountered by healthcare professionals. The subjects were instructed to check how often they have found each situation to be stressful in their current position. Each item was scored from one (never) to five (very often), so that total scores could range from 30 to 150. This was a change from Wolfgang's (1988) original scoring from zero to four, with total scores ranging from 0 to 100. The item has been found to have four different factors which are professional recognition, job uncertainty, patient-care responsibilities and job conflict (Rebecca, 2004).

Data Analysis

Research data analysis is a tool for making duplicate or valid data references from their context. The investigator looks for designed regularities in the content and makes inductions on the premise of the regularities (Krippendor,1990). The data is exhibited in a way that will permit simple analysis and testing utilizing SPSS 23 and the data is introduced into a SPSS spreadsheet. sample sizes of applicable tables containing standard deviations, mean and confidence interval were produced for every gender.

Sekaran (2000 p.397) explained that a sample is a measure of focal propensity that offers a non-exclusive picture of the information without immersing one with each of the perceptions in a set of data. Moreover, standard deviation of an illustration is portrayed as a list of the spread of a scattering or the variability in the data (Sekaran, 2000). A table containing the important sample sizes, means and standard deviations for each of the variables was produced. "In a study that consolidates a couple of variables, beyond knowing the standard deviations and mean of each of the variables, one may often need to know how one variable is related to another" (Sekaran, 2000 p.401). The questionnaire items were grouped due to the answer given by an individual.

Results & Findings

This section provides the results obtained from statistical analysis performed for this study. The first section reports the demographic analysis which examined the descriptive analysis including frequency table, mean etc. The cross tabulation between age group and gender among the independent variables. And also, the second section examined the research questions/ hypotheses stipulated for this study. This study proposes to determine the effect of occupational stress among Konak Hospital workers.

Demographic Analysis

In demographic study, the following control variables were analyzed which include age group, gender, level of education, shift, profession, work hours and total years of experience. The frequency distribution and statistical table is shown below.

Results show that out of 100 respondents, 55 % of the study participants were male while the rest were female (45%). This actually represents the population of gender at Konak work environment. The number of male staff is higher than the female. Therefore, the percentage difference between the male to female represented in this study is 10% which is more significant in this study. In terms of respondent academic qualification, 61 had Baccalaureate certificate and 41 had medical certificate. Cumulatively, two groups of individuals constitute 98% of the study respondents (57% and 41% respectively). These results emphasize the level of education of Konak Hospital Staff as most of these professionals were trained specialists in their field of study. In addition, the minimum educational level for workers is a diploma. Konak Hospital Managements encourage their staff to pursue more academic qualifications for update in their various fields of study and advancement.

For age group distribution, the largest group falls between age (31- 45 years) which accounts for 55% of the participants in this study next to this age group is (20-30 years) which is relatively younger than the largest group. The age group between (46-60) and (61-75) are the smallest which account for 20% of the study participants respectively. As seen in the Table 1 above, 62% of the workers work during the day while 38% work at night while the larger population of workers worked between 36-45 hours which constitute 91% of the study respondents while the rest worked above 45 hours. And also, participants were asked to indicate their years of experience, 34% account for 12 and above followed by 26% which constitute (6 to 8 years) while (3 to 5 years), 22% and (9 to 11) years, 18% respectively. These results show that many of the staff are more experienced in their respective field of work from 6 to 12 years above.

Moreover, this survey was conducted in nine health departments at Konak Hospital, internal medicine, clinical and paramedic accounts for 15% each, intensive care, 14%, radiology and emergency unit constitute 10% each, general surgery 9%, medical sec/ admin, 7% while technical service 5% respectively. Furthermore, the participating health professionals in this study include medical doctors 31% followed by nurses 30% while paramedics and others account for the rest. More also, Table 2 below show the statistical importance of the variables introduced in this study

Discussion and Conclusion

The aim of this study is to examine the effects of occupational stress and burnout level among Konak Hospital members. The major source of stress and burnout level were identified to understand the prevalence level among the population sample. In this study, the results of the research questions are discussed in detail. In addition, recommendations were also presented in this study.

Discussion related Work Stress among Konak Hospital Members

Kahn et al. (1964), first explain the characteristics of work stress. Work-related stress is described as the results of the dynamic interaction between the individual and work environments constituting inequality in job responsibilities and role. To better understand the implication of work stress level among Konak Staff, Health profession stress inventory was designed by Wolfgang (1988) to measure the extent of stress. The HSPI was selected to identify the effect of stress experienced by Konak Hospital Staff and the study groups include specialist doctors, nurses, mental health specialists, paramedics, technicians, medical secretary and admin. The HSPI score was apportioned based on the mean score level. It is revealed that specialist doctors experience stress at an occasional level while nurses usually experience health related stress although some nurses answer never or occasional experience. This means some departments are more stressful than others at Konak hospital for example in clinical services it is usually faced with a lot of pressure because patients need urgent attention from the nurses. Compared to other departments like paramedics and internal medicine, the perceived stress level is occasional or never/rarely. Similar results were reported by Merkel and Elbein, (1990), care nurses are exposed to many stressful situations like death and suffering patients, frequent crisis, emergency alarm etc. high level of performance is demanded which contributes to the usual stress situation. Health professionals associated with internal medicine and general surgery department experienced work related stress occasionally. In addition, the sources of stress noted among the health workers include the scale of job conditions, lack of recognition and support and patient care uncertainty; however , some of these stressful situations are either controllable or uncontrollable. For instance, job conditions associated with health professionals are uncontrollable because of the work responsibilities. Lack of recognition and support can be controlled when there is support and remuneration reward.

Discussion related to burnout level among Konak Hospital members

Leiter and Maslach defined burnout as a sum decline response to constant work stressors relative to the attitude change and jobs responsibilities. In nutshell, burnout is a psychological symptom of emotional exhaustion, depersonalization and cynicism, and is experienced in the workplace as a prolonged response to chronic stressors. (2001).

Burnout level among Konak Hospital members was measured by Maslach Burnout Inventory 1981. The lower level of emotional exhaustion was noted among Konak workers. Almost all the workers experience a low level of emotional exhaustion. This testifies to the fact that, chronic fatigue, depression, trouble sleeping, physical problems are relatively low see appendix B for more information. It is also observed that medical specialists experience both low and moderate levels of depersonalization. In addition, the level of depersonalization associated with Konak Hospital workers is relatively low, almost 55% of the total population have a low level while the remaining 45% share moderate and high levels of depersonalization. This mean notion of detachment leading to cynicism with negative attitudes is scored low. In terms of personal achievement, the health workers recorded high levels because individuals assess their situation positively by having a sense of high accomplishment. This is observed among Konak Hospital Staff in which 80% revealed high levels see appendix B for details. Generally, the level of work-related stress and burnout is minimal among Konak Hospital workers.

Bibliography

Allen, J., Mellor, D., (2002). Work context, personal control, and burnout amongst nurses. Western Journal of Nursing Research 24, 905–917.

Anshel, M.H. (2000). A conceptual model and implications for coping with stressful events in the police. Criminal Justice and Behavior, 27 (3), 375-400.

Biles, P.D. (1999). OSHA Workplace Violence Prevention Guidelines, Washington:

Department of Labor, Occupational Safety and Health Administration(OSHA).

Bonde, J. P. (2008). Psychosocial factors at work and risk of depression: a systematic review of the epidemiological evidence. Occupational and Environmental Medicine, 65, 438-445.

Bonneterre, V., Liaudy, S., Chatellier, G., Lang, T., & De Gaudemaris, R. (2008). Reliability, validity, and health issues arising from questionnaires used to measure Psychosocial and Organizational Work Factors (POWFs) among hospital nurses: a critical review. Journal of Nursing Measurement, 16, 207-230.

Book, B. A. (1989). Therapist heal thyself: Self change processes and burnout among psychologists and social workers. (Doctoral dissertation, University of Kansas, 1990) Dissertation Abstracts International, B 51-05, pp. 2603.

Burke, R.J., (2002). Work experiences and psychological wellbeing of former hospital-based nurses now employed elsewhere. Psychological Reports 91, 1059–1064.

Burton, J., (2010). WHO Health Workplace Framework and Model: Background and Supporting Literature and Practice. WHO Headquarters,

Caplan, G. (1976). The family as a support system. In G. Caplan & M. Killilea (Eds.), Support systems and mutual help. New York: Grune & Stratton.

Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., and Pinneau, R. (1975). Job demands and worker health. U. S. Department of Health, Education and Welfare, National Institute for Occupational Safety and Health. comparisons. Social Science & Medicine, 58, 1483e1499

Karasek, R.A. and T. Theorell,(1992) Healthy work: stress, productivity, and the reconstruction of working life: Basic books.

Cooper, C. L. (1986). Job distress: Recent research and the emerging role of the clinical occupational psychologist. Bulletin of the British Psychological Society, 39, 325-331.

Cooper, C.L. (1993). Proceedings of the National Institute of Occupational Safety and Health Conference - Stress in the 90s: A Changing Workforce in a Changing Workplace. Washington: NIOSH.

Cooper, C.L. (1999). A Strategy for Organizational Stress Interventions. University of Manchester: Manchester School of Management.

Cushway, D., Tyler, P. (1994). Stress and coping in clinical psychologists. Stress Medicine, 10, 35-42.

Cushway, D., Tyler, P. (1996). Stress in clinical psychologists. International Journal of Social Psychiatry, 42, 141-149.

Cushway, D., Tyler, P., and Nolan, P. (1996). Development of a stress scale for mental health professionals. British Journal of Clinical Psychology, 35, 279-295.

Cvejanov-Kezunovic, L., et al., 2014. Occupational exposure to blood among hospital workers in Montenegro. Arch. Ind. Hyg. Toxicol. 65 (3), 273–280.

Dhaini et al., (2015). Care worker's health in Swiss nursing homes and its association with psychosocial work environment: A cross-sectional study, International Journal of Nursing Studies in the press.

Eatough, E.M., Way, J.D., Chang, C.H., (2012). Understanding the link between psychosocial work stressors and work-related musculoskeletal complaints. Appl. Ergon. 43 (3), 554–563.

Eells, T.D., Lacefield, P., Maxey, J., (1994). Symptom correlates and factor structure of the Health Professions Stress Inventory. Psychological Reports 75, 1563–1568.

Engels, J.A., van der Beek, A.J., van der Gulden, J.W., (1998). A LISREL analysis of work-related risk factors and health complaints in the nursing profession. Int. Arch. Occup. Environ. Health 71 (8), 537–542.

Field, A., 2009. Discovering Statistics Using SPSS, third ed. SAGE, London. Geneva, Switzerland

Maslow, A. (1968). Toward a Psychology of Being. Princeton, N.J: Van Nostrand.

Glisson, C., Durick, M., (1988). Predictors of job satisfaction and organizational commitment in human service organizations. Administrative Science Quarterly 33, 61–81.

Gonge, H., Jensen, L.D., Bonde, J.P., (2002). Are psychosocial factors associated with low-back pain among nursing personnel? Work and Stress 16, 79–87.

Graham, P., Dougherty, J.P., 2012. Oh, their aching backs: occupational injuries in nursing assistants Orthop. Nurs. 31 (4), 218–223.

Green, B.L., Lindy, J.D., Grace, M.C., and Leonard, A.C. (1992). Chronic posttraumatic stress disorder and diagnostic co-morbidity in a disaster sample. Journal of Nervous and Mental Diseases, 180, 760-766.

Guyton, A.C. (1981). Textbook of Medical Physiology (6th ed.). Philadelphia:

Humphrey, J.H. (1998). Job Stress. Needman Heights, MA: Allyn & Bacon.

Kahn, R. L., and Byosiere, P. (1992). Stress in organizations. In Handbook of Industrial and Organizational Psychology (2nd Ed.). 571-650).

Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D., and Rosenthal, R.A. (1964). Organizational Stress: Studies in Role Conflict and Ambiguity. New York: Wiley. Washington, DC: American Psychological Association.

Karasek, R., & Theorell, T. (1990). Healthy work: Stress, productivity and the reconstruction of working life. New York: Basic Books.

Kawachi, I. (2006). Injustice at work and health: causation or correlation? Occupational and Environmental Medicine, 63, 578-579.

Keane, T.M., and Wolfe, J. (1990). Comorbidity in post-traumatic stress disorder; an analysis of community and clinical studies. Journal of Applied Social Psychology, 20, 1776-1788.

Kelly, S. (1995). The Impact of the Relationship and Family Stresses in the Workplace. In P. Cotton (Ed.). Psychological Health in the Workplace (pp. 21-29). Melbourne: The Australian Psychological Society.

Kemery, E.R., Mossholder, K.W., and Touliatous, J. (1985). Outcomes of role stress: A multi-sample, constructive, replication. Academy of Management Journal, 28, 363-375.

Kenny, D. T. and Jones, S. (1999). Improving injury management: Paradigms and practices. In Proceedings of Australian Society of Rehabilitation Counsellors 4th National Conference. Coffs Harbor: ASORC.

Kenny, D.T., Kable, S., Kroon, M., Quinn, S., & Edwards, S. (1999). Employer compliance with rehabilitation. Journal of Occupational Health and Safety Australia and New

Zealand, 15 (3). Kenny, J. G. Carlson, F. J. McGuigan, and J. L. Sheppard, (Eds.), Stress and health: Research and Clinical Applications. Amsterdam: Harwood

Kivimaki, M., Vahtera, J., Elovainio, M., Virtanen, M., & Siegrist, J. (2007). Effort reward imbalance, procedural injustice and relational injustice as psychosocial predictors of health: complementary or redundant models? Occupational and Environmental Medicine, 64, 659-665.

Leiter, M. P. (1991). Coping patterns as predictors of burnout: The function of control and escapist coping patterns. Journal of Organizational Behavior, 12, 123-144

Maslach, C. (1999). Working too hard: A mismatch model of burnout. In Proceedings of Work, Stress and Health 99: Organization of Work in a Global Economy. Baltimore:

National Institute for Safety and Occupational Health.

Maslach, C., (1976). Burned-out. Human Behavior 5, 16–22.

Maslach, C., Goldberg, J., (1998). Prevention of burnout: New perspectives. Applied and Preventive Psychology 7, 63–74.

Maslach, C., Jackson, S.E., 1981. Maslach Burnout Inventory. Consulting Psychologists Press, Palo Alto, CA.

Maslach, C., Schaufeli, W.B., Leiter, M.P., (2001). Job burnout. Annu. Rev. Psychol. 52 (1), 397–422.

McCaughey, D., et al., (2014). The relationship of positive work environments and workplace injury: evidence from the National Nursing Assistant Survey. Health Care Manage. Rev. 39 (1), 75–88.

Michie, S., & Williams, S. (2003). Reducing work related psychological ill health and sickness absence: a systematic literature review. Occupational and Environmental Medicine, 60, 3-9

Miller, A., et al., (2006). Evaluation of the effectiveness of portable ceiling lifts in a new long-term care facility. Appl. Ergon. 37 (3), 377–385.

Minter, S. G. (1999). Too much stress? Occupational Hazards, 61 (5), 49-52.

Nagy, M.S., 2002. Using a single-item approach to measure facet job satisfaction. Journal of Occupational and Organizational Psychology 75, 77–86.

O'Donnell, C. (2000). Motor accident and workers' compensation insurance design for high quality health outcomes and cost containment. Disability and Rehabilitation, 22, 88-96.

O'Driscoll, M.P., Beehr, T.A., (1994). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. Journal of Organizational

Behavior 15, 141–155.

OFS, 2012a. Absence Rate due to Illness/Accident of Employees Employed Full-Time by Sex, Nationality and Occupancy Rate. Available from: http://www.bfs.admin.ch/bfs/portal/fr/index/themen/03/02/blank/ data/06.Document.169536.xls (cited 21.03.14).

OFS, 2012b. Swiss Health Survey 2012. Federal Department of Home Affairs, Switzerland.

Oh, H., Eom, M., Kwon, Y., 2004. A study on aggressive behavior among nursing home residents with cognitive impairment. J. Korean Acad. Nurs. 34 (8), 1451–1459.

OSHA, 2009. Ergonomics for the prevention of musculoskeletal disorders. In: Healthcare Risk Management Occupational Safety and Health Administration, USA, pp. 1–40.

Ostermann, R.F. (1999). The SWS stress / support mode. NJ: School of Psychology: Fairleigh Dickinson University.

Ozanne, E. (1990) Reasons for the emergence of case management approaches and their distinctiveness. In A. Howe, E. Ozanne & C. Shelby-Smith (Eds.). Community Care Policy and Practice: New Directions in Australia. (pp. 186-194). Victoria: Public Sector Management Institute.

Pai, D.D., et al., 2015. Violence: burnout and minor psychiatric disorders in hospital work. Rev. Esc. Enferm. USP 49 (3), 457–464

Pakenham, K., Dadds, M. R., and Terry, D. J. (1994). Relationship between adjustment to HIV and both social support and coping. Journal of Consulting and Clinical Psychology, 62, 1194-1203.

Parasuraman, S., and Cleek.M.A. (1984) Coping behaviors and managers' effective reactions to role stresses. Journal of Vocational Behavior, 24, 179-193.

Parker, S.K., Griffith, M.A., and Holdaway, S. (1999). What is so distressing about a little name calling and teasing? Work performance anxiety as an explanation of the negative effects of harassment. In Proceedings of Work Stress and Health, 99: Organization of Work in a Global Economy. Baltimore: National Institute for Occupational Safety and Health.

Parkes, K.R. (1990). Coping, negative affectivity and the work environment; Addictive and interactive predictors of mental health. Journal of Applied Psychology, 75, 399-409.

Parry, G. (1990). Coping with Crises. London: BPS Books and Routledge.

Peters, V.P., de Rijk, A.E., Boumans, N.P., 2009. Nurses' satisfaction with shift work and associations with work, home and health characteristics: a survey in the Netherlands. J. Adv. Nurs. 65 (12), 2689–2700.

Piko, B., Baraba´s, K., Boda, K., (1997). Frequency of common psychosomatic symptoms and its influence on self-perceived health in a Hungarian student population. European Journal of Public Health 7, 243–253.

Qin, J., et al., (2014). The impact of workplace factors on filing of workers' compensation claims among nursing home workers. BMC Musculoskelet.Disord. 15 (29), 2–9.

Santos, S.R. and Cox, K. (2000). Workplace adjustment and intergenerational

Sauter, S., and Keita, G.P. (1999). Introduction. In Proceedings of Work, Stress and Health 99: Organization of Work in a Global Economy. Baltimore: National Institute for Occupational Safety and Health.

Sauter, S., Hurrell, J., and Cooper, C. (1989). Job Control and Worker Health. New York: Wiley.

Sauter, S.L., and Hurrell, J. J. (1999). Occupational health psychology: Origins, content, and direction. Professional Psychology: Research and Practice, 30 (2), 117-122.

Sauter, S.L., and Murphy, L.R. (1995). Organizational risk factors for job stress. Washington, DC: American Psychological Association.

Schaufeli, W. B., & Enzmann, D. (1998). The burnout companion to study and research: a critical analysis. London, UK: Taylor & Francis.

Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. Career Development International, 14, 204–220. http://dx.doi.org/10.1108/13620430910966406

Schuler, R.S. (1980). Definition and conceptualization of stress in organizations. Organizational Behavior and Human Performance, 25, 184-215.

Shamian, J., Kerr, M.S., Laschinger, H.K., Thomson, D., (2001). A hospital-level analysis of the work environment and workforce health indicators for registered nurses in Ontario's acute-care hospitals. Canadian Journal of Nursing 33, 35–50.

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. Journal of Occupational Health Psychology, 1, 27e41.

Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., et al. (2004). The measurement of effort reward imbalance at work: European

Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental heal the a meta-analytic review. Scandinavian Journal of Work, Environment & Health, 32, 443-462.

Szymanski, E.M. (1999). Disability, job stress, the changing nature of careers, and the career resilience portfolio. Rehabilitation Counseling Bulletin, 42, 279-284.

Szymanski, E.M., Ryan, C., Merz, M.A., Trevino, B., & Johnson-Rodriguez, S. (1996). Psychosocial and economic aspects of work: Implications for people with disabilities. In E.M. Symanski and R.M. Parker (Eds.). Work and Disability: Issues and Strategies in Career Development and Job Placement (pp. 9-38), Austin, TX: Pro-Ed.

Trinkoff, A.M., et al., (2005). Staffing and worker injury in nursing homes. Am. J. Public Health 95 (7), 1220–1225

Trinkoff, A.M., Storr, C.L., (1998). Substance use among nurses: differences between specialties. American Journal of Public Health 88, 581–585

Widmer, R., (2013). Interim result. How does the Introduction of Swiss DRG to Long-Term Care Off? CURAVIVA, Switzerland.

Willemse, B.M., et al., (2012). The moderating role of decision authority and coworker- and supervisor support on the impact of job demands in nursing homes: a cross-sectional study. Int. J. Nurs. Stud. 49 (7), 822–833.

Wolfgang, A.P., (1988). The Health Professions Stress Inventory. Psychol. Rep. 62 (1), 220–222