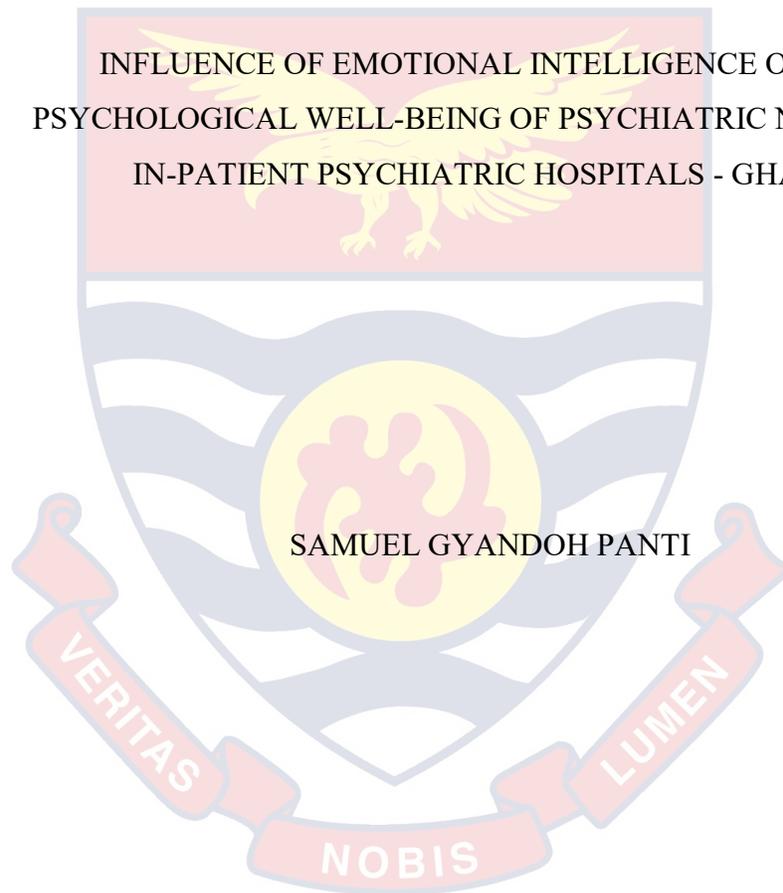


UNIVERSITY OF CAPE COAST

INFLUENCE OF EMOTIONAL INTELLIGENCE ON THE  
PSYCHOLOGICAL WELL-BEING OF PSYCHIATRIC NURSES AT  
IN-PATIENT PSYCHIATRIC HOSPITALS - GHANA



SAMUEL GYANDOH PANTI

JUNE 2021

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BY

SAMUEL GYANDOH PANTI

Thesis to the Department of Education and Psychology of Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Philosophy degree in Clinical Health Psychology

JUNE 2021

## DECLARATION

### Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature..... Date: .....

Name:.....

### Supervisor's Declaration

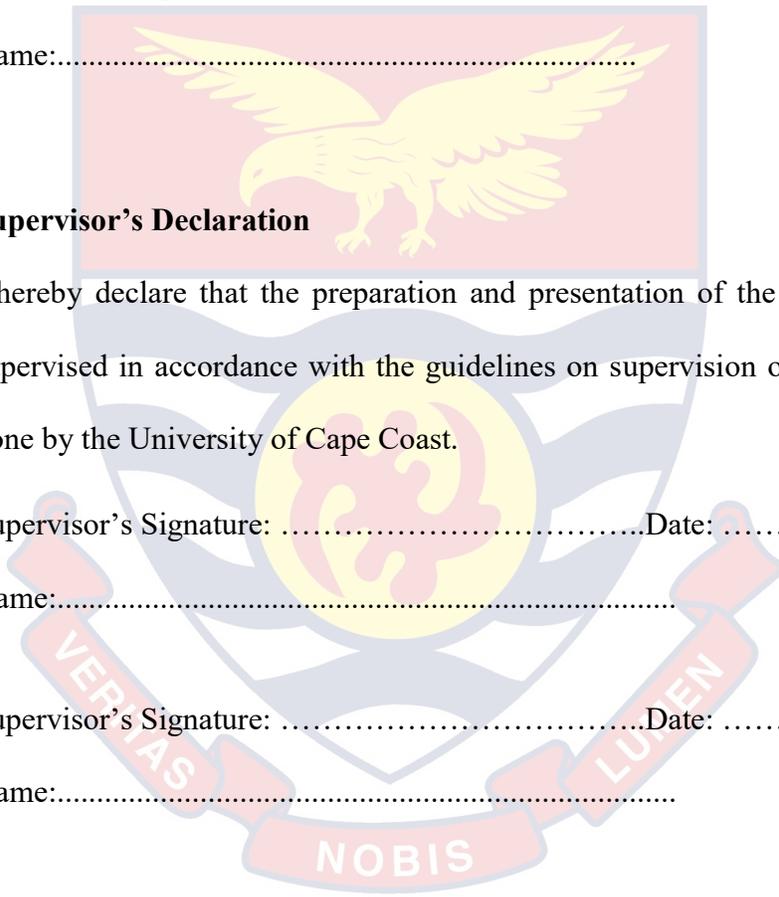
I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid done by the University of Cape Coast.

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## ABSTRACT

The study was conducted to determine the influence of Emotional Intelligence on the Psychological Well-being of psychiatric nurses at in-patient psychiatric hospitals in Ghana. The Trait Emotional Intelligence – Short Form scale by Petrides (2009) was used to measure the Emotional Intelligence of the psychiatric nurses whilst the Psychological Well-being Scale by Ryff (1989) was used to measure their Psychological Well-being. The age range, years of work experience, and the gender of the psychiatric nurses were tested to determine their influence on the relationship between their Emotional Intelligence and Psychological Well-being. The results of the study revealed that psychiatric nurses from Accra, Pantang, and Ankaful Psychiatric Hospitals have moderate Emotional Intelligence and moderate Psychological Well-being. The results also demonstrated a strong relationship between their Emotional Intelligence and their Psychological Well-being. Finally, age range, gender, and years of work experience did not moderate the relationship between their Emotional Intelligence and their Psychological Well-being. It was concluded that there was room for improvement in their Emotional Intelligence and Psychological Well-being since the two variables play tremendous roles in increasing the number of recoveries of patients in psychiatric hospitals. It was recommended that the Ghana Health Service and the Nursing and Midwifery Council of Ghana organise training workshops to develop the Emotional Intelligence and Psychological Well-being of psychiatric nurses in Ghana.

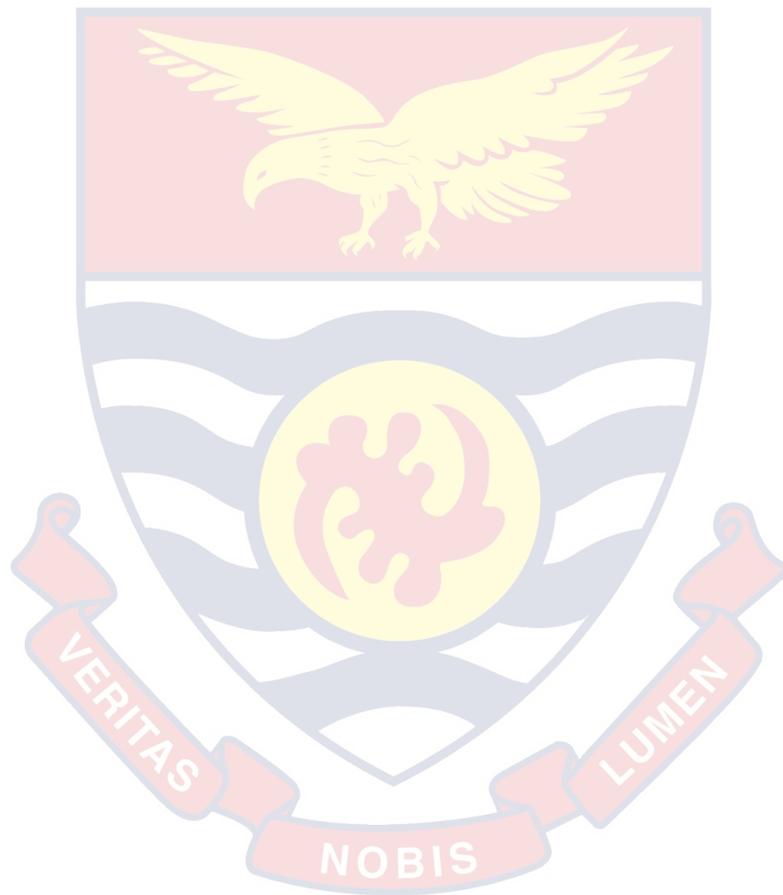
KEYWORDS

Emotional Intelligence

Psychiatric Hospital

Psychiatric Nurses

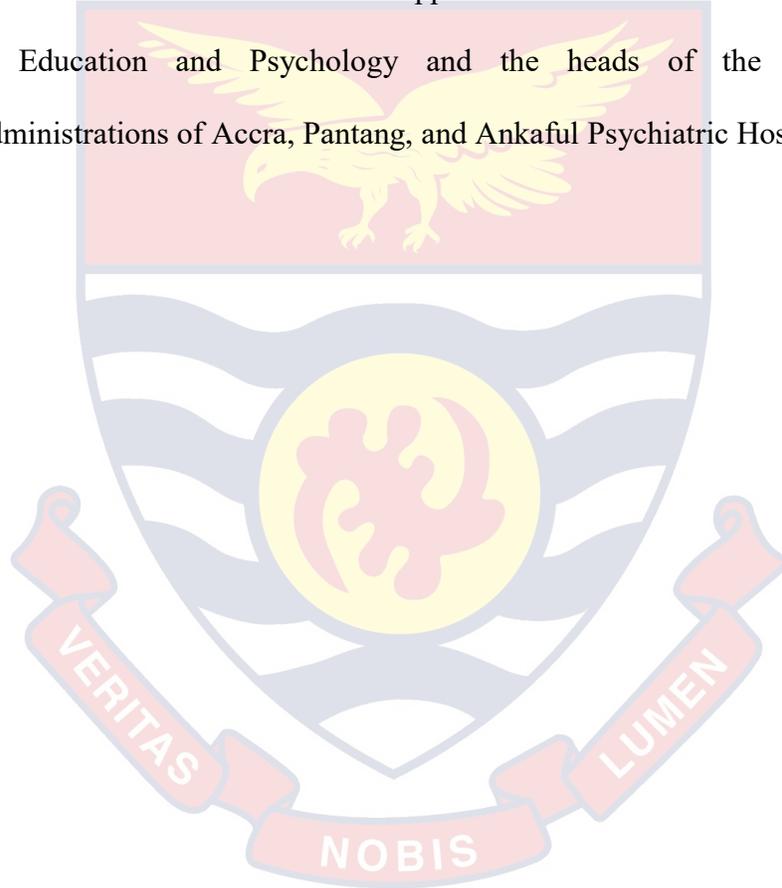
Psychological Well-being



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I would also like to show appreciation to the Lecturers at the Department of Education and Psychology and the heads of the various Nursing Administrations of Accra, Pantang, and Ankaful Psychiatric Hospitals.



## DEDICATION

The work is dedicated to my parents, Mr. Panti and Mrs. Panti, and my sisters; Dora Panti, Selina Panti and Hilda Panti. A special dedication to Ms. Evelyn Lamisi Asuah, a student at the University of Cape Coast and Mrs. Ernestina Hammond, Headmistress of Ahantaman Girls High School – Ghana.

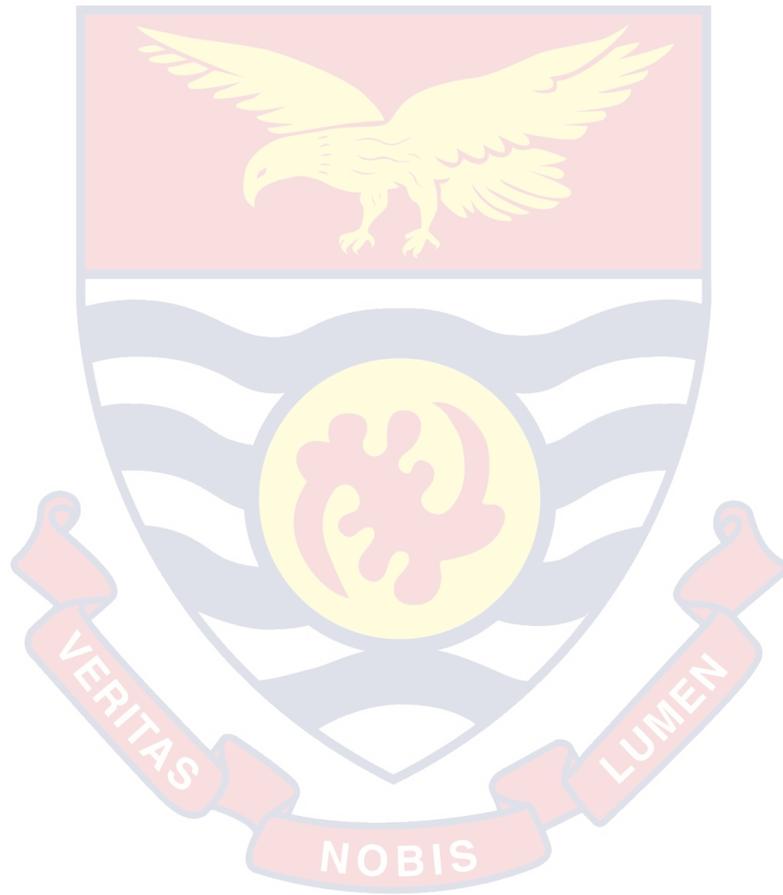


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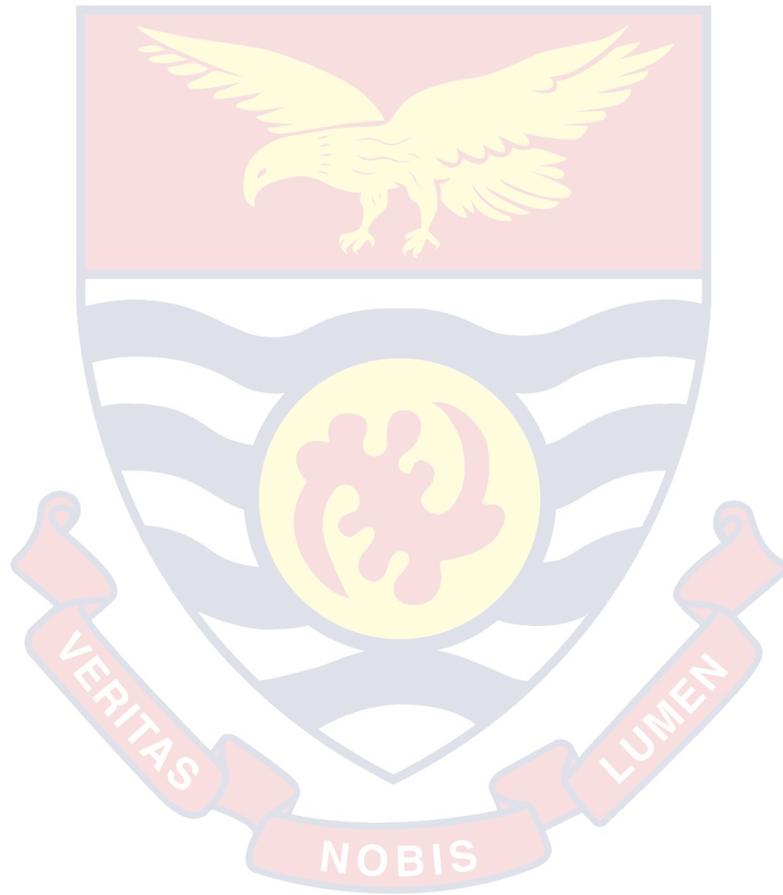
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## CHAPTER ONE

### INTRODUCTION

All over the world good mental health is one of the most essential human qualities for one to perform his or her duties diligently. A healthy mental health is the state of well-being in which individuals accept their level of capacity, work productively and fruitfully and make meaningful contributions to their society, according to the World Health Organisation [WHO] (2001). The psychiatric nurse plays a major role in the reformation of patients with mental illness. The psychiatric nurse assists other mental health professionals to bring recovery to mentally ill patients. According to Gyuse, Ayuk, and Okeke (2018) the health care system over the years has undergone significant changes building on expanded use of emerging technology, advancement in medical knowledge and have become more intelligent and critical in their care (health) delivery system, and nurses are major stakeholders in effecting these changes in the various healthcare units. Gyuse, Ayuk, and Okeke (2018) also reported the efforts made by governments to further make more expenditures in the health sector to improve it due to its importance to human health.

According to Vitello-Cicciu (2002), Emotional Intelligence forms an essential ability the psychiatric nurse needs to possess in the care of mentally ill patients. Due to the stressful aspect of their work, their Psychological Well-being is mostly infringed upon (WHO, 2007). Baird, Lucas, and Donnellan (2010) reported that as persons grow their level of Psychological Well-being decreases. Also males or masculinity have been reported as having a high level of

psychological well-being with regards to self-acceptance, environmental mastery, and purpose in life as compared to the female gender (Matud, López-Curbelo, & Fortes, 2019). Several studies have also reported that there is a relationship between persons Emotional Intelligence and their gender (Charbonneau & Nicol, 2002; Mayer, Salovey & Caruso, 2004; Pandey & Tripathi, 2004; Brackett, Mayer & Warner, 2004). Females have higher scores of intelligence about their emotions than males, according to studies by Brackett, Mayer, and Warner(2004) and Pandey and Tripathi (2004). Due mainly to their high levels of emotional intelligence, females are better at relating to others than males, according to the report.

According to some research, there are variations in Emotional Intelligence levels as a function of age (Srivastava & Bharamanaikar, 2004; Parker, Saklofske, Wood, Eastabrook & Taylor, 2005; Chapman & Hayslip 2006). In a study of secondary school teachers, Tyagi (2004) found no connection between the variable and age. As the number of years of work experience increases, the emotional intelligence levels of workers also increase (Day & Carroll 2004; Van Rooy & Viswesvaran, 2005). Most of these studies about the difference in the levels of emotional intelligence with regards to age and gender, however, were not conducted using psychiatric nurses specifically. This study is aimed at determining the levels of Emotional Intelligence and psychological well-being and how they interplay among psychiatric nurses at in-patient psychiatric hospitals.

## Background of the Study

The work of the psychiatric nurse at mental health facilities go beyond mere caregiving but must include leadership, the management of preliminary encounter between nurses and patients and to discover and uphold a moral commitment in caregiving (Sjöstedt, Dahlstrand, Severinsson, & Lützén, 2001; Snow, 2001). The work of a psychiatric nurse, according to WHO (2011), is to care for patients with acute or chronic mental health problems, identify and evaluate patients' difficulties, and decide about the best ways to overcome them. Furthermore, the psychiatric nurse is supposed to monitor and give the right dosage of medication and injections to patients and finally monitor their recovery process (WHO, 2011).

In Ghana, it was recorded that about 650,000 suffered from serious mental disorders, with 2,166,000 living with mild to moderate mental disorders (WHO, 2007). WHO (2007) also reported that the world's treatment rate for mentally ill patients is on the low and attributed some aspect of the challenge to the insufficient number of health workers and no special training given to the mental health practitioners. The report by the WHO Geneva's Department of Mental Health and Substance Abuse in 2007, additionally revealed that Ghana faces a 98% lack of care or treatment of the entire population of 21,000,000 people. This means that only 2% of the people in the country are receiving the treatment and care they need. Ghana became a low-middle - income nation with a population growing to around 25 million in 2011. The Parliament introduced a framework for mental health policy and regulation because the current law on mental well-being

was obsolete and no longer practical and practicable with best practices (WHO, 2011). For its 25 million residents, Ghana had 123 outpatient mental health services, three inpatient psychiatric hospitals, seven community-based inpatient psychiatric units, four community rehab centers, and one day care center. It was estimated that 2.4% (613,987) of the people in the country suffered from mental health illnesses of which 67,780 (that is, 2.8%) only received the care they deserve. The WHO (2011) also reported insufficient health personnel to care for these patients. They reported that available personnel included 1,068 Registered Psychiatric Nurses, 18 psychiatrists, 19 psychologists, 72 Community Mental Health Officers, and 21 social workers.

This workforce caring for mentally ill patients was again reported to have increased in 2018 by the World Health Organisation with the figures standing; registered psychiatric nurses (2,100), psychiatrists (17), and Psychologists (19), (WHO, 2018). Irrespective of the increment in the numbers of the health staff, it has not been able to match the yearly increment of the number of individuals suffering from psychiatric conditions. In WHO's (2018)'s report, in Ghana, only about 650,000 out of approximately 27 million population have been receiving proper mental health care. Hence, there is the necessity to train the few health professionals to work harder to cater to the numbers. One major aspect they should be trained on is their Emotional Intelligence since it is a necessity in building and maintaining relationships (McQueen, 2004).

Intelligence could be Linguistic Intelligence, Emotional Intelligence, Intra, or Interpersonal intelligence among others. As reported by the WHO (2018) there are 3 in-patient psychiatric hospitals in Ghana, namely; Accra, Pantang, and Ankafu Psychiatric Hospitals, with 302 psychiatric Units attached to general hospitals. Just as every service institution prides itself on good services so it is in mental health care. Priority is given to a good person-oriented relationship to help patients return to their normal self (Hummelvoll & Severinsson, 2001). Hummelvoll and Severinsson (2001) also reported that nurses should have professional skills and sensitivity to meet the weakness and anxiety of their patients.

The construct, Emotional Intelligence was introduced by Mayer and Salovey in the 1990s. It was explained by Mayer, Salovey, and Caruso(2004) as a subset of social intelligence that involves the ability to regulate one's own feelings as well as the feelings, moods, and emotions of others, perceive them, and use the information gathered to direct one's thoughts and actions. Collins and Cooper (2014) explain Emotional Intelligence as the ability to manage one's feelings as well as control one's emotions of others to foster a good relationship with the self, others, and the environment in which one finds himself or herself. Petrides and Furnman (2001) have described the construct of Emotional Intelligence as an ability to grasp human variations in the way one view, recognises, understands, controls, and uses emotions relevant to oneself and others. The various definitions comprehend a good relationship between two or more people is appreciably dependent on the intelligence they have about their emotions and how to manage

them. Emotional Intelligence, therefore, helps one to realise what the other person or persons feel, from his or her verbal utterances, his or her body language, or non-verbal cues.

Sex, race, age, socioeconomic status, and educational level are socio-demographic variables could influence one's Emotional Intelligence. Some studies link Emotional Intelligence to the maturation level of the psychiatric nurse. A study by Mano (2017) explored the relationship between self-confidence, stress, and emotions of students and it reported that maturity is key in emotional growth. In the outcome of a study by Akerjordet and Severinsson (2004), it was reported that professional-competence nursing practice is linked to maturation, personal growth, and Emotional Intelligence. The research also made mention of the importance of the individual's moral character in the practice of nursing.

Upon extensive search, there appears to be not much research information on psychiatric nursing practice at in-patient psychiatric hospitals concerning their psychological health, growth, and well-being. Some of these researches include a study by Acquaye (2007) who researched on Nurses in the Greater Accra Metropolis: Job Satisfaction, Occupational Stress, and Mental Health. The research did not include the other in-patient psychiatric hospitals, namely; Ankaful and Pantang Psychiatric Hospitals. It also did not include the Emotional Intelligence and Psychological Well-being of the psychiatric nurses. Another research by Adzakpah, Laar, and Fiadjoe (2017) on the occupational stress among nurses at the Tamale Teaching Hospital did not include the two variables. As well, the study was not about psychiatric nurses but rather about enrolled or

general nurses. Kyereme (2018) also researched the stress levels of Psychiatric Nurses in the Accra psychiatric hospital but did not include Psychological Well-being and Emotional Intelligence.

At psychiatric hospitals, the psychological well-being of psychiatric nurses is an important area in mentally ill patient healthcare. Psychiatric nurses should be psychologically healthy before they can give proper care to mentally ill patients at the ward. Some studies have found that the Psychological Well-being of psychiatric nurses are mostly impaired due to the stressful nature of their work, (Olatunde & Odusanya, 2015; Watson, Lagow, Xu, Zhang, & Bonini, 2008).

One could say that one's well-being could develop through; control of emotions, self-identity, life experience, and personal traits, synonymous with the way other values develop. Ryff and Singer (2008) further separated Psychological Well-being as either Eudaimonic or Hedonic-explaining Eudaimonic as components that describe the individual living well, for instance, having enough money, having properties and physical possessions whereas the Hedonic components describe feeling well, that encompasses having life satisfaction, having self-esteem, self-actualisation, having high self-efficacy and getting positive emotions. Psychological Well-being has been defined by Ford, Lam, John, and Mauss, (2018) as an individual's sense of fulfillment in life, regular feelings of joy, and happiness free of negative emotions and feelings.

Olatunde and Odusanya (2015) found in a study conducted in Nigeria that, little attention had been given to psychiatric nurses and their Psychological Well-being and that caused a high nurse migration to other affluent countries to seek

better working conditions and services to improve their physical, social and psychological lives. According to the same study by Olatunde and Odusanya (2015), it was reported that the training of psychiatric nurses was critical in developing countries since the job satisfaction level of the psychiatric nurse tends to reduce when their Psychological Well-being is low. Proper remuneration, job security, good working conditions, proper communication channels among other work-related incentives are some of the management skills that increase the Psychological Well-being of workers including nurses (Olatunde & Odusanya, 2015).

The number of people suffering from mental illness continues to rise and this, therefore, emphasise the need for enough funding, in addition to targeted strategies and plans to generate effective therapies and treatment models focused on recovery which included increasing the number of health ‘front liners’ at the health sector (WHO, 2018). Furthermore, WHO, (2018) reported a surge in the number of persons living with psychiatric problems or mental illness in Ghana from 2% in 2007, to 2.4% in 2011 to 2.5% in 2017. Studies by World Health Assembly and Brundtland (2001), and Vagharseyyedin, Vanaki, and Mohammadi (2011) also confirmed that the psychiatric nurses carry the biggest part of the service provision in mental health care and are key in psychiatric hospitals, therefore, they must be cared for and empowered for better work output.

### **Statement of the Problem**

The roles of psychiatric nurses have retained growing attention globally and they make up the largest group of health care professionals who care for

patients in the psychiatric health facilities (World Health Assembly, & Brundtland, 2001; McQueen, 2004). The results of McQueen's study (2004) also indicated that coping with mental illness patients required nursing education that included not only the multifaceted functions of psychiatric nurses but also the specific and demanding complexities involved in the treatment of mentally ill patients. A study conducted in Norway by Akerjordet and Stavanger (2004), reported that Emotional Intelligence aids the mental health nurse or psychiatric nurse to search and better understand his or her nursing identity which is important to aid them in their nursing practice. Individuals who know their identity know their strengths and weaknesses and how best to get things done (Grice, 2007). Freshwater and Stickley's (2004) research on nursing has suggested that an emotionally intelligent nurse finds it easy to function in accordance with their thoughts and feelings.

The study also emphasised the importance of the development of quality 'empathy' as a nurse. Harmonious living with self and the environment is also noted as essential to quality living which enhances self-fulfillment and good Psychological Well-being. According to Arafa, Nazel, Ibrahim, and Attia (2003), lesser years of work experience, lower levels of provision of care from loved ones, friends, and family, and negative total work satisfaction causes stress which further affects the Psychological Well-being of psychiatric nurses.

A study conducted in Ghana by Kyereme (2018) to assess factors that influence the stress level of nurses at Accra Psychiatric Hospital found that work-related stress led to suicidal ideations, cardiovascular diseases, and hypertension.

The study however centered only on workload, lack of financial and work resources, as factors that cause stress and impair Psychological Well-being but failed to examine some other key factors like personality, social support systems, and Emotional Intelligence. Another study in Ghana by Acquaye (2007) investigated the impact of Job Satisfaction on psychiatric nurses in the Accra Metropolis. It was concluded in nurses who are happy with their jobs, according to a study possess good mental conditions as compared to other nurses who are not pleased with their job as nurses.

The result of the study by Acquaye (2007) is seen to have a link with the study conducted in Nigeria by Olatunde and Odusanya (2015). Here, it does not make them leave their nursing jobs for other jobs to seek improved psychological well-being as reported in the study by Olatunde & Odusanya (2015), since they already possess it. The study by Acquaye (2007), however, failed to consider psychiatric nurses as participants but used only general nurses. He also failed to add psychiatric hospitals in Accra metropolis but only some selected general hospitals (Marie Lousie Hospital, La General Hospital, and the Achimota hospital) and some polyclinics that do not practice psychiatry.

WHO (2017) in their report after their annual engagement with ministries of health around the globe, midwifery officers, government chief nursing, and other relevant stakeholders found that the general numbers of health workers including general nurses, midwives, and psychiatric nurses are a global shortage. The report indicated fifty percent shortage of the global number of health staff, in particular general nurses, psychiatric nurses, and midwives, to allow effective

preparation, organisation, and management of nursing and midwifery programmes in countries. The report also indicated that the largest needs-based shortages and dwindling of the number of general nurses, psychiatric nurses, and midwives are highest in South East Asia and Africa of which Ghana formed part. The poor Psychological Well-being of these nurses was stated to be a potential cause of the shortage in the numbers. The current study would assess and find out whether their Emotional Intelligence influences their Psychological Well-being, and if that is so if it is necessary to educate the psychiatric nurses to improve on their Emotional Intelligence.

There seems to be no empirical study in Ghana on the relationship between psychiatric nurses' Emotional Intelligence and the six (6) facets of Psychological Well-being; Autonomy, Environmental Mastery, Personal Growth, Positive Relationships, Purpose in Life, and Self-Acceptance. It is therefore prudent that a study that assesses the Emotional Intelligence and Psychological Well-being of psychiatric nurses is conducted. Again, upon search, there seems not to be any study on the two variables using the psychiatric nurses across the three major in-patient psychiatric hospitals in Ghana – Accra, Pantang, and Ankafu Psychiatric Hospitals. The aim of this research is to determine the influence of Emotional Intelligence (moderated by age range, gender, and years of work experience) on the Psychological Well-being of psychiatric nurses at in-patient psychiatric hospitals in Ghana.

### **Purpose of the Study**

This study seeks to assess the influence of Emotional Intelligence on the Psychological Well-being of psychiatric nurses at in-patient psychiatric hospitals in Ghana.

### **Objectives of the Study**

The specific objectives of the study are to determine the:

1. Emotional Intelligence level of psychiatric nurses at in-patient Psychiatric Hospitals.
2. Psychological Well-being of psychiatric nurses at the in-patient Psychiatric Hospitals.
3. Relationship between the Emotional Intelligence and Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.
4. Moderating role of Gender in the relationship between Emotional Intelligence and Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.
5. Moderating role of Years of Work Experience in the relationship between Emotional Intelligence and Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.
6. Moderating role of the age range in the relationship between Emotional Intelligence and Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.

## Research Questions

The current study was guided by the following research questions:

1. What are the levels of Emotional Intelligence (Emotionality, Self-control, Well-being, and Sociability) of psychiatric nurses at in-patient Psychiatric Hospitals in Ghana?
2. What are the levels of Psychological Well-being (Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance) of psychiatric nurses at in-patient Psychiatric Hospitals in Ghana?

## Research Hypotheses

1.  $H_0$ : There is no statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.  
 $H_1$ : There is a statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.
2.  $H_0$ : Gender will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.  
 $H_1$ : Gender will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.

3.  $H_0$  : Years of work experience will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.

$H_1$  : Years of work experience will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.

4.  $H_0$  : Age range will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.

$H_1$ : Age range will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospital.

### **Significance of the Study**

The study will bring to bear information on the Psychological Well-being of Nurses at the in-patient Psychiatric Hospitals in Ghana and the role Emotional Intelligence play in their general daily functioning and nursing practice. Secondly, the study's findings would be beneficial to the hospital board of directors and administrators to put in measures to improve the well-being of nurses through the institution of special services like Clinical Health Psychology services and counseling services in the various general hospitals and psychiatric hospitals.

Also, the findings of the study will guide Policy Makers (Nursing and Midwifery Council, Mental Health Authority, and Ministry of Health - Ghana) to institute programmes, workshops (either annually or bi-annually) and support

units to train and develop the Psychological Well-being of psychiatric nurses. Finally, the outcome of the research would add to the current literature on the Emotional Intelligence and Psychological Well-being of psychiatric nurses.

### **Delimitation**

The study focused on the top three Psychiatric Hospitals in Ghana: Accra Psychiatric Hospital, Ankaful Psychiatric Hospital, and Pantang Psychiatric Hospital. Private Psychiatric Hospitals and out-patient psychiatric units were excluded. This is because it was believed that the three major hospitals had been in existence longer as compared to the private in-patient psychiatric hospitals, therefore nurses in the three-major in-patient psychiatric hospitals would possess the characteristics needed for the study. The study was also delimited to the moderating role of gender, age range, and years of working experience. The researcher, however, did not include other variables like the medical conditions nor salary structure, which may have influenced the Emotional Intelligence and Psychological Well-being of the psychiatric nurses at the in-patient Psychiatric Hospitals. The researcher did not take into consideration their medical condition due to the strict ethical boundaries surrounding the medical conditions of people.

### **Limitations**

The limitation of the study was encountered during the data collection. A major part of the data collection was done by the Research Assistants from the hospital's Nursing Administration with a moderate level of supervision from the researcher. This was because the data was collected during the COVID-19 pandemic period which created some level of restriction on conducting research

work especially at health centres and thus affected the researcher's power to fully supervise the data collection. These restrictions from Ghana Health Service and the Hospital Administrations were ways to curb the spread of the COVID-19 Virus. Due to these restrictions the research assistants that helped with the data collection from the various psychiatric hospitals were psychiatric nurses at the same hospitals and this could have some influence on the responses on the questionnaire due to the familiarity among the psychiatric nurses. Neutral persons could not be used as research assistants because the hospital administration and the Ghana Health Service only recognised the health workers of the hospitals as qualified persons for all forms of data collection for research at the various hospitals. This, however, may have an effect on the study's findings.

### **Definition of Terms**

The following terms are defined operationally as follows:

**Mental Health:** The state of well-being where individuals accept their talents, work properly and efficiently, and contribute to their community.

**Psychiatric Nurse:** A clinical worker specialized in mental health and thus caring for people of all ages who experience mental disorders and psychosis in Psychiatric Hospitals mainly.

**Emotional Intelligence:** It's the ability to control one's own emotions and handle other 's emotions to live in peace with one's self and others.

**Psychological Well-being:** This refers to the inter-and individual positive affect cognitive abilities which may consist of one's relationship with others, and

attitudes that are self-centered which consists of one's sense of control and personal development.

**In-Patient Psychiatric Hospital:** An institution where patients with psychiatric disorders stay while receiving treatment.

### **Organisation of the Study**

The study was organised into five chapters. The first chapter comprised the background to the study, the statement to the problem, purpose of the study, research question and hypotheses, significance of the study, delimitation as well as limitations of the study. Chapter Two presents a review of the literature relevant to the study. This chapter presents the theoretical underpinning of the constructs of the study, and empirical review, and conceptual review. Chapter Three presents the methodology aspect of the study, presents the research design, population and sampling procedure, ethical issues, data collection tools, data collection procedure, and data analysis procedures. Chapter Four presents the analysis of the data and a detailed discussion of the results of the analysed data. Chapter Five presents the Summary, Conclusion, and Recommendations of the study, and finally the areas for further research.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter presents a review of the scholarly literature related to the explanation of the constructs in the study. It will further present information and explanations of the theories that back the constructs in the study. How these constructs interrelate with each other would also be explained in the conceptual framework section of the study.

#### Concept of Emotional Intelligence

Emotional intelligence has been more and more recognised as a vital psychological component for human prosperity and healthy living. Several kinds of research prove that Emotional intelligence is a crucial aspect to consider with respect to Psychological Well-being (Peña-Sarrionandia, Mikolajczak, & Gross, 2015; Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2016). Emotional Intelligence plays a major part in the good health of humans especially that of health professionals (Martins, Ramalho, & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). There is also adequate proof that shows that Emotional Intelligence enhances flexibility and empowers individuals to function wholly in their day-to-day activities, (Kirk, Schutte, & Hine, 2011; Ruiz-Aranda et al., 2012; Slaski & Cartwright, 2003).

The concept has had different viewpoints, categorising the phenomenon into Trait Emotional Intelligence, Ability Emotional Intelligence, and Mixed Emotional Intelligence.

Trait Emotional Intelligence, which is also known as emotional self-efficacy, is described as a collection of emotion-related self-perceptions linked to typical performance at the lower levels of personality hierarchies (Petrides, 2009). It is most commonly measured using a self-report tool (Warwick & Nettelbeck, 2004). The five composite scales mentioned by Bar-On (1997) are Intrapersonal, Interpersonal, Adaptability, Stress Management, and General Mood under Trait Emotional Intelligence. This phenomenon is of the view that the intelligence about one's emotions forms part of one's personality or genes but is not learned as believed in the Ability Emotional Intelligence (Petrides, 2009). Petrides (2009), constructed the Trait Emotional Intelligence Questionnaire to measure one's trait emotional Intelligence. Again, since emotional behavior is a part of one's personality, Trait Emotional Intelligence believes that all emotional behaviors are beneficial and cannot be classified as right or wrong. However, the trait model has been criticised for focusing too heavily on personality types, while the ability model of emotional intelligence believes emotions are dependent on one's cognitive functioning (Rode et al., 2008).

The Ability Emotional Intelligence perspective describes it as “the cooperative combination of intelligence and emotion, thus operating on emotional knowledge” (Mayer et al., 2004). It is once again regarded as a part of a class of intelligence that includes the social, functional, and personal intelligence, all of which may be acquired but are not naturally possessed as a trait. According to Mayer et al., (2004), the competencies under ability emotional intelligence include; perceiving emotions, facilitating emotions, comprehending emotions, and

having control over emotions. The Ability Emotional Intelligence believe that one's emotional intelligence does not form part of the personality nor it is genetic, therefore, it could be learned and developed based on socially accepted norms. Ability Emotional Intelligence has been assessed using IQ-like efficiency measures in accordance with these viewpoints. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is the most used scale under this model (Grewal & Salovey, 2005). It examines a broad range of skills and competencies that affect leadership performance in order to define Emotional Intelligence.

According to this model, people are born with specific cognitive abilities as well as personality traits, and both influence their emotional intelligence. Again, these natural characteristics, which are unique to each individual, are thought to play a role in determining the level of success that can be achieved through the development of their intelligence about their emotions. Emotional Intelligence is thought to be inextricably linked to personality traits nor cognitive functioning and that there should be a greater balance between trait and ability emotional intelligence. In corporate or other professional environments, the mixed model is often used to train and assess management ability and abilities. Self-awareness, self-regulation, social scale, empathy, and motivation are among the five basic Emotional Intelligence constructs outlined in the Mixed Model.

Emotional Intelligence as a thought was initially introduced into the field of psychological science during the early years of the 1990s to early 2000s by John D. Mayer and colleagues (Mayer & Salovey, 1997; Mayer, Salovey, & Caruso, 2004; Salovey & Mayer, 1990). Salovey and Mayer (1990), explained it

as a set of social intelligence that concerned the capability to manage one's own and others' thoughts, mood, and emotions, to comprehend them, and to apply the knowledge gained to direct one's thinking behaviour and emotions. Mayer and Salovey (1990) earlier described Emotional Intelligence as the capacity to be precisely comprehend and appraise a specific emotion; the power to get feelings; the power to comprehend emotions; and therefore the capacity to manage these emotions (Petrides, Furnham, & Mavroveli, 2007).

Matthews, Zeidner, and Roberts (2004) also described Emotional Intelligence as a form of intelligence an individual possesses that enables him or her to detect, process, comprehend and control negative or positive emotions, either oneself's and others. It was also defined by Cartwright and Salloway (2007) as the capability of one to comprehend, consent, and identify their own feelings and sentiments, additionally its effect on one's self and other individuals, and then to use the intelligence gathered to build a tension-free and healthy relationship with others at the workplace and institutions. Emotional Intelligence lays down the difference in individual approach in dealing with different persons and activities in various professions. Many studies have revealed that Emotional Intelligence is an essential element in handling the problems related to different occupations (McQueen 2004; Akerjordet & Severinsson 2007; Bulmer-Smith, Profetto-McGrath, & Cummings, 2009). Persons with high levels of Emotional Intelligence according to Sevdalis, Petrides, and Harvey (2007) showed tremendous real-life decisions, however, persons who had low scores on their Emotional Intelligence were more likely to make poor real-life decisions.

Additionally, Emotional Intelligence according to Mayer and Salovey (1990) has been sub-divided into four main components, namely:

- i. The part of an individual's intelligence to detect and understand their own emotions and that of other individuals;
- ii. The part of an individual's intelligence to exploit these emotional perceptions to achieve various accomplishments;
- iii. The part of an individual's intelligence to comprehend the emotional distinctions that exist; and
- iv. The part of an individual's intelligence to control emotions to accomplish desired objectives.

### **Concept of Psychological Well-being**

Psychological Well-being is a key element in health care and it is aimed at high standards in most workplaces and institutions. Psychological Well-being is well-thought-out as the sense of balance between the positive self and the negative self. Positive well-being is considered as one's functioning status which results in mental and physical healthfulness, whilst negative well-being is vice versa. Burke, Koyuncu, and Fiksenbaum (2016) described Psychological Well-being as a positive state of social, physical, and mental condition. According to them, when one is physically healthy, mentally sound, and is wholeheartedly accepted by society one is said to have good Psychological Well-being. Well-being is not just the absence of illness or sickness, (WHO, 2007). That is, one could be free of all physical illnesses and still have low Psychological Well-being. The term is also referred to as the positive mental health of an individual

(Edwards, 2005). Several studies have revealed that there is a diverse dimension of the concept of Psychological Well-being (Ryff, 1989; Wissing, & Van Eeden, 2002). The development of Psychological Well-being comes about as a result of combining the individual's identity of the self, regulation of emotions, experiences in life, and personality characteristics (Helson, & Srivastava, 2001).

Psychological Well-being is a part of man that aids the individual to function wholly. The field of psychology has lately devoted more attention to research into the positive aspect of individual growth and development, and the capabilities at work and if these influences their well-being (Bulmer-Smith, Profetto-McGrath, & Cummings, 2009; Bakker, Schaufeli, Leiter, & Taris, 2008). According to Edwards (2005), good mental health depicts high levels of Psychological Well-being. He added that an individual is categorised as having positive mental health when the individual has a positive thought of life, the individual is satisfied with happenings in life, has a positive relationship with others, and keeps up with a positive winning mentality.

### **Theoretical Framework**

This section of the write-up explains the theoretical underpinnings of the constructs in the study. It, therefore, gives the reader a better grasp of the constructs and how to relate them to one another.

### **The Trait Emotional Intelligence Theory**

The study employs the Trait Emotional Intelligence Theory to explain the influence of Emotional Intelligence on Psychological Well-being. It is defined as a collection of perceptions of the self, connected to emotions that are not distinct

to the personality of an individual (Zampetakis, 2011). Zampetakis again found that the development of the Trait Emotional Intelligence emanated from the notion that Emotional Intelligence is not influenced by the cognitive ability of an individual. Petrides & Furnham (2003) also terms it as Trait Emotional Self-efficacy. They believed that Emotional Intelligence can alternate because both are associated with various positive results, which includes good productivity.

Judge, Bono, and Joyce (2001) also reported that Trait Self-efficacy influences the individual's cognitive, affective, and motivational processes, additionally the individual's behaviour. They added that persons who have high levels of trait self-efficacy in day-to-day activities are more prone to put up appropriate behaviours, persist in challenging situations, and easily flourish in learning pertinent new behaviours. Higher-level trait self-efficacy is seen as one having a high level of intelligence about their emotions in the sense that one's work is discovered to be linked to several sundries of productive outcomes, which include good performance and job satisfaction. Mayer and Salovey (1997) described that Emotional Intelligence has four divisions, these are; the capability to accurately perceive and display emotions, the ability to assimilate emotions into thought, the capability to comprehend emotion, and the capability to regulate emotions in the self and the self of others. One needs to acquire the lower ability (ability to accurately perceive) and build it up through emotional regulation of the self and the self of others.

Petrides and Furnham (2001) further reported that there is an elementary differentiation within the dimensions of Emotional Intelligence. They proposed a

difference between ability and the trait emotional intelligence. Trait Emotional Intelligence is considered as inborn or a personality that focuses on emotions related to perceptions of the self and behavioural dispositions which is measured through self-reports like rating scales and personality questionnaires (Petrides & Furnham, 2001). However, Ability Emotional Intelligence is regarded as emotions related to cognitive processes which can be measured using tests based on the individual's performance. High Trait Emotional Intelligence scores do not necessarily mean adaptiveness and low scores in Trait Emotional Intelligence do not necessarily mean maladaptiveness (Petrides & Furnham, 2003).

Petrides and Furnham (2003) additionally reported that, some very high marks on Trait Emotional Intelligence questionnaires might be revealing of confidence excessive pride and self-promotion which proved some instances where high scores could have unwelcome consequences. For instance, Petrides and Furnham (2003) found that person's who had a high level of Trait Emotional Intelligence exhibited a lower rate of mood deterioration after being exposed to a short distressing video segment, while participants who scored low on the Trait Emotional Intelligence had a high rate of mood deterioration after being exposed to the same short distressing video segment.

Trait Emotional Intelligence forms part of the personality. It opposes the dependence on an individual's mental abilities by revealing that individuals with Emotional Intelligence are born with it (Vernon, Villani, Schermer, & Petrides, 2008). It is about how people think about their emotional capacity. The Trait Emotional Intelligence theory according to Petrides, Pita, and Kokkinaki, (2007)

posits that some emotion profiles will be helpful in some situations, but not in others. For instance, having an introverted personality and being non-supportive does not mean one is of emotional weakness, but it is a personality trait that tends to be more adaptive but not the ability to express emotions (Murray, Rushton, & Paunonen, 1990).

The Trait Emotional Intelligence theory is seen to be advantageous in relation to other approaches. First and foremost, Trait Emotional Intelligence recognises that one's emotional experiences are subjective (Robinson & Clore, 2002). This is to say that it circumvents a set of problems that plague several models. Again, Trait Emotional Intelligence incorporates the concept into conventional theories in general psychology instead of classifying it as a new subject, separated from existing scientific understanding. Also, it is unattached to a precise exclusive test, instead, it is general and offers a framework for interpreting the data collected from any Emotional Intelligence questionnaire. Finally, it is seen as advantageous in the sense that it can be easily extended to other areas such as social intelligence instead of being restricted to a single distinct model.

Petrides and Furman (2001) also built on a content analysis of the initial theory of Emotional Intelligence introduces fifteen (15) different facets of Trait Emotional Intelligence. These facets, however, have been framed in the dimensional domain of the Trait Emotional Intelligence construct as measured by the Trait Emotional Intelligence Questionnaire (TEIQue) explaining what an emotionally intelligent person is expected to behave in a situation (Petrides,

Furman, & Mavroveli, 2009). The dimensional domain presents in summary, some further explanations, the abilities an Emotional Intelligence person must possess. In other words, the abilities one must possess before being termed as emotionally intelligent.

Table 1 - *Dimensional Domain of Trait Emotional Intelligence*

Facets	Definition
Adaptability	The emotionally intelligent person must have the ability to be flexible and have the will to adjust to new settings. The emotionally intelligent psychiatric nurse is expected to adapt to new situations and behaviours of mentally ill patients.
Assertiveness	The ability to be frank, candid, prepared, and willing to advocate for one's rights
Emotion Expression	To be able to communicate clearly, their own emotions to others.
Emotion Management	The capability of communicating one's feelings to others
Emotional Percept	To be clear on the emotions of others so as their own.
Emotion Regulation	The capability of controlling one's own feelings
Impulsive Control	Ability to think and less likely to cede to pleasurable desires.
Relationships	Possibility to have personal relations with others fulfilled.
Self-esteem	Having self-confidence and being successful
Social awareness	Being brilliant in networking with decent social skills.

Table 1, continued

Facets	Definition
Stress Management	The capability to withstand pressures and manage stress well.
Trait Empathy	The capable of tolerating someone else’s perspective or way of thinking.
Trait Happiness	Being happy and satisfied with one’s life.
Trait Optimism	To be confident and optimistic.

Source: Petrides (2009)

These 15 facets have been grouped into four major dimensions according to the Trait Emotional Intelligence (Petrides, 2009). The four dimensions include sociability, well-being, emotionality, and self-control, in a social environment. The explanation of the four dimensions is as follows.

*Well-being*

This is explained as an individual’s capability to have confidence in the self which comes with a focused mindset to be successful in all life’s challenges (Gökçen, Petrides, Hudry, Frederickson, & Smillie, 2014). Self-esteem, Trait optimism, and Trait happiness of the 15 facets make up the ‘well-being’ dimension of the Trait Emotional Ability. To determine the score for an individual’s well-being the scores for trait happiness, trait optimism, and self-esteem must be computed to ascertain the global score.

### *Self-control*

This is a summary of a person's internalised capability to control his or her feelings in diverse ways that help him or her to resist social pressures and impulsiveness and also manage stress (Gökçen et al, 2014). Stress management, Impulsiveness (low), and Emotion regulation are the facets that make up the dimension of 'self-control'. An individual who does not have self-control tends to be extremely impulsive. The individual tends to decide and act without giving careful thought to the consequences of his or her actions. An individual who does not have self-control also finds it difficult to control stress and emotions.

### *Emotionality*

Gökçen et al, (2014) define 'emotionality' as a person's competency to precisely perceive himself or herself and others' feelings, the capability to communicate their thoughts feelings to others, the capability of being empathic to others' feelings, and the capability to achieve personal relationship goals. Emotion perception, Trait empathy, Relationships, and Emotion expression, are the facets that come together to make up for the emotionality facet of Trait emotional ability. According to Petrides (2009), low levels of emotionality lead to shallow perceptual emotions, displacement of emotions, and weak loyalty and trust in their relationship with others.

### *Sociability*

This is defined as the capacity to recognise, accept and appreciate the thoughts or emotional gestures of other people, the capacity to affect the feelings of others, and the desire to take a stand for what is true (Gökçen et al., 2014).

With the 'sociability' dimension Emotion management, Assertiveness, and Social Awareness come together to form the dimension. Individuals with low sociability are not assertive in their decision-making and find it difficult to realise and comprehend others' emotions (Petrides, 2009). Their work relationship with other colleagues at the workplace is also weak.

'Adaptability' and 'Self-motivation' forms part of the 15 domains but are not keyed in any of the four variables, but they do play a role in the overall Trait Emotional Intelligence score.

### **Theory of Psychological Well-being (Ryff, 1989)**

According to Ryff (1989), Psychological Well-being is associated with happiness and described happiness as the balance between negative affect and positive affect. She also stated in her theory that the expression 'good life' was directly linked to well-being. Studies into the expression 'good life' have been influenced greatly by the pivotal work of Ryff (1989), and in recent times it has seen tremendous attention within the social sciences field. Based on a thorough analysis of the literature, she established an integrated theoretical structure for well-being. According to Ryff (1989), the significant perspectives that led to research of good life were the perspective of life span theories by Erikson (1959) and also some theories on human growth and development (Rogers, 1961; Maslow, 1968). Additionally, Ryff and Keyes (1995) merged perceptions from the earlier study on development by Ryff (1989) on their philosophical quest to define what a good life or a happy life was (Ryff & Keyes, 1995). They claimed that the perspectives encompassed comparable and interrelated measures of

positive psychological functioning. It has been shown that one key similarity is that all the parameters have been defined in terms of well-being rather than ailment (Ryff & Keyes, 1995).

Ryff (1989) propounded six (6) core dimensions of Psychological Well-being which breaks down the construct and further expatiates it for clearer understanding. Ryff additionally established a measuring tool that is still being globally used by researchers who have intent in measuring and researching one's Psychological Well-being. The instrument is named Ryff's Psychological Well-being Scale which has 42 items. She theoretically derived key components of positive psychological health which include Self-acceptance, Positive relations with other people, Autonomy, Mastery of the environment, Purpose in life, and Personal growth (Ryff 1989). This model is popularly referred to as 'Ryff's Six-factor Model of Psychological Well-being' and they are explained in detail as follows:

#### *Self-Acceptance*

Self-acceptance according to Ryff (1989), is seen as an important aspect of mental health, and that it is the most repetitive aspect of Psychological Well-being pointed out in all viewpoints of Psychological Well-being. Self-acceptance is also regarded as an attribute of self-actualisation as well as optimal functioning together with maturity. Having a positive view of one's present self and past self is a pivotal characteristic of positive psychological functioning (Ryff & Singer, 1996). To assess an individual's level of self-acceptance, Ryff and Singer (1998), further stated that individuals who are considered as having a higher level of self-

acceptance admit and accept both negative experiences and positive experiences in all aspects of their lives. On the other hand, individuals who are regarded as having a lower level of self-acceptance get thwarted and dissatisfied with past experiences or incidents in their lives. They get disturbed by certain parts of their personalities and have hope to change and be different from who they are at present. This is closely related to self-actualisation in the theory of needs by Abraham Maslow.

#### *Positive Relations with Others*

According to Ryff and Singer (1998), it has been pointed out that a sincere, trusting interpersonal relationship with other persons is prominent and important to foster healthy and growing relationships. Hence, positive and accommodating relations with other persons are vital in building trust, loyalty, and instituting a lasting relationship, and belonging to caring and supportive groups (Ryff & Keyes, 1995). Positive relations with others with a calm approach towards each other reflects maturity and respect which leads to better-quality interactions and better consideration and acceptance between members, resulting in peace and understanding. On the other hand, a poor relation with others being it family, colleagues, friends among others lead to frustration, misunderstanding, and conflict (Ryff, 1989). In group development, for example, positive relationships with and towards others result in high levels of shared knowledge, empowerment and enhance group performance and bond. Ryff also reports that an individual's ability to love is a key component of mental health. Individuals who are classified as self-actualised here are defined as having affection for others and

strong feelings of empathy and having the capability of showing greater affection, in-depth commitment in friendship, and a more complete sense of togetherness with others (Ryff & Singer, 1998).

### *Autonomy*

According to Ryff (1989), autonomy implicates one having an internal assessment of happenings. This explains that the individual evaluates himself or herself based on personal standards that do not depend on the approval and endorsement of others. One is seen as being self-determined, being independent, and having the ability to withstand and resist pressure from society when he or she has a high level of autonomy. Individuals here are not easily pressured by their peers to change with the aim of fitting in. Ryff and Keyes (1998) also posited that these individuals think and act in certain ways based on their self-set standard evaluation of themselves. They, therefore, do not live their lives according to the standards set by others or society they find themselves, but by their individual set standard. Those with a low level of autonomy, on the other hand, yearn for acceptance and endorsement by others. They struggle to fit in and be accepted by their peers or colleagues. They, therefore, tend to lose focus on their own beliefs, ideas, and direction since they live their lives to please others around them instead of growing at their own pace (Ryff, 1989).

### *Environmental Mastery.*

An individual is seen as having mastery of his environment when he or she has the ability to choose or create environments that are accommodating and safe to the individual's setting (Ryff, 1989; Ryff & Singer, 1998). One component

seen as important for one to achieve environmental mastery is maturity and this is seen to require participation in activities that fall outside the self of the individual. Environmental mastery is also seen as a vital component of the mental health of an individual. Individuals who have high levels of Environmental Mastery have control over their surroundings and environment both internal activities and external activities. These individuals tend to make effective and efficient use of chances and opportunities around them. They also tend to have the ability to create a sound and accommodating environment suitable for their personal growth as well as the growth of their values and beliefs. On the other hand, persons who have low levels of environmental mastery find it challenging in managing their day-to-day activities. They are also incapable of changing or improving their environment to suit themselves to foster their growth – they tend to be unaware of their surroundings and the opportunities in their external world (Ryff, 1989; Ryff & Keyes, 1995).

*Purpose in life.*

This refers to meaningfulness in the life of an individual. This is to say that, an individual can perceive the significance of his or her existence in the world comprising the setting and achieving of goals, dreams, and desires. Persons who are aware of their life's purpose tend to have direction in their actions in life and this aids the individual to have a meaningful life (Ryff, 1989; Ryff & Keyes, 1995). The meaningfulness in life has to do with the individual's present life, past life and, future life and plans. The individual tends to grow in the desired direction when he or she has a purpose in life. Career choice and other major

decisions to be taken in life tend to be purposeful. Persons who score low on purpose in life as a component, tend to have no purpose, drive, or direction in life – they do not have meaning to their past life, present life nor future life. They have difficulty in choosing their life partners and have difficulty in their career choice.

### *Personal Growth*

Psychological well-being necessitates that one continues to develop, grow, and improve on their potential as an individual (Ryff, 1989; Ryff & Keyes, 1995). Openness to experience, taking on new challenges or projects at various times periods of life, are characteristics of the optimal functioning person. Such individuals continually develop, rather than focus on the achievement of a certain fixed state in which all problems are solved. Personal development allows one to develop, evolve, and solve problems constantly, thus increasing one's talents and capabilities. Continued development is associated with an elevated level of personal growth while a lower level indicates a lack of development.. These dimensions, also, include a wide range of well-being and worthy life that comprises positive appraisals of the individual and the individual's already lived life (self-acceptance), a sense of improvement, growth, and development as an individual (personal growth), the conviction that the individual's life has meaning and purpose (Purpose in Life), the ability to have good relationships with other individuals (Positive Relationships with others), the capability to effectively control the individual's life's setting (Environmental Mastery), and possession of willpower (Autonomy).

## Other Theories related to Psychological Well-being

### Abraham Maslow's Theory of Needs

With the intention of better understanding what motivates and inspires human beings, Maslow (1943) proposed that the needs of humans can be organised in a hierarchical order. The proposed hierarchy ranged from physical needs such as food, water, and shelter to abstract concepts such as self-fulfillment. According to Maslow, when the lower need is achieved the next need on the hierarchy becomes our focus of attention. This is to say that, if the lower need is not achieved, the next need on the hierarchy cannot be achieved.

According to Maslow (1943), individuals have different times of reaching different stages of the hierarchy throughout life. He however stated that certain life instances like poverty, illness, and loss of property could interfere with an individual's growth and development on the hierarchy of needs. This can however cause an individual to experience a deficit in a lower need that had earlier been achieved at a higher-order stage. Also with the theory of needs by Maslow, human beings can move from the pursuit of one need to another depending on the situation the person is in at a particular stage in their life. The theory of needs is explained as follows:

#### *Physiological Needs*

This need is stated as the most and vital need for the survival of the human being. Some of the needs that fall under this stage include food, water, breathing (air), homeostasis, and some cases of sex reproduction. Besides the named basic

requirements of food, air, water, sex, and homeostasis, Maslow added shelter and clothing are physical needs as part of the basic needs needed for survival.

### *Security and Safety Needs*

At this level, safety and security need to become primary for human beings; attaining health insurance, securing a job, saving money with a bank, and living in a safer environment in the community all contribute to the needs at this level. The requirements start to get a little more complex as the individual progresses in the hierarchy. The safety and physiological levels of the hierarchy are together known as basic needs (Maslow, 1968).

### *Social Needs*

Social Needs is the third need on Maslow's hierarchy of needs and it includes things such as love, belongingness, affiliations, and acceptance. At this level, the primary thing that human behaviour is the emotions and the need for emotional relationships. When the individual gains friendship, romantic attachments, belongingness to family, and social groups which include churches and religious groups, he or she is said to have attained this level of need by Maslow. According to Huitt (2007) in a further explanation of this Theory of Need by Maslow stated that it is a necessity for one to attain this level of social needs to avoid problems such as depression, anxiety, loneliness, and mental problems. A personal relationship with loved ones, family, and friends has a major impact on the individual's mental health and how the individual relationships with others in groups such as book clubs, sports teams, study groups, among others.

### *Esteem Needs*

The fourth need of Maslow's hierarchical order is the need for appreciation and respect. The need for self-esteem begins to play a more important role in driving the individual's behaviour after the first three bottom levels of need have been satisfied. The urge to achieve the esteem need turns up to be increasingly important to gain for people to have their efforts recognised by people around them. This tends to give the individual some form of prestige and accomplishment when they feel they are making a recognisable contribution to their society and they are being valued by people for their actions.

Maslow mentioned some activities that can help one in accomplishing their self-esteem. Some of these include; participating in some athletic teams, academic accomplishments, accomplishment in professional activities, and partaking in personal hobbies. According to Maslow, persons who succeed in gratifying their needs for self-esteem and acknowledgment from others tend to have confidence in their capabilities. In other words, persons with high self-esteem tend to have increased self-efficacy. On the other hand, according to the theory persons who do not have self-esteem, and recognition from others and their society can grow to feel inferior in the presence of others (Batt, 1969). Together, the levels of respect and social needs reflect the psychological needs in Maslow's hierarchy of needs.

### *Self-Actualisation Needs*

Self-actualisation need is the highest of the needs of Maslow's hierarchical order of needs. Maslow (1943) termed this level as "What a man can be, he must

be," and explained the statement that, as an individual, one must attain his or her full potential, goals, and dreams as a human being. According to Maslow, self-actualised people are the people who seem to have fulfilled themselves and are doing the best that they are capable of doing. He defined self-actualisation as the ability to fully use one's abilities and fully exploiting all other potentialities and talents as a human being. Put differently, persons who are self-actualised are seen as having completely evolved or are growing to their maximum potential. Self-actualised people are seen as less concerned with other people's views, they are self-conscious and focused on achieving their potential and their personal development.

Maslow's theory however being popular in the fields of education and psychology, so as in the business settings has been criticised. Firstly, it has been criticised that needs do not follow a hierarchy as proposed by Maslow (Wahba & Bridwell, 1976). While some research has shown some support for the theories of Maslow [Thoman, Sansone, Robinson, and Helm, (2019); Hromatko, and Hrgović, (2020)], most research has failed to authenticate the concept of a hierarchy of needs. Wahba and Bridwell (1976) explained their criticism as Maslow having little evidence to back his theory. They believe one does not always have to go through the hierarchy and that one can accomplish a higher-order need before accomplishing a lower order need. Wahba and Bridwell (1976) also noted that the theory of Maslow is difficult to test. They stated that Maslow's self-actualisation is hard to scientifically test and again, Maslow's self-actualisation study was also focused on a very small selection of participants.

Notwithstanding the criticisms, Maslow's hierarchical ordered needs are known to be significant in the field of psychology. Maslow as a humanistic psychologist focused his theory on the development of healthy individuals both mentally and psychologically (Villarica, 2011). It was strongly correlated with people's happiness, the difference in cultures. It was also reiterated by Villarica (2011) that social needs and self-actualisation in Maslow's theory are of very much importance to the growth of people's psychological health.

Maslow's Theory of need has been seen as having a link with Psychological Well-being (Baumeister & Leary, 1995). The theory has been stated as having a major impact on other scholars who have attempted to expand on it. Eudaimonic Well-being for instance is one of the theories that have been influenced by Maslow's Theory (Ryff & Singer, 2008). According to Ryff and Singer (2008), the good well-being of a person means a sense of direction and meaning in life. This is similar to Maslow's idea of self-actualisation whereby one knows his or her self and ability and therefore fully use the abilities, capabilities, and potentials. The two theories have a notion that is similar to Ryff's Psychological Well-being which believes that before one will have positive Psychological Well-being he or she must know the purpose of their existence in life. Ryff and Singer (2008) again reports that, when an individual and in the case of the study, the psychiatric nurse, lacks love, care, food, shelter, esteem, and efficacy he or she has low Psychological Well-being. Put differently, the individual tends to be unhappy in life which explains low well-being as explained by (Ryff, 1989). Ryff and Singer (2008) therefore state that one should seek to

achieve the various needs as stated by Maslow's (1943) theory in order to be happy and before he or she would be seen as having high Psychological Well-being.

### *The Theory of Self and Personality (Carl Rogers)*

The theory of personality and self by Rogers is concentrated on the concept of self or self-concept. Just as Maslow's concept of self-actualisation in the theory of need, Rogers believes that if one gets to know the concept of the self he or she will be self-actualised. Rogers believed that one's self-concept can be built when he or she is consciously aware of their life experiences. The theory in the field of psychology, he has had a significant impact., one of which is the client-centered therapy which focuses on the self to help the client or person to be better. The Rogerian theory explained two Selves – that is, 'the real-self' and the 'ideal self'.

#### *The Real-Self*

The real-self according to Rogers (1954) can also be termed as the self-image. It comprises how our body image influences one's self-efficacy and self-esteem intrinsically. It is explained as how one sees himself or herself as a level of importance and influence on his or her psychological health. Put differently, when one perceives himself or herself as handsome/beautiful or ugly, a good or bad person, strong or weak among others, the self-image is directly affected by how he or she feels, thinks, and acts in situations and the environment he finds himself. Rogers (1954) acknowledged that the 'real self' could be initiated by the individual's actualising tendency, and continuous receipt of positive self-regard

statements regard. Rogers believed that the real self can be seen by others and that every person owns his or her real self and that he or she can determine how others see them. Grice (2007) on the real self of Roger's theory also brought out that the inner personality is linked to the real-self and that It is that aspect of ourselves that feels the most true to what and who we are at our heart.

### *The Ideal Self*

Rogers believed that the ideal self represents one's strivings to attain their dynamic goals, ambitions, or ideals. Simply put, the ideal self is the type of self that the individual yearns or desires to be and this is developed over time based on what the individual has learned or experienced in the lifetime. The ideal self could be determined by one's society's beliefs and culture, what one has learned from the parents or teachers, or what one had learned from a role model (McLeod, 2007). This type of self is as a result of factors from the outside world of the individual. It is seen as the self that holds the values learned from others and that one feels others think they should be (Derlega, Winstead, & Jones, 2005)

Rogers (1961), however, in his theory brought out that, there are some situations whereby an incongruence comes between the real self and the ideal self. Congruence between the real self and the ideal self leads to good Psychological Well-being (Boeree, 2006). Put differently when there is a balance between the two selves, the individual tends to be at peace and grow wholly with good mental health. On the other hand, an imbalance between the selves would lead to conditions like depression, anxiety, low self-efficacy, and poor psychological wellbeing (Boeree, 2006). Rogers also instituted Client-Centered Therapy to help

individuals with incongruence between the real self and the ideal self. The psychologist would practice unconditional positive regard for the client and show care and empathy in order to understand the client in the issue he or she has. The purpose of the therapy is to build up the individual's sense of worth and reduce the incongruity between the ideal self and the real self. This will help the individual work more completely in situations and have good Psychological Well-being. According to Rogers (1954), one needs to seek to achieve maximum functioning by bridging the division between their real self and their ideal self. Rogers (1954) states that when one succeeds in balancing the real self and ideal he or she will be seen as having high Psychological Well-being. In further explanations, the theory suggests that the psychiatric nurse should aim at balancing these two selves in order to achieve happiness and high Psychological Well-being.

### **Empirical Review**

This section of the write-up presents research works done by other scholars that are related to the construct and purpose of the study. It presents the reports of the outcomes of these researches, and how similar or related these researches are related to that of others.

### **Levels of Emotional Intelligence among Psychiatric Nurses**

Emotional Intelligence is critical to health service delivery on the part of nurses. An average Emotional Intelligence ability is important for proper caregiving. The importance of the trait is an essential ingredient in caregiving has been confirmed through different research studies (Petrides & Furnham, 2006;

Ezzatabadi, Bahrami, Hadizadeh, Arab, Nasiri, Amiresmaili, & Ahmadi, 2012; Codier, Kamikawa, Kooker, & Shoultz, 2009). Therefore, it has been emphasised in the profession of nursing profession and interpreted in two scopes: firstly, the ability of the nurse to interpret and understand the emotional language of the patient, and secondly, the ability of the nurse to use those perceptions to achieve the aim of handling complicated circumstances towards the patient's quality care. Literature indicates the importance of Emotional Intelligence in the growth and the harmony of personal and professional life not necessarily by improving the technological and educational skills of nurses (Smith, Profetto-McGrath, & Cummings, 2009). They described the emotive needs for nurses as the emotional essence of caring for work, emotional capacity in care delivery, and the need for Emotional Intelligence to manage the emotionally sensitive atmosphere efficiently (Smith, Profetto-McGrath, & Cummings, 2009).

Emotional Intelligence is a major factor in the quality of work. It can affect the actions of mental health nurses and the activities of the hospital (especially patient treatment), the atmosphere for care, facilities, and the capacity to cope with disputes in the workplace (Ezzatabadi, Bahrami, Hadizadeh, et al, 2012). Petrides and Furnham (2006), in a study aimed at exploring trait Emotional Intelligence and the association between four job fields, that is; Job, satisfaction, job commitment, job control, and job stress. The sample used for the study was 167 participants, comprising females (87) and males (80) of which the mean age was 38 years old for both sexes. The research adopted the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) by Petrides, Frederickson,

and Furnham, (2004) to measure their level of intelligence about their emotions. The study reported a difference in Emotional Intelligence and the role of job stress due to gender differences with females having higher scores on the TEIQue-SF than males. Emotional Intelligence also showed to be correlated with perceived job control, job satisfaction, lower levels of job-related stress, and commitment to the organisation. Individuals who had high scores on the measure for Emotional Intelligence were reported to be more self-confident. This helped them to manage their own emotions, anxieties in addition to the stresses and emotions of the other colleague employees. (Petrides & Furnham, 2006).

Codier, Kamikawa, Kooker, and Shoultz (2009), revealed that psychiatric nurses who have high levels of intelligence about their emotions have shown a higher rate of performance, and they live longer. Nurses' Emotional Intelligence directly impacts their quality of health care services in the hospital. In a high-stress environment, nurses' relationship becomes poor as they connect with a variety of people, including staff, patients, and relatives (Ezzatabadi, Bahrami, Hadizadeh, et al., 2012). High Emotional Intelligence among psychiatric nurses leads to healthier behaviours, adaptability, stronger bond with people, and enhanced positive values orientation (Akerjordet & Severinsson, 2007). Numerous research on Emotional Intelligence have been undertaken. Nurses in Iran reported having a high levels of Emotional Intelligence adopting the Cyberia Shrink 33 items questionnaire as the measuring tool (Ezzatabadi, Bahrami, Hadizadeh, et al., 2012). It was also revealed in the study that nurse's emotional

intelligence has a relationship with their job satisfaction, communication skills, and nursing services.

Research in Korea also found a high level Emotional Intelligence of undergraduate business students of two American public universities adopting the 33-item scale developed by Nicola Schutte (Kim, Cundiff, & Choi, 2015). The study also revealed a positive link between their level of emotional intelligence and their ability to create rapport and their ability to engage in negotiations. Again, a study in Turkey revealed nurses possessing average Emotional Intelligence levels which aid them in their day-to-day activities (Basogul & Ozgur, 2016). The study used 277 nurses for the study and the Bar-On's Emotional Quotient Inventory (EQ-I) to determine their levels of intelligence about their emotions. The nurses' emotional intelligence level (mean = 2.75) representing the average. Chinese studies have published a confirmation on the link between nurses' Emotional Intelligence and the service they provide. In Hebei Province, a study by Yongling, Uddin, and Bhuiyan (2019) among tertiary hospitals' nurses' in Dali reported high levels of Emotional Intelligence with a significant impact on their health-giving ability while low levels of Emotional Intelligence were reported in the provinces of Shanghai and Xi'an which caused a short in their health-care giving ability. The scale used in measuring the variable was the Law Emotional Intelligence Scale.

A study by Akerjordet and Severinsson (2007) employed qualitative research to explore psychiatric nurses' experiences with regards to their nursing practice with Emotional Intelligence. They used qualitative interview questions

which were developed from several kinds of literature on Emotional Intelligence. The researchers worked with four main areas, which were; the relationship between the psychiatric nurse and their patients, the leadership and supervision of the psychiatric nurse, the motivation of the psychiatric nurse, and the responsibilities of the psychiatric nurse. After a hermeneutic analysis, the study concluded that intelligence about one's emotions motivates the exploration into a more in-depth understanding of the personality of the licensed psychiatric nurse. It was also reported that learning how to control emotions and the process of maturation is pivotal to the professionalism of the psychiatric nurse. This means that Emotional Intelligence is a key component needed for a psychiatric nurse's personal growth, skills, and development. Another key finding had to do with the moral character of the psychiatric nurse relating to their clinical practice at the hospital. Psychiatric nurses have improved moral character related to their job at the hospital when they have high levels of Emotional Intelligence (Akerjordet & Severinsson, 2007).

Tomar (2016) in a study of Emotional Intelligence among nurses also indicated that the lack of intelligence about their emotions has a negative impact on themselves, despite the nurses having a higher Intelligent Quotient. The study stated that nurses who lack Emotional Intelligence ability fail in their practice as professionals. Tomar (2016) further asserted that an investigation of the traits of nurses with a higher level of Intelligent Quotient but a lower level of Emotional Quotient tends to be arrogant and uncomfortable to relate with by others including their patients and other healthcare workers. Nevertheless, nurses with high levels

of intelligence about their emotions are skilled, proactive, dedicated to other people, compassionate and loving, have a rich and satisfying emotional life. The study also reported that private hospital nurses have higher Emotional Intelligence than government hospital nurses, and this was due to Private Hospitals' market competition to prove themselves to be the best in service delivery.

Gerits, Derksen, and Verbruggen (2004) undertook a research to determine the Emotional Intelligence competencies of Indonesians and the Dutch by applying the Emotional Quotient Inventory (EQ-i), to 1274 Indonesians and 1455 Dutch participants. The outcome showed the level of Emotional Intelligence of Indonesians was largely lower than that of the Dutch. Another study by Gerits, Derksen, Verbruggen, and Katzko (2004) aimed at determining the emotional intelligence levels of nurses and its effectiveness on managing stress and burnout reported that male nurses had higher levels of intelligence about their emotions in comparison to their female nurse counterparts, therefore, female nurses managed their stress levels better as compared to their male colleague nurses. The study used 380 nurses as participants and the Emotional Intelligence Quotient Scale to measure the variable.

Rankin (2013) confirmed that Emotional Intelligence is a strong indicator of their physical cum psychological health, academic, and nursing programme success of psychiatry nursing. Psychiatric Nurses who have intelligence about their emotions have better well-being and reduced depression. The Emotional Intelligence function in mental stress reduction and better coping ability in nurses has also been further emphasised. Caregivers with higher Emotional Intelligence

display increased mental capacity and decreased psychological distress. Karimi, Leggat, Donohue, Farrell, and Rankin (2013) and Couper (2013) noted that psychiatric nurses with higher Emotional Intelligence can tolerate negative and optimistic feelings through emotional control and eventually burnout more effectively. Additionally, Rankin (2013) reported that psychiatric nurses who possess a high level of Emotional Intelligence have low or no discomfort and can handle more demanding therapeutic emotions. Emotional Intelligence does not only affect the quality of the services given by the psychiatric nurse but also significantly appears in health care satisfaction on the side of the patient (Rankin, 2013).

Routson (2010) stated that nurses with a high sense of intelligence about their emotions and good interpersonal relations have are more empathic and cooperative in bonding with patients of meeting their needs. They tend to be better interpersonal partners as compared with nurses with a lower level of intelligence about their emotions. Persons who are stable and have good health have higher life satisfaction. Therefore, nurses with these qualities tend to have high Emotional Intelligence, adjust themselves to harsh conditions, and show high levels of excellence in seeking and achieving their goals (Routson, 2010).

Cadman and Brewer (2001) concluded that those who have chosen nursing as a career should be tested to know their level of Emotional Intelligence before enrolling in nursing institutions and that they should build interpersonal relationships in nursing education. McQueen (2004) also stated that Emotional Intelligence is a human quality that should be built over the lifespan and not only

in the area of nursing. The highly optimistic patterns in an individual nurse's behaviour, growth, and positive values are driven by Emotional Intelligence in the nursing profession (Akerjordet & Severinsson, 2007). Intelligence about the emotions is seen as an important element in the production of effective infirmaries, improved nursing efficiency, and decreased nurse burnout (Vitellico-Cicciu, 2002).

Research investigating the link that exists between Emotional Intelligence and aspects of interpersonal relationships indicated that the variable had a positive association with self-monitoring and empathy (Schutte, et al, 2001). Therefore, those with higher levels of intelligence about their emotions tend to interact more efficiently and are more cooperative with others. They also understand the environment better and adapt self-representation appropriately. This study revealed high social skills in the respondents with high Emotional Intelligence, in terms of social network and interaction. Improved Emotional Intelligence is also associated, favourably, with cooperation. Such results and assumptions suggest that knowing the feelings of others and controlling one's emotions help build good relationships (Schutte, et. al, 2001). Relationships with others are related to high Emotional Intelligence. Emotional Intelligence thus plays a major role in social interactions, according to Song, Huang, Peng, Law, Wong, and Chen, (2010) and Brackett, Rivers, Shiftman, Lerner, and Salovey (2006).

### **Levels of Psychological Well-being among Psychiatric Nurses**

In the creation of a competitive edge for improved workplace efficiency and achievement, Psychological Well-being becomes an important consideration

(Demo & Paschoal, 2016). The value of the well-being of workers lies both in its success connection and because it is a vital component of safe organisations and management (Pawar, 2016). Pawar (2016) also claimed that the significant correlation between Psychological Well-being and the outcomes indicates that organisations can build on overall productivity by improving their worker's well-being. The health personnel, particularly psychiatric nurses, should always look after their health and Psychological Well-being to achieve the best results in patients. Some studies have identified a reduced employee turnover, improved safety, and better job efficiency related to Psychological Well-being (Wright & Cropanzano, 2000; Wright & Bonett, 2007; Burke, Koyuncu, Fiksenbaum, & Acar, 2009).

Psychological Well-being and low-to-high burnout in health workers are related to deprived health outcomes including medical errors, so health workers have low motivation to get their responsibilities fulfilled (Shangping, Ling, & Hong, 2015). Therefore, it is strongly suggested that the enhancement and development of the Psychological Well-being of psychiatric nursing staff lead to improved patient care experience (Maben, et al, 2012). According to the study it was also reported to recognise the importance of the significant factors for Psychological Well-being to improve the general well-being of workers. Psychological Well-being as previously reported is influenced by several factors including enthusiasm, happiness at the job, self-efficacy, efficiency, deindividuation, physical and spiritual exhaustion, the atmosphere, and even the organisational identity (Li, Fu, Hu, Shang, Wu, & Kristensen, 2010; Rodwell &

Munro, 2013; Kuo, Lin, & Li, 2014). Another study concerning Emotional Intelligence being a predictor of Psychological Well-being revealed that the majority of the respondents rating their Psychological Well-being as being moderate (90%), (7.4%) rated as low, and (2.6%) as high (Rathakrishnan et al., 2019). In the study, the workers with moderate to high Psychological Well-being had minimised complications in their work roles at their workplace.

Additionally, Blumberga and Olava (2016), investigated the quality of hospital nursing work-life, Psychological Well-being. They studied to find out if there was a correlation between work-life quality indicators and psychological well-being. The survey's findings reported a significant correlation between Psychological Well-being and work-life quality. It was evident that, the higher the scores of work-life quality, the higher the level of Psychological Well-being. It was also reported in the study that life satisfaction and self-acceptance are related to each other which means that the higher the self-acceptance scores, and the other way around, the higher the life satisfaction of the individual or the lower the life satisfaction, respectively. The research again reported a correlation between the level of educational and Psychological Well-being of nurses, that is, the lower the level of education, the lower the level of Psychological Well-being, and the other way around.

Meng, Luo, Liu, Hu, and Yu (2015) in their study revealed that nurses, in general, have a modest general Psychological Well-being. The study revealed that the physical and Psychological Well-being of local nurses was not optimal when photographic health results showed a wide range of data. With respect to the

detailed well-being, negative emotions, and satisfaction with life were the lowest and second-lowest variables. The difficulty in nursing is to address the negative emotions because of the regular encounters with diseasing patients, the mental condition of the patients, and the many different needs of patients needing solutions and nursing care.

Petrides, Perez-Gonzalez, and Furnham (2007) and Figueroa, Contini, Lacunza, et. al (2005) noted that increased levels of Psychological Well-being may lead to good coping approaches such as commitment, constructive reassessment, or the acquisition of functional and emotional support. In comparison, persons with lower Psychological Well-being used unhealthy solutions such as disregarding the issue, apportioning blame for the problem, or sheltering great feelings and these negative feelings tend to affect their work negatively (Petrides, et al., 2007; Figueroa, et al., 2005).

According to Burke, Koyuncu, and Fiksenbaum (2016), the Psychological Well-being of workers in the hospital are affected and improved by;

- i. A sense of care from the top management of the hospital which surrounds the care delivery environments of patients,
- ii. Caring, noticeable, and welcoming leaders,
- iii. Facilities that promote effective patient care,
- iv. Good communication channels in the nursing divisions,
- v. Healthy work relations existing between nurses, doctors, and other health workers, at the various units,
- vi. Participation of nurses in decisions concerning health care in the hospital,

- vii. The appreciable amount for remuneration,
- viii. Finally, the possibilities for career advancement and promotions.

### **The Relationships between Emotional Intelligence and Psychological Well-being among Psychiatric Nurses**

Numerous research have been carried out to determine the link between Emotional Intelligence and Psychological Well-being. A study using a structural equation model with a sample of 800 revealed Emotional Intelligence has a major positive influence on the Psychological Well-being of workers (Ahmadi, Azar, Sarchoghaei, & Nagahi, 2014). As all workers are emotionally intelligent, it helps in employees ' Psychological Well-being. According to Ahmadi, et al. (2014), Psychological Well-being and personal meaning of nurses are critical for their Emotional Intelligence. Emotional Intelligence is important because it helps us to recognise our individual feeling, distinguish between different feelings, and to better mark them. It also requires the ability to incorporate awareness, empathy, and motivation to enhance the perception and comprehension of interpersonal dynamics (Laborde, Dosseville, Guillen, & Chavez, 2014; Smith, Ciarrochi, & Heaven, 2008).

People who are high in Emotional Intelligence have their Psychological Well-being level high too and a lower degree of Emotional Intelligence leads to a lower experience of Psychological Well-being (Mayer & Salovey, 1990). Emotionally intelligent people are capable of maintaining positive mental states through managing their feelings efficiently and effectively - through recognition, awareness, development, management, and promotion (Mayer, Salovey, &

Caruso, 2004; Mayer & Salovey, 1990). Carmeli, Yitzhak-Halevy, and Weisberg (2009) affirmed the central hypothesis of the role played by Emotional Intelligence in the well-being of individuals. Researchers such as Mayer, Salovey, and Caruso (2004) and Roohafza, Feizi, Afshar et.al (2016) revealed persons who possess higher intelligence about their emotions report higher levels of Psychological Well-being with regards to satisfaction in life, self-acceptability, and self-esteem as compared to individuals who possess relatively lower abilities of Emotional Intelligence. Between Emotional Intelligence and somatic symptoms, a small important association has been found. Also, it was found that Emotional Intelligence may be an essential predictor of happiness and high self-esteem in life - these results were discovered with detailed methodological analysis (Raedeke & Smith, 2004).

Mehmood and Gulzar (2014) studied the Emotional Intelligence and Psychological Well-being of Pakistani youth and reported that Emotional Intelligence was detrimental to depression and beneficial to self-esteem connections. Those with higher-level Emotional Intelligence had the propensity to be positive about themselves and their society. The beneficial association which exists between Emotional Intelligence and mental health was also identified by (Carmeli, Yitzhak-Halevy, & Weisberg, 2009). A study conducted by Rathakrishnan, et. al. (2019) also revealed that Emotional Intelligence predicted Psychological Well-being. In the study the variable presented a positive influence to overall psychological well-being. Emotional Intelligence accounted for 18.5 percent of the difference in psychological well-being.

Other researchers have analysed work on the association between Emotional Intelligence and Psychological Well-being particularly assessing physical, behavioural and social-emotional parameters. James, Bore, and Zito (2012) and Zeidner, Matthews, and Roberts (2012) presented a systematic analysis that indicated that Emotional Intelligence interventions were usually considered to have a relationship with the indicators of Psychological Well-being and negatively linked to affective disorders which include anxiety and depression in nurses. In a study conducted by Schutte, Malouff, Thorsteinsson, Bhullar, and Rooke (2007), Emotional Intelligence was a strong predictor of mental and physical health. Individuals with a stronger vision, comprehension, and cognitive control (high intelligence about their emotions) were noted to be less likely to develop diseases like anxiety disorders and mood disorders, because of their ability to clean up following the induction of negative mood (Schutte et al., 2007). Therefore, higher intelligence about the emotions is linked to the possession of a high Psychological Well-being, which includes improved happiness, improved emotional state of well-being, and less depressive symptoms (Mikolajczak, Petrides, Coumans & Luminet, 2009; Schutte et al., 2007). In terms of the association between Emotional Intelligence and general health which involves the emotional, physical, and Psychological Well-being, it was revealed that persons with elevated Emotional Intelligence have a lower propensity of generating mental illnesses (Petrides, Peres-Gonzalez & Furnham, 2007; Schutte et al., 2001).

Persons who can control and understand their feelings, especially negative feelings have better emotional health (Kafetsios & Zampetakis, 2007; Mikolajczak, et. al., 2009). In the study by Mikolajczak, et. al., (2009), the French version of the Trait Emotional Intelligence Questionnaire (TEIQue) by Petrides, Pita, and Konkinak (2007) was adopted to assess trait emotional intelligence, using 67 students as the participants - 41 males and 26 females. The results of the study revealed that trait emotional intelligence had a positive significant relationship with mood deterioration and mental health. Here, the higher levels of intelligence about the emotions, the higher level of good mental health.

Emotional Intelligence was also potentially linked to the cognitive aspect of Psychological Well-being (Gannon & Ranzijn, 2005). The study found that elevated intelligence about the emotions influences cognition which in turn increases the Psychological Well-being of the individual to increase. Research analysing the link between Psychological Well-being and Emotional Intelligence with respect to satisfaction in life has shown that there is a strong association between these two variables (Gallagher, & Vella-Brodrick, 2008; Palmer, Donaldson, & Stough, 2002). The two variables have been shown to be positively related.

Quality of life and the fulfillment of life have a positive correlation with individuals who have high levels of emotional control, according to Gannon and Ranzijn (2005). Although other human qualities such as the ability of interpretation and the ability of comprehension are not so relevant, they are still linked to emotional control and therefore demonstrate that Emotional Intelligence

generally leads to enjoyment of life (Gannon, & Ranzijn, 2005). Self-acceptance and Self-esteem according to Carmeli, Yitzhak-Halevy, and Weisberg (2007) are other human qualities that are also strongly related to Emotional Intelligence.

A significant number of studies have explored the correlation between Emotional Intelligence and the psychological functioning of individuals. Emotional Intelligence is concluded to be a major human quality of life that one is supposed to have to live with minimal difficulty (Chen, Peng, & Fang, 2016; Boyatzis, Goleman & Rhee, 2000; Shulman, & Hemenover, 2006). A significant relationship between perceived Emotional Intelligence and life satisfaction was observed in the findings. Perceived intelligence about the emotions is the capacity of a person to understand and adjust emotions in times of interaction with another person or with the environment. In the study analysis by Chen, Peng, and Fang (2016), personal satisfaction and positive effects in a population between 50 and 90 years old was expected by the cognitive consistency and remediation aspects of perceived Emotional Intelligence. The study was conducted as a longitudinal study and it showed that emotional stability and reconstruction significantly predicted Psychological Well-being and, on the other hand, emotional depression (Chen, Peng, & Fang, 2016). Another finding from a study by Carmeli, Yitzhak, and Weisberg (2009) also reported that emotionally intelligent people probably are better off than person with lower levels of intelligence about their emotions.

Studies reviewed in the section reported the relationship between emotional intelligence and psychological well-being in different job sectors but not specifically in the Psychiatric Hospitals. This is because there seem not to be

research on the relationship between the two variables with regards to psychiatric nurses. This current study is purposed to make available literature on the relationship between the two variables with regards to psychiatric nurses at the in-patient psychiatric hospitals.

### **Gender Moderating the relationship between Emotional Intelligence and Psychological Well-being among Psychiatric Nurses**

Gender is proposed to be one of the factors that could differentiate Emotional Intelligence among individuals. Some studies have found that there exists a clear difference in females and males with respect to Emotional Intelligence (Cerit & Beser, 2014; Ciarrochi, Chan, & Bajgar, 2001). Explicitly, there is adequate evidence that supports the notion that females score higher most of the time as compared to males in tests that measure Emotional Intelligence. According to Bindu and Thomas (2006), females are more intelligent emotionally than males in most cases because generally females, are more empathic in situations. Therefore, this characteristic helps them to process emotions induced by the surroundings they are in (Bindu & Thomas, 2006).

Another research by Ciarrochi, Chan, and Caputi (2000), first used some unique steps to decrease participants' mood prior to the study to find out whether person who have high intelligence about their emotions would be able to adjust their emotions and whether they could also be better able to keep checks on their mood than those with low emotional intelligence levels. Study findings revealed that emotionally intelligent people could deal with a wide range of circumstances and control their moods, and that there exists gender difference with men scoring

lower than women on the Emotional Intelligent test (Ciarrochi, Chan, and Caputi, 2000).

It has been evident that several emotionally intelligent nurses are rising significantly globally (Cerit & Beser, 2014). Their research reported that Emotional Intelligence among nurses in Turkey differs with respect to gender. They also reported that globally Emotional Intelligence among male nurses was higher as compared to female nurses with respect to empathy, self-motivation, and social skills. Additionally, the level at which male nurses can control negative emotions both at work and home is comparably higher than female nurses (Cerit & Beser, 2014). Also, according to Steyn (2010), the relationship between Emotional Intelligence and Psychological Well-being has been explained both in practice and theory that the gender of people has some level of influence on Emotional Intelligence relating to their Psychological Well-being. Studies by McIntyre (2010), and Thomsen, Mehlesen, Viidik, Sommerlund, and Zachariae (2005) also indicated that gender has some level of influence on one's Emotional Intelligence.

A cross-sectional survey study conducted with a sample of 459 participants aged between 25 to 44 years by Williams, Wissing, Rothmann, and Temane (2010) revealed that the association between Emotional Intelligence and negative affect was moderated by only gender and no other parts of Psychological Well-being. The gender of participants, however, had no effect on the relationship between positive affect and life satisfaction. Research has revealed that to evaluate the moderating role of gender in the association between Emotional

Intelligence and Psychological Well-being, the researcher needs to consider the individual's Emotional Intelligence capacity. That is, the capability to decrease and control negative opinions and experience of negative components of one's life (Castro-Schilo & Kee, 2010). Additional researches by Denton, Prus, and Walters (1999), and Brown and Reilly (2008), suggest that gender is a major factor relating to the differences in emotional and psychological aspects of the life of an individual in terms of capabilities, disposition, lifestyle behaviours and the reaction towards demanding occasions. Gender also plays a part in terms of Emotional Intelligence playing a role as a predictor.

However, some inconsistent results concerning the differences in Gender with respect to Psychological Well-being have been described. Gray (1994) and, Petrides and Furnham, (2001) confirmed that there was no definitive evidence to support the gender difference that created a disparity in people's psychological well-being. Also with the psychological characteristics of individuals, gender caused a difference in their coherence, self-esteem, and mastery, principally relating to health that could be regarded as a moderating variable (Denton, Prus, & Walters, 1999). Again, it has been shown that gender as a variable has proven the distinction in both emotionality and Psychological Well-being, which suggests a possible moderating element (Steyn, 2010). Steyn's research reflected on the class relating to Emotional Intelligence and Psychological Well-being as a moderating predictor. In a study, Steyn (2010) investigated the role of gender in the association between the two variables. The research showed that gender moderated the relationship between Emotional Intelligence and negative affect

but did not moderate positive affect and satisfaction with life. Based on these findings, gender and emotional intelligence did not interact significantly in predicting two of the three components of psychological well-being. The findings indicated that gender played the role as a moderating variable between Emotional Intelligence and negative affect. Gender interacting with Emotional Intelligence, therefore, affects predicting the experience of negative affect in Psychological Well-being (Steyn, 2010). The sample was tested with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) in Spanish, in a study by Extremera & Fernandez-Berrocal (2006), which used 946 college and high school students aged 16 to 59. Gender differences with respect to Emotional Intelligence were also explored in the study. The study results showed that, on the Emotional Intelligence test, women scored significantly higher than men.

Additionally, it was revealed that men show high levels of Emotional Intelligence because of their high self-esteem – men in the study scored high in self-reported Emotional Intelligence. However, women appear to doubt their capabilities and therefore exhibit low self-esteem. This is to say that, women who do not have a belief in themselves and their abilities, even though in reality they possess the trait Emotional Intelligence, will be unable to make use of their Emotional Intelligence as a result of their doubt in their abilities. This will lead to them scoring lower than men on self-reported Emotional Intelligence tests. However, in ability-based tests, women score higher than men (Extremera & Fernandez-Berrocal 2006).

Gallagher and Vella-Brodrick (2008) buttress the notion that there exists a positive correlation between the intelligence of one's emotions and Psychological Well-being especially in the case of gender difference. A study was conducted in Nigeria by Gyuse, Ayuk, and Okeke (2018) to investigate whether gender would regulate nurses' Psychological Well-being. The study participants were 250 nurses that included 42 males and 208 females. The study findings showed that gender has no significant effect on nurses' psychological wellbeing in Enugu Metropolis. In reference to the study findings, it was concluded that there was no major gender impact on nurses' psychological well-being in Enugu Metropolis.

A study conducted by Ahmad, Bangash, and Khan (2009) requested the sample to complete an Emotional Intelligent test, to determine gender differences in Emotional Intelligence among individuals. The study used included 160 participants (80 males, 80 females) as the sample for the research. The results showed that both males and females were emotionally intelligent but in numerous and special ways. Study findings revealed that at some point males have higher emotional intelligence compared to females and in some specific situations and vice versa also for females. In explaining the Emotional Intelligence of females, it was reported in the research that females tend to behave more self-aware as compared to males. The study also reported that females are more empathic, and possess more interpersonal relationship skills, and are used to showing more emotions in their relationships with their loved ones. In contrast, in explaining the Emotional Intelligence of males, it was reported from the research that males tend to be more confident and optimistic in situations, and they are more adaptable to

change in general as compared to females (Ahmad, Bangash, & Khan, 2009). The study attributed Emotional Intelligence to maturity instead of gender. It explained that a wholly mature individual is possible to score higher marks on Emotional Intelligence tests regardless of their sex. This is because one is seen as mature when he or she is well-adjusted and psychologically flexible to himself or herself and their social environment (Bindu & Thomas, 2006). Regarding the socio-cultural viewpoint of Emotional Intelligence, both males and females are trained to behave differently in social circumstances. This may explain why males do not communicate their feelings in the same way as females do in social situations.. This may be may the cause of the difference in their difference in approaches to situations. Katyal and Awasthi (2005) also reported that females may be more emotional as compared to males because of their maternal instinct.

Most of the studies reported on in the section covered mostly the emotional intelligence and psychological well-being of general nurses and health workers but not specifically the psychiatric nurse at the in-patient psychiatric hospitals due to the limited literature information psychiatric nurses. This current study will however provide some literature on the two variables about the in-patient psychiatric nurses.

### **Years of Work Experience Moderating the relationship between Emotional Intelligence and Psychological Well-being**

Work experience is practically defined as a person's expertise gained while employed in a particular field or occupation for several years or for a longer time. Work experience is one of the most important factors that have some level

of impact on one's Emotional Intelligence. Research by Jorfi, Jaccob, and Shah (2011) showed that the amount of work experience a person has may be a significant factor in determining his or her intelligence about the emotions and their decision making ability.

According to Bhavaneswari, Jagadeesan, and Balaji (2019), in a study on the relationship between Emotional Intelligence and work-related variables and to recognise important work-related factors that can affect business executives' emotional intelligence in Chennai organisations. The study showed that there was a substantial difference between the executives' mean Emotional Intelligence scores that belong to various experiential groups with a 'p' value of 0.000. Again it was reported that the group around 30 years and with a high number of years of work experience had their mean Emotional Intelligence constantly increasing whilst those with lower Emotional Intelligence on the job had been new to the job with no or lesser years of experience. The study further clarified that Emotional Intelligence was higher among the executives who had more than 6 years of work experience in their current position but Emotional Intelligence was lower among the executives who had the experience in their current position from 2 to 5 years. Bhavaneswari, Jagadeesan, and Balaji (2019) however suggested in their study that the lack of interest in the organisational responsibilities might be the reason why executives in that group have a relatively low level of Emotional Intelligence.

Jacob and Singh (2011), researched biographical details in the social work and software professions as indicators of Emotional Intelligence. The results from

the study indicated a positive relationship between age, educational qualification, length of service in the profession, and promotions in the profession with Emotional Intelligence for both social workers, health professionals, and software professionals. It could be stated therefore that, as social workers, health workers, and software professionals grow old with respect to age and experience in their profession they become more educated and experienced, therefore, they get promoted higher in the organisational hierarchy and there is a corresponding increment in their level of Emotional Intelligence as well. Put differently, those who are into social work, health work including nurses and doctors, and software professionals who are old with respect to age and have experience and are better educated may turn out to be emotionally intelligent.

In addition, Amantha and Muniandy (2012) examined the effect of demographic factors on Polytechnic Lecturer's Emotional Intelligence in Malaysia. The Kruskal-Wallis test was used to show a substantial difference between the groups on the impact of working experience as a lecturer on Emotional Intelligence. The highest median value was reported for those serving over 20 years ( $Md = 4.24$ ) followed by the age group 11 to 15 years of work experience ( $Md = 3.55$ ). Those with less than 5 years of experience in the field ( $Md = 3.19$ ) have reported the lowest level of Emotional Intelligence. This research revealed statistically significant differences in the degree of Emotional Intelligence between the subsections of age, school, and work experience.

Jorfi, Yaccob, and Shah (2011) studied the correlation between demographics variables; communication effectiveness, motivation, job

satisfaction, and Emotional Intelligence. Upon reviewing various pieces of literature on this subject, it was found that demographic variables; work experience, and other factors like age, gender, job position, and educational level have a positive relationship with Emotional Intelligence. The research, therefore, reported that years of work experience affect perceived job success.

### **Age range Moderating the relationship between Emotional Intelligence and Psychological Well-being**

Commonly a layman with 'common sense' thinks there is a connection between the expression of Emotional Intelligence and Age. There has been a contention that wisdom and self-awareness come about as an individual age. Major existing research that supports this notion that while individuals grow older, so do their wisdom and self-awareness and hence tend to have high Emotional Intelligence abilities is research by Fariselli, Ghini, and Freedman (2006).

Van Rooy, Alonso, and Viswesvaran (2004) examined group differences in relation to Emotional Intelligence. The sample used for the study comprised 275 undergraduate students (216 out of 275 being females) between the ages of 18 to 44 years old. The study adopted the Emotional Intelligence Scale (EIS) by Schutte, Malouf, Simunek, McKenly, and Hollander (2002) which formed part of the Mixed Emotional Intelligence Scales. The findings of the study reported that females had scores that were slightly higher than the scores of the men on the Emotional Intelligence Scale. In addition, their scores on the Emotional Intelligence test increased with their age. This is to say that, the older the

individual, the higher their score on the Emotional Intelligence Test (Van Rooy, et al., 2004). Another study that confirmed this assertion was conducted by (Extremera, & Fernandez-Berrocal, 2006). The research used a sample of 946 students (520 females and 426 males) with ages between 16 years and 58 years of age. Apart from the study's interest in exploring age differences in relation to Emotional Intelligence, it also aimed to examine gender differences with respect to Emotional Intelligence. The study by Mayer, Salovey, and Caruso, (2008) adopted the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT). The study results revealed a strong positive association between the participants' age and their scores for Emotional Intelligence. This is to say that, as the participants get older, his or her Emotional Intelligence level increases. The study also reported that females scored higher as compared to the males on the MSCEIT (Extremera & Fernandez-Berrocal, 2006).

Kafetsios and Zampetakis (2007), tested Emotional Intelligence as a set of abilities an individual possesses. These abilities were in four facets, that is, emotion management, the ability to perceive, the ability to understand, and facilitation. The research sampled 239 adults in the 19 to 66-year age range. The study adopted Mayer et al., Emotional Intelligence Test [MSCEIT] (2002) which had 141 items as the measurement tool for their intelligence about their emotions. The MSCEIT can provide a score for Emotional Intelligence, and additionally be used in to measure four other abilities (the ability to perceive, emotion management, the ability to understand, and facilitation). The study results reported that older people scored higher in facilitation, understanding, and

emotion management compared to younger participants, but not in perception and on Emotional Intelligence. The study also reported that females scored higher in the emotion perception ability and facilitation ability. A major characteristic of the study and the research being conducted is the ages. That is, the ages of Psychiatric Nurses in Ghana mostly fall within the age range given as a characteristic for the participants in the study by (Kafetsios, & Zampetakis, 2007).

Current population research in the field of nursing has reported a higher prevalence of issues related to emotions, especially depression and anxiety among women in younger age groups (WHO, 2007). A similar outcome was reported by Chen and McMurray (2001), that nurses with younger ages ranging between (20–29 years) working in Intensive Care Units (ICUs) were the most susceptible to emotional exhaustion. In the same study, younger-age nurses were at a substantially higher risk of psychological morbidity relative to older nurses. As younger nurses are expected to have fewer years of work experience compared to their older nursing counterparts, this variable is also expected to be significantly related to psychological health problems.

In another study by Humpel and Caputti (2001), it was reported that age influences an individual's level of Emotional Intelligence. Research by Derksen, Kramer, and Katzko (2002) have supported this observation that there is a correlation between Emotional Quotient and age. In the research, people between the ages of 30-60 display higher levels of intelligence about their emotions than age groups below the age of 30 years and over 60. Furthermore, Snowden, et. al

(2005), found that global Emotional Intelligence findings were higher for men and women in terms of both features and ability metrics, and improved with age.

Nayak (2014) using the Multifactor Emotional Intelligence Scale (MEIS) by Extremera and Fernandez-Berrocal (2006), in measuring emotional intelligence reported that younger people showed a mean of Emotional Intelligence (M=22.94) which was lower level as compared to older people (M=24.22) in rural and urban areas. A significant difference was observed among urban and rural people in the Emotional Intelligence study, irrespective of sex and age.

Another study examined the sociodemographic features of Mental Health Nurse which included their age, class, and years of experience found that older and more experienced nursing workers had greater Psychological Well-being (Zheng, Zhu, Zhao, & Zhang, 2015). Increased Psychological Well-being and self-regulation will strengthen the psychiatric nurse's activities and partnerships with patients, caregivers, and colleague health workers.

### Conceptual Framework

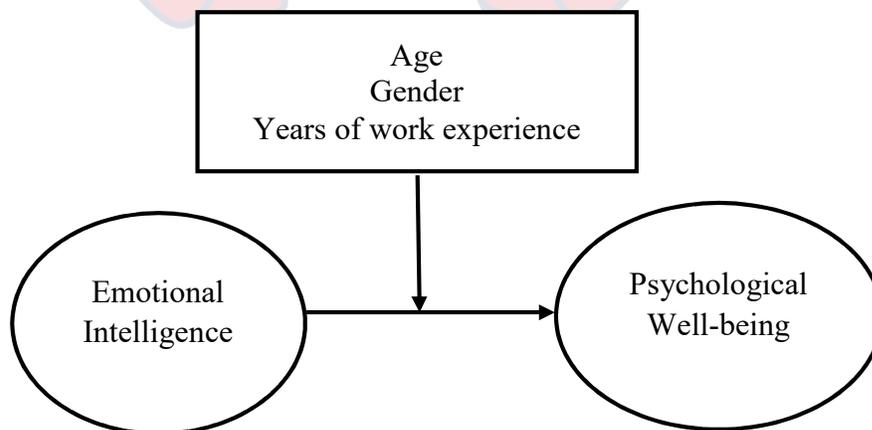


Figure 1: Conceptual Framework

Figure 1 represents the interaction between the variables in the study. In the research, Emotional Intelligence is understood to influence the Psychological Well-being of psychiatric nurses in Ghana. Emotional Intelligence is about how an individual realises and understands his/her emotions and that of others then manages the emotions to foster a good relationship between himself and others. This is to say that it is essential for the psychiatric nurse to be emotionally intelligent since they interact with other mentally ill patients in Psychiatric Hospitals and also get stigmatized by society. It has been established by Codier, Kamikawa, Kooker, and Shoultz (2009) that work environments become friendly with an increase in productivity when workers who are emotionally intelligent interact effectively with each other. Psychiatric nurses in the hospital interact with their colleague nurses, patients, and other health workers like the psychiatrists, psychologists, chaplains, workers of the administration, cleaners among others. The Emotional Intelligence in the study was subdivided into four (4) dimensions – emotionality, self-control, well-being, and sociability.

Psychological Well-being by Ryff (1989) or high self-esteem as stated by Maslow (1968) is another requirement needed to improve productivity and work relations among health workers at the psychiatric hospitals. It develops through a combination of the psychiatric nurse's ability to manage his or her emotions, and the ability of the psychiatric nurse to know her identity and her personality. When a psychiatric nurse has high Psychological Well-being he/she tends to know her purpose, recognise her abilities, and naturally commands respect and recognition from colleague workers. She tends to be self-fulfilled and have increased self-

efficacy in his or her work as a psychiatric nurse (Maslow, 1968). According to Ryff (1989), an individual with high Psychological Well-being has positive mental health; he or she is autonomous in their decision making; has mastery over their environment and their work (self-efficacy); they accept themselves for who they are; they get to know their real purpose in life, and finally grow intrinsically. Also, a WHO's nursing and midwifery history report attributed the reduction of the nurse workforce over the years to their low Psychological Well-being. This has led to some level of low productivity at psychiatric hospitals. It is therefore evident that high Psychological Well-being is a necessary trait in working as a psychiatric nurse.

The study was to determine how Emotional Intelligence relates to the Psychological Well-being of psychiatric nurses. In other words, it was to determine whether the Emotional Intelligence (well-being, emotionality, sociability, self-control) of the psychiatric nurse influences:

- i. their ability to be autonomous in decision making
- ii. their personal growth
- iii. the mastery of their environment
- iv. their ability to know their purpose in life
- v. their positive relations with her colleague workers
- vi. their self-acceptance

Again, determine if their age range, years of work experience, and the gender of psychiatric nurses influence the relationship between their Emotional Intelligence and their Psychological Well-being.

## Chapter Summary

The chapter explained the various concepts or constructs of the study. It explained that Emotional Intelligence is the ability whereby an individual can be aware of his or her emotions and that of others, comprehend them, and use them to relate better with others. Psychological Well-being was also explained as the ability for an individual to have positive mental health or high self-esteem and this attribute of the individual will help increase his or her self-efficacy. The chapter also explained the various theories that back the constructs of the study. The Trait Emotional Theory by Petrides (2009) explained that Emotional Intelligence is innate, that one was born with the ability. It was also reported by Routson (2010) that Emotional Intelligence is a necessary ability to have as a worker and as a psychiatric nurse. With Psychological Well-being as a construct, theories like Ryff's Psychological Well-being Theory (1989), Maslow's Theory of Need (1968), Roger's Theory of the Self, and Personality (1961) were used to back Psychological Well-being in the study. The theories reported that a person who possess a high Psychological Well-being has a positive self-image, knows their purpose in life, they have mastery over their environment, accept themselves and easily relate well with the people around them. Finally, the chapter reported some researches that have been conducted using the constructs of the study. The empirical review covered the research questions and hypotheses of the study.

## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

The study is aimed at finding out the levels of Emotional Intelligence and levels of Psychological Well-being of psychiatric nurses at in-patient psychiatric hospitals in Ghana. Additionally, the study aims at testing whether the difference in their age range, gender, and the difference in their number of years of work experience could moderate the influence emotional has on their Psychological Well-being. This chapter consists of the systematic methods and procedures that were followed in executing this study. It covers areas such as the design of the research, the population of the research, the sampling procedure, the area the study was conducted, the data collection instruments, the data collection procedures, and the data processing and analysis procedures.

#### Research Design

A research design is a strategy adopted by the researcher to produce answers to the questions raised in the study, according to Orodho (2009). Donnelly (2015) also explained that research design provides the glue that keeps the research together and further explained that the aim of the research design is to organise the study, thus illustrating how all the major parts of the research work together to answer the central research problem. Research Design discusses time constraints, data collection, implementation, and the various research groups involved (Edmonds & Kennedy, 2012). In other words, a study's research design articulates what kind of data is needed, what methods are needed to collect and

analyse these collected data, and how all these will respond to the research question. The study adopted the quantitative approach and descriptive research design as its research design. Creswell (2012) stressed that more emphasis is put on explaining rather than evaluating or interpreting the process through the use of descriptive research design. This descriptive research design was chosen for the study because it allows for the testing of several hypotheses. Again, the approach was adopted for the study because of its focus – descriptive research design focuses on describing the nature of a demographic segment (that is; age range, gender, years of work experience) including why a particular phenomenon occurs or happens.

In the course of the study, it aids in explaining why the levels of Emotional Intelligence and Psychological Well-being differ among psychiatric nurses and if the demographics (age, gender, and years of work experience) play a role in the difference. Put differently, the descriptive research design described the theme of the research, without covering the reason the phenomenon occurred. Creswell (2012) reported some major advantages of descriptive research are as follows. Firstly, it provides a detailed view of a research topic as the data collected is quantitative. It aids in easy tracking of data collected, it diversifies the data collected and makes data collected varied. Again, the descriptive research design permits for the research to be conducted in the respondent's natural setting and this ensures that the data collected was done authentically and data is of that high-quality. However, one major disadvantage of the descriptive research design is the issue of confidentiality (Creswell, 2012). Some respondents tend to be

untruthful in their responses when they feel some of the questions on the questionnaire intrudes their personal life or maybe they feel they are being watched by the researcher or a third party – this issue may tend to negate the validity of the data. Here, the respondent loses trust in the confidentiality promised by the researcher. The researcher however gave the respondent some space and privacy when answering the questions on the questionnaire as a way to curb the distrust in confidentiality by respondents.

### **Study Area**

The setting of research is the place or area in which data for the study is collected for analysis. This section of the chapter will present information about the study area and what constitutes these areas or settings – the three hospitals; Ankafu, Pantang, and Accra Psychiatric Hospitals.

The Accra Psychiatric Hospital and Pantang Psychiatric Hospital are found in the Greater Accra Region of Ghana. According to United Nations World Urbanisation Prospects (2018), the population for Greater Accra in 2020 is estimated at 2,514,005. The Greater Accra region is known as the capital of the Republic of Ghana and also the most popular and most active city in the country. The city is also known as one of the most urban in the country, followed by cities like Kumasi, Takoradi, Cape Coast among others. Greater Accra's urban area covers roughly 225.7 square kilometers (Km<sup>2</sup>) of land and almost 900 square kilometers of the entire metropolis. The population density in the metro region is around 1,300 people per square kilometre. Approximately 56% of the folks are under the age of 24 according to (United Nations World Urbanisation Prospects,

2018). It was again reported by United Nations World Urbanisation Prospects (2018) that Accra has a slightly higher population of males than females in the city. Data from the United Nations World Urbanisation Prospects (2018) also reported that around 45 percent of Accra's population is made up of immigrants who came from other African countries like Togo, Nigerian, Burkina Faso, Benin among others. The main ethnic groups in Accra are the Akans, the Ga-Dangme, and the Ewes, with Christians being the largest religious community, 83 percent of the general population, Muslims make up 10.2% of the population and 4.6% had no religion. Most Accra people are considered to be traders and white-coloured-job employees with tight timelines.

The Accra Psychiatric Hospital earlier called Lunatic Asylum was established in 1904. It was then built to serve 200 patients in 1906. Sir Edward Griffiths, then governor of Gold Coast on 4th February 1888 pended his signature on a Legislative Instrument (LI) to legalise care for mentally ill patients. The Hospital is responsible for the care, welfare, preparation, and recovery of patients with mental illness. The hospital has supporting facilities like Ankaful and Pantang psychiatric hospitals and the College of Health, Kintampo. The Hospital has four (4) psychiatrists of which two (2) are specialist and two (2) are consultants. The total nurse population of the hospital sums up to 439 with 62 being enrolled or general nurses, 2 being community health nurses and 375 being registered, psychiatric nurses. The hospital also has a psychology unit with 3 psychologists who provide their services to both the patients and the hospital staff.

The Pantang Psychiatric Hospital, identified as Accra Psychiatric Hospital's second-born child was established to decongest Accra Psychiatric Hospital and Ankaful Psychiatric Hospital. It was commissioned in 1975 by General I. K. Acheampong, President of Ghana's Republic, and was formerly purposed to be a Pan-African Mental Health Village. The hospital has a total of 500 beds, but only 450 patients are currently being treated, and has in their possession a huge land where other facilities are being built, according to Ghana's Mental Health Profile 2003. The hospital is located near a village called Pantang, about 1.6 km off the Accra-Aburi road and 25 km from Accra Central.

The third study area was Ankaful Psychiatric Hospital. This psychiatric hospital is found in Cape Coast which is the regional capital of the Central Region of the Republic of Ghana. The population of Cape Coast, Ghana is 143015 according to the GeoNames Geographical Database (2020) with 51.3% being females (87,084) and 48.7% (82,810) being males. The higher percentage of the age group of persons in Cape Coast is between 15 years to 64 years which is 67.1% with 32.9% falling either above 64 years or below 15 years. The GeoNames Geographical Database (2020) also reported that people in Cape Coast engage mostly in trading, farming, fishing, and schooling.

The Hospital is approximately 12.5km from Cape Coast and 6km from Elmina, occupying an estimated land area of about 1.5 square kilometers. It is precisely located at the village called Ankaful where it derived its name; it shares boundaries with Ankaful Leprosarium / General Hospital to the South and the Ankaful Prisons to the west and Tsikweikrom village to the north. The Hospital is

known to provide special services in psychiatry as well as general outpatient services to people from Cape Coast and its environs. The facility also opens its services to patients from all the other regions of the country and other neighboring countries to Ghana including La Cote d' Ivoire, Burkina Faso, Togo, and Benin.

The hospital was established in 1965 by Dr. Kwame Nkrumah, first President of the Republic of Ghana, to decongest the Accra Psychiatric Hospital which was the first to be established in the country. Ankaful Psychiatric Hospital is mostly referred to as the first-born child of Accra Psychiatric Hospital. Major Units in the hospital are Neurological Department, Operating Theatre for Neurosurgery, and Electro-encephalographic Equipment. The 2003 Mental Health Profile of Ghana stated that the Hospital as of 2003 had 150 in patients against the hospital's 500-bed capacity and additionally the hospital's declining number of nurses and physicians is to blame for the decrease in in-patients. The hospital has a nurse population of 300 with 257 being registered psychiatric nurses. The hospital again has 3 psychiatrists and a psychology unit but no psychologist for the hospital. The information about the number of staff of the hospital was acquired from the nurse administration of the Hospital.

The three psychiatric hospitals were selected as the study areas because of its many years of existence in psychiatric nursing in Ghana. The hospitals are also the only three major in-patient psychiatric hospitals in Ghana that have worked with several nurses and health professionals since their years of establishment. The nurses in the hospitals also fit the inclusion criteria of the research. Figure 2

shows a diagrammatic presentation of where these three hospitals are situated on the map of Ghana.

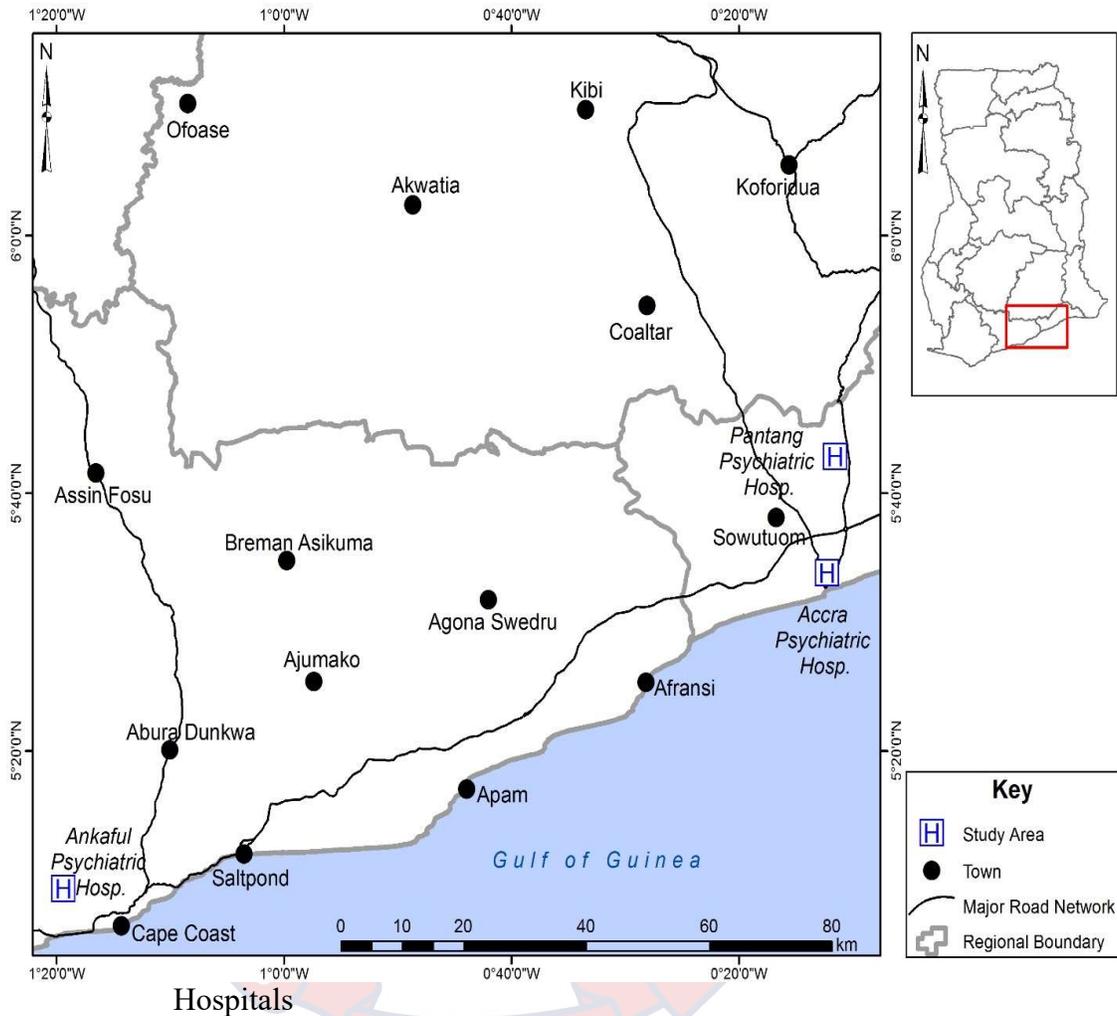


Figure 2 : Map of Ghana indicating Accra, Pantang, and Ankaful Psychiatric

Source: Department of Geography and Regional Planning 2020 – University of Cape Coast

### Population

The general population of the nurses at the three psychiatric hospitals added up to 1172. The nurses in the population however included enrolled or

general nurses, student nurse interns, community health nurses, and psychiatric nurses.

### Accessible Population

The study's accessible population was made up of employed registered psychiatric nurses only at the three psychiatric hospitals making up 966 in number. No specification was given on their gender, age, nor their years of work experience. The psychiatric nurses in the three hospitals were either diploma certificate and degree certificate holders in psychiatric nursing. The nurse population of the three in-patient psychiatric hospitals (Accra Psychiatric Hospital, Ankafu Psychiatric Hospital, and Pantang Psychiatric Hospital) used in the study is presented in Table 2. The figures of the psychiatric nurses were acquired from the nurse administration of the three hospitals.

Table 2 - *Population of Registered Psychiatric Nurses at Accra, Pantang, and Ankafu Psychiatric Hospitals*

Name of Hospital	Number of Psychiatric Nurse Staff
Accra Psychiatric Hospital	439
Pantang Psychiatric Hospital	270
Ankafu Psychiatric Hospital	257
Total	966

Source: Field survey (2020)

### Sample and Sampling Procedure

For the study, a multi-stage sampling technique was adopted. First, the purposeful sampling technique was adopted with the hospitals when selecting the

hospitals for the study based on the number of years that the three hospitals had been in existence in Ghana. The technique was chosen because it was assumed that psychiatric nurses of these three hospitals (Accra, Ankaful, and Pantang Psychiatric Hospitals) have acquired the qualities expected by the researcher since the three hospitals had been in existence longer than other psychiatric hospitals.

The Krejcie and Morgan's (1970) 'Table of Determining Sample Size' was adopted in determining the sample size for the study. Using Krejcie and Morgan's (1970) 'Table of Determining Sample Size', the minimum sample appropriate for the study summed up to 278. In the third stage, the researcher used the proportionate stratified random sampling technique to select the population sample from the accessible registered psychiatric nurse population of 966. Proportionate Stratified Random sampling is a research sampling technique whereby the population is divided into smaller sub-groups referred to as stratum whereby participants are selected proportionately from the strata (Chaudhuri, Das & Narasayya, 2007). The proportionate stratified random sampling was used at this stage because of its ability to allow the researcher to obtain a particular population sample that best represents the total population being studied. The formula used in determining the sample from the three stratum was  $(N \div S \times \text{Strata})$ . With  $N$  representing the total population and  $S$  representing sample size and *Stratum 1*, *Stratum 2*, and *Stratum 3* representing Accra, Pantang, and Ankaful Psychiatric Hospitals respectively. The figures or sample acquired from the 3 strata after the calculation are presented in Table 3.

Table 3 - *Sample Size of the psychiatric nurses at Accra, Pantang and Ankaful Psychiatric Hospitals*

Name of Hospital (Strata)	Sample
Accra Psychiatric Hospital	127
Pantang Psychiatric Hospital	77
Ankaful Psychiatric Hospital	74
Total	278

Source: Field survey (2020)

At stage four, the Simple Random Sampling Technique, specifically the lottery method was adopted in selecting the sample from the various strata (Accra, Pantang, and Ankaful Psychiatric Hospitals). The simple random technique was adopted at this stage because of its purpose to give all participants equal probability to be selected. Here, with the cooperation of the nurse administration leadership of the hospital, the list of names of the psychiatric nurses was acquired at the nurse administration of the hospitals. Numbers were assigned against every name of the psychiatric nurses on the lists. With the help of the research assistants, a random selection of numbers was done. The numbers that were selected then served as a guide in the selection of the psychiatric nurses who served as participants for the study.

### **Inclusion Criteria**

All registered Ghanaian psychiatric nurses, both male, and female, across all ages who worked full time at the three in-patient psychiatric hospitals qualified as participants for the study. The nurses could either be married or not with no

limitation on their academic qualification, that is, either they were diploma certificate holders or degree certificate holders.

### **Exclusion Criteria**

All visiting psychiatric nurses from other foreign countries were unqualified to be used as participants for the study. This was because it was assumed that their culture and tradition differed from the nursing practices in Ghana. Also, student nurse interns were disqualified from participating in the study. This was because it was assumed that they did not have the needed working experience as a needed characteristic of the participants for the study. Again, general nurses and community health nurses were omitted from the study.

### **Data Collection Instrument**

The research instrument in the collection of data was a questionnaire. According to Bulmer (2004), in social science research, a questionnaire is a well-known tool used in gathering information on social traits, current and previous behaviour, behavioural expectations of the participants, and their motivations for behaviour or their convictions with regard to a phenomenon under study. Dillman (2000) also stated that a questionnaire is used when direct observation of behaviour is not possible and that used in measuring attitudes and intended behaviours in a larger population. The questionnaire for the study comprised three sections (Section A-C). The first part of the questionnaire (Section A) presented the demographics which elicited the personal details of the participant's age range, gender, and years of work experience.

Section B comprised a 30-item Trait Emotional Intelligence Questionnaire Short Form – (TEIQue-SF) questionnaire designed by (Petrides, 2009). The TEIQue-SF had been proved to be accurate and true in a variety of cultural and linguistic contexts after being translated into several languages (Mikolajczak, Luminet, Leroy & Roy, 2007; Freudenthaler, et. al, 2008; Feher, Yan, Saklofske, Plouffe & Gao, 2019; Martskvishvili, Arutinov, & Mestvirishvili, 2013; Stamatopoulossu, Galanis, Tzavella, Petrides, & Prezerakos, 2018). The Greek version of the TEIQue-SF was used in this study, which was later translated by (Petrides, Pita, & Kokkinaki, 2007). The instrument was purposed to measure the four domains of the trait Emotional Intelligence of the psychiatric nurses in the specified psychiatric hospitals in Ghana.

The TEIQue-SF has been reported to provide a highly reliable scoring of individual's Trait Emotional Intelligence. The TEIQue-SF however is also used to measure other criteria such as the individual's styles of coping, life satisfaction, perceived control, and personality disorders. Also, the measure has construct validity (Petrides, & Furnham, 2001; 2003; 2006). Deniz, Özer, and Isik (2013) reported a current psychometric property of the instrument (TEIQue-SF) with its internal consistency score or Cronbach alpha of .89, and test-retest reliability of the total score as .86, which explained that the measure was standard enough to be used for the study. The TEIQue-SF comprises 30 items with respondents instructed to respond on a 7-point Likert scale. The participants were asked questions like, "Expressing my emotions with words is not a problem for me" or "I am usually able to influence the way other people live" and were instructed to

reply with answers with 1 representing “I Completely disagree” through to 7 representing “I completely agree” (Petrides, 2009). The TEIQue-SF is subdivided into four (4) facets: Wellbeing, Self-control, Emotionality, and Sociability. Questions 8, 12, 15, 23, 27, and 30 comprised the Well-being facet of the questionnaire. Self-control facet comprised questions 7, 10, 18, 22, 25, and 33. Emotionality facet also comprised questions 4, 5, 11, 16, 19, 20, 26, 31 with Sociability comprising questions 9, 13, 14, 24, 28, and 29. Questions 5, 7, 8, 10, 11, 13, 15, 16, 17, 19, 21, 25, 28, 29, and 31 of the questionnaire were reverse-coded.

The final section of the questionnaire, Section C, adapted the 42-item version of the Psychological Well-being Scale (Psychological Well-being) which grouped variable into 6 subscales namely; Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance (Ryff, & Singer, 2006). In adapting the questionnaire, some of the wording in the instrument was replaced with alternative words that were more understanding to the participants. In the questionnaire used Autonomy comprised questions (34, 40, 46, 52, 58, 64, 70), Environmental Mastery comprised questions (35, 41, 47, 53, 59, 65, 71), Personal Growth comprised questions (36, 42, 48, 54, 60, 66, 72), Positive Relations comprised questions (37, 43, 49, 55, 61, 67, 73), Purpose in Life comprised questions (38, 44, 50, 56, 62, 68, 74) and Self-Acceptance comprised questions (39, 45, 51, 57, 63, 69, 75). The Ryff’s Psychological Well-being scale together comprised 42 items with respondents instructed to respond on a 6-point Likert scale ranging from ‘1’ on the scale representing ‘Completely

Disagree' to '6' representing 'Completely Agree'. The Cronbach's alpha coefficients for the six scales of psychological wellbeing range between 0.83 and 0.91 (Davidson, 2006). This explained that the measure is standard enough to be used for the study. See Appendix A for the full data collection instrument.

### **Pilot Testing of Instrument**

Pretesting of the instrument was carried out at the rehabilitation units of the three in-patient psychiatric hospitals (Accra, Pantang, and Ankafu Psychiatric Hospitals) targeting psychiatric nurses at the Units. The number of psychiatric nurses used for the pre-testing of the instrument was one hundred and twenty (120). Using census technique, all the psychiatric nurses at the rehabilitation units were acquired for the data collection. The data collection period for the pretesting lasted for three (3) weeks, from the second week to the fourth week of April 2020. This was done with the help of three (3) research assistants who were trained for two weeks for the purpose. The research assistants were expected to find out if the wordings of the questionnaire were understanding to the participants. Put differently, it was purposed to filter out any ambiguity in the wordings of the questionnaire. They were also expected to find out if the font size, font style, and spacing of the questions on the questionnaire made reading comfortable for the participants. In other words, if the questions were clear enough for reading. The psychiatric nurses used for the pretesting of the instrument were exempted from participating in the main study. Pretesting of the instrument is known to guide the researcher to adapt the data collection instrument to suit the research.

The reliability coefficients of the various dimensions are shown in Table 4

Table 4 - *Reliability Estimates*

Trait Emotional Intelligence	Items	Alpha
	Emotionality	.721
	Self-control	.732
	Well-being	.701
	Sociability	.722
	Overall (global)	.743
Psychological Well-being	Autonomy	.771
	Environmental Mastery	.743
	Personal Growth	.801
	Positive Relations	.811
	Purpose of Life	.701
	Self-Acceptance	.746
	Overall	.801

Source: Field survey (2020)

### Data Collection Procedure

Data were collected within seven (7) weeks beginning in the first week of May 2020 to the third week of June 2020 with the support of the three research assistants used for the pretesting of the instrument. All research assistants involved in the study went through training to acquaint themselves with the relevant stages of the study protocol before data collection began. They were educated on how to interact with the participants and the importance of upholding all the ethical issues which come with the study. The research assistants were also educated and trained on how best to follow the precautionary protocols from the WHO and Ghana Health Service to reduce the spread of the COVID-19 virus.

This was necessary because the data collection took place during the era of the COVID-19 pandemic. Out of the 278 questionnaires distributed to the respondents, 263 were deemed valid for purposes of analyses. This constitutes a response rate of 94.6% which qualifies to represent the general population according to (2008).

### **Ethical Consideration**

The Institutional Review Board at the University of Cape Coast provided the Ethical Clearance Form (see Appendix B). The form explained the study's intent, the need for individual participation, and the privacy and confidentiality of respondents' responses. Also, an Ethical Clearance was taken from the Ghana Health Service Research Secretariat to aid in the research (see Appendix C). The ethical clearance from the Ghana Health Service was a mandated requirement before being allowed to conduct research using health professionals – in the case of this study, the psychiatric nurses. The two ethical clearance forms were presented in conjunction with an Introductory Letter from the Department of Education and Psychology of the University (see Appendix D). The Introductory Letter contained the name and other necessary information about the researcher.

Participants' consent was sought for the study. This was done by providing the participants with an Informed Consent Form and an Information Sheet which was scrutinised and approved by the Ghana Health Service. The documents spelled out the details of the study indicating the purpose of the research and voluntarily seeking participants' participation. To ensure proper confirmed consent, the research instrument and mode of data collection were

explained; benefits, anticipated risks, and discomfort likely to arise in the course of obtaining participants' data were also explained. Disclosure of the intent of the research was thus communicated to research participants to enable them to have a choice to either participate in the study or not. Participants who were willing to join the study endorsed the Informed Consent Form using their signature or thumbprint.

The anonymity of the participants was also kept. Anonymity according to Burkell (2006) is the condition of being unidentified, unknown, or nameless. Participants were assured that questionnaires have no part that can link participants' identity to information provided. Names and personal identification information was thus of no interest in the research.

Confidentiality, being a feature of the ethical issues of research was also practiced. The awareness of the significance of confidentiality to the participant turns out to be an important aspect of enhancing quality in research (Petrova, Dewing & Camilleri 2016). They explain confidentiality as the act of not disclosing information acquired from a participant of a study to another party and further added that confidentiality is key in building trust between the participant and the researcher. Research participants were assured that their details rovided for the study will be kept private. The information provided was not disclosed to third parties and for use other than stated in the research.

The researcher in conducting the study also aimed at following all the precautionary measures from the World Health Organisation and Ghana Health Service to reduce the spread of the COVID-19 virus infection. Before handling

the questionnaire, the researcher encouraged the participants (Psychiatric Nurses) and research assistants to thoroughly wash their hands with soap and water, and do same again after answering the questionnaire. The researcher also reassured the use of hand sanitisers by participants and research assistants in cases where there were no hand-washing materials available. The social distancing protocol accompanied by the appropriate way of wearing nose masks was also practiced during the collection of data. These protocols were followed strictly, geared towards curbing the spread of the COVID-19 virus.

On the storage of the data, all the data collected during the research was kept by the researcher under lock and key. This data was not made available for other third parties to make use of. The collected data was intended to be kept for five (5) years before discarding them. This will be in accordance with Sieber as cited by Vanderpuye (2013) that data must be stored for at least five years from the date of the final presentation and publication.

### **Data Processing and Analysis**

Data analysis is a critical study of material in order to comprehend its components and relationships, as well as to discover patterns (Twumasi, 2001). Each questionnaire was checked to ensure it was well completed. According to Martin and Bridgmon (2012), respondents who did not respond to more than 10% of the items of the questionnaire should be eliminated. Fifteen (15) of the questionnaires were eliminated since the respective respondents answered less than 10% of the questionnaire, therefore, the remaining 263 well-completed questionnaires. The questionnaires were then numbered from 1 to 263, each

number representing one questionnaire. Inferential statistics were tested using a confidence interval of 95% and an alpha level of .05.

Frequency and percentages were also used to analyse research questions one and two. Frequencies and percentages were adopted for research questions one and two because it is suitable for the researcher due to the determination to describe the features and patterns of the groupings in the data collected (Lavrakas, 2008). Multivariate Linear Regression test was used to analyse the data to test hypothesis one which sought to test whether was a statistically significant relationship existing between Emotional Intelligence and Psychological Well-being. The Multivariate Linear Regression according to Hayes (2018) was used when there are two or more independent variables used in predicting two or more dependent variables. In the case of the study, Trait Emotional Intelligence had four (4) independent variables while Ryff's Psychological Well-being had six (6) dependent variables. The normality assumption was also tested using the Q-Q plot. The normality assumption was tested to determine if the sample used for the study was a perfect representation of the general population of psychiatric nurses as reported by Hayes (2018).

Finally, hypotheses two, three, and four were tested using PROCESS by Hayes (2018). PROCESS by Hayes (2018) was used for the study due to its standardised accurateness in moderation analysis, that is, determining how influential a variable is in the relationship between two or more variables.

## Chapter Summary

The study was conducted using descriptive research design and quantitative approach. The study used 278 psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals in Ghana. The study adapted a standardised scale called the Psychological Well-being Scale by Ryff (1989) and the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) by Petrides (2009). The researcher also adopted a multi-stage sampling technique in selecting the participants from the three psychiatric hospitals. Pretesting of the instrument was done using the psychiatric nurses at the rehabilitation units of the three psychiatric hospitals of which efforts were made to ensure the validity and reliability of the instrument. The number of participants used for pretesting was 120 who were exempted from the main research. To assist with data collection, three research assistants were recruited. They received training on the various stages of data collection and also trained on how to prevent the spread of the COVID-19 virus in the course of the data collection. All research ethical issues including anonymity, confidentiality, safety among others were upheld. Finally, the data were analysed using the percentages, frequencies, mean, standard deviation, multivariate regression, and Hayes' PROCESS.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

This study sought to assess the influence of Emotional Intelligence on the Psychological Well-being of psychiatric nurses at in-patient psychiatric hospitals in Ghana. This chapter is organised into three (3) parts. The first part presents the background information of the respondents. The second part presents the main result. The results are in the order of the research questions and hypotheses. The third part presents the discussion of the results. This is also in the order of the research questions and hypotheses as stated in pages 11, 12, and 13.

#### Background Information

This aspect presents the respondents' demographic details. The demographic details covered includes age range, gender, and years of work experience. Tables 5, 6, and 7 presents the results of the analysis of the age range, gender, and years of work experience of the respondents respectively.

Table 5 - *Distribution of Respondents based on their Age Range*

Variable (Age Range)	Frequency	Percentage (%)
20 – 29 years	104	39.5
30 – 39 years	131	49.9
40 – 49 years	25	9.5
50 – 59 years	3	1.1

Source: Field survey (2020)

N = 263

Table 5 presents that, majority of the respondents fall between 20-39 years representing (89.8%). Also, 1.1% of the respondents are between 50 – 59 years of

which from the table it can be concluded that the majority of the respondents were between 20 – 30 years old.

The results from the study confirm the results by Letvak, Gupta, and Ruhm (2013) which reported that younger nurses are physically stronger and tend to work swifter with high work productivity as compared to older nurses. This could be the reason the majority of the psychiatric nurses in the three psychiatric hospitals are between 20 – 39 years because individuals are noted to be strong at that stage of life. As reported by Letvak, Gupta, and Ruhm (2013) it could also be concluded that the older psychiatric nurses between 50 – 59 years are few in the psychiatric hospitals because at that stage of life individuals tend to get physically weaker and decayed memory with muscle weakness setting in.

Table 6 - *Distribution of Respondents based on their Gender*

Variable (Gender)	Frequency	Percentage (%)
Male	98	37.3
Female	165	62.7
Source: Field survey (2020)		N = 263

Table 6 presents that majority of respondents are females with a figure of 165 out of the 263 respondents representing (62.7%). The number of males among the respondents was 98 representing (37.3%).

The high numbers of female psychiatric nurses than male psychiatric nurses could be a result of the increased number of female nurses globally. Again, nursing as a profession has always been a female profession predominantly. According to Magar, Gerecke, Dhillon, and Campbell (2019), females are

recorded to cover about 70% of the workforce in the health sector and this could explain the reason most psychiatric nurses in the three in-patient psychiatric hospitals in Ghana were females. They reported that female nurses, in general, are also seen as humble, self-sacrificing, nurturing, and subordinate, and this could be the reason behind high numbers of female psychiatric nurses than male psychiatric nurses.

Table 7: *Distribution of Respondents based on their Years of Work Experience*

Variable (Years of Work Experience)	Frequency	Percentage (%)
1 – 9 years	208	79.1
10 – 19 years	52	19.8
20 – 29 years	2	0.8
30 – 39 years	1	0.4
Source: Field survey (2020)		N = 263

Table 7 presents that (79.1%) of the respondents have 1 – 9 years of work experience as psychiatric nurses. Also, only 1 of the respondents representing (0.4%) has 30 – 39 years of work experience of which from the table it can be concluded that the majority of the respondents have between 1 – 9 years of work experience. Table 7 again provided evidence that the older psychiatric nurses between 50-59 years who possess more years of work experience (30-39 years) are on the low (0.4%), and this may be attributed to wear and tear due to aging as revealed by Park and Yeo (2013). Due to this wear and tear as a result of aging, it could be concluded that the psychiatric nurses in Ghana by age 50 – 59 years would be on retirement even though they have many years of work experience.

Most psychiatric nurses have 1 – 9 years of work experience because a higher percentage of psychiatric nurses are of a younger age.

### **Main Results**

This part presents the main results of the study. The results are presented based on the research questions and hypotheses. The study answered two research questions and four hypotheses. The results of the research questions were first presented and then they were followed with that of the hypotheses of the study.

#### **Research Question 1**

*What are the levels of Emotional Intelligence of psychiatric nurses at in-patient Psychiatric Hospitals in Ghana?*

The purpose of this research question was to assess the level of Emotional Intelligence among psychiatric nurses at in-patient psychiatric hospitals. Emotional Intelligence was measured on a four-dimensional scale, namely, well-being, self-control, emotionality, and sociability. The scores for Emotional Intelligence on the TEIQue-SF ranged from 1 to 7 point Likert scale. These scores were classified into three to demarcate three levels: high, moderate, and low. The following ranges were used: low = 1.0 – 2.9; moderate = 3.0 – 4.9; and high = 5.0 – 7.0. Analysis of the results of the responses on the levels of emotional intelligence is presented in Table 8.

Table 8 - *Level of Emotional Intelligence*

Level	Low		Moderate		High	
Dimension	N	%	N	%	N	%
Emotionality	80	30.5	180	68.4	3	1.1
Self-control	21	8.0	233	88.6	9	3.4
Well-being	12	4.6	219	83.3	32	12.1
Sociability	23	8.7	226	85.9	14	5.4

Source: Field survey (2020) N = 263

Table 8 shows that the majority, 68.4%, 88.6%, 83.3%, and 85.9% of the respondents reported a moderate level of Emotional Intelligence in terms of emotionality, self-control, well-being, and sociability dimensions, respectively. However, 30.5%, 8.0%, 4.6%, and 8.7% of the respondents had a low level of emotional intelligence in terms of emotionality, self-control, well-being, and sociability respectively. From this analysis, it can be concluded that psychiatric nurses at in-patient psychiatric hospitals possess a moderate level of Emotional Intelligence.

### **Research Question 2**

*What are the levels of Psychological Well-being (Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance) of psychiatric nurses at in-patient Psychiatric Hospitals in Ghana?*

This research question sought to examine the level of Psychological Well-being among psychiatric nurses at in-patient psychiatric hospitals. Respondents were asked to respond to a number of items portraying their Psychological Well-

being. Psychological Well-being was looked at in terms of autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. The scores for each of the dimensions of Psychological Well-being ranged from 7 – 42. The scores of the respondents were classified into three using the following ranges: full functioning = 7.0 – 18; moderate functioning = 19 – 30; and poor functioning = 31 – 42. Table 9 presents the results of the analysis of the responses of the Psychological Well-being of the respondents.

Table 9 - *Level of Psychological Well-being*

Level of Well-being	Poor		Moderate		Full	
	N	%	N	%	N	%
Autonomy	4	1.5	211	80.2	48	18.3
Environmental mastery	10	3.8	226	85.9	27	10.3
Personal growth	8	3.0	224	85.2	31	11.8
Positive relations	4	1.5	218	82.9	41	15.6
Purpose in life	13	4.9	222	84.4	28	10.7
Self-acceptance	8	3.0	214	81.4	41	15.6

Source: Field survey (2020)

N = 263

Table 9 shows that majority of the respondents had a moderate level of Psychological Well-being on all the six dimensions of Psychological Well-being, autonomy (80.2%), environmental mastery (85.9%), personal growth (85.2%), positive relations (82.9%), purpose in life (84.4%), and self-acceptance (81.4%). However, 1.5%, 3.8%, 3.8%, 3.0%, 1.5%, 4.9%, and 3.0% of the psychiatric nurses had low levels of Psychological Well-being in terms of Autonomy,

Environmental mastery, Personal growth, Positive relations, Purpose of life and Self-acceptance respectively. From the results presented it can, therefore, be concluded that psychiatric nurses at in-patient psychiatric hospitals in Ghana have a moderate level of Psychological Well-being.

### Hypotheses Testing

This section presents the results of the hypotheses. Four hypotheses were tested. Prior to the testing of these hypotheses, generic assumptions such as normality of the distribution, linearity, and outliers for the criterion variables were examined and adhered to. Table 10 presents results on that of normality and outliers.

Table 10 - *Test for Normality and Outliers*

Parameters	Auto.	Envir.	Person	Positive	Purpose	Self.
Mean	26.58	25.63	25.54	27.02	25.31	26.93
SD	4.27	4.05	4.21	3.96	4.15	4.14
5% Trimmed mean	26.52	25.60	25.41	26.95	25.24	26.99
Median	26.0	26.0	25.0	27.0	25.0	27.0
Skewness	.165	.082	.470	.255	.428	-.198
Std. Error	.15	.15	.15	.15	.15	.15
Zskewness	1.10	0.55	3.13	1.70	2.85	-1.32

Source: Field survey (2020)

N = 263

**Note:** Auto. – Autonomy; Envir. – Environmental mastery; Person – Personal growth; Positive – Positive relations; Purpose – Purpose in life; Self – Self-acceptance

As presented in Table 10, for all the six dimensions of Psychological Well-being, the mean scores, median, and 5% trimmed mean were approximately

equal, which indicates the normality of the distribution. In addition to the mean, median, and 5% trimmed mean, the standardised skewness coefficients ( $Z_{\text{skewness}}$ ) were compared to  $\pm 3.29$ . Generally,  $Z_{\text{skewness}}$  coefficient with the ranges of  $\pm 3.29$  for variables is considered to be normally distributed. Furthermore, visual examination of the normal Q-Q plots and histograms confirms the normality of the distribution (see Appendix E).

### **Hypothesis 1**

*H<sub>0</sub>: There is no statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: There is a statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

The focus of this hypothesis was to examine the relationship between Emotional Intelligence and Psychological Well-being. Emotional Intelligence had four dimensions, namely, well-being, self-control, emotionality, and sociability. Similarly, Psychological Well-being also had six dimensions: autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. This hypothesis was tested using multivariate multiple linear regression. The predictor variables were the four dimensions of Emotional Intelligence, and the criterion variables were the six dimensions of Psychological Well-being. Prior to the multivariate regression analysis, multivariate normality, multicollinearity, autocorrelation, and homoscedasticity assumptions were

checked. The data did not violate multivariate normality, autocorrelation, and homoscedasticity assumptions (see Appendix F). With respect to multicollinearity, the correlations among the four dimensions of Emotional Intelligence ranged from -.13 to .33 (Table 11). These correlations were not high, hence indicating no violation of the multicollinearity assumption.

Table 11 - *Correlation Matrix*

		1	2	3	4
1	Emotionality	Pearson Correlation Sig. (2-tailed)	1		
2	Self-control	Pearson Correlation Sig. (2-tailed)	.200* .001		
3	Well-being	Pearson Correlation Sig. (2-tailed)	-.125* .043	.188* .002	
4	Sociability	Pearson Correlation Sig. (2-tailed)	.148* .017	.326 <.001	.232* <.001

\*Significant,  $p < .05$

Having met the assumptions, the results of the multivariate multiple regression are presented in Table 12.

Table 12 - *Influence of Emotional Intelligence and Psychological Well-being*

Criterion Variable	Parameter	Std.		T	Sig.
		B	Error		
Autonomy	Intercept	13.812	2.359	5.856	<.001
	Emotionality	1.377*	.396	3.479	.001
	Self-control	.539	.433	1.244	.215
	Well-being	1.856*	.370	5.011	<.001
	Sociability	-.366	.419	-.874	.383
Environmental mastery	Intercept	11.289	2.223	5.078	<.001
	Emotionality	1.115*	.373	2.989	.003
	Self-control	.665	.408	1.629	.105
	Well-being	1.017*	.349	2.912	.004
	Sociability	1.059*	.395	2.680	.008
Personal growth	Intercept	16.230	2.387	6.799	<.001
	Emotionality	.791	.401	1.974	.049

Table 12, Continued

Criterion Variable	Parameter	<i>B</i>	Std.		
			Error	<i>T</i>	Sig.
Positive relations	Self-control	1.211*	.438	2.763	.006
	Well-being	-.195	.375	-.521	.603
	Sociability	.795	.424	1.874	.062
	Intercept	16.848	2.179	7.732	<.001
	Emotionality	.408	.366	1.115	.266
	Self-control	-.093	.400	-.232	.817
Purpose of life	Well-being	2.080*	.342	6.077	<.001
	Sociability	.156	.387	.403	.687
	Intercept	17.212	2.401	7.169	<.001
	Emotionality	.921	.403	2.286	.023
	Self-control	.041	.441	.093	.926
	Well-being	.626	.377	1.660	.098
Self-acceptance	Sociability	.621	.427	1.456	.147
	Intercept	22.383	2.400	9.325	<.001
	Emotionality	.303	.403	.752	.453
	Self-control	-.739	.441	-1.677	.095
	Well-being	1.059*	.377	2.810	.005
	Sociability	.510	.427	1.196	.233

\*Significant,  $p < .008$  (Bonferroni's alpha)

Table 12 presents the regression coefficients for each of the dimensions of Emotional Intelligence using Bonferroni's alpha of .008. From Table 12, with respect to autonomy, emotionality ( $B = 1.38, t = 3.48, p = .001$ ) and well-being ( $B = 1.86, t = 5.01, p < .001$ ) dimensions of Emotional Intelligence were only significant predictors. Both were positive predictors of autonomy. For environmental mastery, emotionality ( $B = 1.12, t = 2.99, p = .003$ ); well-being ( $B = 1.02, t = 2.91, p = .004$ ); and sociability ( $B = 1.21, t = 2.76, p = .006$ ) were the significant predictors. Their predictions were in the positive direction. Well-being ( $B = 2.08, t = 6.08, p < .001$ ) was the only significant predictor of positive relations and self-acceptance. However, none of the dimensions of Emotional

Intelligence significantly predicted the personal growth and purpose in life aspect of Psychological Well-being.

Summing up the results for Hypothesis 1, there is much evidence to reject its null hypothesis that “There is no statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals” in favour of the alternative hypothesis.

### **Hypothesis 2**

*H<sub>0</sub>: Gender will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: Gender will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

This hypothesis sought to determine whether the relationship between the two variables is contingent on gender. The predictor variable was Emotional Intelligence. This was determined using the global trait Emotional Intelligence score. The criterion variable was the composite score for Psychological Well-being. The moderator was gender, which had two levels. Due to the categorical nature of gender, it was dummy-coded. Dummy Coding according to Hayes (2017) is a process to make the categorical variable of the study into a series of dichotomous variables, that is, variables that can have a value of zero or one only. The Male category was used as the reference group. The hypothesis was tested using moderation analysis with PROCESS by Hayes (2018). The analysis was

performed using 5000 bootstrap samples for percentile bootstrap confidence intervals.

The model containing the Emotional Intelligence, female and the interaction term was statistically significant,  $F(3, 259) = 13.0, p < .001, R^2 = .13$ . Emotional Intelligence, female, and the interaction term accounted for 13% of the variance in Psychological Well-being. Details of the analysis of the results are presented in Table 13.

Table 13: *Moderation Effect of Gender in the Relationship between Emotional Intelligence and Psychological Well-being*

	<i>B</i>	<i>BootSE</i>	<i>Boot95%CI</i>		
			<i>LLCI</i>	<i>ULCI</i>	
Constant	113.18	16.35	79.73	144.56	
X on Y	12.33*	4.41	3.82	21.46	
W1 on Y	-20.13	21.11	-62.01	21.40	
X*W1 on Y	4.71	5.69	-6.54	16.16	
Unconditional interaction	$\Delta R^2$	<i>F</i>	df1	df2	<i>P</i>
X*W1	.003	.80	1	259	.371

\*Significant,  $p < .05$

X- Emotional Intelligence; Y- Psychological Well-being; W1 – Female

From the model in Table 13, while controlling for female and the interaction term, Emotional Intelligence was a significant predictor of Psychological Well-being,  $B = 12.33, Boot95\%CI [3.82, 21.46]$ . However, Female was not significant predictors of Psychological Well-being. The interaction between female and Emotional Intelligence was not a significant predictor of Psychological Well-being,  $B = 4.71, Boot95\%CI [-6.54, 16.16]$ . The

interaction term contributed 0.3% extra to the variation in Psychological Well-being, even though the results were not statistically significant. This implies that gender did not significantly moderate the relationship between Emotional Intelligence and Psychological Well-being. The results suggest that the relationship between Emotional Intelligence and Psychological Well-being does not necessarily differ among nurses at in-patient psychiatric hospitals.

Based on the findings, the null hypothesis that “Gender will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals” was upheld.

### **Hypothesis 3**

*H<sub>0</sub>: Years of work experience will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: Years of work experience will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

This hypothesis aimed to examine whether the relationship between Emotional Intelligence and Psychological Well-being will vary with respect to the number of years nurses at in-patient psychiatric hospitals have spent in their respective working environments. This hypothesis was tested using a simple moderation analysis with Hayes’ (2018) PROCESS. The analysis was carried out using 5000 bootstrap samples with percentile bootstrap confidence intervals. The predictor variable was the global score for Emotional Intelligence, while the

criterion variable was Psychological Well-being. The moderator variable was years of work experience, which was measured on a continuous basis.

The overall model for Emotional Intelligence, years of working experience, and Psychological Well-being was statistically significant,  $F(3, 259) = 12.0, p < .001, R^2 = .12$ . The model accounted for 12% of the variances in Psychological Well-being among the nurses at in-patient psychiatric hospitals. Table 14 presents the results of the analysis of the participant's responses to the moderation analysis.

Table 14: *Moderation Effect of Years of Work Experience in the Relationship between Emotional Intelligence and the Psychological Well-being*

	B	BootSE	Boot95%CI		
			LLCI	ULCI	
Constant	100.20	15.83	68.50	130.48	
X on Y	15.28*	4.27	7.07	23.78	
W on Y	.17	1..80	-3.47	3.78	
X*W on Y	-.03	.48	-.99	.93	
Unconditional interaction	$\Delta R^2$	F	df1	df2	P
X*W1	<.001	.002	1	259	.964

\*Significant,  $p < .05$

X- Emotional Intelligence; Y- Psychological Well-being; W – Years of Work Experience

As shown in Table 14, while controlling for years of working experience, and the interaction term, Emotional Intelligence significantly predicted Psychological Well-being,  $B = 15.28, Boot95\%CI[1.07, 23.78]$ . Years of work experience was not a significant predictor of Psychological Well-being while controlling for Emotional Intelligence and the interaction term,  $B = .17, Boot95\%CI[-3.47, 3.78]$ . Similarly, the interaction between Emotional

Intelligence and years of work experience did not significantly predict Psychological Well-being,  $B = -.03$ ,  $Boot95\%CI[-.99, .93]$ . The contribution of the interaction term to the variation in Psychological Well-being was very minimal ( $R^2 < .001$ ), and this was not statistically significant,  $p = .964$ . In effect, years of working experience did not significantly moderate the relationship between Emotional Intelligence and Psychological Well-being.

From the results, the null hypothesis which stated that “Years of work experience will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals” was not rejected.

#### **Hypothesis 4**

*H<sub>0</sub>: Age range will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: Age range will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospital.*

The focus of this hypothesis was to determine whether the relationship between Emotional Intelligence and Psychological Well-being is contingent on the Age of the respondents. This hypothesis was tested using Hayes’ (2018) PROCESS for moderation analysis. Five thousand bootstrap samples with percentile for confidence intervals. The predictor variable was Emotional

Intelligence. The criterion variable was Psychological Well-being. The moderator variable was Age, and this was measured on a continuous basis.

The overall model containing the Emotional Intelligence, Age, and the interaction between Emotional Intelligence and Age was statistically significant,  $F(3, 259) = 11.96, p < .001, R^2 = .12$ . The model explained 12% of the variations in Psychological Well-being. The details of the moderation results are presented in Table 15.

Table 15: *Moderation Effect of the Age range in the Relationship between Emotional Intelligence and Psychological Well-being*

	<i>B</i>	<i>BootSE</i>	<i>Boot95%CI</i>		
			<i>LLCI</i>	<i>ULCI</i>	
Constant	100.47	52.58	-7.67	199.06	
X on Y	15.12	14.16	-11.16	43.78	
W on Y	.03	1.58	-2.96	3.31	
X*W on Y	-.001	.42	-.88	.80	
Unconditional interaction	$\Delta R^2$	<i>F</i>	df1	df2	<i>P</i>
X*W1	<.001	<.001	1	259	.999

X- Emotional Intelligence; Y- Psychological Well-being; W – Age range

As presented in Table 15, neither Emotional Intelligence,  $B = 15.12, Boot95\%CI [-11.16, 43.78]$ ; age,  $B = .03, Boot95\%CI [-2.96, 3.31]$  nor the interaction between Emotional Intelligence and age,  $B = -.001, Boot95\%CI [-.88, .80]$  was a statistically significant predictor of Psychological Well-being. The interaction term contributed less than 1% of the variance in the Psychological Well-being of nurses at in-patient psychiatric hospitals. In effect, Age did not

moderate the relationship between Emotional Intelligence and Psychological Well-being.

Basing on the results ascertained, the null hypothesis that “Age will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals” was not rejected. This explains that the age of the psychiatric nurses did not increase or decrease the influence their Emotional Intelligence has on their Psychological Well-being, therefore, the null hypothesis was not rejected.

## **Discussion of Results**

### **Research Question One**

*What are the levels of Emotional Intelligence of psychiatric nurses at in-patient Psychiatric Hospitals in Ghana?*

The first research question of the study was aimed at assessing the level of Emotional Intelligence of psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals in Ghana. The study provides evidence that the highest percentage (over 80%) of psychiatric nurses at in-patient psychiatric (Accra, Pantang, and Ankaful Psychiatric Hospitals) in Ghana have moderate levels of Emotional Intelligence. This demonstrates that a significant number of psychiatric nurses in Ghana have some amount of Emotional Intelligence for their work as mental health nurses. A similar study by Akerjordet and Severinsson (2007) confirms that nurses have to possess some level of Emotional Intelligence in their nursing practice. Psychiatric nurses in Ghana, however, having moderate Emotional Intelligence explains that there is still some more room for

improvement on that ability as it is needed in their practice as psychiatric nurses. The results from this current study show that a psychiatric nurse with moderate Emotional Intelligence to some extent would find it easier to build a good relationship with the patients and colleague health workers in the hospitals (Akerjordet & Severinsson, 2007). A good relationship with both groups will help boost up recovery of the patients at the hospital and also create a harmonious environment for work with their colleague health workers. The current research also agrees with Akerjordet and Severinsson (2007) on the report on ‘well-being’ as a dimension of Emotional Intelligence. Psychiatric nurses tend to have some motivation to have a deeper search on the identity of their personality. Psychiatric nurses from the results also have somehow improved social life and work life, and also have a good mental capacity.

The study is also in agreement with the results of the study by Tomar (2016) which sought to assess the difference in psychiatric nurse’s emotional quotient scores and intelligent quotient scores. Tomar’s research in conformity with this research again reported that psychiatric nurses who have moderate to high Emotional Intelligence tend to be poised, easy-going, sympathetic, tend to be committed to other people, and are comfortable with themselves and their achievement in life. They also tend to be autonomous and assertive in their decisions. Tomar (2016) further stated that psychiatric nurses in private psychiatric hospitals have high Emotional Intelligence, therefore, provide better services to patients as compared to psychiatric nurses in government hospitals. The current research however used the three psychiatric hospitals in Ghana which

are government-controlled or public. There is enough evidence to back the report that the psychiatric nurses with the three in-patient psychiatric hospitals in Ghana provide appreciable services to patients since their level of Emotional Intelligence is moderate. The study cannot support the claim by Tomar (2016) with respect to psychiatric nurses at private Psychiatric Hospitals and their services to patients as the current study focused only on psychiatric nurses from the public Psychiatric Hospitals.

The results of the study are again in agreement with the results of a study by Frajo-Apor, Pardeller, Kemmler, and Hofer (2016) who also reported that psychiatric nurses possess an average level of Emotional Intelligence on the job. Emotional Intelligence could be the major potential target for education and training of psychiatric nurses in order to strengthen their resilience, and emotional health to build capable and sociable professionals for the nursing job.

#### **Research Question Two**

*What are the levels of Psychological Well-being (Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance) of psychiatric nurses at in-patient Psychiatric Hospitals in Ghana?*

The second research question of the study was aimed at assessing the level of Psychological Well-being of psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals in Ghana. With the evidence provided by the research psychiatric nurses at the in-patient psychiatric hospitals in Ghana have a moderate level of Psychological Well-being. This could mean that they are self-determined and independent in their decision making (Ryff & Singer, 2008). Psychiatric

nurses have the ability to resist pressures from society and act in their personal ways without being influenced. They set their own standards and live by those standards. Furthermore, the psychiatric nurses from the research show that they have some level of mastery in their environment. They are competent in the management and executing their duties at the wards or units, and all other responsibilities due to them. At the hospital, they are competent with their duties and roles associated with their nursing work. With the increasing number of mentally ill patients in the country as stated by WHO (2017) the psychiatric nurses need to have some appreciable level of good Psychological Well-being. It is therefore worthy that the results of the study have reported that they have a moderate level of Psychological Well-being.

Also, the moderate level of Psychological Well-being of the psychiatric nurses could confirm that the cause of the shortage of nurses in Africa could not solely be attributed to the levels of their Psychological Well-being as reported by WHO (2017). This explains that there could be other factors that had influenced the shortage of psychiatric nurses in Africa but the cause cannot be solely attributed to their Psychological Well-being. Moderate Psychological Well-being means that the psychiatric nurses to a considerable level are not pressured by society and environmental views, a considerable level of self-esteem, a balanced personal growth, a considerable level of mastery on their environment and workplace, pleasant relations with others, and also know their purpose and direction in life (Pawar, 2016). Pawar (2016) also reported that moderate to high Psychological Well-being would help in the increase of patient recoveries at the

hospitals and improve productivity and communication at the hospitals. Psychiatric nurses will in turn be opened to new experiences to improve and develop themselves for their nursing work.

### **Hypothesis One**

*H<sub>0</sub>: There is no statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: There is a statistically significant relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

The first hypothesis of the study was aimed at assessing whether there was a correlation between the Emotional Intelligence of psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals and their Psychological Well-being. Results from the research analyses reported a significant relationship between the psychiatric nurse's Emotional Intelligence and their Psychological Well-being. Put differently, good mental health or vice versa of a psychiatric nurse in the three hospitals is influenced by his or her Emotional Intelligence. This correlates with a study by Linzer, Spitzer, Kroenke, et al., (1996) which reported that women are more prone to affective disorders and males are prone to substance abuse disorders and antisocial personality disorder, and here, their Emotional Intelligence has a strong influence on those disorders. Here, when the psychiatric nurse has high Emotional Intelligence, he or she can influence his or her

psychological health. The result also correlates that of Mayer, Salovey, and Caruso, (2004) who stated that emotionally intelligent people could manage their feelings efficiently and effectively and are capable of maintaining positive mental states.

Furthermore, there have been several research works that have found a relationship between Emotional Intelligence and Psychological Well-being. Carmeli, Yitzhak-Halevy, and Weisberg (2007), and Palmer, Donaldson, and Stough (2002) are notable researches which agree with the findings of this current research. The two research works reported that Emotional Intelligence predicts 'autonomy', 'self-acceptance', and 'life satisfaction' facets of Psychological Well-being. The results conform to the current research results in the view that the analysis presented a positive prediction of 'well-being' and 'emotionality' facets of Emotional Intelligence on 'autonomy' (Psychological Well-being). For example, stigmatisation from the society on psychiatric nurses which affects their mental health and Psychological Well-being can be controlled or checked when the psychiatric nurse has high Emotional Intelligence. It could be inferred from evidence from the analysis that psychiatric nurses at in-patient psychiatric hospitals in Ghana somewhat allow themselves to be pressured or influenced by societal views since they possess moderate levels of 'emotionality' and 'well-being' of Emotional Intelligence. This could indicate that, there is an incongruence between their 'ideal self' and 'real self', therefore, they do not possess high self-esteem as reported by (Boeree, 2006).

Another positive relationship between the two variables had to do with the nurse's 'environmental mastery'. The psychiatric nurse's 'emotionality', 'sociability', and 'well-being' predicted their 'environmental mastery'. Psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals have moderate mastery over their work and duties as psychiatric nurses and this could be a result of their competence to perceive the self and other people's feelings accurately and their possession of good communication skills. Secondly, it could be concluded that they have moderate mastery over their working environment because of their assertiveness and ability to live harmoniously with others and acknowledge, recognise, and accept their viewpoints according to Pawar (2016). Finally, their ability to be optimistic and confident in themselves could be another reason psychiatric nurses are able to have mastery over their nursing work. The psychiatric nurse's ability to relate to others positively and their ability to accept themselves for whoever they have also been seen to be influenced by their ability to perceive and understand their patient's wants and their colleagues' health workers. The ability of the psychiatric nurse to control his or her feelings, anger, shyness, and other emotions also positively predicted their 'personal growth' (Psychological Well-being), which includes learning from their successes and failures and making the best out of those experiences. However, the 'purpose in life' dimension of Psychological Well-being was not predicted by any of the dimensions of Emotional Intelligence.

## Hypothesis Two

*H<sub>0</sub>: Gender will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: Gender will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals*

The second hypothesis of the study was to find out whether ‘Gender’ influences the relationship between Emotional Intelligence and Psychological Well-being of psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals. The evidence from the study found that the gender of psychiatric nurses in Ghana does not influence the relationship between their Emotional Intelligence of the psychiatric nurses and Psychological Well-being, even though, Emotional Intelligence and Psychological Well-being show a significant relationship when ‘gender’ of the psychiatric nurses is held constant. Put differently being a male or female psychiatric nurse does not influence the impact of one’s emotional awareness on Psychological Well-being.

The research did not fully conform with the findings from Steyn (2010) who aimed at finding out the role of ‘Gender’ on the correlation between Emotional Intelligence and Psychological Well-being. The research reported that Gender strongly influenced the relationship between Emotional Intelligence and some aspect of Psychological Well-being. An additional finding of the research by Steyn (2010), however, agreed with this current research. It was found that the

interaction between gender and Emotional Intelligence could predict some aspects of the individual's Psychological Well-being. Here, when a psychiatric nurse is mentally unhealthy the person's Emotional Intelligence would play the same role (either positively or negatively) in the psychiatric nurse without any emphasising on the psychiatric nurse being a male or female. Again it could be explained that it is the emotionality aspect of the psychiatric nurse's personality that has major impact on the psychological well-being and not their gender. Hence, explaining why there was no association between the 'Gender' of psychiatric nurses and their Emotional Intelligence in predicting their Psychological Well-being.

### **Hypothesis Three**

*H<sub>0</sub>: Years of work experience will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: Years of work experience will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

The third hypothesis of the study was geared towards finding out whether the years of work experience of psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals influence the relationship between their Emotional Intelligence and their Psychological Well-being. Evidence from the analysis has shown that the years of work experience of psychiatric nurses in Ghana do not influence their Psychological Well-being and mental health while controlling for

Emotional Intelligence. Deducing from these results, the way psychiatric nurses (Accra, Pantang, and Ankaful Psychiatric Hospitals) in Ghana gain mastery over their nursing work, improve on their relations with others, and their self-esteem is not based on their years of work experience. Here, whether the psychiatric nurse had worked for just a year or ten years, their Psychological Well-being and their mental health is not controlled by their years of service on the job. The results from the research, however, did not conform with the results from Van Rooy, Alonso, & Viswesvaran, (2005) who reported from their study that the years of work experience of a worker have a direct link with one's Emotional Intelligence.

Their study and the current research work agreed on the notion that as years of work experience increase, so do the Emotional Intelligence of the psychiatric nurses. Explaining further, the results proved that psychiatric nurses who have worked for long years tend to have experience in noticing and controlling their negative and positive emotions, improve on their communication skills with patients and colleague health workers in the hospital, and comprehends other's emotions faster. Rathakrishnan, Yahaya, Singh, and Kamaluddin, (2019) further explained that high Emotional Intelligence workers due to long years of work experience get promoted at the workplace. This could be true since older participants who filled the questionnaire for the study were supervisors and in-charge psychiatric nurses whose work was to train and supervise the younger psychiatric nurses. Even though the years of work experience influenced psychiatric nurses' Emotional Intelligence, their interaction did not influence their

ability to decide on their own as psychiatric nurses, and their ability to have healthy mental health.

#### **Hypothesis Four**

*H<sub>0</sub>: Age range will not moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric Hospitals.*

*H<sub>1</sub>: Age range will moderate the relationship between Emotional Intelligence and the Psychological Well-being of psychiatric nurses at in-patient Psychiatric hospitals.*

The fourth hypothesis of the study was tested to determine whether the relationship between the Emotional Intelligence of psychiatric nurses and their Psychological Well-being is influenced by the age range of psychiatric nurses. The results from the analysis showed that the age range of the psychiatric nurses does not influence the relationship between the Emotional Intelligence of the psychiatric nurses and their Psychological Well-being. Some studies reported that Age has some level of influence on the Emotional Intelligence of individuals (Extremera, & Fernandez-Berrocal, 2006; Kafetsios & Zampetakis, 2007). However, the results from the current study contradict this. It rather shows that the age of the psychiatric nurses did not influence their Emotional Intelligence neither did its impact on Emotional Intelligence influence the well-being of the psychiatric nurses. Throwing more light on it, how old the psychiatric nurse is does not influence the relationship between their psychological health and their

ability to be sociable, their capability to perceive emotional language and their capability to control their urges or desires.

### Chapter Summary

This chapter presented analysis of the psychiatric nurses' data collected at in-patient psychiatric hospitals (Accra, Pantang, and Ankaful Psychiatric Hospitals) in Ghana. It reported that 263 out of the 278 data collected was used for the analyses. Frequencies, Percentages, Means, and Standard Deviations were used to analyse research questions 1 and 2. Multivariate Regression was used to analyse hypothesis 1 and Hayes' PROCESS for moderation was used to analyse hypotheses 2, 3, and 4. From the demographics, the majority of psychiatric nurses at Accra, Pantang, and Ankaful Psychiatric Hospitals were females with a percentage of 62.7%. Again, the majority of the psychiatric nurses had 1 to 9 years of work experience with a percentage of 79.1%. The age of the psychiatric nurses also had the majority falling between age 20 to 39 with a percentage of 89.3%. The results from research questions 1 and 2 indicated that the psychiatric nurses had a moderate level of both Emotional Intelligence and Psychological Well-being. The results from hypothesis 1 presented that there was a positive relationship between their Emotional Intelligence and their Psychological Well-being. The age range, years of work experience and their gender did not moderate the relationship between the two variables.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the study's Summary, Conclusion, and Recommendations, and finally, the areas for further research.

#### Summary of the Study

The aim of the research was to determine the influence the Emotional Intelligence of psychiatric nurses at the three in-patient psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) have on their Psychological Well-being. Specifically, the study sought to; (a) determine the Emotional Intelligence level of the psychiatric nurses at the three in-patient psychiatric hospitals in Ghana, (b) assess the level of Psychological Well-being of the psychiatric nurses at the three in-patient psychiatric hospitals in Ghana, (c) determine if there is a correlation between the psychiatric nurses' Emotional Intelligence and Psychological Well-being, (d) the moderating role of demographic variables (gender, years of work experience, and age range) on the relationship between their Emotional Intelligence and Psychological Well-being. These objectives were transformed into two research questions and four hypotheses which were set as a guide for the study (see Pg. 12, 13 and 14).

The study employed a quantitative research approach and a descriptive research design. The study targeted the registered and working psychiatric nurses at the three in-patient psychiatric hospitals in Ghana. The sample of the psychiatric nurses used for the study was 278 out of which 263 completed questionnaires were deemed usable for the data analysis. The study adopted a

multi-stage sampling technique in selecting the sample from the population. The study adapted two standardised scales namely; the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) which had 30-items, by Petrides (2009), and Ryff's Psychological Well-being Scale which had 42 items by Ryff (1989). Frequencies, Percentages, Mean and Standard Deviations were used for analysing the demographics of the data and research questions one and two. Multivariate Regression was used to analyse hypothesis 1, whereas with hypotheses two, three, and four the Hayes' PROCESS was used for the analysis.

### **Key Findings**

The following were the findings of the study:

1. Psychiatric Nurses at the three in-patient psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) have a moderate level of Emotional Intelligence in relation to their emotionality, self-control, well-being, and sociability.
2. Psychiatric Nurses at the three in-patient psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) have moderate Psychological Well-being in relation to their level of autonomy, environmental mastery, personal growth, positive relations, the purpose of life, and self-acceptance.
3. There is a positive relationship between psychiatric nurses' Emotional Intelligence at the three psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) and their Psychological Well-being. Here, as

their Emotional Intelligence increases so as their Psychological Well-being and vice versa.

4. The gender (either male or female) of the psychiatric nurses at the three in-patient psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) do not influence the relationship between their Emotional Intelligence and Psychological Well-being.
5. The level of Psychological Well-being of the psychiatric nurses at the three in-patient psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) remains the same irrespective of the difference in their years of work experience.
6. The level of Psychological Well-being remains the same among the psychiatric nurses at the three in-patient psychiatric hospitals in Ghana (Accra, Pantang, and Ankaful Psychiatric Hospitals) irrespective of the difference in their ages.

### **Conclusions**

The findings of the study have revealed some issues worth considering. First, the psychiatric nurses possess moderate levels of emotional intelligence and psychological well-being which is quite good considering the job they do. Emotional Intelligence from the study has shown to be a major aspect of intelligence the psychiatric nurse is supposed to possess in his or her healthcare giving services in the hospitals. Moderate level of ‘emotionality’, self-control’, well-being’ and ‘sociability’ of their general Emotional intelligence demonstrates that the psychiatric nurses at the in-patient psychiatric hospitals are not fully

empathetic, do not fully understand their own emotions, therefore cannot fully understand the emotions of their patients nor express their emotions properly to their patients. Again, it can be concluded that they are somehow impulsive and find it difficult to manage stress. However, they are somehow good listeners, assertive in their decision-making, and possess an appreciable level of self-esteem and happiness. There is, however, the need to educate the psychiatric nurses to better understand their emotions and improve upon them to ensure they perform their best in the services they provide.

The Psychological Well-being of psychiatric nurses has also demonstrated its importance to the physical, spiritual, and social life of the psychiatric nurse. If the psychiatric nurse accepts himself or herself as a professional nurse, has sound mental health to care for the patients, and accepts his or her purpose in life, and stands firm against stigmatisation is all dependent on the level of Psychological Well-being the Psychiatric Nurse possesses. With the moderate level of 'autonomy', 'environmental mastery', 'personal growth', 'positive relations', 'purpose of life' and 'self-acceptance' of their general Psychological-wellbeing, it can be concluded that the psychiatric nurses at the in-patient psychiatric hospitals do not have full mastery of their environment, do not have a high standard of evaluation of the self, and do not fully understand the meaning of their existence in life.

The duty, however, falls on the Ministry of Health, Ghana Health Services, and the Nursing and Midwifery Council of Ghana to take a critical look at their nursing education system and employ psychiatric nurses who have good mental

health and possess a high of Emotional Intelligence to care for the mentally ill patients. However, psychiatric nurses who do not possess high levels of Emotional Intelligence and Psychological Well-being need to be identified by Ghana Health Service and given some training. This is very pressing due to the predominant surge in numbers of mentally ill persons in the country according to statistics (pg. 3).

### **Recommendations for Policy and Practice**

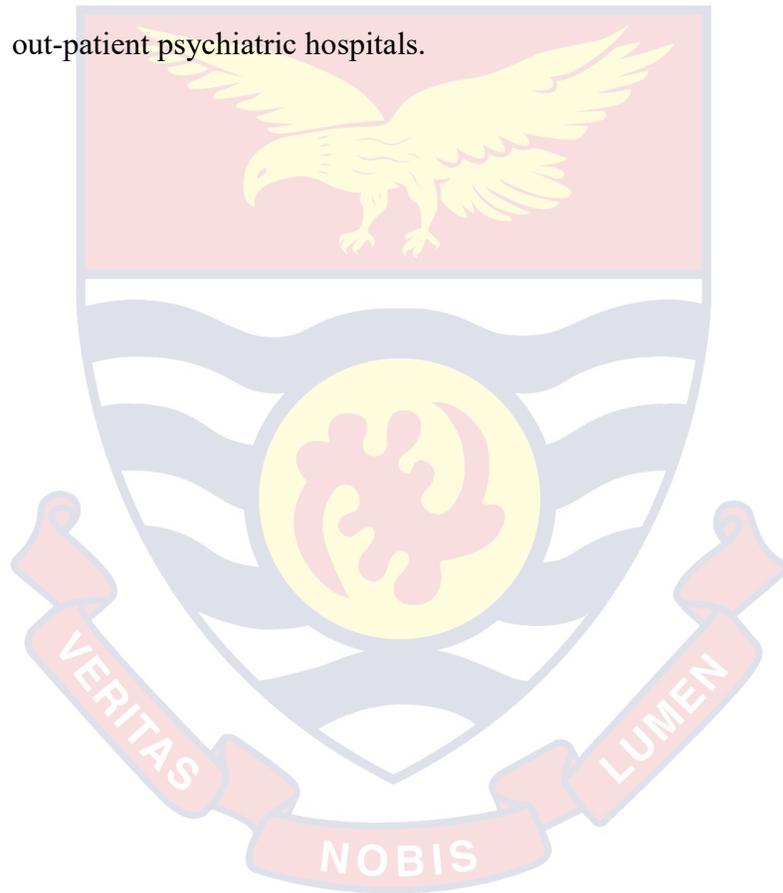
The following are some recommendations based on the study's results and conclusions:

1. The Nursing and Midwifery Council, Mental Health Authority, and Ministry of Health - Ghana periodically train psychiatric nurses on how to improve their Emotional Intelligence as it is an important ability to possess in their nursing practices in psychiatric hospitals.
2. The Ministry of Health institutes compulsory Clinical Health Psychologists in all hospitals especially psychiatric hospitals to train Psychiatric Nurses on regular basis on how to build their Psychological Well-being since it helps them to gain mastery over their work environment, be autonomous in their decision making, helps them to accept themselves and live harmoniously with their colleague health workers.

### Suggestions for Future Research

The following are the suggestion for further studies:

1. Further studies should be conducted to explore if other characteristics like marital status and monthly salary influence the Psychological Well-being of psychiatric nurses in Ghana.
2. There could be a replication of the study using psychiatric nurses at private or out-patient psychiatric hospitals.



## REFERENCES

- Acquaye, A. (2007). Job Satisfaction, Occupational Stress, and Mental Health Among Nurses in The Greater Accra Metropolis. *University of Ghana Digital Collections*. <http://197.255.68.203/handle/123456789/6063>.
- Adzakpah, G., Laar, A. S., & Fiadjoe, H. S. (2016). Occupational stress among nurses in a hospital setting in Ghana. *Clinical Case Reports and Reviews*, 2(2), 333–338.
- Ahmad, S., Bangash, H & Khan, S. A. (2009). Emotional Intelligence and Gender Differences, *Sarhad Journal of Agriculture*, 25(1), 127-130
- Ahmadi, S. A. A., Azar, H. K., Sarchoghaei, M. N., & Nagahi, M. (2014). Relationship Between Emotional Intelligence and Psychological Well Being. *International Journal of Research in Organisational Behaviour and Human Resource Management*, 2(1), 123.
- Akerjordet, K., & Severinsson, E. (2004). Emotional Intelligence in mental health nurses talking about practice. *International Journal of Mental Health Nursing*; 13(1), 164–170.
- Akerjordet, K. & Severinsson, E. (2007). Emotional Intelligence: a review of the literature with specific focus on empirical and epistemological perspective. *Journal for clinical nursing*.16(8), 1405-1416.
- Amantha, J. & Muniandy, B. (2012). The Influence of Demographic Profiles on Emotional Intelligence: A Study on Polytechnic Lecturers in Malaysia. *International Online Journal of Educational Sciences*, 6(2), 62-70.

- Arafa, M.A., Nazel, M.W.A., Ibrahim, N.K., & Attia, A. (2003). Predictors of psychological well-being of nurses in Alexandria, Egypt. *International Journal of Nursing Practice*, 9(1), 313–320.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P. & Taris, T. W. (2008). Work Engagement: An Emerging Concept in Occupational Health Psychology. *American Psychologist*, 55(2), 56-67.
- Baird, B. M., Lucas, R. E., & Donnellan, M. B. (2010). Life satisfaction across the lifespan: Findings from two nationally representative panel studies. *Social Indicators Research*, 99(3), 183–203.
- Batt, C. E. (1969). Mexican Character: An Adlerian interpretation. *Journal of Individual Psychology*, 25(2), 183–201.
- Basogul, C., & Ozgur, G. (2016). Role of Emotional Intelligence in Conflict Management Strategies of Nurses. *Asian Nursing Research*, 10(4), 228-240.
- Baumeister, R. & Leary, M. (1995). The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin*, 11(7), 497-529.
- Bhavanewari, S., Jagadeesan, P., & Balaji, P. (2019). Relationship of Emotional Intelligence, Workplace Spirituality and Performance. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 227-287.

- Blumberga, S., & Olava, S. (2016) *Quality of hospital nursing work life, psychological and subjektive well-being*. Jelgava, Latvija, 13.-14.05. 9th International Scientific Conference “Rural Environment. Education. Personality (REEP)” Latvia University of Agriculture.
- Bindu, P. & Thomas, I. (2006). Gender Differences in Emotional Intelligence. *Psychological Studies*, 51(2), 261-268.
- Boyatzis, R., Goleman, D., & Rhee, K. (2000). Clustering competence in Emotional Intelligence: insights from the Emotional Competence Inventory (ECI). In R. Bar-On & J.D.A. Parker (eds.): *Handbook of Emotional Intelligence* (pp. 343-362). San Francisco: Jossey-Bass.
- Boeree, C. G. (2006). The Individual Psychology of Alfred Adler. *Social and Behavioural Sciences*, 127(3), 427-431.
- Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behavior. *Personality and Individual Differences*, 36(6), 1387-1402.
- Brackett, M. A., Rivers, S. E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating Emotional Abilities to Social Functioning: A Comparison Of Self-Report And Performance Measures of Emotional Intelligence. *Journal of Personality and Social Psychology*, 91(4),780-795.
- Brown, F. W., & Reilly, M. D. (2008). Emotional Intelligence, Transformational Leadership and Gender: Correlation and Interaction Possibilities. *Journal of International Management*,3(2), 1-9.
- Bulmer, M. (2004). *Questionnaires*. V.1. Thousand Oaks, CA: Sage Publications.

- Bulmer, S. K., Profetto-McGrath, J. & Cummings, G. G. (2009). Emotional Intelligence and Nursing: An Integrative Literature Review. *International Journal for Nursing Studies*, 46(12), 1624-1636.
- Burkell, J. (2006). Anonymity in Behavioural Research: Not Being Unnamed, But Being Unknown. *Media*, 3(1), 189–204.
- Burke, R. J., Koyuncu, M., Fiksenbaum, L., & Acar, F. T. (2009). Work Hours, Work Intensity, Satisfactions and Psychological Well-being Among Turkish Manufacturing Managers. *Europe's Journal of Psychology*, 5(2), 12-30.
- Burke, R. J., Koyuncu, M., Fiksenbaum, L., Yirik, S., & Koyuncu, K. (2016). The Effects of Personal and Organizational Resources on Work and Well-Being Outcomes among Turkish Nurses, *Journal of Intercultural Management*, 8(2), 29-54.
- Cadman, C. & Brewer, J. (2001). Emotional Intelligence: A vital prerequisite for recruitment in nursing. *Journal of Nursing Management*, 9(1), 321-324
- Carmeli, A., Yitzhak-Halevy, M., & Weisberg, J. (2007). The relationship between Emotional Intelligence and Psychological Well-being. *Journal of Managerial Psychology*, 24(1), 66-78.
- Carmeli, A., Yitzhak-Halevy, M., & Weisberg, J. (2009). The Relationship Between Emotional Intelligence and Psychological Wellbeing. *Journal of Managerial Psychology*, 24(1), 66–78.

- Castro-Schilo, L., & Kee, W. (2010). Gender Differences in The Relationship Between Emotional Intelligence and Right Hemisphere Lateralisation for Facial Processing. *Brain and Cognition*, 73(3), 162-197.
- Cartwright, A., & Salloway, A. (2007). *Emotional Intelligence: Activities for developing you and your business*. Geneva, Sage Publications.
- Cerit, E., & Beser, N. G. (2014). Levels of Emotional Intelligence of Nursing Students. *International Journal of Caring Sciences*, 7(3), 936-945.
- Chapman, B. P., & Hayslip Jr, B. (2006). Emotional intelligence in young and middle adulthood: Cross-sectional analysis of latent structure and means. *Psychology and aging*, 21(2), 411-418.
- Charbonneau, D., & Nicol, A. A. (2002). Emotional intelligence and prosocial behaviors in adolescents. *Psychological Reports*, 90(2), 361-370.
- Chen, Y., Peng, Y. & Fang, P. (2016). Emotional Intelligence Mediates the Relationship between Age and Subjective Well-Being. *International Journal of Aging and Human Development*, 83(2), 91-107.
- Ciarrochi, J. V., Chan, A. Y. C., & Caputi, P. (2000). A critical evaluation of the Emotional Intelligence construct. *Personality and Individual Differences*, 28(3), 539–56.
- Ciarrochi, J., Chan, A. Y. C., & Bajgar, J. (2001). Measuring Emotional Intelligence in adolescents. *Personality and Individual Differences*, 31(7), 1105–1119.

- Chaudhuri, S., Das, G. & Narasayya, V. (2007). Optimised stratified sampling for approximate query processing. *ACM Transactions on Database Systems (TODS)*, 32(2), 9-23.
- Chen, S. M., & McMurray, A. (2001). "Burnout" in Intensive Care Nurses. *Journal of Nurse Res*, 9(5), 152-164.
- Codier, E., Kamikawa, C., Kooker, B. M., & Shoultz, J. (2009). Emotional Intelligence, performance, and retention in clinical staff nurses. *Nursing Administration Quarterly*, 33(4), 310-316.
- Collins, C. S., & Cooper, J. E. (2014). Emotional Intelligence and the Qualitative Researcher. *International Journal of Qualitative Methods*, 6(3), 88–103.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches (4th ed.)*. Thousand Oaks, CA: Sage.
- Davidson, D. (2006). *Psychological, physical and social wellbeing in an individual and team sport: A phenomenological and quantitative study*. Unpublished master's dissertation, University of Zululand, Mhlathuze, South Africa.
- Day, A.L. & Carroll, S.A. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours. *Personality and Individual Differences*, 36(5), 1443-1458.
- Demo, G., & Paschoal, T. (2016). Well-being at work scale: Exploratory and confirmatory validation in the USA. *Paidéia*, 26(63), 35–43.

- Deniz, M. E., Özer, E., & Isik, E. (2013). Trait Emotional Intelligence Questionnaire-Short Form: Validity and Reliability Studies. *Egitim ve Bilim*, 38(169), 407-419.
- Denton, M., Prus, S. & Walters, V. (1999). Gender differences in structural and behavioural determinants of health: An analysis of the social production of health. *Social Science and Medicine*, 48(4), 1221-1235.
- Derksen, J. J. L., Kramer, I. M. A. & Katzko, M. (2002). Does A Self Report Measure for Emotional Intelligence Assess Something Different Than General Intelligence? *Personality and Individual Differences*, 32(2), 37–48.
- Derlega, V.J., Winstead, B.A., & Jones, W.H. (2005). *Personality Contemporary Theory and Research*. Canada: Wadsworth.
- Dillman, D. A. (2000). *Mail and Internet Surveys: The Tailored Design Method (2nd ed.)*. New York: Wiley.
- Donnelly, J., P. (2015). *Research Methods: The Essential Knowledge Base*. K Arora Nelson Education
- Edmonds, W. A., & Kennedy, T. D. (2012). *An Applied Reference Guide to Research Designs: Quantitative, Qualitative, And Mixed Methods*. Thousand Oaks, CA: Sage.
- Edwards, S.D. (2005). A Psychology of Breathing Methods. *International Journal of Mental Health Promotion*, 7(4), 28-34.

- Extremera, N. & Fernández-Berrocal, P. (2006). Emotional Intelligence and emotional reactivity and recovery in laboratory context. *Psicothema*, 18(1), 72–78.
- Erikson, E. (1959). Identity and the life cycle. *Psychological Issues*, 1(2), 18–164.
- Ezzatabadi, R. M., Bahrami, M. A., Hadizadeh, F., Arab, M., Nasiri, S., Amiresmaili, M., & Ahmadi, T.G. (2012). Nurses' Emotional Intelligence Impact on the Quality of Hospital Services. *Iran Red Crescent Medical Journal*, 14(12), 758-763.
- Fariselli, L., Ghini, M., & Freedman J. (2006). *White Paper: Age and Emotional Intelligence*. Six Seconds: Sage Publications.
- Feher, A., Yan, G., Saklofske, D., Plouffe, R. & Gao, Y. (2019). An Investigation of the Psychometric Properties of the Chinese Trait Emotional Intelligence Questionnaire Short Form (Chinese TEIQue-SF). *Frontiers in Psychology*, 2(1), 10-21.
- Figuroa, M. I., Contini, N., Lacunza, A. B., Levín, M., & Suedan, A. E. (2005). The Coping Strategies and Its Relation With The Level Of Psychological Well-being.A Research With Adolescents Of Low Socioeconomic Level Of Tucuman (Argentina). *Anales De Psicología / Annals Of Psychology*, 21(1), 66-72.
- Fincham J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American Journal of Pharmaceutical Education*, 72(2), 43-56.

- Ford, B. Q., Lam, P., John, O. P., & Mauss, I. B. (2018). The psychological health benefits of accepting negative emotions and thoughts: Laboratory, diary, and longitudinal evidence. *Journal of Personality and Social Psychology*, *115*(6), 1075–1092.
- Frajo-Apor, B., Pardeller, S., Kemmler, G., & Hofer, A. (2016). Emotional Intelligence and resilience in mental health professionals caring for patients with serious mental illness. *Psychology, health & medicine*, *21*(6), 755–761.
- Freshwater, D., & Stickley, T. (2004). The heart of the art: Emotional Intelligence in nurse education. *Nursing Inquiry*, *11*(2), 91-98.
- Freudenthaler, H. H., Neubauer, A. C., Gabler, P., Scherl, W. G., & Rindermann, H. (2008). Testing and validating the trait Emotional Intelligence questionnaire (TEIQue) in a German-speaking sample. *Pers. Ind. Diff.* *45*(1), 673–678.
- Gallagher, E. N. & Vella-Brodrick, D. A. (2008). Social Support And Emotional Intelligence As Predictors Of Subjective Well-Being. *Personality and Individual Differences*, *44*(6), 1551- 1561
- Gannon, N., & Ranzijn, R. (2005). Does Emotional Intelligence Predict Unique Variance in Life Satisfaction Beyond IQ and Personality? *Personality and Individual Differences*, *38*(6), 1353–1364.

- Gerits, L., Jan J. L. Derksen, & Verbruggen, A. B. (2004). Emotional Intelligence and Adaptive Success of Nurses Caring for People with Mental Retardation and Severe Behaviour Problems. *Mental Retardation*, 42(2), 106-121.
- Gökçen, E., Petrides, K., Hudry, K., Frederickson, N., & Smillie, L. (2014). Sub-threshold autism traits: The role of trait Emotional Intelligence and cognitive flexibility. *British Journal of Psychology*, 105(2), 187-199.
- Gray, B. (1994). The gender-based foundations of negotiation theory . In R. Lewicki , B. Sheppard , & R. Bies (Eds.), *Research on negotiation in organizations 4*(pp. 59-92). Greenwich, CT: JA.
- Grewal, D., & Salovey, P. (2005). Feeling Smart: The Science of Emotional Intelligence. *American Scientist*, 93(4), 330-339.
- Grice, J. W. (2007). *Person-centered structural analyses*. In R. Robins, C. Fraley, and R. Krueger (Eds.) *Handbook of research methods in personality psychology* (pp. 557-572). New York, NY: Guilford Press.
- Gyuse, A. N., Ayuk, A. E., & Okeke, M. C. (2018). Facilitators and barriers to effective primary health care in Nigeria. *African Journal of Primary Health Care & Family Medicine*, 10(1), 1–3.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Publications

- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 8(5), 24-40.
- Helson, R., & Srivastava, S. (2001). Three paths of adult development: conservers, seekers, and achievers. *Journal of Personality and Social Psychology*, 80(9), 995-1010.
- Hromatko, I., & Hrgović, J. (2020). The how and the why of the human inability to accept evolutionary explanations. *Evolutionary Behavioral Sciences*. Advance online publication.
- Huitt, W. (2007). *Maslow's hierarchy of needs*. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved from <http://www.edpsycinteractive.org/topics/regsys/maslow.html>
- Hummelvoll, J., & Severinsson, E. (2001). Factors Influencing Job Satisfaction and Ethical Dilemmas in Acute Psychiatric Care. *Nursing and Health Sciences*, 3(1), 81-90.
- Humpel, N., & Caputi, P. (2001). Exploring The Relationship Between Work Stress, Years of Experience and Emotional Competency Using a Sample of Australian Mental Health Nurses. *Journal of Psychiatric and Mental Health Nursing*, 8(5), 399-403.
- Jacob, N. & Singh, S.K. (2011). *Readings in Organisation Development*. New Delhi: Excel Books.

- James, C., Bore, M., & Zito, S. (2012). Emotional Intelligence and Personality as Predictors of Psychological Well-being. *Journal of Psychoeducational Assessment, 30*(4), 425–438.
- Jorfi, H., Yaccob, H.F.Y., & Shah, I.M. (2011). The Relationship between Demographics Variables, Emotional Intelligence, Communication Effectiveness, Motivation, and Job Satisfaction. *International Journal of Academic Research in Business and Social Sciences, Human Resource Management Academic Research Society, 1*(1), 38-62.
- Judge, T., Bono, A., & Joyce, E. (2001). Relationship of Core Self-Evaluations Traits-Self-Esteem, Generalised Self-Efficacy, Locus of Control, And Emotional Stability-With Job Satisfaction and Job Performance: A Meta-Analysis. *Journal of Applied Psychology, 86*(1), 80-92.
- Kafetsios, K., & Zampetakis, L. A. (2007). Emotional Intelligence and Job Satisfaction: Testing The Mediatory Role of Positive and Negative Affect at Work. *Personality and Individual Differences, 44*(5), 712-722.
- Kafetsios, K., & Zampetakis, L. A. (2008). Emotional Intelligence and Job Satisfaction: Testing The Mediatory Role of Positive and Negative Affect at Work. *Personality and Individual Differences, 44*(3), 712–722.
- Karimi, L, Leggat, S., Donohue, L., Farrell, G. & Couper, G. (2013). Emotional Rescue: The Role of Emotional Intelligence and Emotional Labour on Well-Being and Job-Stress among Community Nurses. *Journal of Advanced Nursing, 70*(4), 12-22.

- Katyal, S. & Awasthi, E. (2005). Gender Differences in Emotional Intelligence Among Adolescents of Chandigarh. *Journal of Human Ecology, 17*(2), 18-30.
- Kim, K., Cundiff, N.L., & Choi, S.B. (2015). "Emotional Intelligence and Negotiation Outcomes: Mediating Effects of Rapport, Negotiation Strategy, and Judgment Accuracy," *Group Decision and Negotiation, Springer, 24*(3), 477-493.
- Kirk, B. A., Schutte, N. S., & Hine, D. W. (2011). The effect of an expressive-writing intervention for employees on emotional self-efficacy, Emotional Intelligence, affect, and workplace incivility. *Journal of Applied Social Psychology, 41*(1), 179-195.
- Krejcie, R.V., & Morgan, D.W., (1970). *Determining Sample Size for Research Activities*. Educational and Psychological Measurement.
- Kuo, H. T., Lin, K. C., & Li, I. C. (2014). The Mediating Effects of Job Satisfaction on Turnover Intention for Long-Term Care Nurses in Taiwan. *Journal of Nurse Management, 22*(2), 225-233.
- Kyereme, P.A. (2018). *Factors Influencing Stress Among Psychiatric Nurses at The Accra Psychiatric Hospital*. University of Ghana, Legon.
- Laborde, S. J. P., Dosseville, F., Guillen, F., & Chavez, E. (2014). Validity of the Trait Emotional Intelligence Questionnaire in Sports and Its Links with Performance Satisfaction. *Psychology of Sport and Exercise, 15*(5), 481-490.

- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods* (Vols. 1-0). Thousand Oaks, CA: Sage Publications, Inc.
- Letvak, S., Gupta, S., & Ruhm, C. (2013) Differences in health, productivity and quality of care in younger and older nurses. *Journal of Nursing Management*, 21(7), 914- 921.
- Li, J., Fu, H., Hu, Y., Shang, L., Wu, Y., Kristensen, T. S. & Hasselhorn, H. M. (2010). Psychosocial Work Environment and Intention to Leave the Nursing Profession: Results from The Longitudinal Chinese NEXT Study. *Scandinavian Journal of Public Health*, 38(3), 69–80.
- Linzer, M., Spitzer, R., Kroenke, K., Williams, B. Hahn, S., Brody, D., & deGruy, F. (1996). Gender, quality of life, and mental disorders in primary care: Results from the PRIMEMD 1000 study. *The American Journal of Medicine*, 101(5), 526-533.
- Maben, J., Peccei, R., Adams, M., Robert, G., Richardson, A., & Murrells, T. (2012). *Exploring The Relationship Between Patients' Experiences of Care and The Influence of Staff Motivation, Affect and Wellbeing*. Southampton: NIHR Service Delivery and Organisation Programme.
- Magar, V., Gerecke, M., Dhillon, I. S., & Campbell, J. (2019). *Women's contributions to sustainable development through work in health: using a gender lens to advance a transformative 2030 agenda*. In: Buchan J, Dhillon IS, Campbell J, editors. Health employment and economic growth: an evidence base. Geneva: World Health Organization.

- Martskvishvili, K., Arutinov, L., & Mestvirishvili, M. (2013). A Psychometric Investigation of the Georgian Version of the Trait Emotional Intelligence Questionnaire. *European Journal on Personality Assessment*, 29(5), 84–88.
- Maslow, A. H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370–396.
- Maslow, A. (1968). *Toward a psychology of being (2nd ed.)*. New York: Van Nostrand.
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality and Individual Differences*, 49(6), 554–564.
- Martin, W.E., & Bridgmon, K.D., (2012). *Quantitative and Statistical Research Methods: From Hypothesis to Results*. John Wiley & Sons: Colorado State University-Pueblo.
- Matthews, G., Zeidner, M., & Roberts, R.D., (2004). *Emotional Intelligence: Science and Myth*. Massachusetts Institute of Technology, Massachusetts.
- Matud, M. P., López-Curbelo, M., & Fortes, D. (2019). Gender and Psychological Well-Being. *International journal of environmental research and public health*, 16(19), 3531.
- Mano, R.J., (2017). *A study on relationship between emotional maturity, stress and self-confidence among management students*. Asia Pacific Journal of Research 1.

- Mayer, J. D., & Salovey, P. (1997). What is Emotional Intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and Emotional Intelligence: Educational applications* (pp. 3–31). New York: Basic Books
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional Intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15(3), 197–215.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional Intelligence: New Ability or Eclectic Traits. *American Psychologist*, 63(6), 503-517.
- Mayer, J. D. & Salovey, P. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211.
- Mehmood, T., & Gulzar, S. (2014). Relationship between Emotional Intelligence and Psychological Well-being among Pakistani Adolescents. *Asian Journal of Social Sciences and Humanities*, 3(1), 178-185.
- McIntyre, H. H. (2010). Gender Differences in the Nature and Linkage of Higher-Order Personality Factors to Trait and Ability Emotional Intelligence. *Personality and Individual Differences*, 48(5), 617–622.
- McLeod, S. A. (2007). *Carl Rogers – Simply Psychology*. Retrieved, 8th October 2013, from:[http:// www.simplypsychology.org/carl-rogers.html](http://www.simplypsychology.org/carl-rogers.html).
- McQueen. A. C. H. (2004). Emotional Intelligence in Nursing Work. *Journal of Advanced Nursing* Teacher personality traits and student instructional ratings in six types of university courses. *Journal of Educational Psychology*, 82(2), 250-261.

- Meng, R., Luo, Y., Liu, B., Hu, Y., & Yu, C. (2015). The Nurses' Well-Being Index and Factors Influencing This Index among Nurses in Central China: A Cross-Sectional Study. *PloS One*, *10*(12), 14-44.
- Mikolajczak, L., & Leroy, R. (2007). Psychometric Properties of the Trait Emotional Intelligence Questionnaire: Factor Structure, Reliability, Construct, and Incremental Validity in a French-Speaking Population. *Journal of Personality Assessment*, *88*(3), 338-353.
- Mikolajczak, M., Petrides, K. V., Coumans, N., & Luminet, O. (2009). The Moderating Effect of Trait Emotional Intelligence On Mood Deterioration Following Laboratory-Induced Stress. *International Journal of Clinical and Health Psychology*, *9*(3), 455-477.
- Murray, H. G., Rushton, J. P., & Paunonen, S.V. (1990). Gender and Age on Emotional Intelligence of Higher Secondary School Adolescents. *International Journal of Advancements in Research & Technology*, *3*(2), 64-79.
- Nayak, M. (2014). Impact of culture linked gender and age on emotional intelligence of higher secondary school adolescents. *International Journal of Advancements in Research & Technology*, *3*(9), 64-79.
- Olatunde B, E., & Odusanya, O. (2015). Job Satisfaction and Psychological Well-being among Mental Health Nurses. *International Journal of Translating Community Disorders*, *3*(3),64-70.
- Orodho, A., J. (2009). *Elements of Education and Social Science Research Methods*, 2nd Ed. Kanezja, Maseno, Kenya.

- Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional Intelligence and life satisfaction. *Personality and Individual Differences*, 33(8), 1091-1100.
- Pandey, R., & Tripathi, A. N. (2004). Development of emotional intelligence: Some preliminary observations. *Psychological Studies-University of Calicut*, 4(9), 147-150.
- Park, D. C., & Yeo, S. G. (2013). Aging. *Korean journal of audiology*, 17(2), 39–44.
- Parker, J. D. A., Saklofske, D. H., Wood, L. M., Eastabrook, J. M., & Taylor, R. N. (2005). Stability and change in emotional intelligence: Exploring the transition to young adulthood. *Journal of Individual Differences*, 2(6), 100-106.
- Pawar, B. (2016). Workplace Spirituality and Employee Well-Being: An Empirical Examination. *Employee Relations*, 38(7), 975-994.
- Peña-Sarrionandia, A., Mikolajczak, M., & Gross, J. J. (2015). Integrating emotion regulation and Emotional Intelligence traditions: A meta-analysis. *Frontiers in Psychology*, 6(3), 160-180.
- Petrova, E., Dewing, J., & Camilleri, M. (2016). Confidentiality in participatory research: Challenges from one study. *Nurse Ethics*, 23(4), 442-454.
- Petrides, K. V., & Furnham, A. (2001). Trait Emotional Intelligence: Psychometric Investigation with Reference to Established Trait Taxonomies. *European Journal of Personality*, 15(4), 425-448.

- Petrides, K. V., & Furnham, A. (2003). Trait Emotional Intelligence: Behavioural Validation in Two Studies of Emotion Recognition and Reactivity to Mood Induction. *European Journal of Personality*, 17(4), 39-57.
- Petrides, K.V., Frederickson, N., & Furnham, A. (2004). The Role of Trait Emotional Intelligence in Academic Performance and Deviant Behaviour at School. *Personality and Individual Differences*, 36(2), 277–293.
- Petrides, K. & Furnham, A. (2006). The Role of Trait Emotional Intelligence in a Gender-Specific Model of Organisational Variables. *Journal of Applied Social Psychology*, 36(1), 552-569.
- Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait Emotional Intelligence: Moving forward in the field of EI. In G. Matthews, M. Zeidner, & R. D. Roberts (Eds.), *Series in affective science. The science of Emotional Intelligence: Knowns and unknowns* (p. 151–166). Oxford University Press.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The Location of Trait Emotional Intelligence in Personality Factor Space. *British Journal of Psychology*, 98(2), 273-289.
- Petrides K.V., Perez-Gonzalez J.C., & Furman, A. (2007). On the criterion and incremental validity of trait emotional intelligence. *Cognition & Emotion*, 2(1), 26-55.

- Petrides, K. V. (2009). *Psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue)*. In C. Stough, D. H. Saklofske, & J. D. A. Parker (Eds.), *The Springer Series On Human Exceptionality. Assessing Emotional Intelligence: Theory, Research, And Applications*, (pp. 85–101).
- Raedeke, T. D., & Smith, A. L. (2004). Coping Resources and Athlete Burnout: An Examination of Stress Mediated and Moderation Hypotheses. *Journal of Sport & Exercise Psychology*, 26(4), 525–541.
- Rankin B. (2013). Emotional Intelligence: Enhancing Values-Based Practice and Compassionate Care in Nursing. *Journal of Advanced Nursing*, 69(12), 2717–2725.
- Rathakrishnan, B., Yahaya, A., Singh, S. & Kamaluddin, M. (2019). Emotional Intelligence and Psychological Well-being of Rural Poor School Students in Sabah, Malaysia. *Psymphatic Journal Ilmiah Psikologi*, 6(2), 65-72.
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128(6), 934–960.
- Rode, J. C., Mooney, C. H., Arthaud-day, M. L., Near, J. P., Rudin, R. S., Baldwin, T. T., & Bommer, W. H. (2008). An Examination of structural, discriminant, nomological, and incremental predictive validity of the MSCEIT. *Intelligence*, 36(4), 350-366.

- Rodwell, J. & Munro, L. (2013). Well-Being, Satisfaction and Commitment: The Substitutable Nature of Resources for Maternity Hospital Nurses. *Journal of Advanced Nursing*, 69(1), 10-17.
- Rogers, C. R. (1954). Toward A Theory of Creativity. *Pattern and Growth in Personality*, 11(1), 249–260.
- Rogers, C. R. (1961). *On Becoming a Person: A Therapist's View of Psychotherapy*. Boston: Houghton-Mifflin
- Roohafza, H., Feizi, A., Afshar, H., Mazaheri, M., Behnamfar, O., Hassanzadeh-Keshteli, A. & Adibi, P. (2016). Path Analysis of Relationship Among Personality, Perceived Stress, Coping, Social Support, And Psychological Outcomes. *World Journal of Psychiatry*, 6(4), 89-128.
- Routson, J. (2010). *Emotional Intelligence: An Essential Skill for Nurses*. 6465 South Greenwood Plaza Boulevard, Suite 400, Centennial, CO 80111.
- Ruiz-Aranda, D., Salguero, J. M., Cabello, R., Palomera, R., & Fernández-Berrocal, P. (2012). Can an Emotional Intelligence program improve adolescents' psychosocial adjustment? Results from the INTEMO project. *Social Behaviour and Personality: An International Journal*, 40(7), 1373-1380.
- Ryff, C. D., & Singer, B. H. (1998). The contours of positive human health. *Psychological Inquiry*, 9(2), 2–28.
- Ryff, C. D. (1989). "Happiness is everything, or is it? Explorations on the meaning of Psychological Well-being." *Journal of Personality and Social Psychology*, 57(4), 1069-1081.

- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of Psychological Well-being revisited. *Journal of Personality and Social Psychology*, 69(1), 719–727.
- Ryff, C.D., & Singer, B.H. (2008). Know Thyself and Become What You Are: A Eudaimonic Approach to Psychological Well-being. *Journal of Happiness Studies* 9(20), 13–39.
- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between Emotional Intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology*, 11(3), 276–285.
- Schutte, N. S., Malouff, J. M., Bobik, C. et al. (2001). Emotional Intelligence and Interpersonal Relations. *Journal of Social Psychology*, 141(4), 523-536.
- Schutte, N. S., Malouf, M., Simunek, M., McKenly, J., & Hollander, S. (2002). Characteristic Emotional Intelligence and Emotional Well-Being. *Cognition and Emotion*, 16(6), 769-785.
- Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A Meta-Analytic Investigation of the Relationship between Emotional Intelligence and Health. *Personality and Individual Differences*, 42(2), 921-933.
- Sevdalis, N., Petrides, K. V., & Harvey, N. (2007). Trait Emotional Intelligence and decision-related emotions. *Personality and Individual Differences*, 42(7), 1347–1358.

- Shangping, Z., Ling, L. & Hong, C. (2015). Factors Influencing the Occupational Well-Being of Experienced Nurses. *Journal of Nursing Sciences International*, 2(1), 378-382.
- Shulman, T. E., & Hemenover, S. H. (2006). Is Dispositional Emotional Intelligence Synonymous with Personality? *Self and Identity*, 5(2), 147–171.
- Sjöstedt, E., Dahlstrand, A., Severinsson, E., & Lützén, K. (2001). The First Nurse-Patient Encounter in a Psychiatric Setting: discovering a moral commitment in nursing. *Nursing Ethics*, 8(4), 313–327.
- Slaski, M., & Cartwright, S. (2003). Emotional Intelligence training and its implications for stress, health and performance. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 19(4), 233–239.
- Smith, L., Ciarrochi, J. & Heaven, P. (2008). The Stability and Change of Trait Emotional Intelligence, Conflict Communication Patterns, And Relationship Satisfaction: A One-Year Longitudinal Study. *Personality and Individual Differences*. 45(1), 738-743.
- Smith B. K., Profetto-McGrath J., & Cummings, G. G. (2009). Emotional Intelligence and Nursing: An Integrative literature Review. *Int. J. Nurs. Stud.*, 46(12), 1624-1636.
- Snow, Janet L. (2001). Looking Beyond Nursing for Clues to Effective Leadership. *Journal of Nursing Administration*, 31(9), 440-443.

- Snowden, A., Stenhouse, R., Young, J., Carver, H., Carver, F. & Brown, N. (2005). The Relationship Between Emotional Intelligence, Previous Caring Experience and Mindfulness in Student Nurses and Midwives: A Cross Sectional Analysis, *Nurse Education Today*, 35(1), 152-158.
- Song, L. J., Huang, G. H., Peng, K. Z., Law, K. S., Wong, C. S., & Chen, Z. (2010). The Differential Effects of General Mental Ability and Emotional Intelligence on Academic Performance and Social Interactions. *Intelligence*, 38(1), 137-143.
- Srivastava, K. B.N. , & Bharamanaikar, S. R. (2004). Emotional intelligence and effective leadership behavior. *Psychological Studies*, 49(3), 107-113.
- Stamatopoulou M., Galanis P., Tzavella F., Petrides K. V., & Prezerakos P. (2018). Trait Emotional Intelligence Questionnaire–Adolescent Short Form: A Psychometric Investigation in Greek Context. *Journal of Psychoeducation and Assessment*, 36(4), 436–445.
- Steyn, T.S. (2010). The Role of Gender in the Relationship Between Emotional Intelligence and Psychological Well–Being. *South African Journal of Psychology*, 6(2), 1-41.
- Thoman, D. B., Sansone, C., Robinson, J. A., & Helm, J. L. (2019). Implicit theories of interest regulation. *Motivation Science*. Advance online publication.

- Thomsen, D. K., Mehlsen, M. Y., Viidik, A., Sommerlund, B., & Zachariae, R. (2005). Age and Gender Differences in Negative Affect: Is There a Role for Emotion Regulation. *Personality and Individual Differences, 38*(4), 1935-1946.
- Tomar, D. (2016). A Study of Emotional Intelligence Among Nurses. *International Journal of Scientific Research and Education, 10*. (pp. 18).
- Twumasi, P. A., (2001). *Social Research in Rural Communities, 2nd Edition*, Accra. Ghana University Press.
- Tyagi, S. K. (2004). Emotional intelligence of secondary teachers in relation to gender and age. *Journal of Educational Research and Extension, 41*(3), 39-45.
- United Nations World Urbanisation Prospects (2018). *State of the World's Cities Report: Harmonious Cities*.
- Vagharseyyedin, S. A., Vanaki, Z., & Mohammadi, E. (2011). The Nature Nursing Quality of Work Life: An Integrative Review of Literature. *Western Journal of Nursing Research, 33*(6),786–804.
- Vanderpuye, I. (2013). Piloting inclusive education in Ghana: Parental perceptions, expectations and involvement. Unpublished doctoral thesis, University of Leeds, Leeds
- Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional Intelligence: A Meta-Analytic Investigation of Predictive Validity and Nomological Net. *Journal of Vocational Behaviour, 6*(5), 71–95.

- Van Rooy, D. L., & Viswesvaran, C. (2005). *The Emotionally Intelligent Female: A Meta-Analysis of Gender Differences*. Unpublished data, Florida International University.
- Vernon, P. A., Petrides, K. V., Bratko, D., & Schermer, J. A. (2008). A behavioural genetic study of trait Emotional Intelligence. *Emotion*, 8(5), 635–642.
- Villarica, H. (2011). “Maslow 2.0: A New and Improved Recipe for Happiness”. *The Atlantic*, (pp. 3)
- Vitello-Cicciu, Joan M. (2002). Exploring Emotional Intelligence: Implications for Nursing Leaders. *Journal of Nursing Administration*. 32(4): 203-210.
- Wahba, M. A., & Bridwell, L. G. (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational Behaviour & Human Performance*, 15(2), 212–240.
- Watson, M. R., Lagow, R. D., Xu, K., Zhang, B., & Bonini, N. M. (2008). A Drosophila Model For Amyotrophic Lateral Sclerosis Reveals Motor Neuron Damage by Human SOD1. *Journal of Biological Chemistry*, 283(36), 72-81.
- Williams, S., Wissing, M. P., Rothman, S. & Temane, Q. M. (2010). Emotional Intelligence, Work and Psychological Outcomes In A Public Service Context. *South African Journal of South Africa*, 19(4), 531-540
- Wissing, M., & Chrizanne, V. E. (2002). Empirical clarification of the nature of psychological well-being. *South African Journal of Psychology*, 3(2), 32-44.

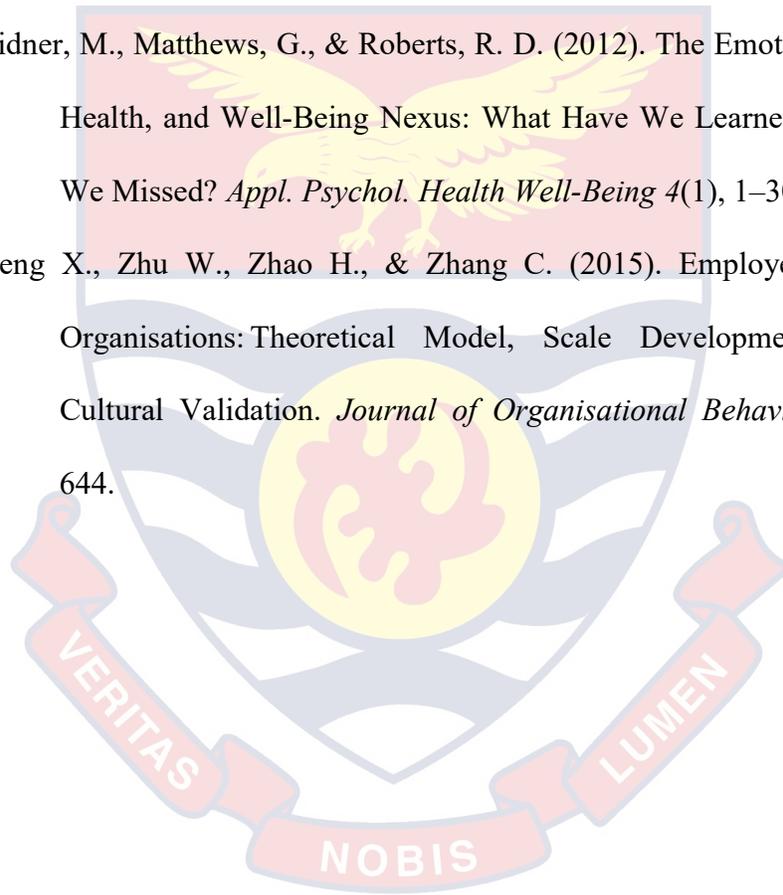
- World Health Assembly & Brundtland, G. H. (2001). Address by Dr Gro Harlem Brundtland, Director-General to the fifty-fourth World Health Assembly, Geneva, Monday, 14 May 2001. World Health Organisation. <https://apps.who.int/iris/handle/10665/78710>
- World Health Organisation. (2001) . The World Health Report in 2001: Mental Health: *New Understanding, New Hope*. World Health Organisation. <https://apps.who.int/iris/handle/10665/42390>
- World Health Organisation (2007). *Mental health: A state of well-being*: Fact File.
- World Health Organisation (2011). *The global shortage of health workers and its impact*. World Health Organisation 2011 Report.
- World Health Organisation (2017). Report on the history of nursing and midwifery. *World Health Organisation, (pp. 1948–2017)*
- World Health Organisation. (2018). *Mental Health Atlas*. Ghana, West Africa. <https://apps.who.int/iris/handle/10665/272735>
- Wright, T. A., & Cropanzano, R. (2000). Psychological Well-being and Job Satisfaction as Predictors of Job Performance. *Journal of Occupational Health Psychology, 5*(1), 84–94.
- Wright, T. A., & Bonett, D. G. (2007). Job Satisfaction and Psychological Well-being as Non- Additive Predictors of Workplace Turnover. *Journal of Management, 33*(2), 141–160.

Yongling, H., Uddin, M. A., & Bhuiyan, A. J. (2019). Emotional Intelligence of Nurses in Tertiary Hospitals in Dali, the People's Republic of China. *Advances in Bioscience and Bioengineering*, 7(3), 32-36.

Zampetakis, L. A. (2011). The measurement of trait Emotional Intelligence with the TEIQue-SF: An analysis based on unfolding item response theory models. *Research on Emotion in Organisation*, 7(4), 289-315.

Zeidner, M., Matthews, G., & Roberts, R. D. (2012). The Emotional Intelligence, Health, and Well-Being Nexus: What Have We Learned and What Have We Missed? *Appl. Psychol. Health Well-Being* 4(1), 1–30.

Zheng X., Zhu W., Zhao H., & Zhang C. (2015). Employee Well-Being in Organisations: Theoretical Model, Scale Development, And Cross-Cultural Validation. *Journal of Organisational Behaviour*, 36(2), 621–644.



APPENDICES

APPENDIX A  
DATA COLLECTION INSTRUMENT

UNIVERSITY OF CAPE COAST  
COLLEGE OF EDUCATION STUDIES  
DEPARTMENT OF EDUCATION AND PSYCHOLOGY

The researcher wishes to thank you in advance for agreeing to participate in this study. This study centers on Emotional Intelligence and Psychological Well-being.

*This work is for academic purpose and we assure you that your responses will be treated as confidential as possible. Thank you for your time and participation.*

**SECTION A PERSONAL INFORMATION**

1. How old are you? .....
2. Sex: Male [ ] Female [ ]
3. What is your number of years of work experience? .....

**SECTION B EMOTIONAL INTELLIGENCE**

*Instructions:* Please answer each statement below by putting a **circle around** the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from: 1 (Completely Disagree) ..... 7 (Completely Agree)

S/N	Statement	Ratings						
4.	Expressing my emotions with words is not a problem for me.	1	2	3	4	5	6	7
5.	I often find it difficult to see things from another person's viewpoint	1	2	3	4	5	6	7
6.	On the whole, I'm a highly motivated person.	1	2	3	4	5	6	7
7.	I usually find it difficult to regulate my emotions.	1	2	3	4	5	6	7
8.	I generally don't find life enjoyable.	1	2	3	4	5	6	7
9.	I can deal effectively with people	1	2	3	4	5	6	7

10.	I tend to change my mind frequently.	1	2	3	4	5	6	7
11.	Many times, I can't figure out what emotion I'm feeling.	1	2	3	4	5	6	7
12.	I feel that I have a number of good qualities.	1	2	3	4	5	6	7
13.	I often find it difficult to stand up for my rights	1	2	3	4	5	6	7
14.	I'm usually able to influence the way other people feel.	1	2	3	4	5	6	7
15.	On the whole, I have a gloomy perspective on most things	1	2	3	4	5	6	7
16.	Those close to me often complain that I don't treat them right.	1	2	3	4	5	6	7
17.	I often find it difficult to adjust my life according to the circumstances	1	2	3	4	5	6	7
18.	On the whole, I'm able to deal with stress.	1	2	3	4	5	6	7
19.	I often find it difficult to show my affection to those close to me.	1	2	3	4	5	6	7
20.	I'm normally able to "get into someone's shoes" and experience their emotions	1	2	3	4	5	6	7
21.	I normally find it difficult to keep myself motivated.	1	2	3	4	5	6	7
22.	I'm usually able to find ways to control my emotions when I want to.	1	2	3	4	5	6	7
23.	On the whole, I'm pleased with my life.	1	2	3	4	5	6	7
24.	I would describe myself as a good negotiator.	1	2	3	4	5	6	7
25.	I tend to get involved in things I later wish I could get out of.	1	2	3	4	5	6	7
26.	I often pause and think about my feelings.	1	2	3	4	5	6	7
27.	I believe I'm full of personal strengths.	1	2	3	4	5	6	7
28.	I tend to "back down" even if I know I'm right.	1	2	3	4	5	6	7
29.	I don't seem to have any power at all over other people's feelings.	1	2	3	4	5	6	7
30.	I generally believe that things will work out fine in my life.	1	2	3	4	5	6	7
31.	I find it difficult to bond well even with those close to me.	1	2	3	4	5	6	7
32.	Generally, I'm able to adapt to new environments.	1	2	3	4	5	6	7
33.	Others admire me for being relaxed.	1	2	3	4	5	6	7

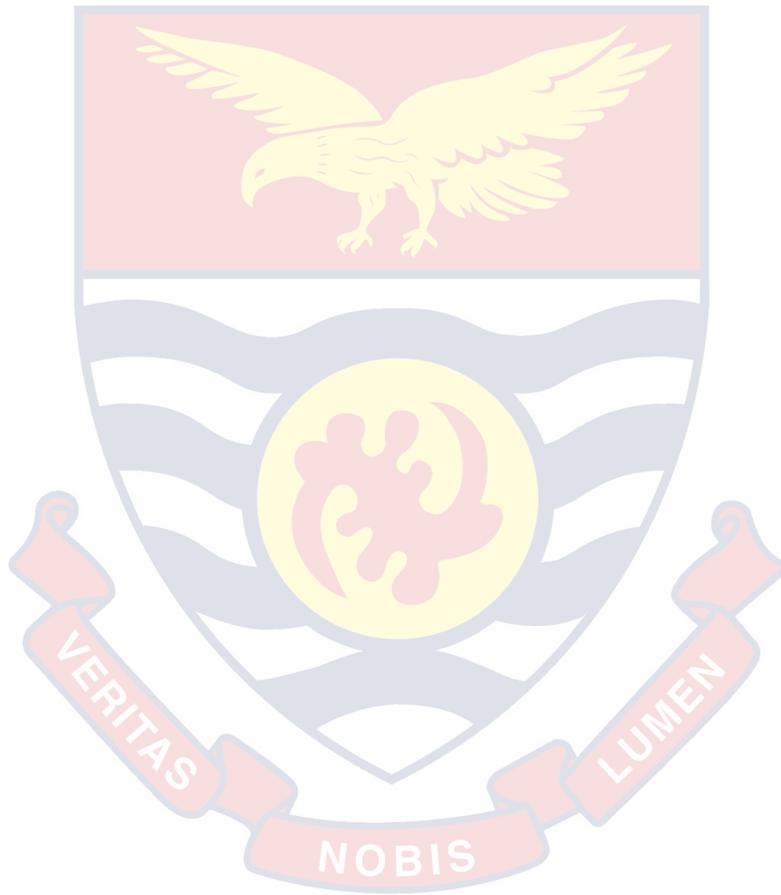
**SECTION C PSYCHOLOGICAL WELL-BEING**

Instruction: Please indicate your degree of agreement (using a score ranging from 1-6) to the following sentences by putting a **circle around** your response: 1 (Completely Disagree), 2 (Disagree), 3 (Somewhat Disagree), 4 (Somewhat Agree), 5 (Agree), 6 (Completely Agree)

S/N	Statement	Rating					
34.	I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	1	2	3	4	5	6
35.	In general, I feel I am in charge of the situation in which I live	1	2	3	4	5	6
36.	I am not interested in activities that will expand my horizons.	1	2	3	4	5	6
37.	Most people see me as loving and affectionate.	1	2	3	4	5	6
38.	I live life one day at a time and don't really think about the future.	1	2	3	4	5	6
39.	When I look at the story of my life, I am pleased with how things have turned out	1	2	3	4	5	6
40.	My decisions are not usually influenced by what everyone else is doing.	1	2	3	4	5	6
41.	The demands of everyday life often get me down	1	2	3	4	5	6
42.	I think it is important to have new experiences that challenge how you think about yourself and the world	1	2	3	4	5	6
43.	Maintaining close relationships has been difficult and frustrating for me	1	2	3	4	5	6
44.	I have a sense of direction and purpose in life.	1	2	3	4	5	6
45.	In general, I feel confident and positive about myself	1	2	3	4	5	6
46.	I tend to worry about what other people think of me	1	2	3	4	5	6
47.	I do not fit very well with the people and the community around me.	1	2	3	4	5	6
48.	When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5	6
49.	I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5	6
50.	My daily activities often seem trivial and unimportant to me.	1	2	3	4	5	6
51.	I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6

52.	I tend to be influenced by people with strong opinions	1	2	3	4	5	6
53.	I am quite good at managing the many responsibilities of my daily life	1	2	3	4	5	6
54.	I have the sense that I have developed a lot as a person over time	1	2	3	4	5	6
55.	I enjoy personal and mutual conversations with family members or friends	1	2	3	4	5	6
56.	I don't have a good sense of what it is I'm trying to accomplish in life.	1	2	3	4	5	6
57.	I like most aspects of my personality	1	2	3	4	5	6
58.	I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5	6
59.	I often feel overwhelmed by my responsibilities	1	2	3	4	5	6
60.	I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	1	2	3	4	5	6
61.	People would describe me as a giving person, willing to share my time with others.	1	2	3	4	5	6
62.	I enjoy making plans for the future and working to make them a reality.	1	2	3	4	5	6
63.	In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5	6
64.	It's difficult for me to voice my own opinions on controversial matters.	1	2	3	4	5	6
65.	I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5	6
66.	I have difficulty arranging my life in a way that is satisfying to me	1	2	3	4	5	6
67.	For me, life has been a continuous process of learning, changing, and growth	1	2	3	4	5	6
68.	I have not experienced many warm and trusting relationships with others	1	2	3	4	5	6
69.	Some people wander aimlessly through life, but I am not one of them	1	2	3	4	5	6
70.	My attitude about myself is probably not as positive as most people feel about themselves.	1	2	3	4	5	6
71.	I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5	6
72.	I have been able to build a home and a lifestyle for myself that is much to my liking.	1	2	3	4	5	6
73.	I gave up trying to make big improvements or changes in my life a long time ago.	1	2	3	4	5	6
74.	I know that I can trust my friends, and they know they can trust me.	1	2	3	4	5	6

75.	I sometimes feel as if I've done all there is to do in life	1	2	3	4	5	6
76.	When I compare myself to friends and acquaintances, it makes me feel good about who I am.	1	2	3	4	5	6



APPENDIX B

ETHICAL CLEARANCE FORM FROM UNIVERSITY OF CAPE COAST

UNIVERSITY OF CAPE COAST  
COLLEGE OF EDUCATION STUDIES  
ETHICAL REVIEW BOARD

UNIVERSITY POST OFFICE  
CAPE COAST, GHANA

Our Ref: CES-ERB/ucc.edu/14/19-03  Date: December 2, 2019  
Your Ref: .....

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

Chairman, CES-ERB  
Prof. J. A. Omotosho  
[jomotosho@ucc.edu.gh](mailto:jomotosho@ucc.edu.gh)  
0243784739

Vice-Chairman, CES-ERB  
Prof. K. Edjah  
[kedjah@ucc.edu.gh](mailto:kedjah@ucc.edu.gh)  
0244742357

Secretary, CES-ERB  
Prof. Linda Dzama Forde  
[lforde@ucc.edu.gh](mailto:lforde@ucc.edu.gh)  
0244786680

The bearer, Samuel G. Panti, Reg. No. EF/CHP/18/0010 is an M.Phil. / ~~Ph.D.~~ student in the Department of Education and Psychology in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He / ~~She~~ wishes to undertake a research study on the topic:

The impact of emotional intelligence on the psychological well-being of nurses at in-patient psychiatric hospitals in Ghana

The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/~~her~~ proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.

In view of the above, the researcher has been cleared and given approval to commence his/~~her~~ study. The ERB would be grateful if you would give him/~~her~~ the necessary assistance to facilitate the conduct of the said research.

Thank you.  
Yours faithfully,

  
Prof. Linda Dzama Forde  
(Secretary, CES-ERB)

## APPENDIX C

### ETHICAL CLEARANCE FORM FROM GHANA HEALTH SERVICE

**GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE**

*In case of reply the number and date of this Letter should be quoted.*

  
Your Health - Our Concern

MyRef. GHS/RDD/ERC/Admin/App/20/131  
Your Ref. No.

Research & Development Division  
Ghana Health Service  
P. O. Box MB 190  
Accra  
GPS Address: GA-050-3303  
Tel: +233-302-681109  
Fax + 233-302-685424  
Email: [ethics.research@ghsmai.org](mailto:ethics.research@ghsmai.org)

5<sup>th</sup> May, 2020

Samuel Gyandoh Pant  
Private Mail Bag  
Department of Education and Psychology  
University of Cape Coast

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	<b>GHS-ERC 043/02/20</b>
Project Title	Influence of Emotional Intelligence on the Psychological Well-Being of Psychiatric Nurses at Accra, Pantang and Ankaful Psychiatric Hospitals - Ghana
Approval Date	5 <sup>th</sup> May, 2020
Expiry Date	4 <sup>th</sup> May, 2021
GHS-ERC Decision	<b>Approved</b>

**This approval requires the following from the Principal Investigator**

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.
- Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....  
Dr. James Akazili  
(Head, Ethics & Research Management Department)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

**APPENDIX D**  
**INTRODUCTORY LETTER FROM THE DEPARTMENT OF**  
**EDUCATION AND PSYCHOLOGY**

**UNIVERSITY OF CAPE COAST**  
**COLLEGE OF EDUCATION STUDIES**  
**FACULTY OF EDUCATIONAL FOUNDATIONS**  
**DEPARTMENT OF EDUCATION AND PSYCHOLOGY**

Telephone: 233-3321-32440/4 & 32480/3  
Direct: 033 20 91697  
Fax: 03321-30184  
Telex: 2552, UCC, GH.  
Telegram & Cables: University, Cape Coast  
Email: [edufound@ucc.edu.gh](mailto:edufound@ucc.edu.gh)



UNIVERSITY POST OFFICE  
CAPE COAST, GHANA  
9<sup>th</sup> December, 2019

Our Ref:

Your Ref:

**TO WHOM IT MAY CONCERN**

Dear Sir/Madam,

**THESIS WORK**  
**LETTER OF INTRODUCTION**  
**MR. SAMUEL GYANDOH PANTI**

We introduce to you Mr. Panti, a student from the University of Cape Coast, Department of Education and Psychology. He is pursuing Master of Philosophy degree in Clinical Health Psychology and he is currently at the thesis stage.

Mr. Panti is researching on the topic:

**"INFLUENCE OF EMOTIONAL INTELLIGENCE ON THE PSYCHOLOGICAL WELL-BEING OF PSYCHIATRIC NURSES AT IN-PATIENT PSYCHIATRIC HOSPITALS IN GHANA."**

He has opted to collect or gather data at your institution/establishment for his Thesis work. We would be most grateful if you could provide him the opportunity and assistance for the study. Any information provided would be treated strictly as confidential.

We sincerely appreciate your co-operation and assistance in this direction.

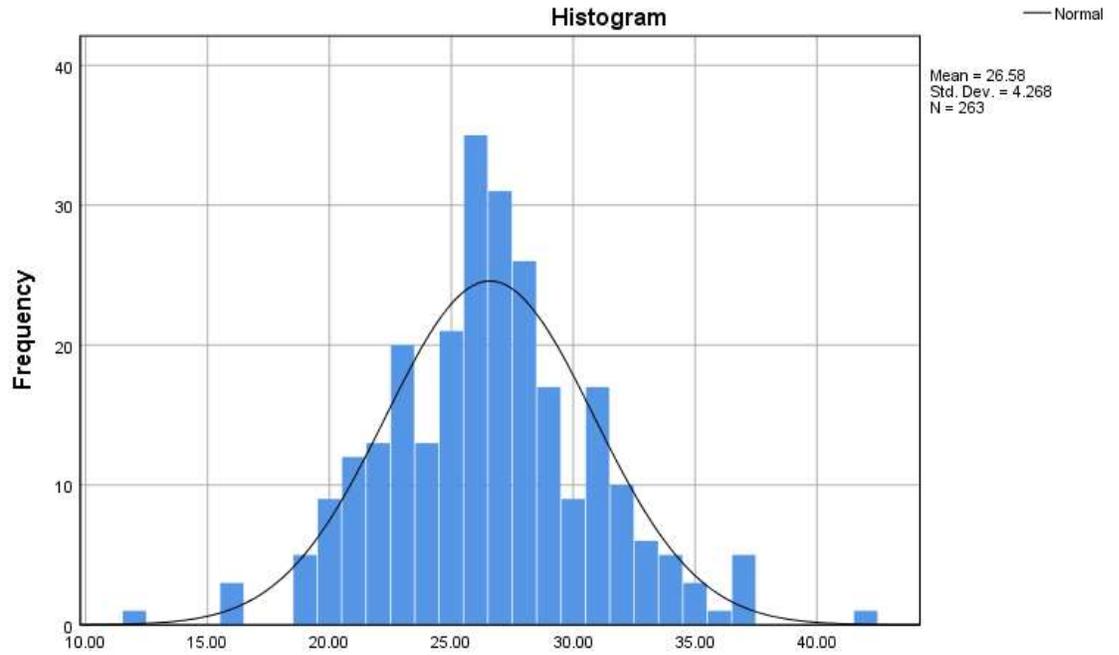
Thank you.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Theophilus A. Fiadzomor'.

Theophilus A. Fiadzomor  
Principal Administrative Assistant  
For: **HEAD**

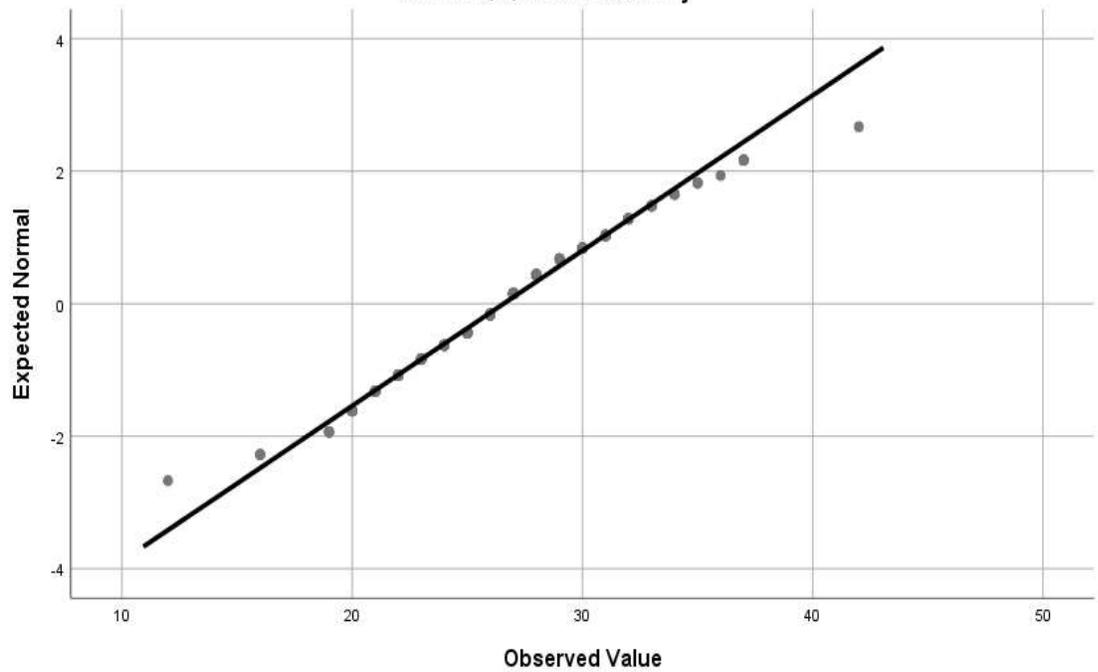
## APPENDIX E NORMALITY AND LINEARITY

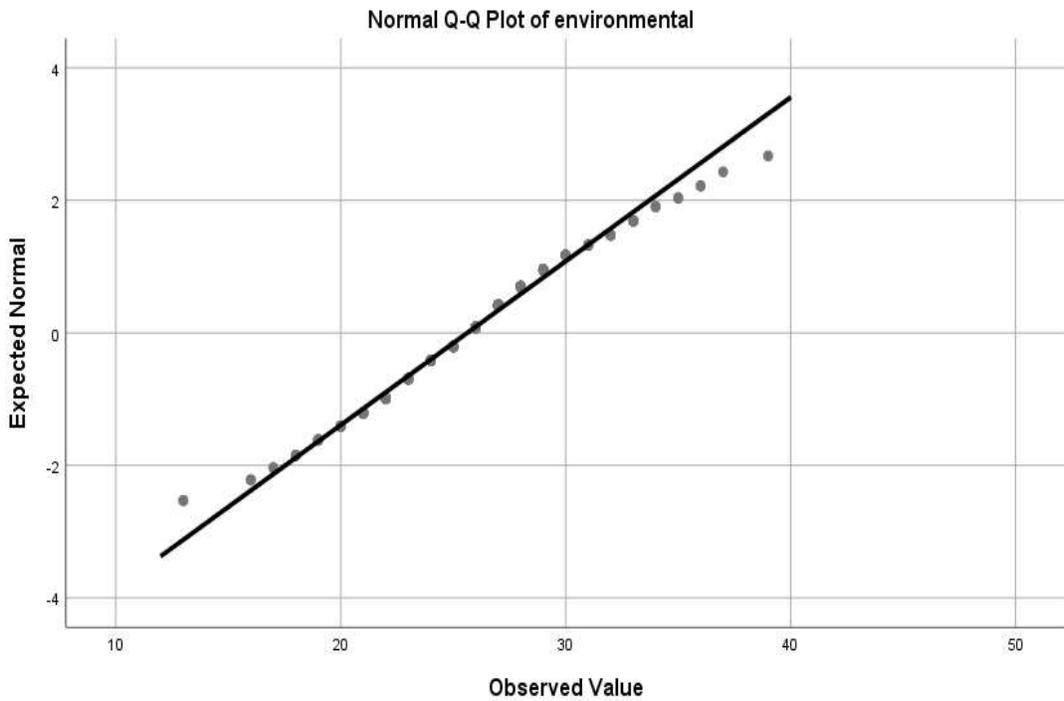
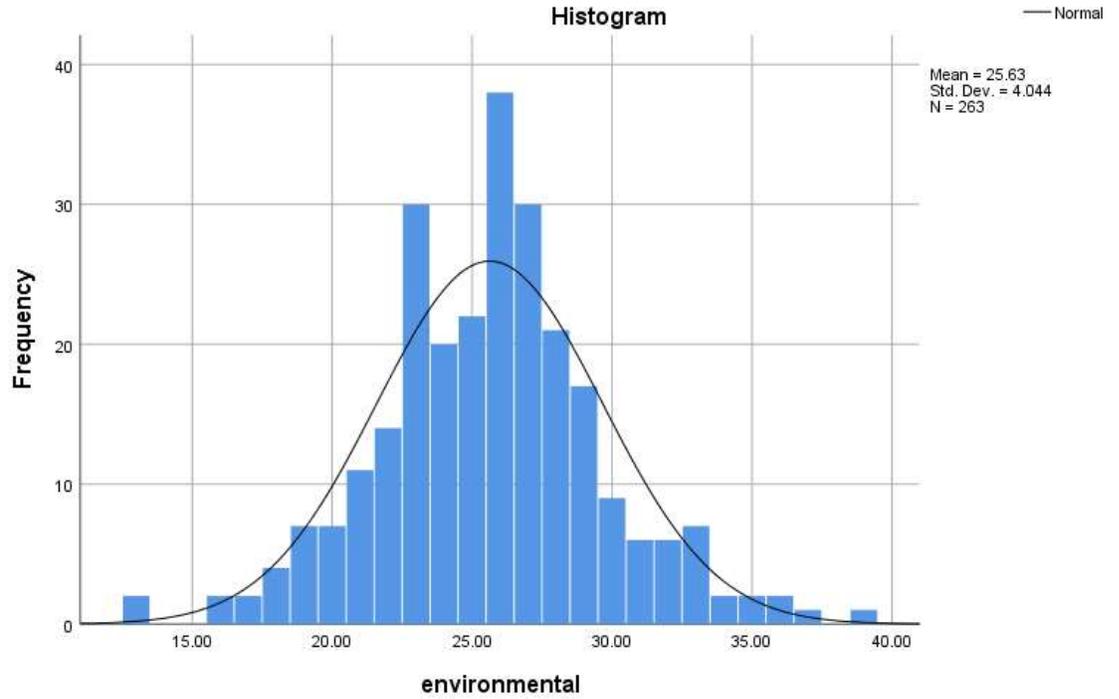


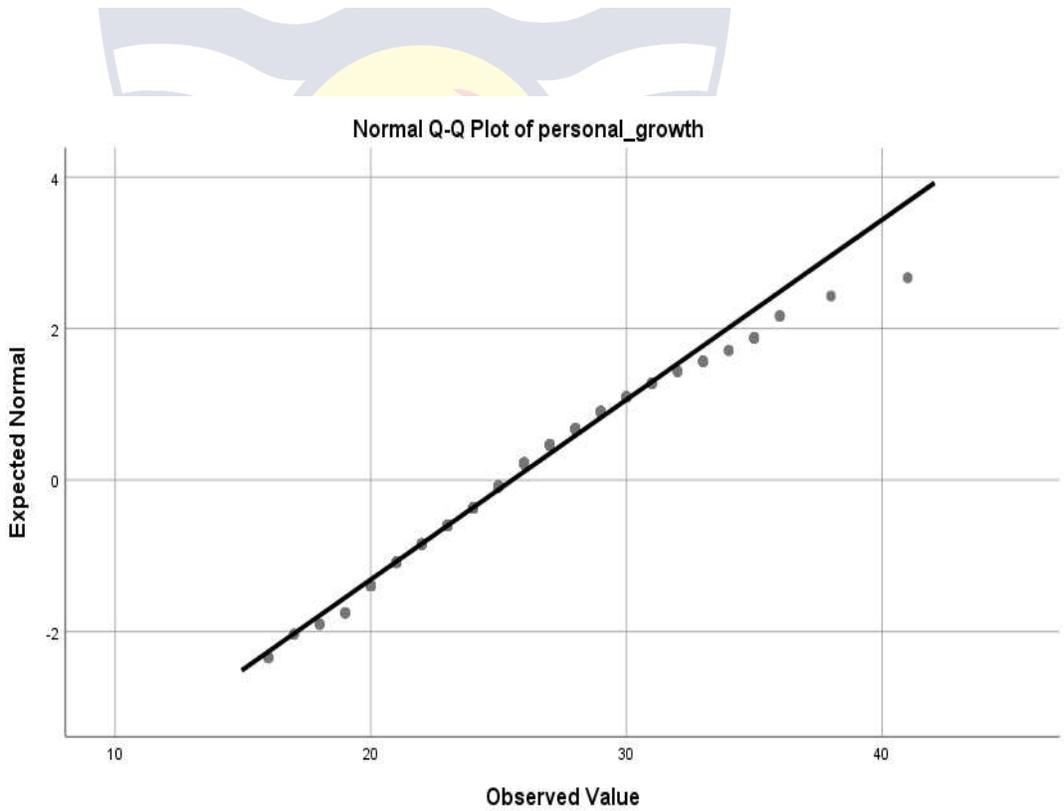
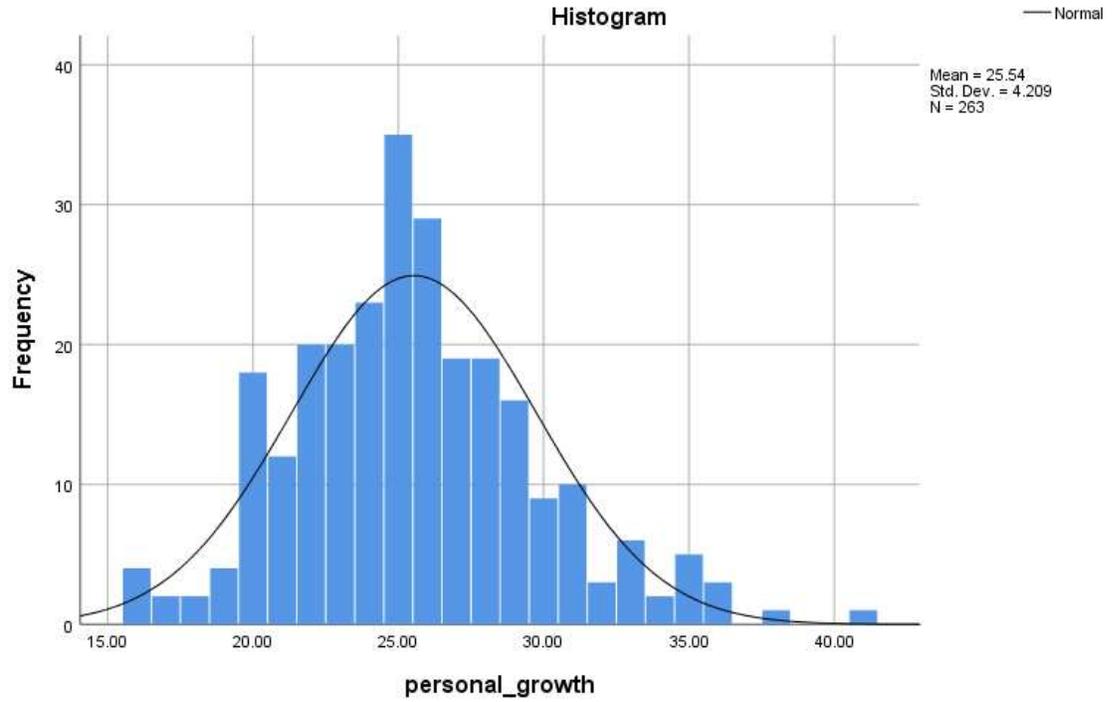
autonomy

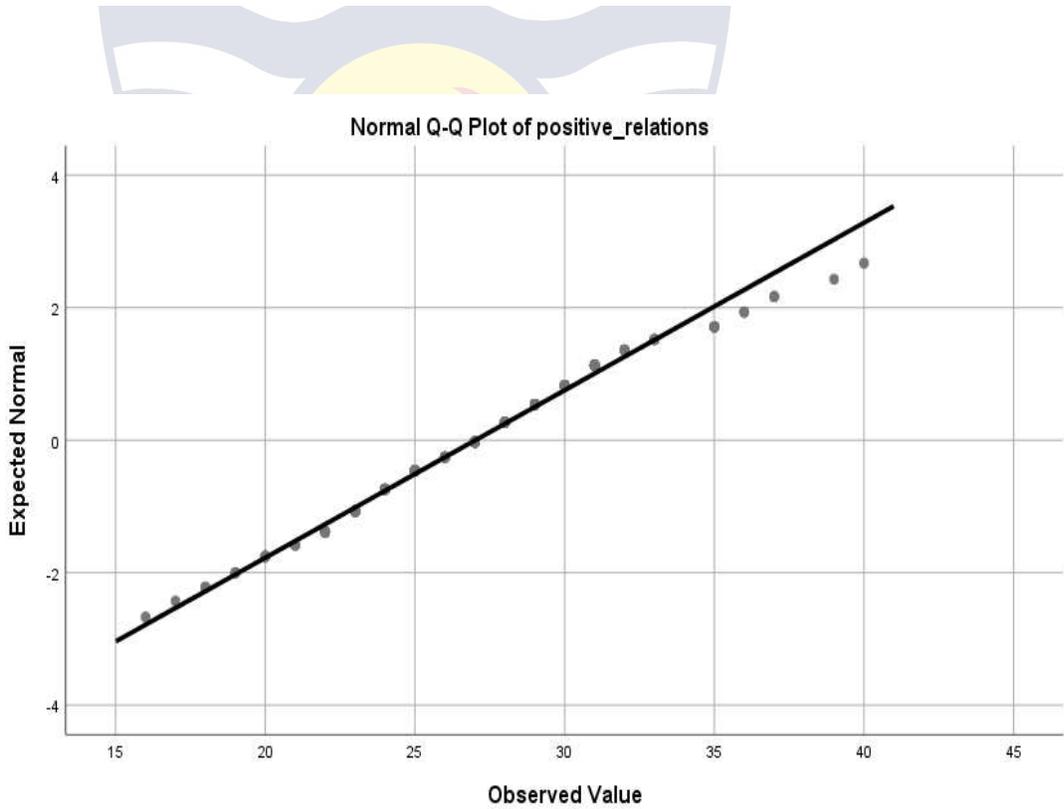
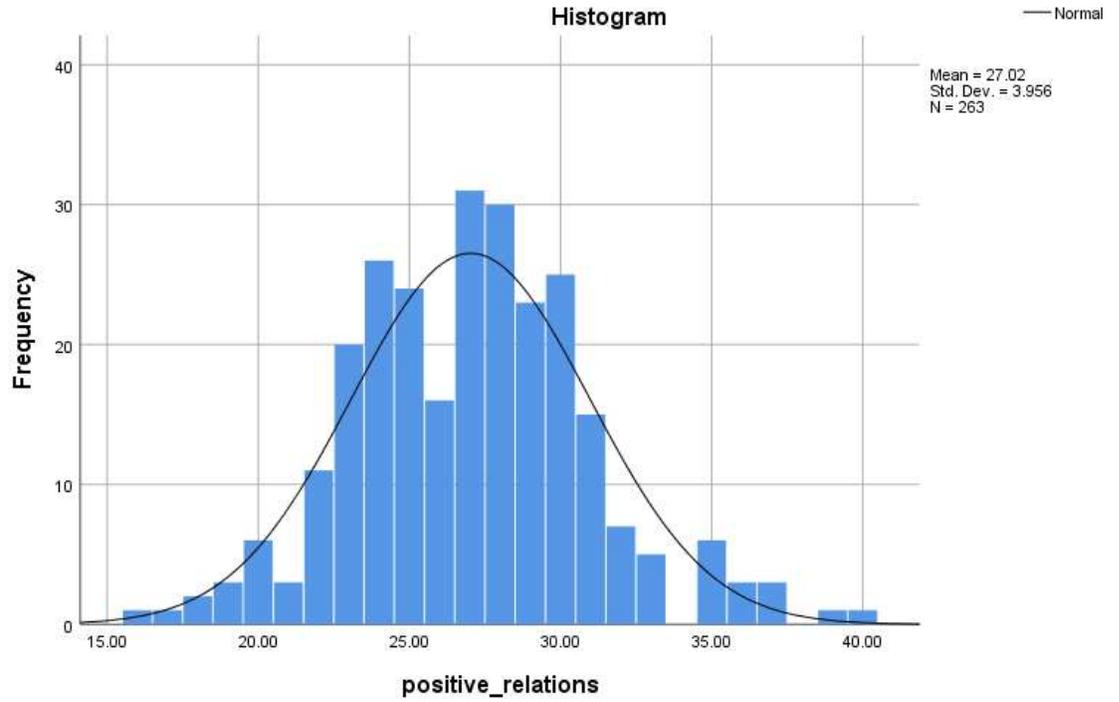


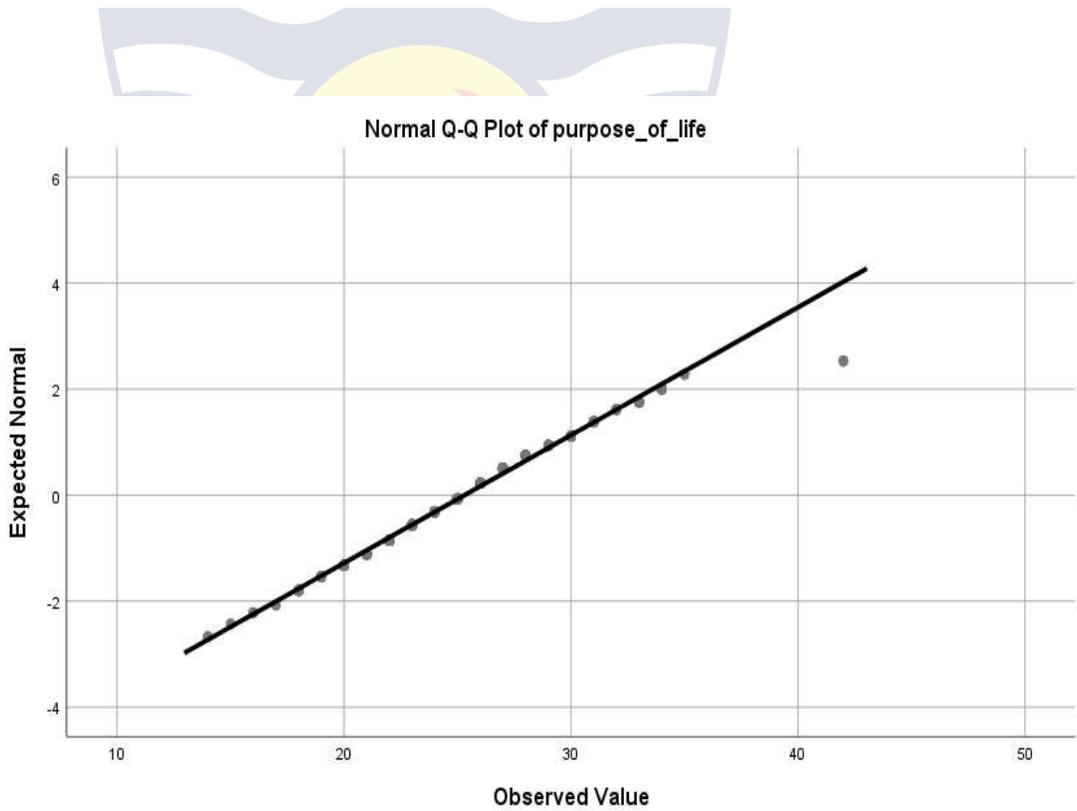
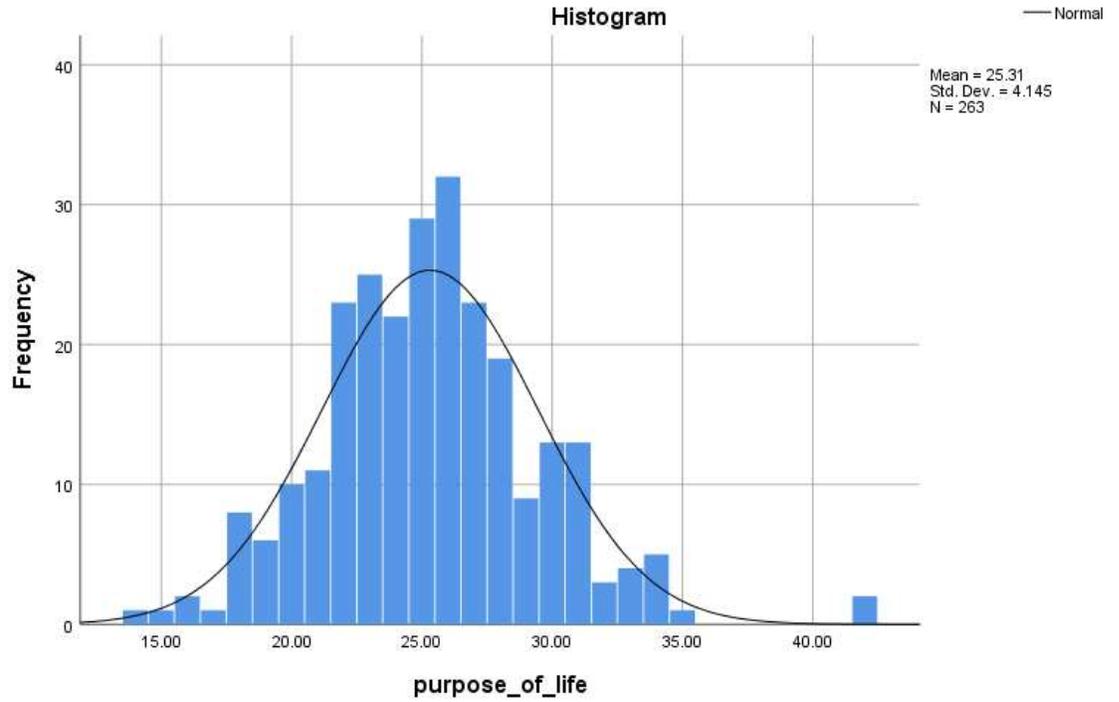
Normal Q-Q Plot of autonomy

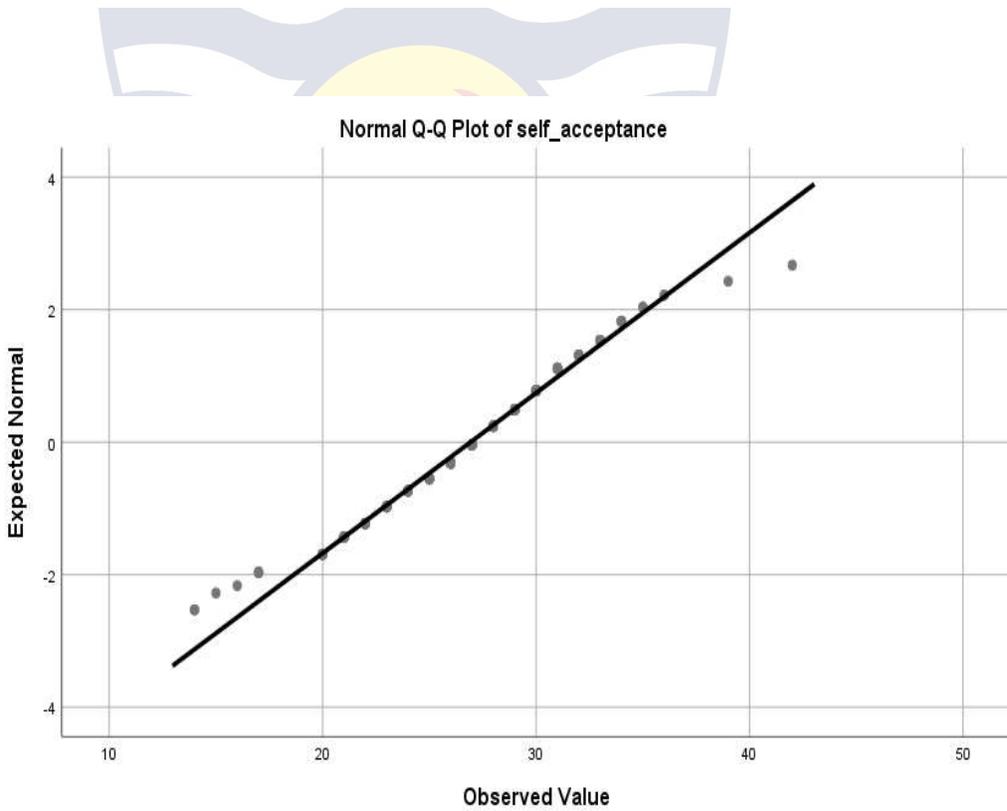
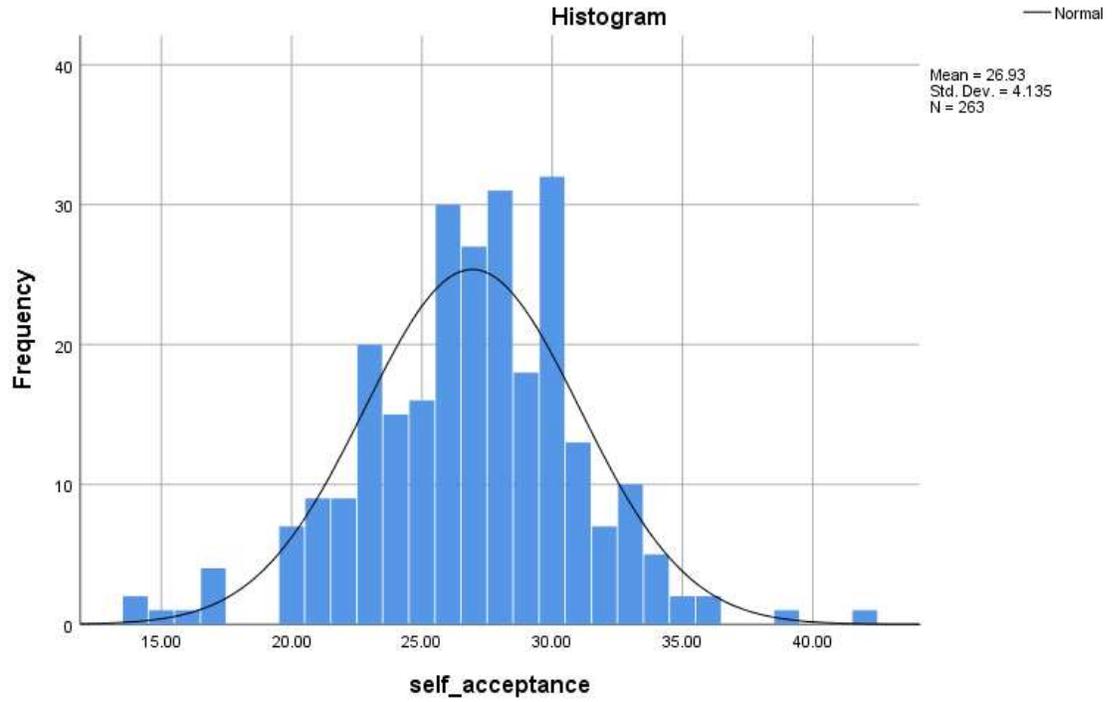






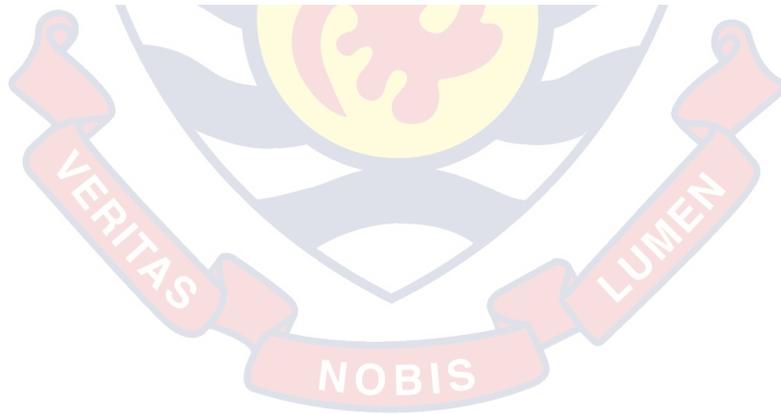
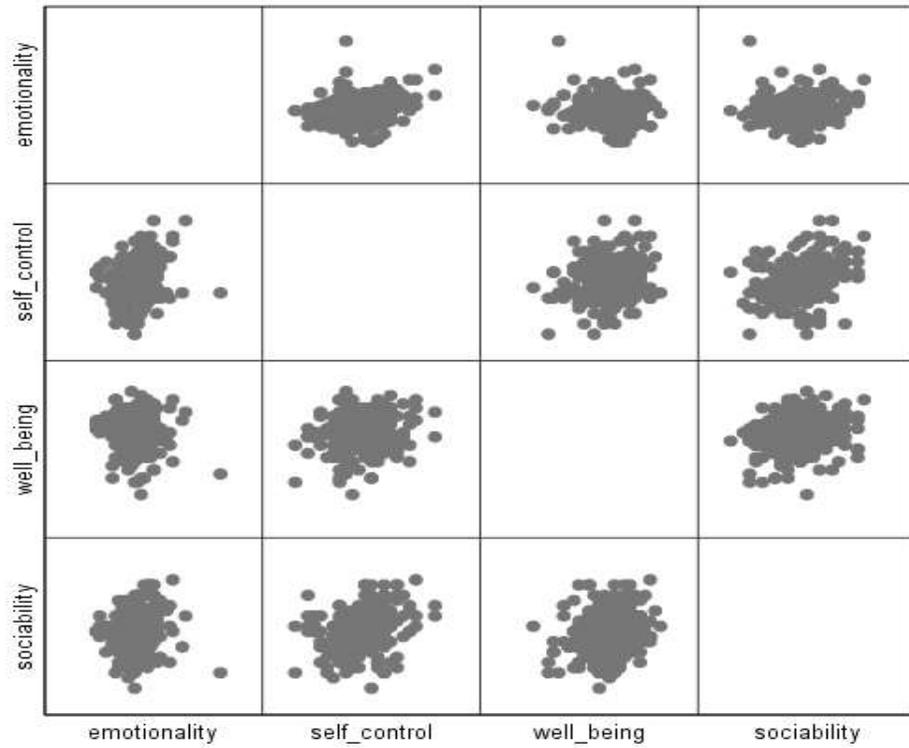




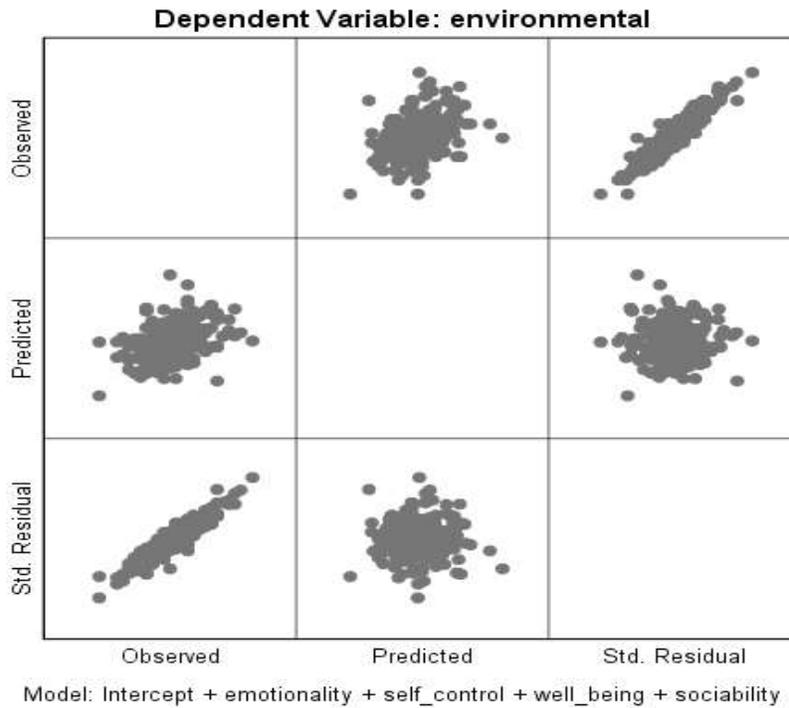
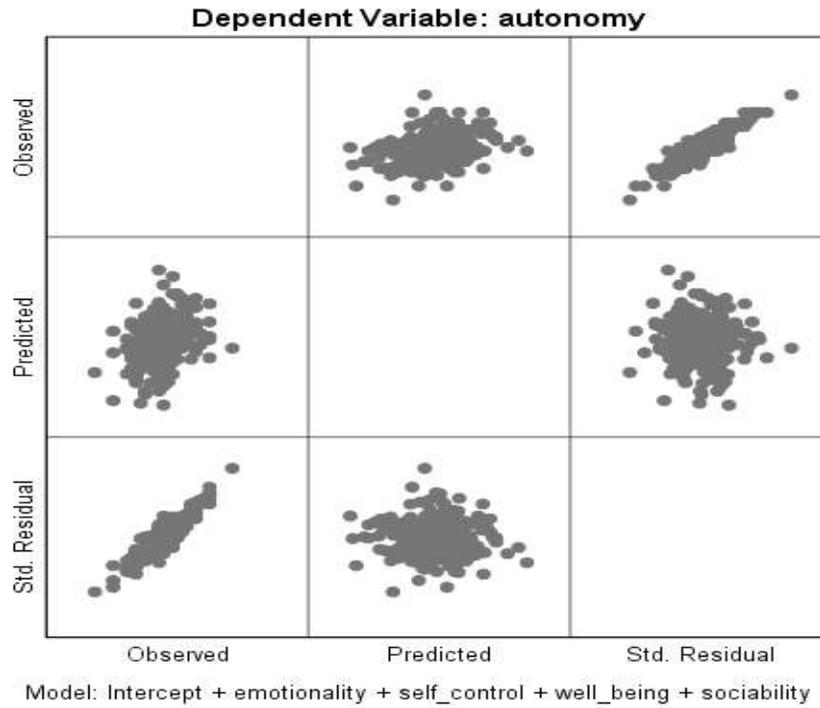


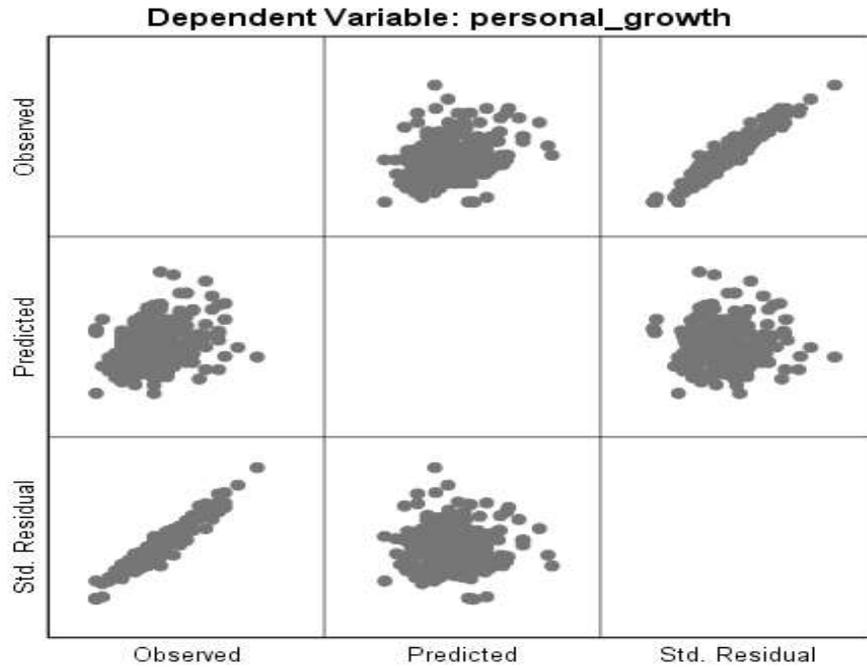
APPENDIX F  
HYPOTHESIS ONE

Multivariate normality

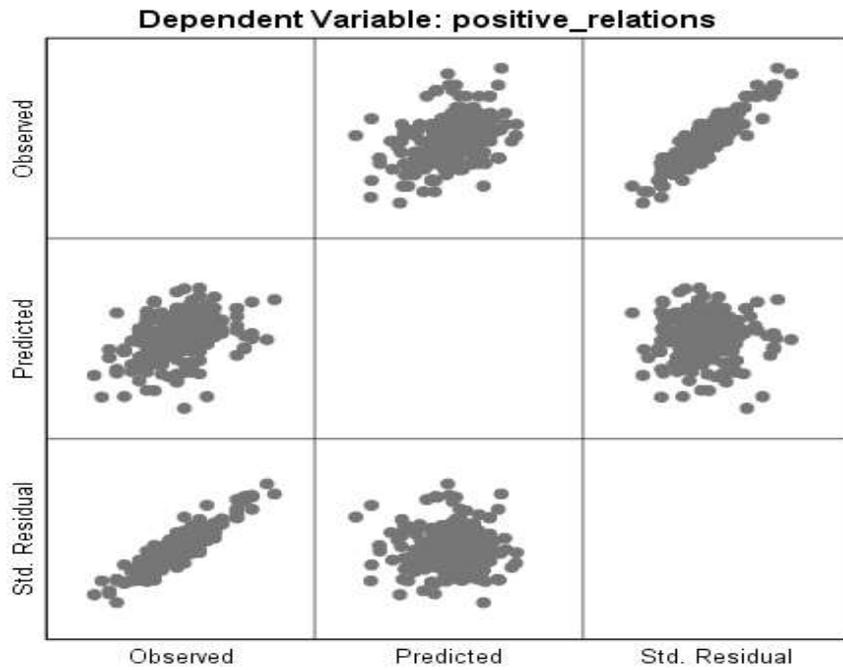


### Homoscedasticity & Autocorrelation





Model: Intercept + emotionality + self\_control + well\_being + sociability



Model: Intercept + emotionality + self\_control + well\_being + sociability

