PSYCHOSOCIAL PREDICTORS OF DEPRESSION, SUICIDALITY AND EFFICACY OF HYPNOTHERAPY AMONG BROTHEL- BASED FEMALE SEX WORKERS IN LAGOS METROPOLIS, NIGERIA

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CERTIFICATION

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DEDICATION

I dedicate this thesis to the memory of my Parents

Late Ichie (Engr) P. C. Okonkwo

(Oka-Omee Abagana)

And

Late Evangelist (Mrs) E. A. Okonkwo

And Sister

Late Ms Lois Ijeoma Okonkwo

May your souls continue to rest in peace with the Lord.

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ABSTRACT

In Nigeria, sex workers by nature of their job are exposed to high risks and multiple health hazards including mental health. However, little is known about their mental health challenges and consequences on the sex worker and the general public. This study was therefore designed to investigate the influence of perceived occupational stress, substance dependence, personality traits, age, duration of sex work, educational levels and efficacy of hypnotherapy on depression and suicidality among brothel-based female sex workers in the Lagos metropolis.

Beck's theory of depression and Klosky and May's theory of suicidality guided the study. The sequential exploratory design was utilised in three phases: exploratory, cross-sectional survey as well as pre-test and post-test quasi experimental design. In phase one, two Focused Group Discussions (FGD), three In Depth Interviews (IDI) and five Key Informant Interviews (KII) were conducted among brothel- based female sex workers, ex- sex workers and key informants. In phase two, 224 brothel-based female sex workers were selected using the Respondent-Driven Sampling (RDS) method. The Centre for Epidemiologic Studies Depression Scale (α=0.89), MINI Suicidality Scale (α=0.87), Sex Work Stress Questionnaire (α=0.98), The Severity of Dependence Scale (α=0.66), Alcohol Use Disorder Identification Test (AUDIT) (α=0.80), and the Big Five Personality Inventory-10 (Neurotism α=0.74, Extraversion α=0.83, Openness to Experience α=0.85, Agreeableness α=0.81 and Conscientiousness α=0.92), were administered**.** In phase three, 16 participants who scored high on depression and suicidality from phase two were randomly selected and assigned into experimental and control groups. Qualitative data were content- analysed, while quantitative data were analysed using zero-order correlation, multiple regression, one-way ANOVA, paired t-test and Independent sample t-test at $p \leq 0.05$.

Participants' age was $\bar{x}$=26.28±5.29 years. Prevalence for depression and suicidality among the sex workers were 42.9%, and 21.4% respectively. Pressure, frustration, conflicts, work load, insecurity, financial and health concerns were identified as domains of sex work stress. Occupational stress (r=0.18) age (β = 0.19, t=2.72), educational level (β = -0.14, t=-2.20), and duration of sex work (β = 0.24, t=3.48) independently predicted depression; while perceived occupational stress (R^2=0.07, F (7,216= 2.19):, severity of substance use (R^2=0.14,F (3,220) =11.46), Openness personality traits (β = -0.15, t=-2.07), age, (β = -0.15, t=-2.15), educational level (β = 0-.20, t=-3.02) and duration of sex work (R^2=0.07, F (3,220) =5.86) jointly predicted suicidality. Hypnotherapy was found to be positively effective in reducing depression (t (7) = -3.83)) and suicidality (t (7) = -9.92)) at post- test evaluation.

Occupational stress, age, educational level and duration of sex work are important predisposing factors in depression; while openness to experience, age, educational level influenced suicidality among brothel-based female sex workers in Lagos. Hypnotherapy is effective in reducing depression and suicidality and therefore should be considered in psychological management among brothel-based female sex workers in Lagos, Nigeria.

Keywords: Occupational stress, Psychological management, Sex workers in Lagos metropolis

Word count: 455

TABLE OF CONTENTS

CHAPTER THREE: METHODOLOGY

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

DSM: Diagnostic Statistical Manual

ICD: International Classification diseases

WHO: World Health Organization

OHS: Ordinary occupational health and safety

SW: Sex Workers

STIs: Sexually Transmitted Infections

HIV: Human Immunodeficiency Virus

UNAIDS: United Nations Programme on HIV/AIDS

ECS: Executive Control System's

OS: Occupational Stress

PTSD: Post-traumatic stress disorder

FSWs: Female Sex Workers

MDD: Major Depressive Disorder

GAD: Generalised Anxiety Disorder

DIS: Diagnostic Interview Schedule

UNODC: United Nations Office on Drugs and Crime

UNIDCP: United Nations International Drug Control Programme

CHAPTER ONE
INTRODUCTION

1.1. Background to the study

Clinical depression (CD) is a mood disorder marked by persistently low mood, excessive sadness, and loss of interest in pleasurable activities. According to the International Classification of Mental and Behavioural Disorders (ICD 11), symptoms of clinical depression include depression, suicidal ideation and self-harming behaviour, as well as sobbing and fatigue, sleep disturbances, low or decreased appetite, low focus and attention, and low self-esteem, suicidal thoughts, attempt or outright suicide. Four to five of these symptoms must be present in an individual for two weeks (DSM-5, 2017) or four weeks (ICD, 11, 2015; Parekh, 2017) before a clinical diagnosis is made. Suicide is twenty-five times more likely among those with depression than the general population. More than one in every ten people who are diagnosed with depression in their lifetime will take their own life. (Parekh, 2017).

Suicidal thought is part of the symptomology of clinical depression but could also occur as a diagnosable entity. Many studies have linked depression and the suicidal behaviour spectrum (Wanyoike, 2014). The researcher believes that in most cases, suicide is not sudden. Tendencies to commit suicide can be recognised over time. Suicidality is the chance that one will attempt suicide. The spectrum begins with suicide ideation/thoughts, suicide plan then attempts. Suicidal ideation or suicidal thoughts is described as a thought process involving planning suicide. It is a spectrum from a detailed plan to a transient consideration, and, in some cases, the individual attempts suicide. Suicide deaths were the fourth leading cause of death among Fifteen to Twenty-Nine-year-olds globally, with 77% of these deaths occurring in low and medium-income countries like Nigeria, where medical resources are scarce (WHO, 2021). The most economically active age group (15–44 years) has the highest mortality rate. (Adewuya, Ola, Coker, Atilola, Zachariah, *et al*. 2016). Lifetime suicide risk in people with untreated depression ranges from 2.2% to 15%. The majority of suicide attempts and suicide deaths happen among teens with depression. Between 15% - 30%

of teens in America with severe depression attempt suicide. According to the WHO (2022), for every suicide, there are about twenty who contemplate and many more who have thoughts of doing it. Nigeria holds the highest position in Africa for high rates and sixth in the world for depression. (Oyetunji, Arafat, Famori, Akinboyewa, Afolami, Ajayi and Kar), and thirteenth position in Africa for suicide. (Ogbolu, Mba-Oduwusi, Ogunubi, Buhari, Rahmond, Tade and Ogunsola, 2020)

Several factors have been identified as precursors to either depression or suicidality. Work-related stressors or occupational stress is one such factor. Occupational stress is the harmful physical and emotional responses that occur when the job requirements are perceived as toxic and generate ill emotions or health with resultant behavioural consequences (Forts, Tian and Huebner, 2020). It is the physiological effects of hostile activity in the workplace or the harmful impact inherent in the performance of a job or work (Olley, 2019). Long hours, high workload, job uncertainty, and interpersonal problems with co-workers are only a few factors contributing to occupational or work-related stress. Work-related stress can cause a decrease in productivity, sadness, anxiety, and difficulty sleeping.

Stress at work can lead to emotional and behavioural issues, which affect health, physical health, emotional stability, cognitive acuity, and satisfying relationships at work and home. Defensiveness, lack of excitement, trouble focusing, and accidents are all possible outcomes, as are lower performance and relationship friction. While sex work is often considered illicit, occupational health epidemiologists rarely view sex work as a form of work. In Nigeria, it is not considered an occupation (Essien., Vite, and Harry, 2021), but social scientists view sex work with its enormous social and psychological consequences as a hazardous occupation needed for empirical consideration. It has emerged that a wide range of ordinary occupational health and safety (OHS) issues potential is more of a problem for sex workers (SW) than STIs and HIV risk, which have been the focus of epidemiological studies. (Viswasam, Rivera, Comins, Rao, Lyons and Baral, 2021)

Personality generally refers to individual differences in characteristic thinking, feeling, and behaviour patterns. These long-standing traits and consistent thought patterns propel individuals to consistently think, feel, and behave in specific ways. Personality traits are traditionally considered dimensions of individual differences in tendencies to

show consistent patterns of thoughts, feelings, and actions across developmental periods and contexts (McCrae and Costa 2003). Personality dimensions include Type A and B personality, introversion/extraversion, psychoticism, neuroticism, and openness to experience. Personality differences have been implicated in diverse mental health issues, including depression and suicidality. Although the aetiology of depression and suicidality is multifactorial, personality is among the important characteristics that have been hypothesised to predict these mental health conditions.

In several populations, including trauma sufferers, personality disorders have been linked to poor depression outcomes and increased suicide risk (Newton-Howes and Tyrer, 2014). In particular, neuroticism, extroversion, agreeableness, conscientiousness, and openness to experience are the five factors that make up the five-factor model, which has been extensively researched and found to have an empirical link with different mental health conditions. A neurotic personality trait, which is the interest of this study, underscores the tendency to be sad and experience feelings such as anxiety, worry, fear, anger, frustration, envy, jealousy, guilt, depressed mood, and loneliness.

Individuals with neuroticism respond worse to stressors and are more likely to interpret ordinary situations as threatening with minor frustrations and hopelessness. They may be self-conscious and shy and have trouble controlling urges and delaying gratification. Extraversion is a personality trait easily recognised by sociability, conviviality, and assertiveness. Individuals with this trait engage in social activities like playing games and music and appear cheerful. This personality trait is less associated with distress during psychological trauma. Agreeableness refers to positive social behaviour conscientiousness, on the other hand, encompasses characteristics such as self-control, attention to detail, meticulous planning, and a drive to succeed. Individuals high on the openness quotient are curious about novel situations, concepts, and encounters. This study examined dimensions of personality related to sex workers and how they influence depression and suicidality of the workers.

Psychoactive substances such as alcohol, Tobacco and Opioids are common drugs of abuse among sex workers. They are sometimes used as a coping tool in the face of daily distress during sex work. Continuous use leads to addiction, as may be expected.

(Nelson, 2012). The term opioid refers to a diverse group of natural or semi-synthetic substances with a morphine-like pharmacological activity that binds to the Opioids receptors. Heroin is an example of an opioid. Opioids with synthetic precursors like fentanyl, as well as prescription opioids like oxycodone (OxyContin) and hydrocodone (Vicodin), as well as codeine, morphine, and tramadol, are all chemically connected.

Opioids act upon the central and the peripheral nervous system, and most have analgesic, mood-altering, "sleep-inducing" (hence "narcotic"), which make it potentially addictive. Generally speaking, the stressful environment, stigma, and psychophysical pains associated with sex work compel many sex workers to indulge in opioid use. Again, the euphoric and pain-relieving properties of Opioids make them a drug of choice among sex workers. Though consumption of illicit substances such as alcohol, opioids, cocaine, ecstasy, and marijuana have been reported among sex workers (Koob, 2000), alcohol and Opioids appeared to be the commonest use and abused substances among this population (Samenkovich, Chokanlingam, Schrrer and Panagopoulus, 2014). The relationship between opioid abuse and depression and the scanty information about its pattern among sex workers in Nigeria attract its empirical examination and, therefore, will be considered in this study.

Sex labour is one of the few occupations in history that have been around for a long time (Genesis.34:31; 38:15,) and one of the most demanding and dangerous (Rekart, 2005; Ross, Crisp, Mansson, & Hawkes, 2012). The exchange of money or goods for sexual services between men, women, and transgender people is sex work. (UNAIDS, 2005). Sex workers were previously addressed as prostitutes. According to Smith, 2013, the noun Prostitute is not a neutral term but gives the picture of a person with a layer of self-worth, drug use, integrity, cleanliness, and sexual functioning, which can be stigmatising in the least. Weitzer (2013) described six types of sex workers: Independent Call Girls/Escorts, Escort Agency employees, Brothel Employees, Window workers, Bar or Casino Workers, and Streetwalker. Other categories are the massage parlour sex workers, door knock or hotel sex workers, who go from one hotel to the other knocking on room doors to ask if their services are needed.

Other categories, according to Alobo and Ndiofon, 2014 are the survival sex workers, the bondage and discipline sex worker, the beer girl sex worker and the transport sex worker. Not mentioned by Alobo and Ndifon, 2014 is the increasing number of

cooperate sex workers who work within large establishments like banks, where they offer sex to persuade clients to patronise their organisation. Some sex workers also operate online by advertising their services through social media like Instagram, WhatsApp, and Face book among others. A new trend called 'Hook up', which was a term for non-relationship sex or sex without dating, is fast becoming a form of sex work because there is an exchange of sex for money or other material gains in many transactions. (Napper, Kenedy, and LaBrie, 2016)

Alobo and Ndifon (2014) listed ten types of sex workers to include, street prostitution, involving the sex worker standing at street corners to solicit customers. They are sometimes called hookers. These sets of sex workers differ significantly from indoor sex workers. Another mentioned is the escort/out-call prostitute who maintains a database for their clients. Another category of sex workers is sex tourists. These are more sophisticated in marketing as they maintain websites to connect with their clients. Another category they called the window or doorway sex workers is likened to the brothel-based workers. For the study, the brothel-based female sex worker is the focal interest of the researcher. While other sex workers constantly move from one location to another, the brothel-based sex worker is more stable in one location and easier to get them to participate in this study. They also seem to share similar characteristics, unlike other types of sexual activity.

While brothels accommodate a good number of female sex workers in Nigeria, there is a steady rise in young students and unemployed graduates who use sex to earn income as call girls or part-time sex workers (Onyeoku, Ngwoke, Eskay and Obikwelu, 2014). Sometimes, porters of hostels or hotel staff act as pimps and links between these groups of sex workers and their clients. Almost two-thirds of brothel and street sex workers are involved in other occupations like trading, hairdressing, and fashion designing. Brothels are in every part of major cities in Nigeria and offer the most affordable range of sex services. The current study concentrated on brothel-based female sex workers within the metropolis of Lagos.

Alcohol, just like opioids, has been documented as a drug of choice among sex workers (Jatau, Sha'aban, Gulma, Shitu, Kalid, Isa, Wada, & Mustapha, 2021). Alcohol, when used directly or with other drugs, perturbs cognitive processes and modifies neurotransmitters and hormonal systems, both of which have been linked to

the emergence of a wide range of mental illnesses (including depression, anxiety, and eating disorders) (Koob 2000). Depression is only one of many mental health issues linked to excessive alcohol usage (Olley, Odeigah, Kolawole & Mohammed, 2019), anxiety, and stress or psychological distress. Little is known about the pattern of alcohol use among sex workers in Nigeria, and this study investigated this.

According to Langham (2019), hypnotherapy uses relaxation, extreme concentration, and intense attention to achieve a heightened state of consciousness or mindfulness. The purpose of hypnotherapy, Langham further emphasised, is to bring about a desirable alteration in a person while in a trance. The hypnotherapy sessions generally focus on the induction of a relaxation response, the production of somatosensory changes, an expansion of awareness, ego strengthening, accessing and restructuring unconscious psychological processes, teaching self-hypnosis, and offering post-hypnotic suggestions for modified responses. (Alladin, 2010; Youssef, 2013).

Literature shows that hypnotherapy can be administered by a hypnotherapist who is certified, on the recipient individually, in a group or self-administered and has an impressive result. In a comparative study by Erfanian and Keshavarz, 2014 on the efficacy of Cognitive Behavioural Therapy (CBT), usually considered the gold standard for psychotherapy and Group Hypnotherapy on depression, Group Hypnotherapy was found to be more efficacious than Cognitive Behavioural Therapy on depression.

Research into the use of hypnosis in the treatment of depression is limited. In Nigeria, very little research has been done on using hypnotherapy to treat depression. One reason for this is that many clinicians believe that existing pharmaceutical and psychotherapy ways of treating depression are already effective, and all that is required is for more professionals to employ them. Some hypnotherapists may be reluctant to employ hypnosis to treat depression because of previously unfounded concerns that hypnosis may harm depressed people. However, numerous solid arguments for the use of hypnotherapy as an effective treatment for depression abound (Aladin, 2010, Youssef, 2013, Yapko, 2006). Yapko (2006) Some of the ways that hypnotherapy can help people with depression are by giving them a positive outlook on treatment, getting rid of multiple depressive symptoms like insomnia and rumination, and changing self-

organisational patterns like thinking, responding, paying attention, or perceiving in ways that contribute to depressed thinking and mood.

Many psychiatric diseases, particularly depressive disorders, have not been adequately studied regarding hypnosis as a therapy. However, new research results have shown that hypnotherapy effectively treats depression. Women with sleep onset insomnia were studied by Kirsch, Lynn and Rhue (1993); Schoenberger (2000), excluding those taking drugs or "seeing other professional services". Cognitive-behavioural treatments like hypnotherapy in this group would boost expected effects since the others utilised either relaxation methods, systematic desensitisation, or in vivo exposure, which are widely regarded as behavioural treatments. Group hypnotherapy was superior to group cognitive behavioural therapy in treating depression, which has long been considered the gold standard for effective psychotherapy. In 2014 (Erfanian and Keshavarz, 2014), hypnotherapy may have a bright future in treating depression, according to studies like this one.

1.2. Statement of Problem

Sex work (SW) represents a risky and vulnerable population group with myriad psychological distress due to hazards. Occupational evidence reveals that those who engage in sex work are highly exposed to violence, including physical/sexual intimate partner violence, poor working conditions, displacements due to police harassment, and injectable/non-injectable drugs (Ling, Wong, Holroyd, Gray. (2007) Coetzee, Jewkes, and Gray (2017), Duff, Sou, Chapman, Dobrer, Braschel, Goldenberg & Shannon, 2017; Coetzee, Bockley, Otwombe, Miloranovic, *et al*.,2018). For example, Coetzee *et al*. (2017) reported by female sex workers in Soweto, South Africa, lifetime non-partner rape and all rape violence in 55.5% and 62.4%, respectively. In the previous year, almost 66% of these sex workers in their business had been discriminated against, and almost two-thirds suffered poly victimisation (Coetzee *et al*., 2017). Similarly, Coetzee, Bockley, Otwombe, Miloranovic *et al.* (2018) reported that 68.7% and 39.6% of female sex workers reported severe depression and post-traumatic stress disorder. There is a significant prevalence of mental health difficulties among SWs, with factors such as workplace stress, trauma, and lifestyle cited as contributing causes (Grandey, 2000). Regarding mental health, 74% of American SWs had symptoms of significant mental diseases, but only 47% of Australian SWs met the criteria for post-traumatic stress disorder. In Hong Kong, 26% of SWs admitted to

having suicidal thoughts or making a suicide attempt. Ling et al (2007) reported that stress and burnout can result from the emotional toll of sex work.

Similar stories are reported in Nigeria, as Fawole and Dagunduro (2014) reported a 52.5% prevalence of sexual violence against prostitutes working in Abuja, Nigeria's capital. As vulnerable and stigmatised as they are, the general community of the same age does not usually expect sex workers to be in such good health. Though sex workers, due to the quasi-legal or illegal and stigmatising character of their trade, are not represented in the public health framework of occupational health, the enormous risk inherent in sex work as the vector of communicable disease, including STI and HIV transmission makes it an important empirical exercise for behavioural scientists (Duff *et al*. 2017). Studies in Europe and America show a high prevalence of alcohol use, alcohol dependence, stress, anxiety, and depression among commercial sex workers (Vanwesenbeeck, 2005). For example, in a sample of 96 sex workers, Vanwesenbeeck (2005) showed that 87 per cent of respondents reported having mild to severe depressive symptoms, while more than half (54 %) reported having severe present emotional distress. 74% of respondents have considered suicide at some point in their lives, while less than half (42%) have attempted suicidal ideation.

In addition, research by Pandiyan, Chandrasekar, and Madhusudhan (2012) showed a high rate of psychological morbidity among Indian sex workers who were also found to indulge in different forms of substance abuse. According to this study, 74% of the study population was using alcohol, 14% were using Opioids, while 2% used cannabis. A remarkable 74% of this population was suffering from depression due to the effect of these substances. While similar studies are absent in the Nigerian space, there is hardly any evidence that the situation is much different.

There is a relationship between personality traits and depressive symptoms. Depressive symptoms, in turn, are associated with personality changes that may be temporary or persistent. Characteristics that go hand in hand with introversion and extroversion are called "personality traits." particularly regarding assertiveness and positive emotions have been associated with suicidality. Some other researchers also found a relationship between social introversion, irritable temperament, and suicidality. (Pompey *et al*. 2008). Furthermore, Otigo *et al*. (2009) suggest that hostility, a common trait in cluster B personality disorders, is positively related to suicidality. In South Africa, depressive

symptoms were associated with experiences of forced sex and transactional sex and those involved in sex work-related occupations (Smith *et al*.2006). Similarly, Popoola (2013), in his study, found that most sex workers in Nigeria got into the profession to make money. As a result of their work, they face risks like poor health, the risk of getting sexually transmitted diseases (STDs), harassment from law enforcement, and a drop in social status culminating in severe psychological consequences. How these personality traits relate to depression and suicidality, especially among sex workers, remains an empirical consideration, and this study addressed it.

Literature is replete with psychosocial studies among sex workers given documented evidence, though findings vary in prevalence and pattern of depression and suicidality. Methodological and contextual factors regarding varied working conditions, legality/illegality of the trade, and mental health outcomes could explain these differences. Investigating Psychosocial and mental health outcomes among sex workers where their trade is illegal represents a significant knowledge gap, limiting understanding of sex workers' occupational outcomes in this setting. Given the paucity of epidemiological health research on the occupational stressors factors related to the physical and emotional health of sex workers were analysed in this study, depression and suicidality among sex workers in the Lagos Metropolis, Nigeria.

1.3. Research Questions

The study addressed the following research questions.

1. What is the prevalence of depression and suicidality among brothel-based female sex workers in the Lagos metropolis of Nigeria?
2. What psychosocial factors predict depression and suicidality among brothel-based female sex workers in the Lagos Metropolis of Nigeria?
3. Do age, duration of sex work and educational level influence depression and suicidality among brothel-based female sex workers in the Lagos Metropolis of Nigeria?
4. Is hypnotherapy effective on depression and suicidality among brothel-based female sex workers in Lagos Metropolis, Nigeria?

1.4. Purpose and Objectives of the Study

The general purpose of the present study was to investigate the psychosocial factors that predict depression and suicidality and examine the efficacy of hypnotherapy

among brothel-based female sex workers in the Lagos Metropolis of Nigeria. Specifically, the objectives were to;

1. Find the prevalence rate of depression and suicidality among female sex workers working in a brothel in the Lagos Metropolis.
2. Examine the psychosocial factors that predict depression and suicidality among brothel-based female sex workers in the Lagos Metropolis.
3. Explore the predictive roles of age, duration of sex work and educational levels on depression and suicidality among brothel-based female sex workers in the Lagos metropolis.
4. Investigate the effectiveness of hypnotherapy on depression and suicidality among brothel-based female sex workers in the Lagos Metropolis.

1.5. Statement of Hypotheses

The researcher for the study formulated eight hypotheses.

1. Occupational stress, personality traits, and severity of substance use will significantly predict depression among Female Sex Workers

2. Occupational stress, personality traits and severity of substance use will significantly predict suicidality among Female Sex Workers

3. Younger Female Sex Workers will have a significantly lower score of depression than their older counterparts

4. Younger Female Sex Workers will report lower scores on suicidality than their older counterpart

5. Age, duration of sex work, and educational level will significantly jointly and independently predict depression among Female Sex Workers

6. Age, duration of sex work, and educational level will significantly jointly and independently predict suicidality among Female Sex Workers
7. Participants in the experimental group will experience significantly lower scores on depression after exposure to hypnotherapy than their control group counterpart

8. Participants in the experimental group will experience significantly lower scores on suicidality after exposure to hypnotherapy than their control group counterpart

1.6. Relevance of Study

Despite the morality of sex work as an occupation, it is still a leading source of income, especially in low- and middle-income countries (Sulaimon, Muhammad and Shofoyeke,2018). Sex work is sometimes referred to as one of the oldest occupations. Despite the level of stigmatisation experienced by its practitioners, the trade continues to boom in the face of increasing economic hardship and recession. It is mentioned in the Bible as far back as Genesis, the book of beginnings. (Genesis.34:31, 38:15). Sex workers are part of the larger population. Therefore, it is a grave mistake to assume that neglecting them in health care plans will not boomerang on the general population at one point or the other. The relevance of this study lies in the fact that dealing with depression and suicidality in the population cannot be effective without giving adequate attention to vulnerable populations like sex workers, who have a higher prevalence rate of depression and suicidality than the general population. Studies on sex workers should be more than investigating their role in spreading sexually transmitted diseases like HIV, neglecting that the sex workers themselves are part of society and go through psychological distress even more than the general population. This is one relevance of the study.

Going by the literature, sex workers are a risky and vulnerable group experiencing a high level of psychological and social distress due to stigmatisation, insecurity, rape, violence and brutality from law enforcement agents due to the nature of their jobs. Coetzee (2018, 2017) reported that in South Africa, as much as 68% of sex workers are depressed. The story is not different in low- and medium-income countries like Nigeria, where prevalence rates of 41.8% for depression and 22.8% for suicidal ideation have been reported. (Beatie, Smilenova, and Krishnaratne, 2020). The relevance of this study also lies in the revelation of the public health implication of having a depressed and suicidal population of sex workers whose character traits are known to be the practice of risky sexual behaviours.

This study is relevant to legal and health policymaking in Nigeria. The official estimated number of sex workers operating in the country's space is not available, but

one key feature of the market for sex work in Nigeria is that female sellers, and male buyers dominate it. However, in recent times, the market structure in terms of the gender of sellers seems to be changing. Proper planning and mental health policy for sex workers cannot be carried out without adequate statistics. With the rate at which brothels are springing up and the heavy concentration of sex workers in their vicinities, most especially at night, it should be a concern if these are not regulated. This consequently poses a danger to the health of the working population and the country's sustainable development efforts. The census of sex workers in Nigeria will continue to be an illusion if the practitioners are stigmatised and discriminated against. The study brings to light the need to amend the policy on sex work to make the identification of sex workers easier.

Furthermore, mental health practitioners will benefit from this study. Management of depression and suicidality, particularly among the vulnerable and stigmatised population, requires more than conventional approaches. Creative dimensions are also needed to complement existing methods for better treatment outcomes. Hypnotherapy is creative psychotherapy and can be self-administered. For clinical psychologists who offer psychotherapy, hypnotherapy can be a medium for changing cognitive distortions implicated in depression and suicidality. Finally, this study adds to the body of knowledge and emphasises the need for further research on psychosocial factors that can predict depression and suicidality among prostitutes who work in brothels.

1.7. Operational Definition of Terms

The following are the definition of terms as used by the researcher in this study

Brothels: These are hotels dedicated to operations and activities of sex work

Depression: Constant sadness and a lack of desire to participate in formerly enjoyable activities are prominent symptoms of depression, which may also be accompanied by an incapacity to carry out everyday tasks for at least two weeks. (WHO). It was assessed using the Centre for Epidemiological Studies- Depression (CES-D-10). It was preferred because it correlated with the Centre for Epidemiological Studies-Depression (CES-D). The short attention span of sex workers was also a consideration.

Hypnotherapy: This is the induction of a sleep-like state using the power of suggestibility to alleviate psychological distress in individuals. It is induced by trained personnel using increased levels of focus and suggestibility

Severity of substance use: The extent of recurrent use of drugs or substances that cause significant clinical and functional impairment such as health problems, disability, and failure to meet primary responsibilities at work, school or home. It was measured using the severity of dependence scale (SDS)

Suicidality. - Suicidality is the probability that an individual will attempt suicide. The spectrum begins with suicidal ideation/thoughts and a plan and may progress to a suicide attempt. Suicidal ideation or suicidal thought is described as a thought process involving planning suicide. These thoughts can range from a detailed plan to a transient consideration and in some cases, places the individual at risk for attempting suicide It was measured using the suicidality sub-scale on the Mini International Neuropsychiatric Interview (MINI)

Opioid: The opioid is widely used for pain relief and can produce euphoria. These drugs are chemically related and interact with opioid receptors on the body and brain nerve cells. They are available legally on prescription.

Perceived Occupational Stress: This is the way sex workers perceive the strains due to the effect of their work or work environment. These include the strain of insecurity, conflict with other workers, poor income and other strains associated with stressful work.

Personality: This is the long enduring way people think, feel, and behave. It is their default mode for relating with other people. Relationships with other individuals are the most direct means of demonstrating one's character, which includes everything from one's mood to one's attitude to one's beliefs. It was measured using the Big Five Personality Inventory.

Psychosocial Factors: These represent traits that impact a person's mental or social health. A person's physical and mental health can be described in relation to their

environment. In this study, psychosocial factors considered are age, duration of sex work and educational level.

Age. Age is generally seen as the time an individual has lived on earth. For this study, age is seen in terms of young and old. Any participant whose age is below the mean age is considered younger, and those above the mean age are considered older.

Duration of Sex work: For this study, the duration of sex work is seen as the length of time in years that a sex worker has spent as a sex worker. For this study, duration was shown in categories of five years intervals. The categories were Less than a year to four years, Five years to Nine years, Ten years to Fourteen years, and Fifteen years and above.

Educational Level. Educational levels are the academic certifications obtained by the participants of the study. For this study, educational levels were recorded as Primary School Certificate, Ordinary level West African Examination Council (WAEC) Certificate or its equivalent, Ordinary National Diploma (OND), Higher National Diploma or Bachelor's Degree and above.

Female Sex Workers: These are people who engage in sexual activity in exchange for money or other material gains. They are different types of sex workers, but female sex workers who operate from brothels, referred to as brothel-based sex workers, are of interest in the study.

Control Group: Control group in research is used to establish causality by isolating the group from the effect of the independent variable. In this study, the control group was isolated from experiencing the effect of the hypnotherapy intervention.

Experimental Group: An experimental group in research is the group that receives the treatment a researcher wants to study. In this study, the experimental group received hypnotherapy as an intervention for the independent variables to be compared with the control group.

CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 Theoretical Review

2.1.1a Theories of Depression

Depression has been studied over the years through different theories based on psychology's significant schools of thought. Behaviourism emphasises how much a person's surroundings matter in influencing their actions. The focus is on observable behaviour and how individuals learn behaviour, as seen by classical conditioning, operant conditioning, and social learning. Behaviourism will therefore see depression as an individual's interaction with the environment. When the trigger is obvious, rationalise the condition as depression. The shortcoming of this is that many depressive episodes have no apparent cause.

On the other hand, psychodynamic theories see depression as directed anger, introjection of love object loss, severe superego demands, excessive narcissistic, oral, and anal personality needs, loss of self-esteem, and deprivation in the mother-child relationship during the first year. This perspective has had a tremendous influence on other theories of depression. However, according to McLeod (2015), the concepts in these theories are difficult to define and test scientifically and operationally.

The humanistic school of thought believes that people have specific requirements. Thus, Maslow (1962) believes that anything that frustrates self-actualisation, which is the essential need in the hierarchy of needs, can lead to depression. This study focused more on the cognitive theory of depression, which seems to have wide acceptability, mainly because its constructs are more precise and scientific. Particular attention was on Beck's theory of depression.

2.1.1b Beck’s Theory of Depression

Beck (1967) identified three mechanisms that he believed were responsible for depression. These are:

1. The cognitive triangle, comprised primarily of destructive, habitual ways of thinking,
2. Unhelpful mental models
3. Deficiencies in reasoning (faulty information processing)

He discussed the cognitive triad, which he referred to as the three types of negative thinking common in those suffering from depression. A person's gloomy outlook on life, the world, or the future is reflected in these views. People who suffer from depression often have a pessimistic and defeatist outlook on life because they feel powerless, unworthy, and useless compared to the rest of the world. People who are depressed believe that there is no hope for the future because they believe their lack of value will prevent their circumstances from improving. A person's negative outlook on their own life and the world around them affects their ability to process information and solve problems. They then construct an unfavourable self by obsessing over negative thoughts.

Anyone who has acquired the cognitive triad does not inevitably go on to suffer depression, but a negative self does increase the risk. For this negative schema to be activated in later life, a stressful life experience must first occur. Someone with a poor self-image is more likely to partake in illogical thought processes and to miss important details in favour of focusing on the parts of a situation that support their preconceived notions. Beck discovered "logical errors" or "flawed thinking" as a negative bias in information processing. They are self-defeating and usually lead to depression. These are:

1. Arbitrary inference, which is the tendency to draw a conclusion that is not positive in the absence of supporting evidence
2. Simplifying a complex problem down to its worst parts is called "selective abstraction."
3. The tendency to exaggerate the severity of an issue while downplaying the efficacy of a proposed solution
4. Personalisation, where adverse incidents appear to be blamed on them when they are not.

5. Conceptual Binaries in theory, these thoughts predispose and exaggerate the cognitive triad. Beck believes this way of thinking grows automatically and leads to depression.

2.1.1c The Hopelessness Theory of Depression

This theory explaining the aetiology of depression postulates that when people are continuously exposed to harsh conditions that they cannot control, they gradually begin to believe that such harsh conditions are inescapable, leading to a feeling of helplessness and hopelessness. Feelings of hopelessness will inevitably follow this pattern. A flaw in this approach was that it did not account for the fact that some people feel depressed in a stressful situation that they cannot change, while others do not (Abramson, Seligman, & Teasdale, 1978). In the beginning, it was to reform the learned helplessness theory and lean heavily on the attribution for explanations. (Abrahamson *et al*. 1978.) He predicted that people make causal attributions in three dimensions: from within to without, from stable to unstable, and from the world at large to particular events. in reaction to a bad life event, these attributions enhance their risk of depression. According to this revised idea (Richard, 2015), an undesirable occurrence was more likely to lead to depression if attributed to an internal, stable, and universal source.

For example, arguing with a friend may cause a depressed person to believe that their interpersonal skills (internal) are so bad that they will not ever improve (stable) and that this incident would have a negative impact on all of their other social relationships if they allow it (global). To put it another way, if an acquaintance's irritability (external) is attributed to a poor day (unstable) and the individual believes this is uncharacteristic of their previous social contacts (specific), they are less likely to develop depression (Kleiman, 2014).

2.1.2.a Theory of Suicide

Suicide has been explained psychologically in a variety of ways. For example, Shneidman (1985, 1993), Durkheim (1897/1951), Baumeister (1990), (Abramson *et al*. 2000; Beck, 1967), and Abramson and Abramson (Abramson and Abramson, 2000) all saw suicide as a result of excessive anguish (psychache). Suicide study and prevention have significantly benefited from these notions. Suicidal thoughts and suicidal behaviour, however, have one aspect that may be stifling progress in understanding

suicide: these theories fail to distinguish between these two phenomena. When one considers that most people who acquire suicidal thoughts never attempt to take their own life, this distinction is critical (Klonsky & May, 2014; Nock *et al*., 2008).

2.1.2b The Three-Step Theory (3ST) of Suicidality

Klonsky and May (2014) argued that an "ideation-to-action" approach should guide suicide theory, research, and prevention. There are two separate phases: (a) having suicidal thoughts and (b) going from suicidal thoughts to actual suicide attempts. They came up with a theory that examines suicide from an ideation-to-action perspective. The Three-Step Theory was the name given to it (3ST). People with suicidal thoughts are said to have a combination of pain and despondency. For those who have both anguish and despondency, connectivity is crucial in keeping their thoughts from spiralling out of control. The third section describes how progress is achieved from ideation to attempted suicide through the contributions of dispositional, acquired, and practical elements. Using Amazon's Mechanical Turk, Klonsky and May administered self-report measures to 910 adults in the United States (increased sample size for past attempts and ideation records). The findings confirmed the theory's fundamental assumptions. Pain and hopelessness were discovered to play a significant role in a person's suicidal thoughts. Men and women of all ages (i.e., ages 18–25, 26–35, and 36–70) showed the same results. People experiencing a lot of anguish and hopelessness tended to be more socially connected. Finally, a person's suicidal thought history can be predicted by a person's dispositional, acquired, and practical components of suicidal capacity.

Step 1: Development of Suicidal Ideation

According to experts, pain is thought to be the initial stage of suicidal thoughts. Pain is often, but not always, a symptom of emotional or psychological distress. To a large extent, people are moulded by their experiences and interactions with others. Behaviours that are rewarded are performed, while penalised are avoided. Painful daily experiences can make people feel that they are being punished for being alive, which can decrease their will to live. Suicidal thoughts begin to form as a result. An unspecified ache is being felt. For example, electric shock, loud noises, noxious odours, and social exclusion (Alexander *et al*., 1973), as well as other forms of

corporal punishment (Watson & Rayner, 1920), are all examples of how punishment can influence behaviour (Tanner & Zeiler, 1975).

Furthermore, any pain or unpleasant input that is severe enough can impair one's will to live (Mazur, 2012). Physical discomfort (negative self (Ratcliffe et al., 2008), social isolation (Durkheim, 1897/1951), feelings of being a burden to others and a lack of connection (Joiner, 2005), feelings of helplessness and being trapped (O'Connor, 2011), (Baumeister, 1990) are only a few examples. To put it simply, suicidal thoughts are triggered by grief and despair.

A person's suicidal thoughts are not triggered solely by pain. People with chronic pain are more likely to focus on the potential for a better future if they hope to improve their current circumstances rather than the possibility of ending their own lives. This is why suicidal ideation is also a result of hopelessness. Suicide is a viable option for those in constant agony and hopelessness. Suicidal thoughts begin to take hold. Distress and despair are common causes of suicide attempts (May & Klonsky, 2013).

Step 2: Strong Versus Moderate Ideation

The second step toward potentially lethal suicidal behaviour involves connectedness. Connectedness can be to people, a job, a project or a sense of purpose. Connectedness, when significant, keeps suicidal ideation at a moderate level. The individual with persistent pain may harbour suicidal ideation, but connectedness greater than the pain will keep the ideation at a moderate level and not progress to a suicidal attempt. However, high levels of pain and hopelessness with low levels of connectedness will result in intense suicidal ideation and an active desire for suicide

Step 3: Progress from Ideation to Attempt

After the pain and hopelessness factors are satisfied with a low level of connectedness, the third step is attempted suicide. Joiner (2005) opined that the key determinant is whether the individual can commit suicide. According to Joiner, the human body and mind are hardwired to protect themselves from physical and mental harm. Due to this, even when people are experiencing acute suicidal ideation, it is difficult for them to attempt suicide. Joiner emphasises skills that are learned. An individual's acquired capability increases after exposure to traumatic events like physical abuse, self-

inflicted injuries that were not intentional, and the deaths of close loved ones by suicide and events that inflict pain on the individual.

Three main variables influence a person's ability to commit suicide: dispositional, learned, and practice-based factors. Pain sensitivity (Young, Lariviere, Belfer, & Czajkowski, 2012) and blood fear are examples of dispositional traits predominantly influenced by hereditary. Thus, for instance, People who cannot feel pain as much are more likely to try to kill themselves. The contrary is that one born with a low threshold for pain or phobia of blood will have a lower capacity. Indeed, new findings have shown that genetics play a significant role in capability for suicide. (Smith *et al*., 2012). Adoption of factors, including habituation to pain, injury, terror, and death-related experiences, can also lead to an increased propensity to take one's own life.

To paraphrase the 3-step hypothesis, individuals with significant suicidal thoughts will only end their lives if and when they can due to dispositional, acquired, and practical variables in their lives. Practical factors are the knowledge of and access to tools that can cause death like guns or substances that can cause death. Another example is anaesthesiologists and other medical professionals whose suicide rates are elevated because of their knowledge of and accessibility to different drugs. (Swanson, Roberts, & Chapman, 2003).

2.1.3a Occupational Stress

Theories of Work-Related Stress

Several theories have attempted to explain work stress and general stress extensively. These theories are aimed at helping leaders and managers better understand the dynamics of stress and how to manage it better.

2.1.3b Transactional Theories of Work-Related Stress

According to the most widely used transactional theory, stress is directly linked to the interplay between an individual and their environment, which may strain their abilities and put their well-being at risk (Lazarus 1986, Lazarus & Folkman, 1987). As a result, a more recent version of this theoretical model implies that this interplay gives rise to this theory. This interplay in terms of psychological and physiological processes is known as stress. The findings of Lazarus *et al*. (2001) suggest that, as a result, the

individual's perception of the work environment can make it appear to be a source of stress. However, various elements, such as personality, situational demands, coping skills, past experiences, and time-lapse, might affect an individual's assessment of expectations and capabilities. On the other hand, stress merely impacts how a person interprets and assesses its sources. (Ganster & Rosen, 2013).

Experiencing occupational stress is linked to a person's exposure to specific job events and their judgment of their ability to cope. Relying on a transactional theory, Cox (1993) provided an altered version of that theory that depicted the source of the stressor and the views of those stressed concerning his/her ability to deal with it, along with the psychological and physiological changes that come from this process.

2.1.3c The Revised Transactional Model of Occupational Stress and Coping

Goh, Sawang, and Oei's (2010) revised transactional model of occupational stress and coping builds on Lazarus' (1986) transactional theory of stress and coping. Karasek's (1996) JDC theory of job demands and employee responses (Karasek, 1979) was used to demonstrate how individuals perceive and deal with work-related stress. The individual gets in contact with the stressor and assesses or appraises his or her experience of it. He or she then goes on to assess the risk, and then coping strategies are put in place to respond to the stressor. Finally, the model also outlines how immediate outcomes and outcomes after 2 to 4 weeks are involved throughout this stress and coping process.

Stressful situations can majorly impact an individual's perception of stress and its associated outcomes, as demonstrated by this process. According to this paradigm (Ficková, 2002), emotions play a role in a person's coping technique. Specifically, this model claims that stress, coping, and the development of negative outcomes can occur at various stages related to stress in the workplace and how employees deal with it, including both cognitive and behavioural responses.

2.1.4 Five-factor theory of personality. (Digman, 1990)

The "five factors" or "Big Five" hypothesis provides modern psychologists with a comprehensive and scientific framework for analysing personality traits (Digman, 1990). The idea is based on a five-factor model in which generalisable attributes are

linked to generalisable categories of personality traits, with separate categories linked to various behavioural features. The five-factor personality model has been carefully considered because, despite its relative youth, it has proven to be one of the most useful and widely applicable frameworks for researching people's unique traits (Digman, 1990). Goldberg (1993) used Digman's (1990) five-factor model of personality and applied it to the executive suite. According to Russell and Karol (1994), the Big Five characteristics can also be understood in terms of the global aspects of personality.

To be extroverted is to have a substantial interest in the external environment. Extroverts are gregarious, inquisitive, and confident in establishing the unknown (Ewen, 1998). (Ewen, 1998). Character qualities related to extroversion include talkativeness, assertiveness, excitability, friendliness, and enhanced affective expression. Extroverts are the most daring of personalities, eager to accept any obstacle. The reverse of extraversion is introversion. Individuals who identify as introverts tend to be more reserved, reticent, thoughtful, and low-key in their social interactions. Their isolation in the public sphere has always been read as a symptom of despair or shyness when neither of those emotions is at play. Compared to extroverts, introverts demand more alone time and require lower amounts of stimulus (Ewen, 1998).

Agreeableness is a metric used to assess a person's social compatibility and general amicability. The desire to be pleasant and accommodating in social situations reflects individual variances in caring about fostering cooperation and social harmony (Graziano & Eisenberg, 1997). They have a positive outlook on humanity and are characterised by empathy, consideration, friendliness, generosity, and helpfulness. They are more confident in the general public's honesty, decency, and trustworthiness and less likely to feel the sting of social exclusion (Bierman, 2003). Further, while most people are more willing to aid their own family or those they empathise with, evidence suggests that pleasant people will help even when neither of these factors is present (Graziano, Habashi, Sheese, & Tobin, 2007). (Penner, Fritzsche, Craiger & Freifield, 1995).

Researchers identified a correlation between the conscientious personality trait and traits like organisation, thoroughness, planning, and impulse control in their subjects.

In no way is this similar to the issues with impulse control that characterise neuroticism. Individuals with low levels of conscientious self-discipline lack the motivation to undertake a task that they would like to accomplish, which is conceptually comparable but empirically separate from those with high levels of neurotic impulsiveness, as observed by Costa & McCrae (1992). Similarly, Goleman (1997) noted that many conscientious behaviours are examined by self-reported integrity tests offered by various organisations. These exams often target a broad range of emotional intelligence skills. For example, many studies have found that conscientiousness is a strong indicator of job success since it predicts reliability, motivation, and effort in the workplace (Salgado, 1997).

Neuroses, which include phobias, sadness, and panic disorder, are all forms of "internalising" mental diseases (Hettema, Neale, Myers, Prescott, & Kendler, 2006). An ongoing propensity to experience unpleasant emotional states and sensations, including anxiety, wrath, guilt, and low mood, is characteristic of neuroticism (Bradshaw, 1997), a personality trait with a generally pejorative connotation (Matthews & Deary, 1998). Goleman (1997) observed similar results, concluding that these people have a diminished ability to cope with stress, are more inclined to see harmless circumstances as dangerous, and are more likely to attribute insurmountable significance to minor irritations. They may have difficulty regulating their emotions and waiting to feel pleasure. Low emotional intelligence includes difficulties with self-regulation, motivation, and social skills, all of which are negatively correlated with neuroticism.

Higher levels of neuroticism are associated with increased emotional responses in stressful conditions (Van Heck, 1997). Moreover, instead of more direct methods, they resort to denial, wishful thinking, and self-criticism as coping mechanisms (Bolger, 1990; Heppner, Cook, Wright, & Johnson, 1995; McCrae & Costa, 1986). Those high in neuroticism are more likely to experience the symptoms of burnout because of their inability to deal effectively with stressful events at work (Bakker, Van der Zee, Lewig & Dollard, 2006). High levels of neuroticism have been linked to impaired emotional regulation, which can lead to impaired cognitive functioning, poor decision-making, and ineffective stress management. Higher neuroticism is associated with greater resilience (Jeronimus, Riese, Sanderman, & Ormel, 2014; Jeronimus, Ormel, Aleman,

Pennix, & Riese, 2013); nevertheless, neuroticism can fluctuate in reaction to both positive and negative experiences (Jeronimus, Riese, Sanderman, & Ormel, 2014; Jeronimus, Ormel, Aleman, Pennix, & Riese, 2013). In contrast, those who score low on the neuroticism measure are less prone to emotional upheaval and display fewer outward signs of reactivity. These people are also more likely to be psychologically level-headed and free of chronic negative emotions (Dolan, Garcia, Cabezas, & Tzafrir, 2008).

The degree to which a person is receptive to new information and willing to modify their beliefs and behaviour in light of it is a measure of their "openness to experience," also known as "intelligence" or "intelligence/imagination" (Goldberg, 1993; McCrae & John, 1992). Characteristics associated with this category include a broad range of interests, creativity, introspection, sensitivity to one's emotions, a penchant for novelty, and a thirst for knowledge (Costa & McCrae, 1992). Academic research has found that people open to new information are more likely to hold progressive political views and accept people from diverse backgrounds (McCrae, 1996; Jost, 2006). Therefore, they tend to be more accepting of people of all backgrounds and ways of life. Ethnocentrism and right-wing authoritarianism are less prevalent among them. Regarding mental health, openness does not correlate with either neuroticism or anything else. Being receptive to new information and open to new experiences are only two distinct ways of interacting with the universe (Butler 2000).

Even among at-risk groups like sex workers, the attributes described by the five-factor model of personality (conscientiousness, agreeableness, neuroticism, openness to experience, and extroverts and introverts) are evident.

2.1.5 Theories of Hypnotherapy

2.1.5a Social Cognitive Perspective

Robert Kegan's writings set the stage for what would become known as the social cognitive approach (1941), which first established that hypnotic response is goal-directed. The operator defines and understands the subject's most general aim as acting like a hypnotised person during the session, which is what White calls "meaningful, goal-directed striving." Instead of adopting the later social cognition theories, White maintained that hypnotic behaviour is associated with altered consciousness and subliminal cognition.

The socio-cognitive theorists believe that hypnotic experiences and behaviours are related to other complex social behaviours in a subtle sense, despite their differences in emphasis and focus. Both hypnotised and non-hypnotised people act according to their goals and interpretations of proper behaviour and sentiments, regardless of the state of hypnosis (Lynn and Rhue, 1991). There are several ways hypnotherapy may help one achieve their goals, and this is one of the most effective ways it is done. Cultural, individual, and interpersonal factors play a role in hypnotic responses. Hypnosis occurs inside a cultural environment that has developed over time and been given specific meanings. Common hypnosis beliefs include those outlined in surveys by McConkey (1986), Wilson *et al*. (1986), Green *et al*. (2005) and McConkey (1986). An altered state of consciousness, powerful influence, and docile and responsive subjects are only a few characteristics of those who can be put into hypnosis.

During hypnosis, hypnotised patients are never genuinely unable to control their behaviours. As a result, they tailor their skills to meet the needs of the moment rather than vice versa. Hypnotherapy patients are thereby invested in completing the requirements of what they see as the hypnotic role, although their answers often represent neither simple compliance nor role-playing absent authentic experiences of proposed events. Theorists of social cognition do not dispute that hypnosis frequently results in significant shifts in a person's state of mind. They differ from classic state theorists, however, in that they view the experience of being in a different state as only one of many subjective impacts of suggestion. Instead, they contend that the hypnotic induction's response-enhancing effects result from elevated levels of drive and expectation (e.g., Barber, 1969; Braffman & Kirsch, 1999).

Hypnotic experiences, like many complex social experiences, are the result of a variety of factors, including abilities, attitudes, beliefs, and expectations, as well as attributions and interpretations, as well as the relationship in which the behaviours take place and the way people want to be perceived by others. Because of their importance in hypnotic response, these characteristics are referred to as "social cognitive". These theories include social-cognitive, social-psychological, and cognitive-behavioural approaches to cognition. Hypnotic effects, including behavioural reactions to suggestions, subjective responses to suggestions, and the subjective sensation of trance, can all be explained without reference to any particular state or circumstance.

As far as social cognitive theorists are concerned, the most fundamental feature of hypnosis is a general and widely dispersed human predisposition to submit to social pressure. Sarbin and Coe, 1972; Coe, 1978; Spiegel, 1998. When Kirsch *et al*. examined simulators, they discovered that they replied to fewer suggestions when they were alone and unaware of being observed. There was no difference in how many suggestions non-simulating participants received regardless of their surroundings. This study concludes that hypnotic suggestions naturally affect people susceptible to suggestions. It goes beyond compliance to explain hypnotic responses, and several social cognitive theories we will cover below have provided descriptions of hypnotic suggestibility, the factors that influence subjective experiences during the process, and the phenomenon of hypnosis.

Understanding social cognitive theories requires distinguishing between "role-taking" and "role-playing," the latter including lying or claiming to be under hypnosis, while the former does not. According to Sarbin, some performers can completely immerse themselves in a role and become utterly oblivious to their surroundings.

2.1.5b Response Expectancy Theory

A recent version of social learning theory is Irving Kirsch's response expectancy theory (Kirsch, 1985, 1991, 1994). (Rotter, 1954). In the hypothesis, non-volitional responses might be generated by expectations for changes in subjective experience. Expectations of automatic responses to specific situations, in turn, generate self-fulfilling prophecies in the form of automatic responses.

According to Kirsch, only the name hypnosis unites these many inductions. If an inert preparation has the same effect as a medicine, it is considered a placebo. For this reason, the effects of hypnotic inductions on suggestibility must be viewed as expectancy manipulations, similar to placebos. This means that hypnosis can be achieved simply by giving individuals a placebo and telling them that it induces the state of hypnosis (Glass & Barber, 1961; Baker & Kirsch, 1993). For Kirsch (1991), expectancy and ability are two independent elements that determine hypnotic suggestibility, and this concept has been confirmed empirically (Braffman and Kirsch, 1998; Benham *et al*., 2006). Only around 10% of the variance in response may be attributed to correlations between anticipation and suggestibility. However, some research has observed significantly stronger associations. When waking suggestibility

is examined or assessed, there are strong relationships between hypnotisability and expectation.

2.1.5c The Integrative Model of Hypnotherapy

Lynn and his colleagues (1991) developed an integrative model to account for individual differences in hypnotic responses and how hypnotised individuals creatively seek and integrate information from various sources in a goal-directed manner. This model focuses on integrating situational, interpersonal, and intrapersonal variables. People's ability to create psychological conditions that elicit desired experiences forms the core of the integrative paradigm. According to Lynn and his colleagues, individual variances play a significant role in the hypnotic reaction. Other people do not get suggestions, so they do not know what it is like. People's ability to pay attention and to have fantasies and imaginations may vary, but only a minimal level of these talents may be required for many people to accept the characterisation of the scenario that many ideas call for" (Lynn and Rhue, 1988).

Lynn places a greater emphasis on elements that significantly impact hypnotic responses than most other theories. It is not necessary to be aware of one's surroundings to perceive and analyse the meaning of a stimulus (see Hassin *et al*., 2005). It is also common for inductions to use terms and phrases that suggest the presence of a passive or receptive mental state. Self-referential thinking and a sense of self-directed activity are lessened even when inductions emphasise awareness since the hypnotist directs action.

Several social cognitive theorists have paved the way for therapeutic hypnosis by promoting research as a foundation for the practice (Lynn & Kirsch, 2006). Using the example of Barber (1985), the author argues that hypnosis-assisted suggestion administration can enhance therapeutic outcomes by (1) fostering treatment motivation and expectations that become self-fulfilling prophecies; (2) focusing on the client's belief that hypnotherapists are more highly trained, skilled, and knowledgeable; and (3) allowing the therapist to speak to the patients in an intimate and meaningful manner that is not ordinarily permitted.

2.1.5d State Theories of Hypnotherapy

1. Neo-dissociation theory by Hilgard.

According to Edgette (1985), state theory includes Hilgard's idea of hypnosis. Dissociation in a high-level control system is thought to create the hypnotic experience. The executive control system (ECS) is supposed to be divided into different streams via hypnotic induction. The ECS functions, but the amnestic barrier prevents it from being seen in the conscious mind. Hypnotic ideas activate one component of the ECS, and the individual is aware of the results but not of the process by which they are achieved.

2. The Neuro-physical Theory of Gruzelier.

Gruzelier proposed a neuro-physical theory of hypnosis. Gruzelier's neuro-physical theory of hypnosis claims that those who are more hypnotisable have a superior executive function and may use their attention in various ways, according to Edgette (1985). Brain alterations in hypnosis are the basis of Gruzeiller's (1998) paradigm. There are three stages to the process, each with a distinct pattern of brain activity. During hypnosis, the brain's attentional control system is altered, making a person more susceptible to suggestion. Individuals in the initial stage of hypnotic induction pay attention to the hypnotist's remarks, which activate the left frontal-limbic brain areas. In the second stage, the subject relinquishes control and attention to the hypnotist, resulting in decreased activity in the left frontal lobe. During the third stage, the subject's passive imaging increases right-sided temporal and posterior systems. A side effect of inducing a hypnotic state is that the highs become frontally impaired (Dienes & Perner, 2007). Socio-cognitive theorists are sceptical of Gruzelier's neurophysiological theory, backed by behavioural and neuro-physical evidence.

2.2 Literature Review

Occupational Stress and Depression

According to literature, the term "workplace stress" has been defined in a variety of ways. An imbalance between the demands of the workplace and an individual's needs, abilities, and resources can lead to bodily and psychological suffering. (Quick & Henderson, 2016). The majority of us are exposed to some level of work-related stress on a regular basis. There is no long-term harm to people who have short-lived, one-time experiences. It is possible, however, that severe bodily and psychological injury may result from long-term exposure to a high degree of professional stress. Good stress, or eustress as it is commonly known, is a term used to describe the stress that

inspires and stimulates the worker to learn new skills and perform better than the debilitating effects generally associated with occupational stress.

Individuals are put under strain by stress, according to Gardazi *et al*. (2016), which pushes their psychological and physiological variables beyond the limit of stability. It can have a significant impact on an individual's health and performance (Lecompte *et al*., 2017). In situations where an individual feels overwhelmed and has difficulties dealing with it, the term "stress" might be used.

"Stress," as defined by Hussain *et al*. (2016), is an emotional response to perceived threats to an individual's health and well-being. As a result of this gap, people experience stress since they are unable to satisfy the expectations, they have placed on themselves. As the apparent mismatch rises, so does one's degree of stress (Mian *et al*., 2016). All professions are subject to stress (Malik *et al*., Björkqvist & Stelman, 2017). However, the prevalence of stress in both working and non-working classes of society is rising (Zafar, Siddiqui, Jamali, & Razzak, 2016). According to surveys, longitudinal studies, and absence records, this development is clearly evident (Warraich, Ahmed, Nawaz, & Khoso, 2014). Global impairment from mental illness will be second only to coronary disease by 2030, according to a report by the World Health Organization (Malik *et al*. 2017). Depression and other common mental diseases can thrive in an environment that is dominated by stress. An examination of the literature on occupational stress reveals a number of job-related issues that have the potential to interfere with employees' daily lives. Occupational stress is caused by factors such as work overload, role ambiguity, role conflict, and bad working circumstances linked with a particular employment (Malik *et al*., 2017).

Burnout is one of the long-term impacts of occupational stress, which has a negative impact on the individual and the workplace culture (Hayes, Douglas, & Bonner, 2015). However, stress can have a wide range of other effects, including but not limited to the desire to leave the workplace, reduced quality of life, lower job satisfaction, and impaired job performance (Cheng, Liou, Tsai, & Chang 2015). (Nabirye, Brown, Pryor, & Maples, 2011). The ability of a person to concentrate, pay attention, and make sound decisions can all be seriously harmed by high levels of stress (Gao, Newcombe, Tilse, Wilson, & Tuckett, 2017; Shapiro, Astin, Bishop, & Cordova, 2005). Patients and their families may suffer as a result of professional stress in the

nursing profession. Experiencing stress at work is associated with a higher risk of an increase in bad clinical care that affects patients, which in turn has an impact on the quality of care as well as treatment outcomes (Chou, Li, & Hu 2014; Adriaenssens *et al*., 2015).

Work-related stress, anxiety, or melancholy can be caused by a variety of factors, according to data from the Health and Safety Executive. Working long hours or under a lot of pressure was the leading cause of stress, sadness, or anxiety among workers in the Labour Force Survey (2009/10–2011/12). Also cited in the study were issues such as a lack of support from management, changes in organizational structure at work, aggression, and a lack of clarity about one's function at work. Stress, depression, and anxiety among women were statistically higher than in the general population. Ages 25 to 54 years old show this clearly. However, males had lower rates than all other genders, though. A survey of 100,000 people in Great Britain yielded this summary (HSE, 2019). Researchers in Japan studied the prevalence of work-related mental diseases and suicide in the country. The researchers used a database of all cases of compensation for mental diseases and suicide in Japan over a five-year period to assess the prevalence of occupational mental disorders and suicide by sex, age group, and industry. Between January 2010 and March 2015, a total of 1990 instances involving compensation for mental disorders and suicide compensation (619 women and 1371 men) were examined. Between the ages of 30 and 39, compensation-related incidents were more common. There was a higher incidence of "accommodation/ eating/ drinking/ information/ communication" and "information/communication/scientific research, professional and technical services" among men than women. The incidence rate for people under the age of 29 was particularly high in certain industries.

Cross-sectional correlations between physician working hours and occupational stress (OS) were examined by Tomioka, Morita, Saeki, Okamoto, and Kurumatan (2011). A survey was circulated to people who had graduated from medical school. The Centre for Epidemiologic Studies Depression scale was used to evaluate factors such as working hours, effort-reward imbalance (OS), social support, and depression. The correlation between these factors and depression was analysed using a multiple regression model. In contrast, there was no link between working hours and

depression. According to working hours and ERR, adjusted ORs of depression were shown to be higher in groups with a larger ERR.

According to a study conducted in Soweto, South Africa, the prevalence of depression and post-traumatic stress disorder (PTSD) and their risk factors among female sex workers (FSWs) were evaluated by Coetzee, Buckley, Otwombe, Milovanovic, Gray, and Jewkes (2018). The study involved 508 female sex workers (FSWs). A chi-squared test of association and multinomial regression were used to examine risk factors for depression and post-traumatic stress disorders in raw and RDS-adjusted data. They discovered that 68.7 percent of those polled had severe depression symptoms, 39.6 percent had PTSD, and 32.7 percent had both PTSD and depression. "Experiencing violence also raised the chance of co-morbidity, according to the study. Internalized stigma also enhanced the risk of developing a mental health problem. Higher levels of self-esteem were linked to a variety of variables, both independent and coexisting. In their conclusion, they found that FSWs in Soweto had a significant burden of curable mental health issues resulting from multiple exposures to violence, sex-work-related discrimination, and overall moderate levels of self-esteem hiding defence mechanisms".

Nnabugwu (2009) "conducted a comparative study of sex work in Nigeria and Botswana to examine the influence of sex work on the empowerment and emancipation of disadvantaged segments of society. As part of their investigation, they looked at the role of both the government and individuals in generating and perpetuating sex work, as well as how to best confront it in society. An additional quantitative study of 215 sex workers and a qualitative study of 120 participants in focus groups and case studies comprised the total number of participants in the three studies. According to their findings, the sex workers' notion of sex work contributes to societal stability. In addition, sex work is created and maintained by society. Further, the researcher argued that sex workers' vulnerability as women is exacerbated by their identity as sex workers, which creates a need for sex work in the first place. There are several dangers associated with sex employment, including violence from partners, police brutality, and an inability to discipline clients. Among female sex workers, these and other characteristics have been linked to an increased risk of depression. (Adewuya, Atilola, Ola, Coker, Zachariah, Olugbile, Fasawe, & Idris 2018). It was

shown that stress at work and at home had a significant impact on anxiety and sadness. 129 subjects were analysed using serial regression. Workplace insecurity and family stress were found to be the most closely linked to depression and anxiety symptoms. Stress at work or at home was also linked to signs of anxiety and depression in both sexes. A nurse may experience stress due to a number of variables that have been recognized (Sarafis *et al*., 2016). Nursing is a demanding job because of its long working hours, harsh working conditions, and shift work (Chou *et al*., 2014). In addition, high workloads, conflict among nurses and with other health care professionals, inadequate training, lack of social and workplace support, lack of positive feedback, staff shortages, remuneration, exposure to morbidity, and mortality are identified sources of occupational stress amongst nurses (Glazer & Gyurak, 2008; Mark & Smith, 2012; Sveinsdottir, Biering, & Ramel, 2006; Wu, Chi, Chen, Wang, & Jin, 2010)".

Depression

"In a Dunedin study of 1972–1973 longitudinal birth cohort, where Major depressive disorder (MDD) and generalised anxiety disorder (GAD) were identified by interview and diagnosed using the Diagnostic Interview Schedule (DIS) and the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria, respectively. Melchoir *et al* (2007) found that Participants exposed to high psychological job demands (excessive workload, extreme time pressures) had a twofold risk of MDD or GAD compared to those with low job demands. (Melchoir, Capsi, Milne, Danese, Poulton & Moffitt, 2007)"

Suicidal Thought

"Suicide kills more than 800,000 individuals around the world every year" (Peden *et al*., 2002). According to findings from the American College Health Association (2008), many students report feeling depressed or suicidal while completing academic work. According to one study, 6% of BA students and 4% of MA students attempted suicide seriously during the academic year, with suicide rates among students worldwide increasing dramatically in the decade preceding 2000 (Collins & Paykel, 2000).

Suicidal thoughts have been linked to a variety of characteristics, including gender, ethnicity, and socioeconomic status (Canino & Roberts, 2001; Moscicki, 2001),

although nearly all research efforts have been directed at adolescents and young people. There is a lack of data on the suicidal ideation of medical students in Nigeria, especially the undergraduates of universities, the majority of whom are youths, despite the fact that there have been studies on the suicidal ideation of adolescents and youths in civilized countries (Reynolds & Mazza, 2000; Shaffer & Hicks, 2004; Roberts, 2000). Because of this lack of data in Nigeria, most of the material evaluated was sourced from journals, textbooks, and seminar papers that were primarily written by people from other countries.

Asghari *et al*. (2013) conducted a study and discovered that 22% of the students were suspicious of psychological illnesses. According to the findings, suicidal thoughts are linked to students' self-esteem and mental health. A comprehensive regression study of self-concept and mental health revealed that a comprehensive regression study of self-concept and mental health can account for 23% of the variance in suicidal thoughts.

In an Iranian study conducted by Mousavi *et al*. (2008), 10.33 percent of students admitted to having suicide thoughts. More than a quarter of students had suicidal thoughts in a previous survey, with 17 percent of those having suicidal thoughts and 9.4 percent of those having suicidal intentions (Mohammadnia *et al*., 2012). In Spain, 3.6 percent of senior students reported having suicide thoughts, according to another survey (Calvo and Associates, 2003). Dyrby (2008) found that 11% of senior students reported having a high level of suicidal ideation. Ten percent of college students reported having suicide thoughts, according to Mousavi *et al*. (2008). A study conducted by Wilcox *et al* (2010), surveyed 1100 students and found that 12 percent of them had suicide thoughts during the study period. According to Mohammad Nia *et al* (2012), just 19/4 percent of medical students graduated. Research by Zhang *et al* (2012) found that about 20% of students had contemplated suicide. In their study, Asghari *et al* (2013) showed a 9% prevalence.

Suicidal thoughts in medical students were studied by Russell, Tan, Tan, Ingrid, and Angela (2017). Particular behaviours and psychological features, concomitant mental health concerns, and challenging interpersonal or educational situations all had a role in the emergence of suicidal ideation within this demographic as data from four Norwegian medical universities over a six-year period revealed. The study also revealed that female medical students have significantly higher rates of suicidal

tendencies. School-aged Thai teenagers were surveyed to assess the prevalence of suicidal ideation and to examine the relationships between suicidal ideation and psychological distress and social-environmental factors. Risk variables were divided into three categories: psychological (hopelessness and loneliness), social-environmental, and socio-demographic, according to the study's authors. It was attended by a total of 2,767 students. Overall, the survey indicated that 8.8 percent of Thai school-aged teenagers had expressed suicidal thoughts in the past year (9.9 percent of men and 7.7 percent of females). Further research found that sadness was the most significant predictor of suicidal thoughts. A lack of parental bonding was also linked to suicide thoughts, according to the study. Even among high school students in Thailand, alcohol usage was revealed to be a substantial risk factor for suicide thoughts. Sexual activity (ever sex) has been linked to suicide thoughts in both Chinese and non-Chinese populations, according to this study.

According to Gunnell, Harbord, and Singleton (2004), who studied 2,404 individuals in the UK and used a random survey sample, the occurrence of suicidal behaviour was generally assumed to be 2.3%. Other evidence showed that the incidence of suicidal thoughts was associated with: being female; not being part of the workforce (that is, not being employed), and having a history of suicidal thoughts. Life circumstances, employment, social status, weekly wages, residential term, and substance abuse were not associated with suicide ideation or recovery.

A study carried out by Angela (2017) investigated Suicidal ideation in medical students, their findings found that medical student suicidal thoughts are influenced by a wide range of factors, including the prevalence of depression and the fact that many students are depressed when they take their own lives, the study found. Suicidal thoughts are more likely in medical students who have a history of substance abuse, high academic demands, and a general decline in quality of life. Mental health problems and suicidal thoughts are more common among medical students with certain personality traits. This finding was reported in the journal Paediatrics. Anxiety, depression, and a lack of confidence in one's own abilities are all symptoms of this. Suicidal thoughts have been linked to low self-esteem, which suggests feelings of self-dissatisfaction and contempt. They also found that suicidal thoughts were linked to lower interpersonal functioning scores, which meant that people who had these

thoughts were less likely to do social things with family, friends, or coworkers because of physical or emotional limitations.

Conducting a study to find out the incidence and correlates of suicidal thoughts among medical students and new doctors According to Tyssen, Vaglum, Grnvold, and Ekeberg (2001), working with 522 Norwegian medical students, suicidal thoughts were associated with lack of control, personality type, single marital status, bad life events, and mental suffering in medical school, although attempts were far less common (anxiety and depression).

“Another study by Kjeldstadli, Tyssen, and Finset (2006) found that the level of life satisfaction among Norwegian medical students plummets as soon as they begin their studies and remains poor all the way through graduation. “Another study conducted in 2014 revealed that medical students are less inclined to address their issues and seek mental health treatment because of fears of stigmatization, confidentiality, and any impact on their future careers of such treatment”. Higher levels of stress are associated with a rise in suicidal thoughts, while suicidal ideation is decreasing in people with lower levels of perceived stress. Shakeri's (2006) findings are in line with those of Kadivar *et al*. (2007). Metha and Mc Whirter (1997) discovered that students with depression, alcohol and drug abuse, and past and present stress were significantly more likely to have suicidal thoughts. Rich and Bonner (1987) discovered that sadness, stress, and loneliness account for 30% of the variation in suicidal ideation among 202 students”.

Using a cross-sectional survey and convenience sampling approach with a sample size of 457, the researchers conducted a study on the correlates of suicide ideation and attempt among youth living in the slums of Kampala. 31.1 percent of the participants were male, while 68 percent were female. A whopping 31% of those polled reported having suicidal thoughts. This study in Kampala's slums and streets found that having two deceased parents was significantly associated with suicidal ideation and behaviour, suggesting that family context and coping mechanisms may be the best way to understand and capture the increased burden of suicidal ideations and behaviour. In the research, suicidal behaviour was found to be statistically connected with sex trade, loneliness, and the expectation of a premature death, all of which were explored as possible correlates in the research.

In Reza *et al*. (2017)'s cross-sectional study, students' suicidal ideation and correlates were examined to see if students' suicidal ideation was associated with smoking, bullying, sexual abuse, contemplation of alcohol use, loneliness, and anxiety, as well as whether or not their parents' understanding and support of their behaviour were negatively correlated. 727 males (47.9%) and 790 females (52.1%) were selected from representative high schools and classes using a two-stage cluster selection method. About 4.1% of the respondents revealed having considered suicide previously, and students who reported losing their appetite as a result of anxiety had around four times the odds of suicidal thoughts than students who did not report this. Persistent sexual abuse had a positive correlation with suicide ideation, as did current smoking and thoughts of using alcohol or other substances as a kind of self-medication. Indeed, students who had been sexually molested had a 2.63-times greater chance of contemplating suicide. In addition, a study found that teenagers who had been sexually assaulted were more likely to engage in suicide behaviour than those who had not been sexually abused.

Shahmanesh, Wayal, Cowan, Mabey Copas, and Patel (2004) used the Respondent Driven Sampling method to study suicidal behaviour among sex workers in Goa, India. The study included 326 sex workers and 35 RDS seeds. Several sociodemographic characteristics, such as age, ethnicity, attendance at school, number of children, and length of stay in Goa, were shown to be associated with suicide attempts among the respondents.

Abuse of Substances

It is said that drugs have been around since the dawn of time. Many civilizations and societies have a long history of drug use and misuse (Musk & De Klerk 2003). Many people have used natural herbs such as opium, coca, and cannabis for a long time. For therapeutic purposes, opium has been used by healers, while the general populace has smoked cigarettes and drank coffee in socially acceptable ways. It wasn't just a popular drink in Colonial America, but also a useful medicine for numerous ailments. From roughly AD 1200 to AD 1550, the in case of South America consumed cocaine, which was a fundamental part of their religious and social institutions (Wolmer, 1990). Pot was first brought to the Southwest by Mexican-origin laborers in the 1920s. When heroin was readily available in Southeast Asia during the Vietnam War, the rate of

American military members abusing the drug was significant. The active element in all alcoholic beverages is ethyl alcohol, or ethanol. Beer's ethanol content ranges from 3% to 4%, whereas wine's ethanol content ranges from 12% to 14%, and liquor's ethanol content goes from 45% to 50%. Every plant, fruit, root, and nut he came across had been studied by the previous man. Due to their pharmacological effects, these drugs' use would be influenced by the experiences that were novel and by a particular group's way of life. A substance may be utilized as a love potion in one region but as a sacred food or drink in another (Kombo, 2005).

Addiction had spread across the globe by the turn of the twentieth century, and the United States was no exception. In 1833, the American Temperance Society was founded in response to poverty, crime, and disorderly public conduct caused by excessive alcohol consumption. Poverty and oppression may have been the result rather than the cause of substance usage. According to a prominent psychiatrist and critic of numerous social policies constraining choice, Thomas Szaz claimed that drugs served as a handy excuse for the social problems of city life (Szasz, 1987).

Barbiturates, benzodiazepines, and amphetamines were some of the synthetic chemicals that arose from the advent of medicinal chemistry. When these were first presented, they were intended to aid in the restoration of good health. The stronger and faster methods of administration, which favour the most rapid transport to the central nervous system and contribute to addiction, were designed in the later stages of drug development. Since the beginning of time, society's attitude toward psychoactive substances has evolved.

Traditional theoretical boundaries have been eroded in light of the worldwide context of drug use, which has a significant impact on people's views, values, and perceptions (Gakuru, 2012). Across North America, Latin America, and Asia, the problem of drug and substance misuse is a major concern for society and local authorities (Ngesu *et al*., 2008). Families, communities, and nations face serious health, social, and economic consequences from the use of psychoactive substances. There are an increasing number of alcoholics between the ages of 15 and 29. Alcohol is responsible for 9% of all deaths. A total of 15.3 people in 148 countries have been linked to drug use and injecting drugs, and 120 of these people had HIV (WHO report, 2012). Ten percent of the adult It is predicted that the U.S. population will hit have alcohol abuse or

dependency. When it comes to opium, the amount of morphine in opium ranges from 2.6% to 9.9% by weight (Kalant, 1977).

Drug misuse is widespread in Africa, affecting both young and old, wealthy and poor, rural and urban (United Nations Drug Control Program, 1998). Men are more likely to use drugs, but this is quickly changing as women's substance consumption is becoming less conspicuous and more private. Women, the young, the educated, and healthy people prefer drinking wine, but young males prefer consuming beer. Tobacco use is more common among men, those who drink heavily, those who are less educated and those who are middle-aged and older.

Recently, there has been a increase in the manufacturing, distribution, usage of drugs and substances in many African countries, including Kenya. Since the operations of organizations and individuals who use Africa as a transit point to trade with nations in the north, several of these countries have turned into drug marketplaces (Affinith, 2002). As a result of the continent's drug problem, its nations have developed their own drug control programs. There are numerous anti-drug laws, legislation, and agencies in place. In many cases, these countries are signatories to UNODC, the United iNations iOffice ion iDrugs iand iCrime i(UNODC), iand ithe iUnited iNations iInternational iDrug iControl iProgram i(UNIDCP), (UNIDCP). As a result, worldwide drug use continues to rise.

There was a lack of information concerning the dangers of drug and substance usage because individuals are afraid to discuss it. Addiction is a problem among both students and non-students, with the majority of students at secondary and higher institutions abusing substances, according to recent evidence (NACADA, 2006). High school students in Kenya are most likely to consume khat (tobacco), alcohol, cannabis, cocaine, stimulants, and sedatives. Alcohol intoxication is a severe concern in Kenya (Edward & Anif, 1990).

When the non-medical use of drugs affects not only the users and abusers individually, but also their families as a whole, it is becoming viewed as a major social and public health problem in Kenya (Mauri and Acuda, 1983). Mt. Kenya and the Western parts of Kenya still have bhang farms that are thriving. Miraa is a multibillion-dollar legal narcotics industry (Ngunyi, 2007). Doctors, pharmacists, and others who work in

medical settings are among the most likely to misuse prescription medicines. While some people want to keep their medical conditions private, they nevertheless have a general concept of what type of medication they should take.

Occupational Stress and Suicidality

Anxious working situations, such as excessive work expectations and limited job control, as well as an effort-reward imbalance and a dearth of social support, may have a bad impact on mental health (Bonde, 2008; Milner, Krnjack, LaMontagn, 2017; Park, Min, Chang, Kim, Min, 2009; Cho, Kim, Chang, Fiedler, Koh, &Crabtree, 2008). Improved working circumstances have also been shown to have a positive association on mental illness (Turecki & Brent, 2016). Occupational stress and suicidal ideation are closely linked, so it's necessary to look into the link between the two to see if there are ways in which these conditions can be improved. The link between work-related stress and suicide has been extensively researched. In addition, these studies were constrained by a variety of methodological issues: some used a cross-sectional design (Loerbroks, Cho, Dollard, Zou, Fischer, & Jiang, 2016), while others only included certain subgroups (Otsuka, Nakata, Sakurai, & Kawahito, 2016), while others lacked systematic information regarding work stress (Yoon, Jeung, Chang & Dos 2016). (Leach, Poyser, Butterworth, 2017; Kim, Hong, Yook, & Kang, 2017). There has also been a vast variation in the consideration of possible confounding factors in the various studies. A recent meta-analysis and systematic review found that suicide thoughts were substantially linked to high work demands, poor job control, effort-reward imbalance, insufficient social support, job instability, and role conflict (Milner, Witt, LaMontagne, & Niedhammer, 2018). As a result, inflated relationships and reverse causality are possible because most of the research in our study was cross-sectional.

They found that a low degree of social support was associated with increased level of occupational stress and suicidal ideation in 334 professional firemen who participated in a study on the association between social support and suicidal behaviour.

More than half of the 54 acutely suicidal U.S. troops studied by Bryan, Clemans, Leeson, and Rudd in 2015 had a history of at least one suicide attempt, and those with a history of repeated attempts had the most severe suicide thoughts and the highest number of chronic stressors. Chronic but not acute stressors were also linked to a person's suicidal thoughts in a significant way. According to Gradus, Smith, and Vogt,

family support and stress were found to be directly linked to suicidal ideation in a study of 1046 combat-exposed veterans of Operation Enduring Freedom and Operation Iraqi Freedom, according to Gradus, Smith, and Vogt. Feng, Li, and Chen (2015) studied the effects of stress on suicidal ideation in rehabilitation patients recovering from acute pesticide poisoning and showed that self-efficacy and dispositional optimism partially reduced the association between stress and suicidal thoughts. It was discovered that, in addition to depressive disorders, brooding amplified the effect of perceived stress on suicidal ideation.

Suicidal ideation was reported by 10.86 percent of Chinese students in Shang, Li, Li, Wang, and Siegrist (2014)'s study on a stressful psychosocial school environment and suicidal ideation using 1004 Chinese students. The effort reward imbalance had association with an increased risk of suicidal ideation. Suicidal behaviour among commercial sex workers in Bengaluru, India was studied by Vaniprabha and Javid (2015). The research involved 100 men and 100 women who worked in the sex industry between the ages of 18 and 25. Their findings showed that women were more likely to suffer from feelings of burdensomeness and suicidal thoughts than men. They argued that their regular exposure to trauma made them more susceptible to committing suicide, which goes against the principles of self-preservation.

Suicide and Substance Abuse

This is considered a form of self-administered psychoactive chemical use (alcohol or drug). One factor that can contribute to suicide is substance misuse [Ugwuoke, 2016]. It has been shown that substance abuse is related to suicide in all three stages of substance use: intoxication, withdrawal, and chronic use. There is a young person smoking, drinking, using drugs, or abusing alcohol in every corner of the country. A few took medicines to deal with their worry and hunger, while others did so because of peer pressure (Igbokwe, 2011). For people with an alcohol use disorder, the risk of suicide rises six-fold (Harris & Barraclough, 1998). Adolescents that use drugs or alcohol are more susceptible to commit suicide, according to studies (Conason, Oquendo, & Sher, 2005; Bae, Ye, Chen, Rivers, & Singh, 2005; Gould, Greenberg, Velting, & Shaffer, 2003). According to psychiatric autopsy studies, between 19 and 63 percent of suicide victims have a substance use problem, which includes alcohol, cannabis, and other drug misuse and dependency (Ebong, 2016).

“In a Nigerian study of mental health and well-being, Uwakwe and Gureje found a relationship between suicidal conduct and co-occurring mental and substance use disorders (2011). Those who had attempted suicide at least once in their lifetimes were shown to have higher rates of DSM-IV disorders than those who hadn't. Those who have attempted a relapse multiple times have had more comorbid conditions as a result. If you've tried to kill yourself, you're more likely to have three or more co-occurring mental health conditions than someone who hasn't attempted suicide. Psychotic disorders, anxiety disorders, and substance abuse are all linked to suicide, but when researchers took into account co-occurring conditions like depression and bipolar disorder, they found that the latter two were almost totally explanatory of the former. When it comes to suicidal behaviour, co-morbid mental and drug abuse problems were proven to be an important factor, the scientists wrote.

According to Oladeji and Gureje (2011), parents who suffer from mental illness are more likely to have suicidal children. Parents who suffer from panic disorders are more likely than those who do not to have suicidal thoughts in their children." behaviors may have been passed down from one generation to the next because of an individual's inability to regulate their anxiousness and impulses." Okulate (2001) also looked at the military context, studying suicide attempts in the Nigerian military context by describing the characteristics of patients who attempted suicide and comparing them to a group of non-suicidal, affective disorder patients at the Department of Psychiatry at the Military Hospital in Yaba, Lagos. Okulate (2001) suicidal attempt patients made up 0.37 percent of all hospitalizations over a five-year period, and 60.8 percent of those patients were younger than 30. It's safe to say that the number of female and male patients was nearly equal. Chronic stress and depression were the most commonly diagnosed conditions.

However, military men used more severe methods, such as hanging and self-inflicted wounds, but no firearms were involved in their suicide attempts. Non-suicidal patients were more likely to be unmarried and suffer from a mental illness, such as depression or schizophrenia, than those who had tried suicide. According to the Bangladesh study, more than half of the participants had a substance use issue, which is consistent with previous research. According to Hengartner, Islamic and Haker (2015), approximately a third of Australian sex workers were dependent on cocaine or cannabis at the time of

the survey. According to the findings of a recent study, only 38% of women imprisoned for offenses unrelated to sex workers had cocaine in their system when they were detained. 2002 Larsen, Yacoubian, and Urbach as with substance abuse, sexting and substance abuse are linked.

Many people take drugs to deal with the pain of sexual encounters, and sex employment can be a source of funding for substance misuse. More information can be found on this topic (Hengartner, Islam & Haker, 2015; Roxburgh & Copeland, 2006) here. Increasing numbers of women around the world, particularly in Sub-Saharan Africa, are working in the sex industry. This is connected to a wide range of sexually transmitted diseases, exploitation, violence, and mental disorders. " The persistence of sex work is typically attributed to women's socioeconomic marginalization and poverty. In the minds of many, prostitution is a way for women who are unable to find work in other sectors to make ends meet (Whelelan, 2001). It's possible that the issue of poverty may not be a concern if the sex workers come from middle-class families. Sexual behaviour could be seen as an alternative "strategy" for becoming financially and socially independent, even if money isn't the main reason for it.

Murphy and Venkatesh (2006) see sex employment as a career option. In spite of the profession's uncertainty and the lack of traditional mobility systems, sex workers can nevertheless view and understand their work as a career, they suggest. Despite the fact that the sex business is scattered, 'disorganised', and informal, it is legitimate to consider sex work as a career choice. "The purpose and significance that it takes on in (sex workers') life...." is what makes sex work an occupation, not the pecuniary rewards it delivers. According to research, sex workers see their work as a way to earn money to support themselves and their dependents (Whelehan, 2001; Stadler and Delany, 2006). For example, according to Whelehan (2001), "given their talents and education, female prostitutes in the US and across cultures can earn as much or more than comparable paid jobs in the straight sector." Additionally, sex workers may find that their working circumstances are better than those offered by other employment options, and that their labour is self-regulated (Pheonix, 1999).

“When the dangers of sex work are considered, the occupational structure of sex labour becomes clearer. These dangers are a wide range of things. In the case of anti-sex work laws, for example, dominant discourses generally portray sex workers as

distinct from "decent" women. Sex workers are also frequently the subject of the public's apprehensions about the dangers of drug use and moral decay (Hubbard, 1997). For those in the "stigmatised and marginalised profession," sex workers accept physical, sexual, and psychological assault as job hazards, according to O'Neil (1996). Poor and risky working conditions, limited access to contraceptives and health services, aggression and abuses by clients and police enforcement, and drug usage are some of the most common dangers of sex-related labour (Harcourt & Donovan, 2005; Kulick, 2003)".

Sex workers in a variety of contexts have been found to have a high rate of drug misuse (Graham, 1994; Cusick, 1998; Green, 2004; Malta *et al*., 2008). There appears to be a correlation between sex workers and drug users, according to research (Maher, 1996; Maher and Curtis, 1992; Maher and Daly, 1996; Dalla, 2000; Epele, 2001; Miller and Neaigus, 2002). To finance their addictions, drug users may engage in sex work, while sex workers may use drugs as a means of escaping the realities of their personal and professional lives (Strathdee & Sherman, 2003).

"If sex workers are under the influence of drugs, it is extremely dangerous for them to engage in sex because of the chemical qualities of the drugs. Researchers in the 1980s observed a substantial link between the use of alcohol and illicit drugs during sexual activity and a lack of compliance with 'safe sex' guidelines designed to reduce the risk of HIV/AIDS (Stall *et al*, 1986; Stall, 1988; Stall & Ostrow, 1989). Sex workers' claims of drug-related harm have also been found in recent studies (Stadler & Delany, 2006)".A study by Plant (1991) indicated that many of the social and cultural patterns that link drinking and sexual activity are thought to be caused by cultural norms, especially those that have to do with fun and going out. Even in prostitution, where drug use is a part of the culture, its economic motivations and social ties with clients are reflected in its use of drugs. Weisberg stated in a 1985 study of adolescent sex work that the sex workers said that taking drugs made their employment more bearable and less stressful. As a result of drug use, they said, 'It gets their mind off what you're doing, 'It makes it bearable, 'It calms me down, so I can go through with it,' and that 'otherwise, I would kill myself' (1985).

Theories of risk must be used to understand how sex industry culture and drug use contribute to the development of sexual health risks among employees. Risk and

Danger (1992) by Mary Douglas presents a theoretical framework for the study of risk. To counter the idea that risk-taking is immoral, Douglas (1992) points out that risk-takers and risk-avoiders are influenced by their ties to the community. The social context in which risk-takers make their judgements about which risks are reasonable and which are irrational may be overlooked by blanket condemnations of risk-taking as irrational. It is important to understand how others react location where the predicament is being experienced if we are to comprehend how individuals interpret their social settings when selecting what is too risky and what risks are worth taking, as Sanders (2004) elaborates on Douglas' theories.

Risks to their health and sexual health can be seen in this study because of the usage of heavy drugs by sex workers. Discussions on policies and initiatives to solve the challenges will make this point constantly obvious. Sex workers, on the other hand, must be understood in light of socio-cultural circumstances that influence their lives and careers. Risk-takers and risk-avoiders are two sides of the same coin, as'sex workers react to their circumstances and determine whether to take or avoid hazards' (Sanders, 2004). (Sanders, 2004). This notion is supported by numerous studies that show that in many locations, sex workers are viewed as morally depraved individuals by the general population because of their occupation. In addition to the moral, sociocultural and gendered context of commercial sex, these conventional images enhance the vulnerability and marginalization of sex workers. Many sex workers turn to narcotics to cope with the difficulties that confront them on a daily basis. When it comes to drug use and risky behaviour, sex workers' personal stories and narratives are used by Sanders (2004) to anchor their experiences and decisions in the realities of their lives and jobs.

Depression and Substance Abuse

“A frequent belief is that women engage in sex work for the purpose of obtaining cash to buy substances or to exchange drugs for money in exchange for sex services”. Research shows that substance misuse and sex work are strongly linked. Researchers have found that (Goldstein, 1979; Gossop *et al*., 1994; Nuttbrock *et al*., 2004; Roxburgh, Degenhardt *et al*., 2008). heroin, cocaine crack, cannabis, and alcohol are the most common narcotics used by prostitutes in the industry (Gossop *et al*., 1994; Norton-Hawk, 2001; Nuttbrock *et al*., 2004; Surratt *et al*., 2004). However, the

relationship between substance misuse and prostitution is still up in the air in the academic literature. There are conflicting reports about whether or not women's involvement in prostitution is linked to their substance misuse prior to their involvement in prostitution (Inciardi & Surratt; Potterat; Rothenberg; Muth & Darrow & Phillips-Plummer 1998). (Dalla, 2000; Kuhns, Heide, & Silverman, 1992). People who abuse substances prior to engaging in prostitution do so as a means of funding their addiction, whereas those who acquire substance abuse issues after engaging in prostitution use substances as a way of dealing with the ups and downs of the industry.

Addictions like alcohol and any other drugs seems to boost the self-confidence of prostitutes, as well as offer them with a means of coping with or suppressing their unpleasant emotions (Gossop *et al*., 1994; Young, Boyd, & Hubbell, 2000). The degradation and trauma of prostitution can exacerbate an already existing substance misuse problem, according to some academics (Young *et al*., 2000). Others point out that drug usage can precede, co-occur with, or even succeed in prostitution; this is a combination of these possibilities (Gossop *et al*., 1994). As long as they are there, substance misuse and prostitution are likely to reinforce each other (Norton-Hawk, 2001)".

"To be clear, not all sex workers take drugs, and not all women who use drugs engage in sex work (Romero-Daza, Weeks, & Singer, 2003). Trying to say that women only participate commercial sex work as a result of substance misses the bigger picture, which is a complex interplay between a variety of social, cultural, and economic issues (Ettorre, 2007; Wilson & Widom, 2010). Women in sex work are frequently found to be abusing substances, which is a problem that should be put into consideration in the context of other social, political, and psychological factors that influence women's decisions to enter and continue in the trade (see Dalla, 2002).

According to the findings of the National Institute on Drug Abuse, a third to half of opioid abusers have been diagnosed with severe depressive disorder at some point in their lives (Sadock, Sadock, 2007). Anxiety and sadness are the most common co-morbidities of addiction in research (Flavio 2005; Harrell & Karim 2008). Stress, in addition to sadness, may be a factor in patients' drug misuse. Addiction is influenced by a wide range of circumstances, including social, economic, and psychological stress. Anxiety is a physical manifestation of stress. In the event of a chronically

unwell family member, he loses the support of his family and friends, and they are less likely to meet his requirements or listen to his sorrows. They may not comprehend what he is going through, and he may not receive the emotional support he needs. In light of the aforementioned, this study focuses on stress, anxiety, sadness, and quality of life in both addicts and people who appear to be healthy. because of the importance of the above-mentioned components in sustaining addiction".

"An increased risk of HIV and STI infection and transmission is connected with untreated depression (Oldenburg *et al*. 2014; Rael and Davis 2017; Shen *et al*. 2016; Yuen *et al*. 2016), which is consistent with previous research. Sex workers' mental health has been the subject of a variety of interventions, with various degrees of success (Gunn *et al*. 2016; Swendeman *et al*. 2015)".

Depression and Certain Personality Characteristics

In spite of these advancements, there are still many unanswered questions. According to previous studies, lower-order aspects of these FFM features appear to play an important role in the link between the NEC interaction and depression. An understanding of how components interact could have substantial consequences for therapy development, given that emerging evidence suggests that each aspect has at least partially separate neurological roots (Allen & DeYoung, 2015). First and foremost, the translational value of the NEC interaction has yet to be investigated in a currently depressed group.

Self-Destructive Behaviours and Personality Types

According to Klein, Kotov, and According to Bufferd (2011), depression and personality features are closely linked. (2011). This review focuses on research that examines the question in relation to the Big Five personality theory. Additional investigations may be conducted if new information or hypotheses are discovered. There is a strong correlation between neuroticism, which is associated with depression, and extraversion, which is associated with depression. Watson *et al*., 2010, Kotov *et al*., 2010 and others in a few studies, researchers have investigated the connection between various forms of depression and various personality traits (Joefsson *et al*., 2011). There has been a great deal of research into whether or not a person's personality changes after a depressive episode (Steunenberg, Braam, Beekman, Deeg

& Kerkhof, 2009). Multiple studies (such as Bienvenu *et al*. in 2004; Jylhä in 2008; Klein and colleagues (2011); Kotov *et al*. 2010; Steunenberg *et al*. 2009) have determined that neuroticism is one of the strongest relationships between depression and personality traits. Injury avoidance, a Cloniger temperament feature similar to neuroticism, has not been linked to depression symptoms (e.g. Elovainio *et al*., 2004; Jylha *et al*., 2011; Klein *et al*., 2011; Klein *et al*., 2011; Kronström, 2011). Neuroticism has been the subject of numerous studies. There is evidence that self-harm and depression are linked, as reported by Klein *et al*. (2011a).

According to Bienvenu and colleagues (2004), "neuroticism had no direct correlation with depressive symptoms." Consequently, a closer examination of neuroticism's many characteristics is required. When it comes to severe depressive disorder, extraversion and extroversion are often linked. Much research has established a correlation between depression and low extraversion, but it is smaller than the correlation between depression and neuroticism. It is less controversial than the association between poor extraversion and depression identified in various research (e.g., Jyla 2008; Carrasco Ortiz and del Barrio Gándara, 2002; Greens and Jonker, Spinhoven and Blom, 2002; Klein, Kotov and Naragon-Gainey, 2010; Klein, Kotov and Naragon-Gainey, 2010). (Klein *et al*., 2011; Kotov *et al*., 2010). Additionally, the connection between sorrow and extraversion is being examined using the lens of extraversion. "

Bienvenu *et al*. (2004), poor assertiveness is associated with depression, while Naragon-Gainey and colleagues (2009a) discovered that depression negatively impacts one's social as well as psychological well-being. Concurring with this was the conclusion reached by Klein and colleagues in 2011. Optimism, on the other hand, was shown to be more critical. The existence of extraverted characteristics such as ascendance or pleasure seeking was not linked to the occurrence of depressive symptoms. There appears to be no link between openness and the development of depression. In the large-scale meta-analyses conducted by Kotov, Gamez, Schmidt, and Watson (2010) and Klein *et al*. (2011), there was no connection observed between openness and depressive symptoms. In individuals with serious depression, Bienvenu and colleagues found that one of the characteristics of openness was an openness to one's own feelings (2004). However, Carrasco Ortiz & del Barrio Gándara (2007) discovered the opposite connection. Openness to feelings and severe depressive

disorder can be linked, despite the study's questionable results, which are based on data from a large number of participants. Even while conscientiousness has been linked to depression, it's gotten little support.

Low conscientiousness is linked to major depressive disorder (Kotov *et al*. 2010). (Klein *et al*. 2011). This connection has also been discussed by Carrasco Ortiz and del Barrio Gándara (2007). For example, Bienvenu, Jylhä, and Gotlib (2004), Goodwin & Gotlib (2004), Kendler and Myers (2010), and the like have all failed to find a correlation that is significant. In any study or meta-analysis, depressive symptoms were not found to be influenced by agreeableness. According to this study, depression and agreeableness don't appear to go hand in hand.

Personality traits have also been extensively examined in relation to depressive states. According to Klein *et al*. (2011), high level of neuroticism have been associated to an increased incidence of depression and a worse prognosis for recovery. According to studies, depression has been linked to a higher level of neuroticism. All three personality traits (neurotic, extraverted, and conscientious) were found to have state effects by Karsten *et al*. (2012), but their magnitudes were rather small. Neuroticism and extraversion were found to have similar effects by Griens *et al*. (2002). During therapy and rehabilitation, there is some indication that neuroticism can be lessened, but it is still higher than in the general populace. In later life, relapses of depression are associated with a higher level of neuroticism (Steunenberg *et al*., 2009). People's personalities vary with time, even though they tend to stay the same for most of their lives. Even if neuroticism's mean level falls throughout this time, other attributes rise, according to this study's findings. There has been some research into the link between personality traits and mental illness. In terms of mood disorders, anxiety disorders, and different forms of phobias, personality traits appear to be similar (Trull & Sher, 1994; Jylhä *et al*., 2011; Nyman *et al*., 2011). Having high levels of neuroticism, low levels of outgoingness, and low levels of conscientiousness are all linked to both sadness and alexithymia (Atari and Yaghoubirad, 2016).

A correlation between excessive neuroticism, depressive symptoms, and multiple sclerosis has been demonstrated (Khodarahimi & Rasti, 2015). Interestingly, low levels of neuroticism have also been associated with an increased risk of suicide in those with depression (McCann, 2010). When depression is present, excessive neuroticism and

non-suicidal self-injurious conduct may be linked. Depression and drug use may be linked in some way (Trull & Sher, 1994). The quality of data in previous studies has been a problem. Size and data collection are of essential importance in any research project. Some studies only involve a few hundred people, whereas others (e.g., Griens *et al*., 2002; Kronström, 2011) only comprise a few hundred people. Atari and Yaghoubirad, 2016). For example, if the sample is comprised of psychology students or patients, the results may be inaccurate (Naragon-Gainey *et al*., 2009). For example, see Carrasco Ortiz and del Barrio Gándara (2007); Elovaino *et al*. (2004); Goodwin & Gotlib (2005); Josefsson and colleagues (2011); Jylhä and colleagues (2008); Nyman and colleagues (2011); Steunenberg and colleagues (2009); Josefsson *et al*. (2011). - Trull & Sher, 1994;

Both Bienvenu *et al*. (2004) and Carrasco Ortiz and Gándara (2007) showed an adverse link between openness and sadness, and their findings were published in peer-reviewed journals. Bienvenu *et al*. (2004) observed a strong connection between depression and openness to feelings despite the lack of the openness sum component. Bienvenu *et al*.'s alresults cannot be compared to this study's since the factors of comparison have not been deleted. Since Carrasco Ortiz and del Barrio Gándara's sample consisted of young people and the depression score was scored using a different instrument, their findings cannot be directly compared to those of this study (the CDI). We don't know if sadness and openness are linked because the people who took part in the study were young and from a non-clinical group.

According to the meta-analyses by Klein and Kotov, depression is associated with a lack of conscientiousness. A theory proposed by Klein and colleagues (2011) states that "although mediation and moderating effects have not been investigated," "conscientiousness has been hypothesized to influence depressive symptoms through increasing exposure to negative life events." According to the findings of this study, conscientiousness appears to exert its influence primarily through neuroticism. In previous studies, no correlation between agreeableness and depression was found, and this study found no evidence of the same. A weak correlation between high agreeableness and sadness can be found when subjects with mild neuroticism are excluded.

According to McCann's investigation at the national level, increase in neuroticism are associated with depression (2010). Depression and a less successful recovery have been associated with people who are more neurotic (Klein *et al*., 2011). Long-term studies have found a link between high levels of neuroticism and an increased risk of depression (e.g., Jylhä, 2008). Reduced assertiveness, one of the extraversion traits linked to depression by Bienvenu and colleagues (2004), has been shown to be linked to depression. In addition to medication, Hayward *et al*. (2011) point out that positive emotions and physical activity can help with depression as well. There was no indication of a link between extraversion and depression by Naragon-Gainey *et al*. (2009). However, the exact nature of the link between higher level of neuroticism and depression is still unknown. High levels of neuroticism and depression have been linked, but they are not the same thing, as researchers have discovered. Various personality qualities have been examined in the context of major depressive episodes and in the absence of them. According to studies by Griens and colleagues (2002) as well as Karsten and colleagues (2012), the state has an effect on neuroticism. In spite of this, the influence isn't all that significant. Further, more in-depth study of the subject is therefore required. Bienvenu *et al*. (2004) investigate if depression leaves behind "scars," or long-lasting abnormalities in one's personality. According to Jylhä (2008, 88), neuroticism decreased and extraversion increased during the healing phase. In neuroticism and extraversion, there was still a large discrepancy between the pre- and post-recovery scores. There was an increase in low extraversion and no change in neuroticism after one year of follow-up (Jylhä, 2008). Neuroticism diminished over the course of a decade, but other traits grew (Rantanen *et al*., 2007). According to Jylhä (2008), "marks" from the 29th major depression episode appear to vanish over time.

Depression, for example, is predicted differently by empirical studies of its characteristics (DeYoung, Carey, Krueger, & Ross, 2016). Both withdrawal and volatility can be found in people with neuroticism. While volatile behavior is connected with externalized negative emotions such as anger and impatience, the internalized negative emotions of depression, such as melancholy and concern, are recorded by withdrawal. Excitement and assertiveness are two more traits that fall under the extraversion umbrella. But exuberance is a sign of happiness and the desire to socialize with others. An extraverted personality trait connected with depression is a high level of excitement, whereas a low level of assertiveness is not (Naragon, Watson,

& Markon, 2009). As a final thought, the qualities of conscientiousness associated with depression include a tendency to work hard and maintain orderliness. People who are hard-working and goal-oriented are more likely to be reliable, while those who are careful and scrupulous are more likely to be scrupulous, tidy, and reliable. Effortlessness has been linked to depression-related withdrawal in earlier studies, although orderliness and withdrawal had no relationship (or even correlated positively (DeYoung et al., 2007) when adjusting for diligence. The correlation between extroversion, introversion, conscientiousness, and neuroticism was established, as shown by these results sadness may be explained by traits at the lowest levels of each of these personality traits. In a study of 275 patients with a history of mood disorder, depressive symptoms were found to be strongly linked to industriousness, enthusiasm, and withdrawal in a study of 275 patients. Depression had no significant association with orderliness, and assertiveness, or volatility. (Quilty, DeYoung, & Bagby, 2013).

Prior study on personality and depression has primarily focused on the Big Five, despite the fact that previous studies have shown that qualities can interact to predict outcomes (e.g., Quilty *et al*., 2008; Shoss & Witt 2013, for example) (for a review, see Vasey *et al*., 2013). Joiner and Lonigan (2000) and Verstraeten and his colleagues (2009) say that depression is linked to a lot of different personality traits. These include neuroticism and extraversion as well as conscientiousness.

It is possible that any two-way interaction between characteristics (such as neuroticism and extraversion) will have a greater impact if the third trait (such as conscientiousness) is lower than if the third trait (such as conscientiousness) is high. In a study by According to Dinovo and Vasey (2011), the triangular relationship foreshadowed the emergence of internalising psychopathology. The findings of this initial study could be confirmed or disproved by these subsequent studies. Three-way interaction was replicated in four healthy groups by Vasey and colleagues (2013) using a variety of traits. When it comes to assessing how anxious you are, researchers found that the interaction effect only worked for depression outcomes.

The three-way link was observed to explain symptoms concurrently as well as retrospectively in a sample selected and selected to include an appropriate proportion of patients at the extremes of each evaluation and optimization. Neuroticism, conscientiousness, and extraversion (N & E C) interaction has been found to be a

significant predictor of depressive symptoms in healthy individuals. A "best two out of three principles" approach was used by Vasey and colleagues (2014), in which two of the three trait dimensions are low-risk enough to protect against the risk of the third dimension. "Two out of three principles" is a term used to describe the idea that having high risk scores on two out of three characteristics is akin to having high risk scores on all three characteristics (Vasey *et al*., 2014). In spite of these advancements, there are still many unanswered questions. According to previous studies, lower-order aspects of these FFM features appear to play an important role in the link between the NEC interaction and depression. An understanding of how components interact could have substantial consequences for therapy development, given that emerging evidence suggests that each aspect has at least partially separate neurological roots (Allen & DeYoung, 2015). First and foremost, the translational value of the NEC interaction has yet to be investigated in a currently depressed group.

Self-Destructive Behaviours and Personality Types

People's perceptions and adaptations to the environment have been demonstrated to be linked to personality traits, especially under stressful conditions (Harkness and Lilienfeld, 1997). Suicidal ideation, attempts, and deaths can be predicted by personality qualities such as hopelessness, neuroticism, and extraversion, according to an analysis of studies published between 1977 and 2004. (Brezo *et al*., 2006b). In other studies, it has been found that those who display traits like impulsivity and irritability, as well as aggression, anxiety and scepticism, as well as non-conformity, self-criticism and perfectionist tendencies, are more likely to commit suicide (Brent *et al*., 1994; Nordstrom *et al*., 1995; Dean *et al*., 1996; Engstrom *et al*., 1999; Conner *et al*., 2001; Beautrais, 2003; Beevers and Miller, 2004; Enns *et al*., 2003; Minarik *et al*., 1997; Donaldson *et al*., 2000; Brezo *et al*., 2006a; Duberstein *et al*., 2000; Ronningstam and Maltsberger, 1998; Fazaa and Page, 2009; Ohring *et al*., 1996). There is a protective impact on suicide from agreeableness; stability of self-esteem; and resilience, which may be gender-specific. (McCann *et al*., 2010; Fazaa *et al*., 2009; de Man *et al*., 2004; Nrugham *et al*. 2010.) (Street and Kromrey, 1994).

Some data suggests that male and female personality traits differ. According to one study, men may be more forceful and receptive to ideas, while women may be more neurotic, amiable, warm and open to feelings. ' (Costa *et al*., 2001). Suicidal behavior

may differ between men and women based on their personalities, according to some researchers (McCrae *et al*., 1999; Widiger and Anderson, 2003). This may provide light on the very high number of guys who take their own lives. The NEO Five-Factor Inventory was used in to investigate one's character through a case-control psychological autopsy research study (De Leo, Draper, & Snowdon, unpublished) in Australia (NEO-FFI; Costa and McCrae, 2003). There were no statistically significant differences between men and women, according to the results of the studies. Male Australian suicides were found to have considerably higher scores on neuroticism and lower scores on extraversion and agreeableness when compared to the sudden death controls. When compared to their control groups, female suicide fatalities likewise showed similar results. The suicide rates among women are greater than those among men, but this is consistent with findings from earlier studies. Anger was assessed using the Overt Aggression Scale in the same study. (Yudofsky *et al*., 1986). The results showed that those who committed suicide had much higher levels of hostility than controls, especially among men. Male suicides, on the other hand, were more likely to display signs of aggression in the month leading up to their death.

Researchers in McClure's 2017 study looked at how personality traits were linked to a sample of 65-year-olds who lived in the community. Over the course of the study, 106 older persons (mean age 74.2, SD 5.8), including 78 female participants, participated. Emotionally and psychologically, the vast majority of the individuals were in good health. A lower Extraversion was found to be connected with more severe suicidal ideation in this group of elderly people. Suicide ideation appears to be strongly linked to extroversion and socially prescribed perfectionist traits. When it comes to the study of personality subtypes, Agwaya, Aloka, and Raburu (2015) looked at the association between the two among chosen secondary school students in Kenya. There was a significant difference in pupils with an extroverted personality subtype and those without.

Different types of psychopathologies, such as depression, are predicted differently by empirical investigations into their aspects (DeYoung, Carey, Krueger, & Ross, 2016). Neuroticism, for example, is characterized by both withdrawal and volatility. In contrast to the externalized negative emotions of anger and irritation that are associated with volatile behaviour, the internalized negative emotions of depression, such as

melancholy and worry, are captured by withdrawal. The extraversion domain includes two additional characteristics: excitement and assertiveness. Exuberance, on the other hand, is associated with a sense of well-being and a desire to connect with others. Symptoms of depression are associated with extraverted facets that are high in enthusiasm, but facets that are low in assertiveness are not (Naragon, Watson, & Markon, 2009). As a final point, industriousness and orderliness, two elements of conscientiousness, may be linked to depression. An industrious person is more likely to be reliable, persistent, and goal-oriented, while an orderly person is more likely to be scrupulous, tidy, and meticulous.

In previous analyses, industriousness was found to be adversely correlated with depression-related withdrawal, while withdrawal and orderliness were found to have no connection (or even be favourably related when controlling for industriousness; DeYoung *et al*., 2007). (or even positively related when controlling for industriousness; DeYoung *et al*., 2007). As a whole, these data show that lower-order characteristics in each of these domains might be responsible for the relationship between extraversion, conscientiousness, neuroticism, and depression. To date, a study of 275 patients with a history of mood disorder indicated that the intensity of depressive symptoms was highly connected with industriousness, excitement, and withdrawal, but there was no relationship between depression and orderliness, assertiveness, or volatility. (Quilty, Pelletier, DeYoung, & Bagby, 2013).

Many studies on personality and depression have looked at features other than the Big Five, despite the fact that they have shown that traits can interact to predict outcomes (e.g., Quilty and colleagues in 2008; Shoss and Witt in 2013). See Vasey *et al*., 2013 for a comprehensive review. You can get more information about this topic in Vasey and colleagues' (2013) comprehensive review. For example, two-way correlations between neuroticism, extraversion, and conscientiousness and depression, for example, are numerous (Joiner & Lonigan, 2000; Verstraeten *et al*., 2009). Verstraeten and colleagues, 2009; Jointer and Lonigan, 2000).In other words, it's possible that the impact of any two-way interaction between traits (such as neuroticism and extraversion) depends on how high or low the third trait (such as conscientiousness) is. This would mean that the third trait's level could moderate the effect of any two-way interaction between traits, like neuroticism and extraversion. Dinovo and Vasey (2011)

discovered that the development of internalizing psychopathology was predicted by the three-way interaction. These further studies were able to confirm or refute the initial study's findings. First, Vasey and colleagues (2013) replicated the three-way interaction in four healthy groups using a variety of trait measures. When it comes to depression, researchers found that the interaction effect only applied to outcomes that were based solely on feelings of concern.

As demonstrated by According to research by Vasey and coworkers (2014), three-way interaction not only predicts diseases simultaneously but also explains problems in a sample chosen to include an appropriate proportion of participants at the more extreme levels of each feature dimension. According to well-replicated research, the interaction between neuroticism, conscientiousness, and extraversion (N & E C) significantly predicts depressive symptoms in healthy individuals. Only a small amount of research supports the assumption that having high risk scores on two out of three qualities is similar to having high risk scores on all three characteristics, which is called the "worst two out of three principles" (Vasey *et al*., 2014). (Vasey *et al*., 2014). In spite of these achievements, there are still many unsolved questions. According to prior studies, lower-order components of these FFM traits appear have a significant impact on the relationship with the NEC interaction and depression. A knowledge of how components interact could have considerable repercussions for therapy development, given that increasing data suggests that each facet has at least partially independent neural underpinnings (Allen & DeYoung, 2015). (Allen & DeYoung, 2015). First and foremost, the translational significance of the NEC interaction has yet to be studied in a currently depressed group.

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Researchers in McClure's 2017 study looked at how personality traits were linked to a sample of 65-year-olds who lived in the community. Over the course of the study, 106 older persons (mean age 74.2, SD 5.8), including 78 female participants, participated. Emotionally and psychologically, the vast majority of the individuals were in good health. A lower Extraversion was found to be connected with more severe suicidal ideation in this group of elderly people. Suicide ideation appears to be strongly linked to extroversion and socially prescribed perfectionist traits. When it comes to the study

of personality subtypes, Agwaya, Aloka, and Raburu (2015) looked at the association between the two among chosen secondary school students in Kenya. There was a statistically significant difference (at a P0.05 level) between pupils with an extroverted personality subtype and those without.

Different types of psychopathologies, such as depression, are predicted differently by empirical investigations into their aspects (DeYoung, Carey, Krueger, & Ross, 2016). Neuroticism, for example, is characterized by both withdrawal and volatility. In contrast to the externalized negative emotions of anger and irritation that are associated with volatile behaviour, the internalized negative emotions of depression, such as melancholy and worry, are captured by withdrawal. The extraversion domain includes two additional characteristics: excitement and assertiveness. Exuberance, on the other hand, is associated with a sense of well-being and a desire to connect with others. Symptoms of depression are associated with extraverted facets that are high in enthusiasm, but facets that are low in assertiveness are not (Naragon, Watson, & Markon, 2009). As a final point, industriousness and orderliness, two elements of conscientiousness, may be linked to depression. An industrious person is more likely to be reliable, persistent, and goal-oriented, while an orderly person is more likely to be scrupulous, tidy, and meticulous.

Self-Destructive Behaviours and Personality Types

People's perceptions and adaptations to the environment have been demonstrated to be linked to personality traits, especially under stressful conditions (Harkness and Lilienfeld, 1997). Suicidal ideation, attempts, and deaths can be predicted by personality qualities such as hopelessness, neuroticism, and extraversion, according to an analysis of studies published between 1977 and 2004. (Brezo *et al*., 2006b). In other studies, it has been found that those who display traits like impulsivity and irritability, as well as aggression, anxiety and skepticism, as well as non-conformity, self-criticism and perfectionist tendencies, are more likely to commit suicide (Brent *et al*., 1994; Nordstrom *et al*., 1995; Dean *et al*., 1996; Engstrom *et al*., 1999; Conner *et al*., 2001; Beautrais, 2003; Beevers and Miller, 2004; Enns *et al*., 2003; Minarik *et al*., 1997; Donaldson *et al*., 2000; Brezo *et al*., 2006a; Duberstein *et al*., 2000; Ronningstam and Maltsberger, 1998; Fazaa and Page, 2009; Ohring *et al*., 1996). There is a protective impact on suicide from agreeableness; stability of self-esteem; and resilience, which

may be gender-specific. (McCann *et al*., 2010; Fazaa *et al*., 2009; de Man *et al*., 2004; Nrugham *et al*. 2010.) (Street and Kromrey, 1994).

Some data suggests that male and female personality traits differ. According to one study, men may be more forceful and receptive to ideas, while women may be more neurotic, amiable, warm and open to feelings. ' (Costa *et al*., 2001). Suicidal behaviour may differ between men and women based on their personalities, according to some researchers (McCrae *et al*., 1999; Widiger and Anderson, 2003). This may provide light on the very high number of guys who take their own lives. The NEO Five-Factor Inventory was used in an Australian case-control psychological autopsy study (De Leo, Draper, and Snowdon, unpublished) to examine personality (NEO-FFI; Costa and McCrae, 2003). There were no statistically significant differences between men and women, according to the results of the studies. Male Australian suicides were found to have considerably higher scores on neuroticism and lower scores on extraversion and agreeableness when compared to the sudden death controls.

According to past research, this is the case. When compared to their control groups, female suicide fatalities likewise showed similar results. The suicide rates among women are greater than those among men, but this is consistent with findings from earlier studies. Anger was assessed using the Overt Aggression Scale in the same study. (Yudofsky *et al*., 1986). The results showed that those who committed suicide had much higher levels of hostility than controls, especially among men. Male suicides, on the other hand, were more likely to display signs of aggression in the month leading up to their death.

Researchers in McClure's 2017 study looked at how personality traits were linked to a sample of 65-year-olds who lived in the community. Over the course of the study, 106 older persons (mean age 74.2, SD 5.8), including 78 female participants, participated. Emotionally and psychologically, the vast majority of the individuals were in good health. A lower Extraversion was found to be connected with more severe suicidal ideation in this group of elderly people. Suicide ideation appears to be strongly linked to extroversion and socially prescribed perfectionist traits. When it comes to the study of personality subtypes, Agwaya, Aloka, and Raburu (2015) looked at the association between the two among chosen secondary school students in Kenya. There was a

statistically significant difference (at a P0.05 level) between pupils with an extroverted personality subtype and those without.

In a survey of college students, researchers found a relationship between suicide ideation and poor extraversion and high neuroticism. Researchers from Hawton, Houston, Haw, Townsend, and Harriss (2014) assessed the features of the suicide attempter with and without concomitant mental and personality disorders in order to further investigate the link between suicide and psychiatric co-morbidity. There was evidence of co-morbidity between mental and personality disorders in the study participants, and more patients with comorbid conditions attempted suicide throughout the follow-up period.

Both the association between neuroticism and suicidal ideation as well as between extraversion and suicidal ideation showed inverse correlations, according to the findings of this study. Suicidal ideation and personality were found to be linked across both groups in a study utilizing multi-group confirmatory factor analysis, according to Iliceto, Fino, Sabatello, and Candilera, (2014). 316 young adults and 339 older persons participated in the study. Personality qualities have been linked to suicide thoughts in a study of 109 adults by Segal, Marty, Meyer and Coolidge (2012). Personality is strongly linked to suicide ideation, according to Segal, *et al*. (2012). Except for neuroticism, which showed a positive correlation, Segal and his colleagues opined that personality showed a inverse relationship with suicidal ideations.

Occupational Stress Perceived

There are many different ways to describe occupational stress in both popular and professional literature. An imbalance between the demands of a work environment and an employee's requirements, abilities, and resources is considered to be an occupational stressor, according to most experts. To put it more succinctly: When it comes to work-related stress, most people feel it from time to time, and it is generally accepted that these short-lived, episodic events offer no long-term impact. In the long run, prolonged exposure to a high degree of professional stress can cause considerable bodily and psychological harm. It's not uncommon to hear the term "eustress" (positive stress) being used to describe the stress that stimulates and inspires the worker to learn new skills and perform at their best, without having the debilitating effect that is normally associated with workplace tension.

For Gardazi *et al*. 2016, stress causes pressure in the individual while pushing their psychological or physiological aspects to their limits. It could have a negative impact on an individual's health and performance (Lecompte *et al*. 2017). Stress is defined as an individual's inability to cope with a circumstance that is too much for them to handle. People's self-esteem can be affected by stress, according to Hussain *et al*. (2016), which can alter their expectations both physiologically and mentally. A person's ability to meet obligations is directly correlated to how they feel about their workload, which is where stress comes in. As the perceived mismatch rises, so does the level of stress (Mian, *et al*. 2016).

Stress is a part of every job, no matter what industry you work in. In spite of this, the prevalence of stress in both the working and non-working classes of society has increased (Zafar, Siddiqui, Jamali, & Razzak, 2016). These findings can be found in surveys and long-term investigations, which show that this development has taken place. It's based on the work of Warraich *et al*. (2014). According to World Health Organization studies (Malik *et al*. 2017), mental illness will soon overtake cardiovascular disease as the world's leading cause of disability. A stressful environment can exacerbate depression and other common mental diseases. Research into occupational stress shows that work-related factors can have a negative impact on an employee's life. Factors such as a heavy workload, uncertainty in one's role, disagreement in one's role, and a bad working environment all contribute to occupational stress in the workplace (Malik *et al*. 2017). According to Takrim and Siddiq (2016), the workplace environment has a substantial impact on stress levels. According to the study, employees' physical and psychological resources may be exhausted over time as a result of the unique demands of their professions. Working conditions, shift work, long hours of work, excessive workload, role conflicts, and poor relationships with the employer can all contribute to occupational stress. Occupational stress can be broken down into a variety of social and psychological factors, which can then be linked back to the individual (Warraich, *et al*. 2014). In addition, these numerous internal and external elements also play a crucial role in causing occupational stress (Malik *et al*. 2017). It affects everyone in some way or another. Because of our socioeconomic conditions, it is well-known that women are more prone to suffering from work stress than their male counterparts.

As evidenced by the findings of Seema Bhatt and Pramod Pathak (2010), who conducted a study titled "Occupational Stress among IT/ITES Women Professionals in Leading Indian Metros: A Case Study," in which they looked at the nature and intensity of stress patterns among IT/ITES professionals by gender and marital status. Some pressures appear to have different effects on men and women, which necessitates different approaches to solving their difficulties. Furthermore, it was implied that marriage had no effect on these individuals' careers. They came to the conclusion that IT/ITES personnel were at risk of stress and needed some assistance in dealing with it. A study by Nidhi Turan and Sultan Singh (2011), titled "Association of Organizational Stress Symptoms with Employees' Demographic Variables," looked at the relationship between various stress manifestations (such as headaches and diabetes) and the demographic variables of workers (age, gender, education, and length of work experience). Most of the respondents reported experiencing headaches, depression, general stress, high blood pressure, exhaustion, and back discomfort as a result of their professional duties. They said employees in higher age groups, particularly females, should be given extra attention.

According to Srimathi and Kiran Kumar (2010), in their study "Psychological Wellbeing of Employed Women Across Diverse Organizations," the psychological well-being of working women in various professions was evaluated. For this study, we randomly recruited women from a variety of workplaces (industry, hospitals, banks, educational institutions, and call centers/BPOs). Women working in industry had the lowest psychological well-being, followed by women working in health organizations. The psychological well-being of female bank employees was found to be moderate. The overall psychological well-being of female teachers was the greatest. According to Urmila Rani Srivastava's (2010) study on shift work, shift employees were shown to have a significantly higher level of workplace and life stress, as well as higher mental health outcomes and emotional state changes than their day-to-day counterparts. According to the findings, shift workers' emotional states, including anger and tension, were good predictors of mental health difficulties. Anger and a low level of energy arousal were found to influence the mental health of daytime employees. Anger was found to be the biggest predictor of all mental health outcomes. According to the study's findings, workers who work shifts or nights face several physical, mental, or

social issues as a result of the disruption to their circadian rhythms caused by shift work, according to the study's findings.

Stress in the banker's life: Demands-Control Model as Predictors of Employee's Activity Participation by Saif ur Rehman et al. (2010) examined the reliability and validity of work characteristics and their relationship with the demands-control model and activity involvement in two cross sectional studies of private and public-sector commercial banks in Rawalpindi and Islamabad, Pakistan.

Two cross-sectional surveys of self-reported data were conducted by the researchers. For each of the five criteria (demands, control, job stress, activity participation, and social supporters), appropriate internal consistency was achieved. Control can be divided into three categories: (a) personal competence and ability to manipulate, (b) colleagues' help in job activities, and (c) supervisory support to exercise power and assistance in carrying out work activities.

They conducted an empirical investigation of the influence of work stress on the job performance of bank employees in their research article, "Impact of Occupational Stress on Employee Performance in Banks: An Empirical Study," by Samartha and colleagues (2010). Because of the additional obligations they bear at home, women in with high-stress occupations are more likely to suffer from psychological distress. According to a study, employees with a lower level of education are more likely to suffer from stress. The stress levels of lower-income and married workers are also high. The study also found that the deployment of innovative technologies in banks has resulted in a decrease in stress levels.

According to a study titled "Study of occupational stress among railway engine pilots," traffic volume and speed in Indian Railways are expected to rise, resulting in increased stress for those who work with trains. Train engine pilot jobs fall under the category of physically demanding work. Workers in the train industry have higher levels of stress than those who work in the office. Stressors in the workplace for commodities Compared with high-speed and passenger train pilots, 42 railway pilots had a substantially larger number. Conflict between roles and feeling overwhelmed were the most common causes of stress and types of workplace stressors. An investigation of the amount of stress among railway engine pilots was conducted by Prakash *et al*

(2011), who concluded that growing workloads, demanding management, inadequate ergonomics, and fierce competition both within and outside the workplace are likely to contribute to stress. The costs to both the organization and the customers are enormous because of the tension caused by an overabundance of stress. It has been determined that postural pain is one of the top 10 stresses. The survey also found that the administration was making very little attempt to alleviate the stress of its personnel. One hundred public bank employees and another one hundred private bank employees in Quetta, Pakistan were interviewed by Malik (2011) for his study titled "A study on occupational stress experienced by private and public sector bank employees in Quetta city. It has been discovered that public sector bank personnel are subjected to a higher level of occupational stress than private sector bank employees.

According to a 2012 study titled "Occupational Stress among Sanitary Workers" by Rajan, sanitary workers are more prone to occupational stress than other workers. Their stress is caused by factors such as lack of education, illiteracy, poverty, and unplanned lifestyles. Stress-inducing issues at work include imprecise job descriptions, unfairness, a lack of respect, being excluded from departmental decision-making, a large workload, and low self-esteem. Workers in the sanitary industry are prone to high levels of absenteeism and frequent use of sick time, as well as interpersonal conflict and job instability. Patients' well-being and safety are jeopardized when sanitation staff are overworked and under-engaged, both of which have negative effects on infection control.

When Zarra-Nezhad *et al*. (2010) conducted a study on the topic of "Occupational Stress and Family Difficulties of Working Women," they discovered that striking a work-life balance is a major personal and family concern for many people worldwide. Working mothers' lives are complicated enough that they have to cope with stress from both their personal and professional lives on a regular basis. There are various reasons why a person's job and family life may be out of balance. Many things appear to make the weight of the burden fall disproportionately on women. Workplace stress and family troubles in working women have a substantial beneficial association.

Organizational Bullying and Women's Stress at Work by Gholipour *et al*. (2011) examined the connection between workplace bullying and stress in women. They came to the conclusion that stress in the workplace is a major problem, and they presented

some solutions to that problem. Stress and bullying were found to have a substantial correlation. According to the researchers, women's lack of knowledge about their rights, a lack of knowledge of bullying, and a preference for masculinity have all contributed to the rise of the "passive" posture of women, according to the researchers.

"Stress among Working Women: A Comparative Research on the Government and Private Sector" was the title of a study conducted by Sharma and Chaudary (2011) that looked at the degree of stress experienced by women in various types of organizations. According to the study, women in the private sector were found to be more stressed than their counterparts in the public sector. There was no correlation between a woman's age and experience and her level of stress. This showed that the level of stress is not dependent on the age and experience of women, but rather on the type of organization.

In his research publication entitled "Women in Healthcare: Barriers and Enablers from a Developing Country Perspective" (Tlaiss, 2013), he looked at the overall position of women managers in an industry where female employees outnumber female managers. Despite the fact that women make up the vast majority of healthcare workers, according to this report, they are underrepresented in positions of leadership. Macro-social and meso-organizational constraints frequently obstruct their aspirations to managerial positions. A similar relationship existed between women's experiences in the healthcare industry and the attitudes and structural barriers they faced on a macro level in society as a whole.

Personality

The Latin word "persona," which means "mask," is the root of the phrase "personality." Masks were worn by players in ancient Greece and Rome to conceal their identities on stage during plays. In the words of Kevin Leary (2011), "personality" refers to the sum total of an individual's actions, particularly those that are long-lasting and consistent enough to lead us to resemble and differ from others in a variety of way. Structure, styles of behaviour, interests, attitudes, capabilities, abilities, and aptitudes are all components of personality (Munn, 1965). A person's distinct identity is formed as a result of their psychophysical systems interacting with their surrounding environment. In this way, the psychophysical systems that govern an

individual's characteristic behaviour and thoughts establish his or her unique personality (Allport, 1968).

There are various ways to define "personality," but a common theme is that it refers to distinct patterns of behaviour that characterize each individual's adaptation to the circumstances of his or her existence. A growing number of people are beginning to recognize the importance of personality in determining one's own behaviour. Personality is said to be influenced by a combination of genetics, upbringing, and life experiences. It refers to both biological and social influences. Although there are numerous theories and models for assessing personality traits, no one model seems to be able to accurately represent the entire personality of any individual. Further research is needed in the domain of personality taxonomy so that we can better understand how to categorize people's behavioural, emotional, and experiential traits. SES and depressive symptoms were studied by Jokela (2011) to see if their temperament and personality qualities affected the results.

Social class and personality factors have been linked to depression risk by researchers. The participants in the Cardiovascular Risk in Young Finns Study were 2678 people who responded to the survey. During the three study waves in 1997, 2001, and 2007, the age range was 18–49 years old. Individuals were evaluated on the Temperament and Character Inventory for temperament and the Five-Factor Model for personality. Beck's Depression Inventory was used to measure depression in this study. In addition, they looked at factors including education, job title, and annual salary to gauge one's socioeconomic standing. High neuroticism or avoidance of harm, as well as low extraversion or reward dependency, were found to be linked to higher levels of depressive symptoms in people with lower occupational positions and income. Persistence was negatively associated with income and depressive symptoms, but this interaction effect was not detected with conscientiousness. This suggests that the mental health implications of a poor socioeconomic position may be most potent for those who are sensitive to hostile or threatening stimuli.

Among N.C.C. cadets, Saxena and Puri (2013) conducted a study on the relationship between risk-taking behaviour, personality, and sensation-seeking tendencies. They discovered that young people, particularly those drawn to the military, are more risk-averse than the general population because they are driven by a need for thrills and

excitement and by certain personality features. In order to discover the truth, a study was carried out that took into account the aging population, in particular to determine the potential dangers. Risk-taking, on the other hand, has not been proven to be linked to personality traits or the desire for stimulation.

In his research, Husin (2011) examined the association between the Big Five personality traits and employee work satisfaction. The findings showed a weak, positive, and significant link between the 91 major personality traits and the level of job satisfaction among employees. Extrovertism and openness to new experiences both showed a strong correlation with job contentment. Extraversion was shown to be the biggest predictor of job satisfaction in a study by Zhai *et al*. (2012) to evaluate the impact of the Big Five personality traits on job satisfaction and subjective wellbeing (S.W.B.).

In a study conducted by Kappagoda (2013), extraversion, agreeableness, and conscientiousness were found to have strong positive associations with job satisfaction. Job satisfaction was found to be negatively associated with neuroticism in the study results. Openness to experience and job happiness were found to have insignificant correlations. Eswaran and Islam (2011) studied the Big Five personality dimensions and job participation. Job participation was found to be closely linked to traits like extraversion and agreeableness. On the other hand, they discovered no connection between job involvement and neuroticism, conscientiousness, or openness to experience in their research. Overall, the results showed that there was a correlation between Big Five personality traits and job involvement, but it wasn't significant or extensive.

University teachers in southeast Nigeria were studied by Agbor *et al*. (2013) for the association between Big Five personality traits and job satisfaction. In the study, there were strong correlations between high scores on conscientiousness and low levels of neuroticism.

Personality and Occupational Stress

The role of the Big Five factors in job stress has been addressed by a number of researchers, but very few studies have examined the independent impact of each of the five components on work stress on their own. Neuroticism (also known as

dispositional negative affectivity) and extraversion have received extensive attention in the occupational stress literature, among other Big Five qualities. Even though these three traits are crucial for a successful workplace environment, almost no one has paid any mind to them thus far.

Turkish health care professionals were studied by Ozutku and Altindis (2011), who looked at personality and other aspects of stress. Extraversion and work stress were found to have a negative correlation, but neuroticism was found to be favourably connected. The findings of the regression analysis showed that neuroticism, gender, and position variables were all significant predictors of job stress. Big Five Personality Qualities - a strategy for managing stress" Research by Subburaj *et al*. (2012) indicated that personality traits predicted occupational stress. Extraversion, openness, agreeableness, conscientiousness and neuroticism were all found to be strongly linked to occupational stress. Personality traits are more predictive than any other environmental variables, according to the study.

Using the big five personality, Rai and Kumar (2012) examined the association between role stress (role overload, role ambiguity, and role conflict) and executives in the industrial sector, whether both government and corporate, respectively. Role neuroticism was found to be associated with all three elements of role stress, namely role overload, role ambiguity, and role conflict. The relationship between agreeableness and role ambiguity and total stress was found to be unfavourable. Conscientiousness was found to have a negative correlation with job ambiguity, role conflict, and overall stress in the workplace. In hierarchical regression analysis, neuroticism was found to be a significant predictor of role stress and its aspects.

According to Garbarino and colleagues (2013), there is a strong correlation between the big five features and work-related stress in special-force police personnel. The findings showed that certain of the five-factor model's personality traits were linked to an increased level of stress and a greater level of stress reactivity. In terms of occupational strain, neuroticism (a lack of emotional stability) was the most strongly linked to it. Low effort and reward imbalance were linked to high agreeableness. Occupational stress and the five major personality traits have a complicated relationship, in part because of a dearth of studies in this area. It appears, however, that neuroticism is the most significant predictor of workplace stress. There are strong

associations between neuroticism and other factors, including copying, unfavourable stresses encountered at work and other measures of psychological anguish can all contribute to an individual's overall state of mind represents a person's susceptibility to experiencing negative emotions (e.g., Hart *et al*., 1995).

According to Ozutku & Altindis (2011), Subburaj *et al*. (2012), and Rai & Kumar (2012), neuroticism and stress have a strong correlation. According to new findings, extraversion has a direct link to stress at work (Fontana & Abouserie, 1993; Hart *et al*., 1995; George, 1996; Mills & Huebner, 1998; Hart, 1999; Cano-Garcia *et al*., 2005; Ozutku and Altindis, 2011; Subburaj *et al*., 2012). Few studies have found a link between stress and agreeableness. There are several studies that have been done on this subject (2012). Openness to experience and conscientiousness in determining employee job stress has not been established. Despite the lack of scientific proof, it is possible to hypothesize about plausible correlations.

Suicidality

Suicidal thoughts, or suicidal ideation, are defined by Timothy (2018) as contemplating or planning suicide. These thoughts could be anything from a thorough plan to just a passing notion, and in some situations, they put the individual at risk of attempting or committing suicide. An individual's likelihood of committing suicide is known as suicidal intent. (Meyer, 2010). Suicidal thoughts arise when a person is unable to cope with a difficult situation. Some examples include financial difficulties, the death of a loved one, a broken relationship, or a crippling or life-altering illness. Many people with suicidal thoughts keep their feelings and thoughts to themselves and don't display any evidence of distress.

The following is a five-part review of the literature. Research has shown that stress is a major factor when it comes to teenagers' thoughts of taking their own lives. Optimism and suicidal ideation are discussed in the second section of this article. For the third time, the function of social support in adolescents' suicide thoughts is examined. According to demographic characteristics, research of suicidal thoughts is analysed fourth. It is concluded that research in India is examined. In the field of psychology, stress is a psychological characteristic that has been extensively examined in relation to depression, hopelessness, suicidality, and suicidal behaviour. Stress is caused by a

lot of things, like bad events in your life, family problems, academic sources, and parental expectations.

A link has been found between the occurrence and severity of life's stressful events and an individual's depression and thoughts of suicide in people of all ages. For example, in a sample of youngsters, for suicidal youngsters, Cohen-Sandler, Berman, and King (1982) discovered that they were subjected to much more stressful events in their lives compared to depressed or psychiatric patients. Study after study has discovered a link between the frequency of recent stressful life events and the likelihood of suicidal ideation among those who have attempted suicide in the past. According to Jacobs (1971), many young people who attempt suicide have a lengthy history of emotional and behavioral problems that peak in adolescence. Thoughts of suicide are associated with traumatic occurrences in one's life (Flannery, Singer, & Wester, 2001; Yang & Clum, 1996). Researchers have found that suicidal thoughts are linked to recent stressful life events in adolescents, according to numerous studies (e.g., De Man, *et al*., 1993a, 1993b; Dubow, Kausch, *et al*., 1989; Garrison, *et al*., 1988; Reynolds, 1988; Smith *et al*., 1989). According to a cross-lagged panel study by Clum, Luscomb, and Patsiokas (1991), Life stress was observed to increase the likelihood of future suicide attempts by suicidal attempters. A survey of 409 high school pupils was undertaken by Cole *et al*. (1992). Study participants with a greater risk of suicide reported higher levels of life stress, lower quality friendships, and lower self-esteem in the previous year. According to Sandin, Chorot, Santed, Valiente, and Joiner (1998), there was a link found between suicide ideation and traumatic experiences in the wake of traumatic experiences. They found evidence to support the idea that some life events may operate as a risk factor for suicide behaviour in adolescents, although the strength of their connection was only moderate or weak. According to King (1997), adolescent suicide behaviour may be exacerbated by recent interpersonally stressful events. Adolescent suicide attempters were shown to be more likely to attempt suicide if they were under the influence of stressors connected to their parents and close friends, according to Adams, Overholser, and Spirito (1994). In a study of 425 teenagers between the ages of 14 and 18, Huff (1999) discovered that the degree and regency of suicidal ideation were significantly predicted by regency and stress level.

The authors of the study, King *et al*. (2001), found a link relationship between these variables and suicidal ideation and/or behaviour: exposure to stressful life events; living in a low-income home environment; parental history of mental illness; inadequate parental supervision; limited instrumental and social competence on the part of the parents, sexual activity and marijuana use, recent drunkenness, current smoking, and physical fighting (2001). Since the 1980s, researchers have analysed relevant English-language articles and other papers to consolidate knowledge concerning the risk factors for suicidal behaviour in young people. The international literature identified 63 domains of risk factors, factors like not having enough money or education, having a bad family life, being a psychopath, having special weaknesses, and being in stressful situations. Adversity in a young person's life was found to increase the likelihood of them taking their own life when many risk factors from other domains were taken into account.

Suicidal thoughts are often linked to painful events in a person's life (Flannery, Singer, & Wester, 2001; Yang & Clum, 1996). Previous studies have revealed a connection between recent stressful life experiences and suicidal thoughts in adolescents (e.g., De Man *et al*., 1993a, 1993b; Dubow, Kausch *et al*., 1989; Garrison *et al*., 1988; Reynolds, 1988; Smith *et al*., 1989). High levels of stress are associated with an increased risk of suicide ideation in the future, according to a cross-lagged panel study conducted by Clum, Luscomb, and Patsiokas (1991). Suicidal attempters who were 12–17 years old in a Hong Kong community sample were more likely to attempt suicide if they had significant levels of stress in their life. Self-harm urges conduct as well as the intention to injure or terminate oneself in the previous years were assessed using survey responses, according to Wong *et al*. (2005). Researchers observed a link between suicidal ideation and suicide attempts, but not with actual suicides, even when demographics were taken into consideration in the study. Exposure to other people's suicides had no effect on a person's suicidal tendencies if depression was a factor in those tendencies. Liu, *et al*., (2005) did a research using 1,362 rural high school students in Shandong, China. Researchers found that 19% of the sample had suicidal thoughts, and 7% had attempted suicide in the six months prior to the study's completion. Suicidal ideation and attempted suicide were exacerbated by the stress of everyday living, as well as other reasons.

According to research by Mazza and Reynolds (1998), suicidal thoughts are more likely to arise in males who are enduring difficulties in their everyday lives and who have had negative life events. In three studies of American Indian adolescents, researchers identified a correlation between suicidal thoughts and unfavourable life events (Howard-Pitney, *et al*., 1992; Manson, Beals, Dick, & Duclos, 1989; Novins, *et al*.,1999). Results from a study on American Indian youth done in 2006 by researchers Yoder, Whitbeck, Hoyt, and LaFromboise were found to be similar to findings from other earlier studies. Suicidal thoughts were shown to be associated with person's self-esteem, gender, enculturation, and drug usage.

Cerutti, *et al*., (2011) examined prevalence of deliberate self-harm (D.S.H.) and its clinical implications in a sample of 234 Italian high school students (mean age = 16.47; SD = 1.7). D.S.H. involvement was found in 42 percent of the study subjects. Trauma such as domestic violence or sexual abuse, severe natural disasters, the death of a close family member, or witnessing such events as these were found to be associated with an increased risk of developing DSM-5 According to the research, life stress is one of the precursors and overwhelming predisposing factor for suicidal ideation. Eighty percent of adolescents had experienced considerable life stress in the three months before their suicide attempt. According to Aro and Lonnqvist (1994), (Heikkinen, Aro, and Lonnqvist), stressful life situations are more likely to affect teens and young adults in the three months preceding their suicide, according to research, and this is especially true in the final weeks and days before death (Cooper, Appleby, & Amos, 2002). External consequences such as disciplinary action or legal challenges, as well as interpersonal arguments or losses, are often major life events associated with an elevated risk of suicide (Adams, *et al*., 1994; Beautrais, Joyce, & Mulder, 1997; Gould, Fisher, Parides, Flory, & Shaffer, 1996). Stressors for young people include academic pressure, occupational stress, interpersonal challenges, the significant loss of a loved one, illness, and the breakup of a relationship (Butler, Novy, Gagan, & Gates, 1994; Kurtz & Derevensky, 1993; Mullis, Youngs, Mullis, & Rathge, 1993). Priester and Clum (1993) used a poor midterm test grade as a mild, naturalistic stressor to predict sadness and suicidal thoughts.

Numerous studies have shown a connection between academic demands and suicide. Nelson and Crawford (1990); Ayyash-Abdo (1990); Lewinsohn, Rohde, and Seeley (1993); (2002; 2003). Many adolescents believe they are judged on the basis of their

good results, and the pressure to do well is a crucial indicator of their better academic outcome. Suicide attempts are often linked to academic challenges, so this is not surprising. According to the research by Töero, Nagy, Sawaguchi, Sawaguchi, and Sótonyi, (2001) found an association between the pressure to perform well in school and suicidal behaviour in children and adolescents. According to their research, the annual suicide rate spiked around test seasons, when children and teenagers are under a lot of stress at school. According to some researchers, the cultural and familial expectations to do well in school may make the link between adolescent academic stress and suicidal thoughts even stronger in East Asian countries. There are a lot of expectations that Asian adolescents have for themselves and for others (e.g., parents and professors). This makes it hard for them to deal with academic pressure.

Shaheen (2009) found that parental expectations were the most significant predictor of adolescent emotional distress in an Indian study. One of the only paths to upward mobility and additional opportunities for many Asians is academic accomplishment. People and families play a critical role in academic performance because of this (Gloria & Ho, 2003; Sue & Okazaki, 1990). Failure to live up to one's own high standards and the expectations of close friends and family members can lead to the loss of one's reputation and support. This is a major problem. Or, to put it another way, children grow up in a culture where they are always under the watchful eye of others, most notably their own parents and instructors (Yeh & Huang, 1996). Adolescent suicide has been connected to academic stress across a variety of countries and cultures (Shagle & Barber, 1995). For more information on this topic, see Greenberger, Chen, Tally, and Dong, 2000. Among Singapore's teenage suicide attempters, academic difficulties were also found to be a factor in their suicidal conduct (Ho, Hong, & Heok, 1999). Ung (2003) notes that the suicide attempt rate among Singaporean adolescents is 11 percent, mainly due to school-related concerns.

According to numerous studies, adolescent suicidal ideation is closely linked to stress. Other research has indicated that stress has an indirect impact on the connection between life stressful events and suicidal behaviour. Researchers from Hong Kong showed that depression acted as the key mediator in the link between stressors and suicidal thoughts in Stewart, Lam, Betson, and Chung's (1999) study of adolescents. Ang and Huan (2006) evaluated more than 1,300 12- to 18-year-old Asian teenagers in Singapore for their levels of stress, despair, and suicidal thoughts. In this study,

adolescent depression was reported to be lessen the relationship between academic stresses and suicidal thoughts that had already been found.

Hiramura, Shono, Tanaka, Nagata, and Kitamura (2008) conducted a study on the impact of stressful life events and depression, as well as depressive cognitive processes on suicidal ideations in 500 Japanese undergraduates. Suicidal ideas were mostly unaffected by stressful events in one's life; instead, they were fuelled by depression and dysfunctional thought processes. Even in the face of a difficult life, suicide ideas were found to be modulated by depressed mood and depressive cognitive patterns. As part of their research, Hintikka and colleagues found that suicidal thoughts are linked to a number of negative life events and actions, as well. Even in the face of life's difficulties, a depressive state appears to be a prerequisite for suicidal ideation. In a study conducted by Konick and Gutirrez (2005), 345 college students were examined in order to identify several risk variables linked to suicide thoughts. According to their findings, college students who are depressed or hopeless are more prone to considering suicide. Suicidal thoughts are frequently accompanied by a sense of hopelessness and depression, which must be taken into consideration. Young adult's weak the ability to think on one's feet or a mental disease may be linked to life circumstances, though. For some teenagers, this is the case (Beautrais *et al*., 1997). Studying a sample of college-aged suicidal people, Schotte and Clum (1982) found that those who had more negative life stress were more hopeless and sadder than their non-ideating peers. Suicide attempts were also much higher among those who were poor problem solvers and under high stress. Terzi-Unsal and Kapci conducted a study of 605 high school students in a Turkish city to examine three potential suicide models (2005). Suicidal thoughts in teenagers have been linked to a lot of different things, like adolescent life events, psychological features, social support, and one's own sense of self-worth.

Suicide is influenced by life circumstances that have a moderate effect on suicidal behaviour in the short term but a profound effect on cognitive deficits in the long term. (Yang and Clum, 2000). Despite Schotte and Clum's diathesis-to-stress model, Chang (2002) found no support for it (1982). Stress in one's life can impact suicidal ideation. Theoretically, though, social problem solving may serve as a protective buffer. Emotional intelligence was measured objectively and subjectively by 302 university students in a cross-sectional approach (E.I.). Sadness, hopelessness, and suicidal thoughts were more prevalent among people with a higher level of emotional

perception (E.P.) than those who were less adept at managing other people's emotions (M.O.E.).

In addition, there was a substantial incremental value in all other measures of social and emotional competence except for minimising emotions, as revealed in a cross-sectional study on depression, anxiety, and suicide ideation by Ciarrochi, Scott, Deane, and Heaven (2003). Berman and Jobes (1991) suggested that psychotherapy, cognitive coping mechanisms, social support, and interpersonal interactions could all play a role in the link between stress and suicide. Teenagers who have attempted suicide in the past year were found to have a stress score 33% higher than non-suicidal teenagers, according to Rubenstein and colleagues (1989). Family cohesion and friendship were found to have a stronger indirect effect on stress and depression than family cohesion and friendship. Other researchers have discovered a connection between stress and suicidal ideation. According to Wilburn and Smith (2005), a relationship was established between high levels of stress and suicidal ideation among college students. They discovered that having a high sense of self-worth had a calming influence on suicidal thoughts when stressful life events were present, confirming their hypothesis that having a high sense of self-worth would do so. Studying 515 teenagers (mean age of 15.2) for six months, O'Connor, Rasmussen, and Hawton (2010) found that the diathesis-stress framework (T1–T2) was a good fit for their study. Acute life stress was found to be a significant contributor to feelings of anxiety and depression. SPP (socially prescribed perfectionism) and acute life stress predicted depression and self-harm.

Students who have previously shown suicidal thoughts were recruited for a study by Johnson, Gooding, Wood, and Tarrier (2010). Stressful life events and suicide thoughts are less likely to be linked, according to the study's authors, when people have a more optimistic view of themselves. No effect of stressful situations on suicidality was seen for those with moderate or high self-assessment levels. According to the results of the Schematic Appraisal Model of Suicide (SAMS), those who have a good self-perception are less likely to commit suicide. Suicide risk factors such as stress, depression, substance abuse, and a death mindset were all explored in depth by researchers Cheng and Chan in 2007 in the form of two theoretical models. Adolescents who lived in a high-stress social setting were more likely to take their own lives, whereas those with a strong social network and supportive families were less

likely. Support from family was significantly more important than that provided by friends (both directly and indirectly). A look at the ruminative processes of brooding and reflecting was undertaken by Chan, Miranda, and Surrence (2009). An ethnically diverse sample of college students (N = 1,011) found that brooding is a critical mediator of the 71 concurrent relationships between negative life events (INEs) and symptoms of depression and suicidal ideation. Depressive symptoms and suicidal ideation were only partially mediated, suggesting that people who brood over bad life events may be more sensitive to suicide ideas as a result of depression symptoms as well as brooding itself.

Chang, Sanna, Hirsch, and Jeglic (2010) conducted a survey with a random sample of 160 Hispanics. They discovered that loneliness and poor life events enhanced hopelessness and suicide thoughts. Loneliness, in combination with distressing life events, was revealed to be a major factor in both measures of suicide risk. Walsh and Eggert (2007) analysed 730 high school students in the Northwest and Southwest regions of the United States to examine suicide risk and protective factors (e.g., drug use, mental distress, stress). Suicide risk was connected with a lower level of protective factors in those who drank alcohol and smoked marijuana. A suicidal child's family is less cohesive, expressive, and conflictual than a non-suicidal child's family. Children who have attempted or pondered suicide are more likely to report their family as having higher levels of depressive symptoms, regardless of whether they fit the criterion for diagnosing depression disorder. Pillay and Wassenaar (1997), teenagers who took their own lives were more likely to have argued with their parents before they did so. In the six months preceding the study, many more suicidal individuals than control subjects experienced difficulties with family members and romantic partners. In both the suicidal and non-suicidal subjects, family satisfaction declined. Researchers found that suicidal adolescents use suicide as a way to express their discontent with family life. Tang and colleagues (2009) examined the prevalence of suicidal thoughts and actions among 10,233 Taiwanese teenagers. Nine and a half percent of those who participated in the study the previous year attempted suicide. Many of the risk factors for suicide among teenagers include gender identity and self-esteem issues as well as weekly alcohol usage (together with illicit drug use), severe family conflict, and low maternal education level. Teenage suicide attempts in Taiwanese teenagers were found to be connected with a variety of multidimensional factors. Wan and Leung (2010)

claim that a number of family variables, including physical abuse and divorce or separation of parents, contribute to young people's attempts at suicide. A teen may have tried to kill himself or herself because of how he or she felt about his or her parents and the problems they were having in their lives.

According to Liu (2004), suicide gender variations in the interplay of gestures (both conceptual and actual) were discovered to have independent and interdependent effects on emotional distress and engagement in delinquent behaviour. According to the study, there was a correlation between suicidal thoughts and delinquent behaviour in females, as well as between emotional distress and suicidal thoughts and delinquent behaviour in young women, according to the study. In males, the influence was not statistically significant. Suicidal thoughts were more common in Singaporean adolescents with a history of emotional distress, low self-esteem, and antisocial behaviour. Suicidal thoughts among females were only significantly predicted by emotional distress. No association was found between suicide thoughts and men's negative self-perceptions. Computer-assisted telephone interviews were utilized by Taylor, Grande, Gill, Fisher, and Goldney (2007) to obtain data from a random sample of South Australians (CATI). Researchers found that 4.7% of South Australians aged 16 and up had suicidal ideation. Survey results from 1997 to 2005 showed little shift in the general direction of public opinion. Suicidal thoughts were linked univariately to a wide variety of parameters.

Marital status, money situation, psychological stress, physical activity, and fruit consumption were found to be the greatest predictors of suicide ideation in the final multivariate model. According to Page and West (2011), psychosocial distress, health-risk behaviours, and 12-month suicidal thoughts were found to be linked in a sample of 25,568 youths from seven African countries. Suicidal thoughts and a number of expected psychological features were examined by Heisel, Flett, and Hewitt (2003) exploring the connection between the two. Suicidal thoughts were strongly linked to feelings of anxiety, melancholy, hopelessness, and social hopelessness. Having suicidal thoughts was found to be linked to a person's level of sadness and social apathy.

Researchers at Tehran University discovered that suicide thoughts negatively impacted resilience in 265 students. This study found a strong link between suicidal ideation and

signs of anxiety, sadness, and other mental health issues. Hankin and Abela (2011) examined the incidence, course, and long-term prediction of non-suicidal self-injury (NSSI) in a community sample of 103 adolescents (ages 11–14) from early to middle adolescence. After a 21-year follow-up, only 18% of young people participated in the NSSI for the first time. At the beginning of the trial, those who participated in NSSI were more likely to have a negative cognitive style and a depressive mother. Non-NSSI youth more likely to have adverse consequences from stress and depression as well as poor relationship quality, excessive reassurance-seeking, and early signs of depression in their mothers two years after baseline. Many of these indicators pointed to NSSI's return in the coming two decades.

This study looked at the suicidal ideation and behaviour among South African students (N = 1,157) from three different Cape Town secondary schools by Peltzer, Kleintjes, Wyk, Thompson, and Mashego (2008). In their research, they found that students who struggled to regulate their anger, had low self-esteem, and were under a lot of stress were more likely to take their own lives. Research done between July 2005 and July 2009 included 27 qualitative interviews with young Latinas (aged 11–19) residing in New York City who had attempted suicide, with the results of those interviews being analysed thematically by Zayas *et al*. (2010). There was a correlation between rising stress at home and suicide attempts, which resulted in the emotionally unstable conditions necessary for the attempt to occur. Insanity and Hopefulness Dispositional optimism is a personality trait that suggests a positive attitude towards the future for an individual. The good news is that it may help protect you against stress or mental disease.

According to Seligman *et al*. (1999), increasing one's level of optimism can help alleviate the symptoms associated with depression. According to research by Magaletta and Oliver (1999), as well as one's general well-being (ahin, Batigün, & ahin, 1998), having a good view on life, such as optimism, hope, and happiness, can improve one's health and recovery from injury and disease. Irving, Snyder, and Crowson (1998). A person's level of pessimism (or lack of optimism) makes sense when faced with a wide range of unpleasant outcomes. Roberts, Roberts, and Chen (1998) found positive associations between suicidal thoughts and dispositional pessimism. Study participants with a history of suicide attempts were examined for signs of suicidal ideation, depression, and other potential risk factors (poor self-esteem, loneliness, fatalism, and

pessimism). A history of suicidal attempts, sadness, and a pessimistic perspective were all found to be connected with suicidal thoughts.

To test the hypothesis that parental support has a mediating effect on the connection between optimism and depressive symptoms in middle school students, the researchers surveyed a community sample of 149 children between the ages of 12 and 13 from an urban area in Northern Italy. The researchers found that a positive outlook and depressive symptoms were found to be moderated by parental support. Adolescents with a more positive outlook on life were less likely to suffer from depression. However, the favourable effects of parental optimism reduced the negative consequences of parental pessimism. Pessimism and depression have been thoroughly investigated, but less is known about dispositional optimism's influence on suicidal thoughts. Psychological discomfort and well-being (Chang, 1998) have been found to be regulated by optimism (Kleinman, 2000). (Hewlett, 1998). It's typically a good thing. Hirsch and his colleagues have conducted a slew of studies to discover the function optimism plays in suicidal ideation. In a study of college students by Hirsch and Conner (2006), hopelessness and suicidal thoughts were found to be linked. Thoughts of ending one's life aren't always linked to a lack of hope. Optimism may play a big role in influencing the results. Hirsch, Conner, and Duberstein (2007) found that even when they took into account things like age, gender, depression, and hopelessness, optimism was still linked to suicidal thoughts.

Other studies have found a link past traumatic experiences with present-day suicidal thoughts or suicide attempts, and dispositional optimism has been shown to lessen this link after correcting for hopelessness or the intensity of depressive symptoms. This relationship was altered as a result of the accumulation of all possible negative events. Adversity or hardship may not cause people to think or attempt suicide if their outlook on life is more future-oriented (Hirsch *et al*., 2007a). People who are homeless or who have a good outlook on the future, regardless of their current situation, are less likely to attempt suicide or have suicidal thoughts (Hirsch & Conner, 2006; Hirsch *et al*., 2007b). Explanatory style was also examined in this study as a factor in the link between adversity and suicidal thoughts in college students. Pessimistic or unhappy people are more likely to contemplate suicide than people who are optimistic about life events. More thoughts of suicide were connected to pessimistic explanation styles, whereas optimistic styles were linked to fewer. 269 college students were studied by

Priester and Clum (1992) to see if their attribution style was a probable risk factor for bad outcomes. The explanatory style was found to be associated with despair, suicidal thoughts, and hopelessness. A lower degree of depression, hopelessness, and suicidal thoughts was linked to an optimistic explanatory style, whereas a higher level was linked to a negative explanatory style.

Internal control was found to be the most effective defence against suicidal thoughts and actions, but external control increased the likelihood that a person would consider suicide and actions. In Lynch *et al*.'s study, people who were more pessimistic at baseline were more likely to have suicidal thoughts a year later (1999). In an effort to predict suicidal thoughts (2008), O'Connor, Fraser, Whyte, McHale, and Masterton contrasted optimistic outlooks for the future with a general sense of hopelessness. When it came to predicting suicide thoughts in Time 2, people's optimism about the future proved to be more accurate than their general misery. Negative future thinking wasn't connected with suicidal thoughts.

According to a cross-cultural study by Shun (1999), Ghanaian college students felt less despondency and were more optimistic than their American counterparts. When it came to the suicidal ideation scale, American participants endorsed a greater number of items than their Ghanaian counterparts. Pessimism was found to be a predictor of suicidal thoughts in both Kuwaiti and American students in Adel-Khaled and Lester (2002), another cross-cultural study on suicidal ideation (mean age: 21.9 years). In a study of university students, Blankstein, Lumley, and Crawford (2007) looked at moderating factors like daily stress, self-esteem, dispositional optimism, coping mechanisms, and students' perceptions of social support in their study of the relationships between perfectionism and other traits in various dimensions and students' present-day feelings of hopelessness and suicidal ideation. There was a link between being optimistic and having problems in social situations, but the results were different depending on gender and the outcome.

Eckersley and Dear (2002a) examined the links between high rates of teen suicide in developed countries and a variety of socioeconomic and cultural factors. Numerous indices of individualism, including personal freedom and control, were strongly associated with the suicide rates of young males. O'Connor, Rasmussen, Miles, and Hawton studied a total of 808 Scottish high school pupils aged 15–16 years in 2009.

One factor that contributed was a lack of optimism. Thoughts on Ending Your Life and the Help of Others Assistance received from others has a significant impact on people's ability to deal with adverse life circumstances. When a person has strong, supportive social ties, their health and ability to manage stress improve and decrease. It has been discovered that social support is a key factor in both the risk of suicide among adolescents and adults. Adult and adolescent research have found that people who are suicidal often lack supportive connections with others, such as studies by D'Atilio and Campbell (1992), Howard-Pitney and colleagues (1992) and Rudd (1990). (1992). More suicidal adolescents reported less social support from their families, teachers, or friends than their nonsuicidal peers at high-risk adolescent schools (Esposito & Clum, 2003). Peer support is a common way for adolescents to deal with stress and anxiety (e.g., Wills & Cleary, 1996). Suicidal teens may require this type of assistance even more so than other teenagers because of the greater likelihood that they have had to deal with more life's traumas and stresses (De Wilde, Kienhorst, Diekstra, & Wolters, 1992). King, Segal, Naylor, and Evans (1993) found that adolescents with suicidal tendencies have a less close relationship with their families than their peers who have not been diagnosed.

Life dissatisfaction and suicide may be mediated by social support systems (Valois, Zullig, Huebner, & Drane, 2004). Others have also argued that social support plays a role in predicting suicidal thoughts as well. Peer victimization has been linked to poor mental health (Rigby, Slee, & Martin, 2007) and is a substantial risk factor for suicidal thoughts and attempts. However, this effect is reduced by gender. According to Verkuyten and Thijs (2002), peer victimization was shown to be common among teenagers with suicidal ideation. Students who have been victimized by peers are more likely to suffer from mental health issues such as depression, suicidal thoughts, and even attempted suicide compared to those who haven't been victimized. Females were also more likely to be victims of crime if they had not been victimized on a regular basis. There is a greater potential for depression and suicidal behaviour is associated with more types of victimization. Adolescent depression and suicide may be exacerbated by certain types of peer victimization.

A comprehensive survey of 8778 Chinese adolescents was used by Cui, Cheng, Xu, Chen, and Wang (2011) to perform their research. They found a strong link between

suicidal thinking and behaviour and particular difficulties in peer interactions, such as a lack of peer affiliation and being bullied. A link between loneliness and suicidal ideation and behaviour was revealed to be a moderating factor in the study. In addition, certain gender differences were observed. Similar findings were reported by Jutengren, Kerr, and Stattin (2011) in a Swedish study of 880 junior high school pupils (mean age = 13.72). Adolescent gender reduced the association between harsh parenting and self-harm, even though harsh parenting was not a predictor of self-harm. In a study of adolescents (aged 12 to 18 years old), suicidal ideation was found to be strongly associated with bullying at school by Rigby and Slee (1999). Data showed that victims of bullying were more than twice as likely to consider suicide as bullies themselves. Suicide ideation was favourably connected with a history of depression, while close friends and supportive parents were adversely associated. More than 16,000 Finnish teenagers between the ages of 14 and 16 were surveyed in a study by Kaltiala-Heino, Kaltimäki, Rimpelä, Marttunen, Rimpelä, and Rantanen (1999). According to the study's findings, both bullies and those who are bullied are at risk for depression. Most common in people who have been bullied or who have been bullied. Bullied teenagers were more likely to have suicidal thoughts when depressive symptoms were taken into account.

Recent research has found that women are more likely than men to suffer from suicidal thoughts in all countries and cultures. It was therefore necessary to create an appropriate scale of stressful life events for the Indian population, and the events encountered before attempting suicide were compared with those experienced by two control groups with similar demographics. According to the research (Gupta & Pradhan, 2007), suicide attempts and life events appear to have a direct correlation. In a study of 250 college students (125 men and 125 women) from several Haryana institutions, Singh and Joshi (2008) evaluated the connection between depression, life stress, and personality with suicidal thoughts. Depression, stressful life experiences, and two personality traits extraversion and psychoticism were all linked to suicidal ideation. In a study of 120 female college students, Chatterjee and Basu (2010) looked at both internal and external factors that could lead to suicide ideation. Using content analysis of the interview, researchers discovered four key elements that can contribute to suicide thoughts. For example, a freak accident, a sexual assault, or a rejection in love were shown to be more important than the death of an important person or an

intense financial problem, which were determined to be less essential. According to the findings, 12.5% of kids exhibited high suicide thoughts. There was a correlation between suicidal thoughts and the overall number of reasons for living (total score). Suicidal ideation was found to be adversely associated with worries about the future and moral objections. The results of a study conducted by Arun and Chavan (2009), which included 2402 students from grades VII to XII, showed that students who had scholastic difficulties and a home situation that was unsupportive were more likely to have suicidal thoughts.

In a cross-sectional study in 2009, young people in rural and urban populations in the state of Goa, India, were surveyed for the prevalence and risk factors of suicidal behaviour. Based on the results of the structured interview, factors that may have contributed to recent suicidal behaviour were evaluated. In the previous three months, 3.9% of young people said they had engaged in suicide behaviour. Taking one's own life was linked to female gender, not attending school or college, independent decision-making, premarital sex, physical abuse at home, lifetime experience of sexual abuse, and probable common mental problems (C.M.D.). In an independent analysis, violence and psychological distress were found to be independently related to suicide behaviour among females in a gender-segregated analysis; characteristics associated with gender disadvantage, particularly for rural women, may exacerbate their vulnerability.

Research by Manani and Sharma (2011) indicated that students of the CBSE board had a higher degree of suicide ideation than students of the I.S.C. board, but were lower than students of the U.P. board. There are no substantial disparities between male and female students when it comes to contemplating suicide. In addition, students who have a high level of exam anxiety are more likely to have suicide thoughts than those who have a low level of exam anxiety. Research in this field is scarce despite India's alarmingly high youth suicide rate. Suicidal ideas have been studied extensively in relation to stressful and unpleasant life experiences, but few studies have been conducted on student stress. People in India are subjected to a great deal of stress due to the country's high academic and social expectations. In their daily lives, there are many highs and lows. Due to rising peer pressure, parental conflict, and academic pressures, as well as the need to effectively compete for admission to different courses,

students feel a great deal of stress. Stressed students are more likely to have suicidal thoughts and attempts than those who are not, thus researchers chose to investigate the correlation between student stress levels and suicidal thoughts. Optimism and pleasure with social support have also been shown to have a positive impact. The main or direct effect model and the stress-buffering model have been presented to describe the effect of social support (Cohen & Wills, 1985).

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2.3 Conceptual Framework

Psychological variables

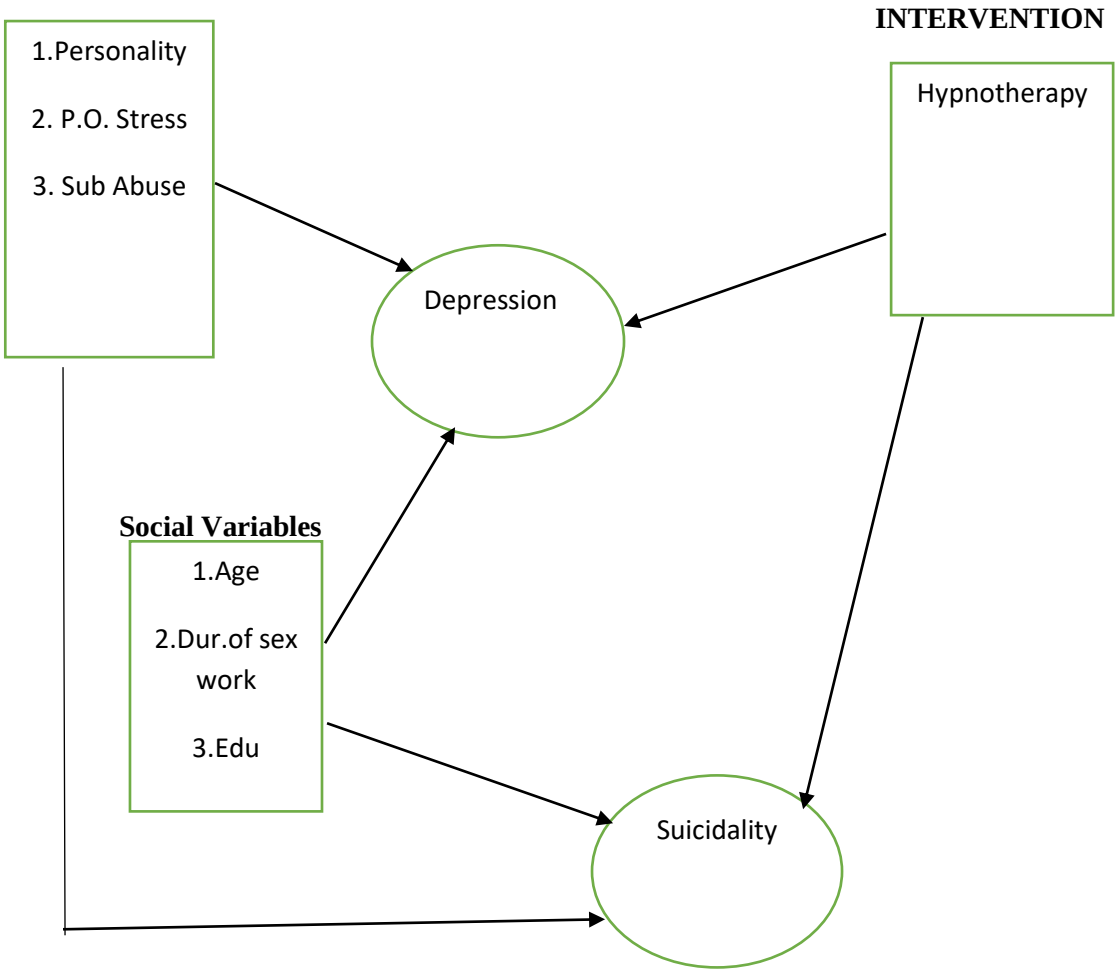

Figure 2.1. Showing the effect of psychological variables (Perceived occupational stress, personality traits, and substance dependence, social variables (Age, Duration of sex work, and educational level on depression and suicidality and hypnotherapy intervention on Depression and Suicidality

Source: Researcher, 2020

CHAPTER THREE
METHODOLOGY

This provides a narrative discourse of the research design, setting, participants, sampling technique, and procedure, including the data collection procedure and data analysis. The research was carried out in three phases.

3.1. Phase One: Qualitative Study

3.1.1 Design

This study phase employed a qualitative design to explore peculiar trade-related stressors and perceived challenges experienced by sex workers. Two Focus group discussions (FGD), Three In-depth Interviews (IDI) and Five key informant interviews (KIIs) were carried out in this phase. A pilot study was also conducted in this phase to revalidate study instruments and develop the sex work stress scale. It was also used to explore the terrain of brothel-based sex workers to get information on how best to carry out the study among the population of interest.

3.1.2 Setting

The study was conducted in the suburban parts of the Lagos Metropolis. The Suburban part of Lagos Metropolis comprises Agege, Alimosho, Ifako Ijaiye, Kosofe, Mushin, Oshodi-Isolo Shomolu and Ikeja. (Adewuya, 2016). The Rail line in 1901 and the growth of the Lagos port transformed Lagos and its environs into a vast residential and industrial area. This is partly responsible for the metropolis being a melting pot for different ethnic groups in Nigeria and neighbouring countries. This study phase was conducted in the metropolis's Ikeja, Agege, and Ojota areas. This area was chosen for the first phase of the study because, as the capital city of Lagos state, it shares most characteristic features of other parts of the Lagos Metropolis.

3.1.3 Study Population

Participants in this study were drawn from the population of females who engaged in commercial sex work in the suburban part of the Lagos metropolis. The population of sex workers in the suburban part of the Lagos metropolis is not known neither is the

number of brothels. Operation of a brothel is still considered illegal in Nigeria; therefore, many brothels are not labelled. Many of the brothels visited were based on information from two Non-Governmental Organizations (NGOs) that work closely with sex workers.

3.1.4 Participants

Participants for the qualitative study were drawn from the population of brothel-based female sex workers in the study locations based on the records of the NGOs.

3.1.5 Sampling Procedure

Phase One

The snowballing sampling procedure was employed in recruiting individuals for this study phase. The snowball sampling procedure is a recruitment method in which participants are encouraged to assist the researcher in recruiting other participants for the study. Steps were taken not to violate the participant's privacy. Only the nicknames of the participants were used. It was also ensured that participants met the inclusion criteria.

Inclusion Criteria

i. Individuals who are female sex workers operate from brothels within the Lagos metropolis.
ii. Individuals must be aged 18 years old and older.
iii. Individuals who understand English and or Pidgin English Language
iv. Willing to provide written informed consent to participate in the study

3.1.6 Procedure

The first phase of the study adopted the qualitative method with the use of Focus Group Discussion (FGD), In-depth Interviews (IDI), and Key Informant Interviews (KII). Data collected from this phase was used to generate items for developing a scale to measure occupational stress among sex workers. Participants were selected using the snowball sampling method among female sex workers in Lagos, Nigeria. This method was used because sex workers are difficult to involve in a study like this by other means. Two Focused group discussions were held.

Guidelines for the Focus Group Discussions

Aim: To explore the experiences of sex workers in the brothels and gather opinions, beliefs, and attitudes about their work and the use of substances, like opioids, alcohol, and cannabis, as coping tools for occupational stress among female sex workers in Lagos metropolis and to provide an opportunity to learn more about substance use and misuse generally among female sex workers for research purpose.

Number of participants: Eight female sex workers for each FGD

Duration of FGD: One Hour

Questions used as guidelines for the discussion

1. What are the different problems female sex workers usually face in the cause of their job?
2. How, in your opinion, do they use drugs/substances to cope with these problems?
3. What are the different drugs/ substances used to cope with these problems?
4. What are the common names or slangs for these substances?
5. What do you know about painkillers that make one high or intoxicated?
6. What problems do they cause for people that take them?
7. How does working as a sex worker affect you as an individual?
8. Do sex workers experience security challenges? How does it affect you as a sex worker?
9. Have you experienced violence as a sex worker? Can you share your story with us?
10. Do you have anything to say about the issues of substances or drugs not mentioned here?

The two Focused Group discussions were carried out in two locations within one week. Each Focused Group Discussion lasted for approximately one hour. The discussions were transcribed verbatim and line by line, after which they were analysed and summarised. Audio recording of the session was carried out using an audio recorder on a smartphone with the participants' permission.

The summary from the Focused Group Discussions are:

a. Sex work is seen as a means, not an end
b. Sex workers are forced to have poor and irregular sleep patterns
c. Sex workers are exposed to constant threat and physical abuse from clients and fellow sex workers
d. Conflicts of interest generate high levels of distress

e. Income is low, yet they spend so much on medical care
f. They suffer much stigmatisation even in religious circles
g. They turn to alcohol and drugs to cope
h. The effects of drugs help them be bold to fight for clients, as failure to do that will mean low-income and brothel owners do not accept excuses for non-payment of bills and dues.
i. Some substances tend to promote stamina needed for the rigours of sex work.
j. They experience police harassment regularly and pay their way out through sex.
k. Sex workers are not happy selling sex. They feel its condition that pushed them into the trade.

In-depth Interviews

Three in-depth interviews were also conducted involving three female sex workers called 'managers' because they organise the younger ones and have been in the trade much longer. Each interview lasted for approximately Forty minutes. The participants for the interview were not part of the Focused Group Discussions. The interviews were transcribed line by line, analysed, and summarised and the key factors were extracted to develop a new sex work stress scale.

Key Informant Interviews

Five Key Informants were interviewed. They were

Two retired sex workers now working with an NGO

One Manger of a Brothel

1 Social worker who has worked with sex workers

1 Pharmacy operator situated around seven brothels in an area known for the sale and use of narcotic substances and drugs known to render services to sex workers by selling medications to them for their medical complaints.

Item Generation

With the help of research and statistics experts, items were generated for the Sex Work Stress Scale by generating and validating the items. Strict ethical procedures and scientific guidelines were followed in this process. A Pilot study was also carried out among sex workers using open-ended questions to allow for the free expression of the participants.

A total of Forty-Eight (48) tentative items were generated from the qualitative phase. The generated content and items were subjected to a face validity exercise involving five mental Health Professionals (three psychiatrists, two clinical psychologists & one social worker). They are familiar with the culture of the setting in this context because they have not less than five years of practice experience in handling stress in the workplace. They were asked to evaluate the relevance, clarity and conciseness of the items included in the questionnaire. They were also asked to assess the items to determine if the questionnaire contained relevant items for assessing stress in the workplace among sex workers. Based on this initial assessment, 36 items were retained. The 36 items retained were given to 120 female sex workers who were selected using the snowball technique.

Face validity

Ninety-Eight (98) female sex workers were operating in Ikeja, Ojota, Agege and Ogba areas. They were excluded if they were unwilling and not in a position to give informed consent. Corrected filled questionnaires were scored and subjected to internal consistency (how well a set of items conceptually fit together) through Cronbach's alpha reliability value.

Concurrent validity

The Sex Worker Stress Scale was correlated with three existing scales: The perceived Stress Scale, the Social Support Scale, and the Presence of Meaning in Life Scale, to establish convergent and discriminant validity, respectively. The Sex Worker Stress Scale significantly and positively correlated with the perceived stress scale ($r = .32$, $p<.01$) and was not significantly associated with social support ($r = -.13$, $p>.05$) and the presence of meaning in life scale ($r = -.09$, $p>.05$). This shows that the newly developed Sex Work Stress Scale significantly converges and discriminates with the existing standardised scales, hence, establishing the suitability of the new scale in assessing stress among sex workers.

3.2 Phase Two: Cross-Sectional Survey

Table 3.1: Distribution of respondents based on demographic characteristics in phase 2 of the study

Variables	Options	Frequency	Per cent
Age	18-22 years	43	19.2
	23-27 years	117	52.2
	28-32 years	44	19.6
	33- 37 years	12	5.4
	38 years and above	8	3.6
Geo-political Zone	North-West and East	3	1.3
	South-West	19	8.5
	South-East	42	18.8
	North-Central	26	11.6
	South-South	134	59.8
Religion	Christianity	206	92.0
	Islam	8	3.6
	Traditional	4	1.8
	Other religion	2	.9
	No religion	4	1.8
Marital status	Single	194	86.6
	Married	5	2.2
	Divorced/Separated	19	8.5
	Widowed	5	2.2
	Cohabiting	1	.4
Occupation	Artisan	162	72.3
	Small scale business	53	23.7
	Civil service	3	1.3
	Others	6	2.7
Duration of sex work	1-4 years	180	80.4
	5-9 years	34	15.2
	10-14 years	3	1.3
	15 years and above	7	3.1
Educational Qualification	Primary School certificate	91	40.6
	WAEC/NECO	121	54.0
	OND	5	2.2
	HND/Bachelor' Degrees and above	7	3.1

3.2.1 Design

This phase of the study adopted a sequential exploratory mixed method. It necessitates the investigation of psychosocial predictors of depression and suicidality and the efficacy of hypnotherapy among sex workers in brothels in Lagos metropolis, Nigeria, based on informed findings from the exploratory qualitative method. The dependent variables of the study were depression and suicidality, while the independent variables were psychosocial factors, namely perceived occupational stress, personality traits, the severity of substance use, age, duration of sex work, educational level and hypnotherapy.

3.2.2 Setting

The study was conducted in Lagos Metropolis. Lagos (Eko in Yoruba) is a metropolitan city in Lagos State Nigeria. It is the most populous city in Nigeria and on the continent of Africa. Metropolitan Lagos consists of 16 out of Lagos state's 20 Local Government Areas. Excluded LGAs are Badagry, Epe, Ibeju Lekki and Ikorodu. Lagos State Government reported that the metropolis has an estimated population of about 16,060,303. The areas covered by the Lagos metropolis are (1) Island (Victoria Island, Apapa, Etiosa, Lagos Island), (2) Mainland (Ajeromi- Ifelodun, Lagos Mainland, Surulere), (3) Suburban (Agege, Amuwo Odofin Alimosho, Ifako-Ijaiye, Kosofe, Mushin, Oshodi-Isolo, Shomolu and Ikeja.). (Adewuya, 2016). The metropolis houses 35% of the total landmass of Lagos State but makes up 85% of the total population of the state. (LSBS,2005). The Rail line in 1901 and the growth of the Lagos port transformed Lagos and its environs into a vast residential and industrial area. Although originally inhabited by the 'Awori group' of the Yoruba people, today, Lagos State has a very diverse population because of heavy migration from other parts of Nigeria and surrounding countries. There are more than 250 ethnic groups represented in Lagos Metropolis, including the Hausa, Igbo and Fulani but the Yoruba are the dominant ethnic group (Adewuya *et al.*, 2018).

3.2.3 Study Population

Participants in this study were drawn from the population of females involved in sex work in the Lagos metropolis. The population of sex workers in Lagos is presently unknown. This is because it is still a trade that is highly stigmatised, and most sex workers will not openly declare that they are involved in the trade for census purposes.

Twelve years ago, a survey reported 2,567 registered sex workers in 93 major brothels in Lagos (1126 in the Ikeja division) (Aledayelu, 2007). Even this figure cannot be substantiated. The United Nations Joint Program for HIV/AIDS (UNAIDS, 2018) estimated 103,506 sex workers in the country. With a population of 200 million people, the estimated number of sex workers in Lagos can be put at 10,351. The number is expected to be higher because Lagos is highly densely populated.

3.2.4 Participants

A total of Two Hundred and Twenty-Four brothel-based female sex workers drawn from the population of female sex workers operating in the Lagos metropolis were recruited for the study. They were made to spread across the 3 cluster areas of the Lagos Metropolis, which include Island, Mainland, and Suburban (Lagos State Bureau of Statistics, 2005). This reduces the likelihood of bias while enhancing our ability to learn about the participants' social environments and facilitate comparisons between people recruited from various parts of the country. 43(19.2%) of the respondents fall between the age bracket of 18-22 years, and the majority, 117(52.2%) belong to the age bracket of 23-27 years, 44(19.6%) falls between the age range of 28-32 years, 12(5.4%) were between 33-37 years, 8(3.6%) were 38 years and above. More so, based on Geo-political zones, 3 (1.3%) of the respondents were from North East or North West, 19 (8.5) were from South West, 42(18.8) were from the South East 26(11.6%) were from the North Central geo-political zone, larger per cent 134(59.8%) were from South South part. The majority, 206 (92%) of the respondents, were Christians, 8(3.6%) were Muslims, 4(1.8%) were traditionalists, 2(0.9%) practised other religions, and 4(1.8%) reported not practising any religion.

In addition, a larger percentage of the respondents 194(86.6%) were single, 5(2.2%) were married, 19(8.5%) were divorced/separated, 5(2.2%) were widowed and 1(0.4%) is cohabiting with her partner. Based on the occupation of the respondents 162(72.3%) were artisan, 53(23.7%) were small scale business owners, 3(1.3%) were civil servants, and 6(2.7%) engaged in other business. Furthermore, the majority, 180(80.4%) of the respondents had between 1-4 years of sex work experience, 34(15.2%) had between 5-9 years of experience, 3(1.3%) had 10-14 years of experience, and 7(3.1%) had 15 years and above experience in sex work. Finally, on educational qualification, 91(40.6%) of the respondents possessed primary school

certificate, majority, 121(54%) acquired secondary school certificate, 5(2.2%) were OND holder, 7(3.1%) were degree holders. (See Table 3.1)

3.2.5 Sampling Procedure

Respondent-Driven Sampling was used for the sampling process. It is a hybrid of "snowball sampling" (having people refer others they know) and "respondent-driven sampling." Because the sample was acquired in a non-random manner, a mathematical model weights the sample to compensate due to the difficulty of reaching female sex workers via any other technique. Stratified Random Sampling (SRS) was used to stratify brothels in Lagos city into island mainland and suburban groups. The Respondent-Driven Sampling approach was then used to recruit participants. The RDS Seeds were assigned for each brothel according to the seed's age range, ethnicity, and years of experience. Seeds were the first participants to invite others in their category to participate in the research.

3.2.6 Inclusion Criteria/ Exclusion criteria

v. Individuals who are female sex workers operating from brothels within the Lagos metropolis.
vi. Individuals must be aged 18 years old and older.
vii. Individuals who understood English or Pidgin English Language
viii. And were willing to provide written informed consent to participate in the study

Exclusion Criteria:

i. Individuals who are not female sex workers and operate from brothels within Lagos Metropolis
ii. Individuals who are less than 18 years of age
iii. Individuals who do not understand English or Pidgin English Language
iv. Individuals who are unwilling to consent to take part in the study.

Sample Size Calculation

Kish's (1965) formula was used in calculating the study sample size for this study phase based on a combined depression and suicidality prevalence rate of 13.3% based on an extensive study conducted among over 10, 000 residents in Lagos State (Adewuya *et al.*, 2018).

According to Kish's Formula;

$$N = \frac{\left(\frac{Za}{b}\right)^{pq}}{d^2} \quad \text{……. 3.1}$$

N = Sample number

q = 1 – p

Za/b = Z Scores corresponding to a one-sided test = 1.96

p = Estimated population proportion (prevalence) assuming 13.3% (Adewuya *et al*., 2018).

d = Acceptable margin of error at 5% (standard value of 0.05)

$$N = \frac{(1.96)^2 X0.133X0.88}{(0.05)^2}$$

$$N = \frac{3.842X0.11}{.0025}$$

N = 177

A total of 224 participants were eventually recruited for the study. An additional 10% was added to account for attrition and uncompleted questionnaires. This will bring the total sample required for this study phase to 194.

3.2.7 Instruments

Sex Work Stress Questionnaire (SWSQ): This is a newly developed occupational sex scale by the researcher. It has 12 items and has an internal consistency of Cronbach Ω =.98. A higher score above the norm implies high sex work strain, with a lower score below the norm indicating low sex work stress. The sex worker scale was correlated with three existing scales: perceived stress scale, social support scale, and presence of meaning in life scale to establish convergent and discriminant validity, respectively. The sex worker scale significantly and positively correlated with the perceived stress scale ($r = .32$, $p<.01$) and was not significantly associated with social support ($r = -.13$, $p>.05$) and the presence of meaning in life scale ($r = -.09$, $p>.05$). This shows that the newly developed sex work stress scale significantly converges and discriminates with the existing standardised scales, hence, establishing the suitability of the new scale in assessing stress among sex workers.

The severity of Dependence Scale (SDS): The Severity of Dependence Scale (SDS) was the first developed to determine the degree of heroin addiction. The Substance Dependence Scale (SDS) has been proven helpful in measuring substance addiction in general. Maria *et al*. (2014) reported that factor analysis found two-factor solutions. Where factor 1 had a Cronbach's Ω of .66 (overall Scale coefficient= 0 .44). Criterion-related validity was established for the scale by comparing sex workers who reported use of any of the drugs in the scale and those who did not abuse ($r=0.34$, $p<05$)

Alcohol Use Disorder Identification Test (AUDIT): This instrument was published in 1989 by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviour, and alcohol-related problems. It is a simple and effective screening method for unhealthy alcohol use, defined as risky or hazardous consumption. It can also help to identify alcohol dependence, as was used in this study. It has ten items and has internal consistency reliability of (Cronbach Alpha) of 0.80 (95% C10.51-0.59). Though it is designed to be used by professionals, it can be self-administered, making it one of the most used screening tools for alcohol use in the world. (Sanders, Aasland, Babor, De la Fuente and Grant, 1993)

The Big Five Personality Inventory-10 (BFI-10): The Five Personality inventory-10 is a short version of the Big Five personality Inventory developed by John, Donahue and kentle (1991). The 44-item Big Five Inventory was used to produce the scale, created with time constraints in mind. Correlations between test-retest results indicate acceptable reliability. Strong relationships exist between BFI-10 scores and other Big Five instruments, correlations between self and peer judgments, and associations with socio-demographic characteristics. The BFI-10 has been shown to have reasonable reliability estimates in some previous investigations. Among a group of university students in the United States, Ramstedt *et al*. 2014, demonstrated test-retest correlations between r =.65 (Openness) and r =.79 (Extraversion), r =.49 (Neuroticism) and r =.62 (Openness) for six weeks. Several findings support the factorial validity, the construct validity, and the criterion validity of the BFI-10. (Rammstedt & John, 2007, Rammstedt *et al*, 2013, 2014). In an Arabic non-clinical setting, Alansari (2016) reported Cronbach alpha for Neuroticism; for those who are extraverted, open-minded, agreeable, and conscientious females as 0.74,0.83, 0.85, 0.81 &0.92, respectively.

Centre for Epidemiologic Studies Depression Scale (CES-D), NIMH

The CES-D is a brief self-report questionnaire developed in 1977 by Laurie Radloff to assess the severity of depression symptoms in the general population. When compared to the Patient Health Questionnaire-9 (PHQ-9) and the WHO Disability Assessment Schedule (WHODAS), the CES-D -10 is a ten-item questionnaire with good internal consistency throughout the sample (=0.69-0.89) and adequate concurrent validity. It had a good to the exceptional area under the Receiver Cronbach Alpha of 0.81. Psychometric properties were tested in African American and black Caribbean adults. Alpha was found to be 0.80 and 0.76 in African and black Caribbean women. (Bijorgvinsson, 2013).

Suicidality Scale: Suicidality is a subscale adapted from the Mini International Neuropsychiatric Interview is a brief, structured interview used to identify mental and personality disorders. Sheehan and Lecrubier came up with the first version of it. Kapper values were noted to be good and excellent between MINI and Screening for cognitive dysfunction in unipolar depression (SCID) diagnoses more than 0.75. Inter-rater and test-retest reliabilities were good and excellent. It is scored by adding all the points where 1-8 points are low, 9-16 points are moderate, and 17 points and above is a high suicide risk

3.2.8 Procedure

The researcher obtained ethical approval from the Lagos State Univesity Teaching Hospital (LASUTH) Ethical Committee. This was followed by data collection for the second phase of the study. Data were collected with the aid of six research assistants who are Master's Degree holders in Clinical Psychology. A respondent-driven sampling approach was employed in recruiting individuals to participate in this study phase. Brothels in the Lagos Metropolis were grouped into three based on their locations. These are Island, Mainland, and suburban areas of the metropolis. This is to improve the precision of the Sampling by reducing sampling error. Seeds for the respondent-driven Sampling were appointed for age range, ethnicity, and duration in business. The seeds of the RDS were used to recruit 224 participants for the study. They were drawn to cover all socio-economic strata of female sex workers operating within the Lagos Metropolis of Lagos state Nigeria.

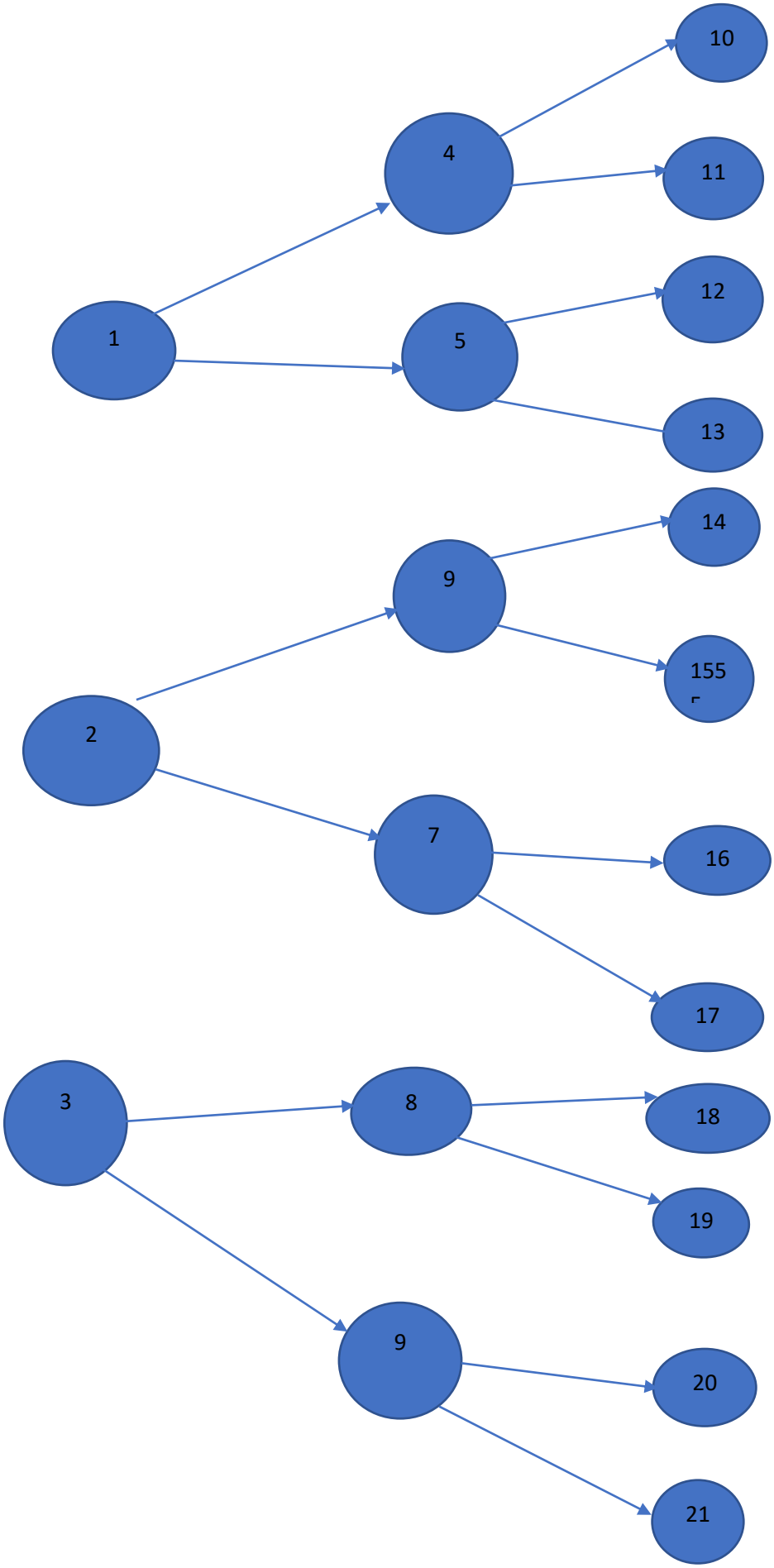

Figure 3.1: Showing the waves of the Respondent Driven Sampling technique
Source: Researcher, 2020

Figure 3.1 is an illustration of the Respondent Driven Sampling wave. Numbers 1, 2 and 3 are the first set of seeds chosen based on their age, duration of sex work and educational level. Number 1 invites 4 and 5 into the research, 2 invites 6 and 7, and 3 invites 8 and 9. On the next set of waves, 4 invites 10 and 11, 5 invites 12 and 13, 6 invites 14 and 15, 7 invites 16 and 17, 8 invites 18 and 19, and 9 invites 20 and 21. The procedure is done repeatedly until the sample size is complete.

Table 3.2 Descriptive Statistic Showing the prevalence and pattern of depression and suicidality among FSW in phase Two

	Options	Percentage
Depression	Prevalence	42.9
	Mild	30.4
	Moderate	58.9
	Severe	10.7
Suicidality	Prevalence	21.4
	Low	54
	Moderate	33.5
	High	12.5

The prevalence of depression was 42.9%, with 30.4%, 58.9% and 10.7% at mild, moderate and severe levels, respectively. Also, there was a 21.4% prevalence of suicidality, with 54%, 33.5% and 12.5% at low, moderate and high levels, respectively.

3.3. Phase Three: Quasi-Experimental Study

3.3.1 Design

A pre-test post-test experimental design, as utilised by (Olley, 1997), was employed in this study phase. This design involved establishing a baseline for the dependent variables (depression and suicidality), instituting the intervention (hypnotherapy), and assessing depression and suicidality at the post-test. Sex workers who scored and met the cut-off mark for depression and suicidality, who participated in the cross-sectional study and were willing to participate in the quasi-experiment, were therefore randomly assigned into experimental and control groups.

3.3.2 Study Population

Participants in this study phase were drawn from the brothel-based female sex workers who participated in the cross-sectional survey in study phase two. They were selected based on their scores on depression and suicidality; and have met the cut-off for medium to severe scores.

3.3.3 Participants

Of 112 participants who met the cut-qw2eqaoff scores for depression and suicidality, 20 agreed to participate in the experimental phase. They were randomly assigned to two groups. Experimental and control groups. The assignment was by simple ballot. The pet names of the participants were written on a sheet of paper and wrapped up in a bowl. Two research assistants picked the names from the bowl one after the other until all the names were taken. One set of numbers was assigned to the experimental group, while the other was assigned to the control group. Four participants dropped out, and 16 made it to the end of the intervention phase.

Table 3.3: Frequency Table for Participants in Phase Three

		Frequency	Percentage	Valid%	Cum%
Age	20-24yrs	4	25.0	25.0	25.0
	25-29yrs	6	37.5	37.5	62.5
	40yrs & ab	16	37.5	37.5	100.0
	Total	16	100.0	100.0	
Geo-political Zone	South West	2	12.5	12.5	12.5
	South South	14	87.5	87.5	100
	Total	6	100	100	100
Religion	Christianity	16	100	100	100
Marital Status	Single	10	62.5	62.5	62.5
	Divorced/Separated	2	12.5	12.5	75.0
	Widowed	4	25.0	25.0	100
	Total	16	100.0	100.0	
Occupation	Small Scale Business	10	62.5	62.5	62.5
	Others	6	37.5	37.5	100.0
	Total	16	100.0	100.0	
Duration of sex work	1-11 Months	10	62.5	62.5	62.5
	1-3 yrs	4	25.0	25.0	37.5
	4 yrs & above	2	12.5	12.5	100.0
	Total	16	100.0	100.0	
Education	WAEC/NECO	10	62.5	62.5	62.5
	OND	4	25.0	25.0	25.0
	HND/ Bach Degree and above	2	12.5	12.5	12.5
	Total	**16**	**100.0**	**100.0**	

25% of the participants fell between 20 and 24, 37.5% were between 25 and 29, and 37.5% were 40 years and above. 12.5% of the participants in the experimental phase were from the South West geo-political zone of Nigeria. This includes Lagos, Ogun, Oyo, Osun and Ondo states. 87.5% were from the South-South geo-political zone. This zone included people from Cross River, Akwa Ibom, Edo, Rivers and Delta States. All the participants in the experimental phase were Christians. It should be noted that these participants were willing to participate in the experimental phase. On the participants' marital status in the experimental phase, 62.5% were single, 12.5% were either divorced or separated, and 25% were widowed. Among the participants in the experimental phase, 62.5% were engaged in small-scale businesses, while others were students, civil servants or not involved in any other occupation. Among the participants in the experimental phase, 62.5% (10) of them had been into sex work for about less than a year, 25% (4) for between one and three years and 12.5% (2) for four years and above. Among the participants in the experimental phase, 62.5% (10) of them had an Ordinary Level certificate, 25% (4) had an Ordinary National Diploma (OND), and 12.5 (2) had a Higher National Diploma/ Bachelor's degree or above.

3.3.4 Instruments

The main instrument for the intervention phase was a manual containing hypnotherapy scripts, incorporating the theoretical procedures and mechanism of hypnotherapeutic treatment. The manual is found in the appendix section.

3.3.5 Therapeutic Procedure for Hypnotherapy

The hypnotherapy intervention was administered to the participants as a group**.** This mode of administration was adopted because it has been found to work as effectively as individually administered hypnotherapy. Moreover, administering the intervention was a time saver considering that nothing is lost in its efficacy. Erfanian and Keshavarz, 2014; in a comparative study of Cognitive Behavioural Therapy (CBT) which is often regarded as the gold standard for psychotherapy, and Group Hypnotherapy, on depression, found Group Hypnotherapy more efficacious. After all the participants in the experimental group were fully sited, the experiment phase began with the following procedures.

1. Gain the client's consent- At this point, the researcher obtained the participant's consent to commence the hypnotic procedure. This was obtained in writing and signed by each participant. At this point, the researcher introduced himself again, welcomed each experimental group participant, and explained the hypnotherapy procedure.
2. Induction of trance- An induction of trance is the process undertaken by a hypnotist to establish the state or condition for hypnosis. Prepared scripts were used for this stage. At this stage, the researcher gave the instructions for the trance induction. He said

   'You may begin by taking a few deep relaxing breaths and orienting yourself to the experience of relaxing…. What I would like for you to do now, with your eyes closed, is to imagine that right in front of you, within an arm's reach, is a blackboard, so close to you that if you were to reach out, you could write on it. See it in your mind's eye. Imagine it. Maybe you see the old-fashioned type of blackboard, slate, those that used to be used in school. Maybe you imagine one of these new office green boards. Whatever colour your blackboard is, that's your blackboard. See it in your mind's eye. Maybe your blackboard has a metal frame or a wooden frame- it does not really matter. Whatever frame you see in your mind's eye, that is part of your blackboard…. (Please see the appendix for the rest of these scripts).
3. Deepening of the trance state- This stage involved making the trance state deeper by encouraging suggestions offered by the hypnotherapist. To deepen the trance state, the researcher gives the hypnotic suggestion as follow

   ‘I want you to see a stairway in front of you while you sit there relaxed and comfortable. Stairs lead down to a luxuriously carpeted floor with an ornate handrail running across. Ten gentle steps lead slowly down the stairwell as you look down. Once you have taken the first few steps, you will notice that the more comfortable and relaxed your body becomes, the more you will be able to proceed down the rest of the stairs. With your hands on the handrail and going down the stairs one step at a time, you will soon find yourself at the bottom of the staircase.…. (Please see the appendix for the rest of the deepener.)
4. Hypnotic suggestions- This is the main stage and involves giving suggestions targeted at resolving problem behaviour that the hypnotherapy session sets out to

correct or treat. Prepared scripts for each session were used. These scripts were prepared to tackle the dependent variables and associated factors majorly.

According to numerous studies, there is a strong correlation between low extraversion and depression. Neither Kotov, Gamez, Schmidt, and Watson (2010) nor Klein *et al*. (2011) found any correlation with openness (2011). It was found in a study (Bienvenu *et al*., 2004) that those with clinical depression had a somewhat higher mean openness to feelings, a component of openness. In Carrasco Ortiz and del Barrio Gándara (2007), a different connection was discovered. The fact that so many people participated in the research suggests that openness to one's emotions may be associated with major depressive illness. (Please see the appendix for the rest of the scripts)

5. Post-hypnotic suggestions- These were instructions given during the trance state to be unconsciously acted upon when the participant was out of the hypnotic trance. It helped the participant to act or feel a certain way or do a specific behaviour out of trance. This part is not scripted. The researcher says

   'Your thoughts, feelings, and actions will continue to be affected by the things I have implanted into your subconsciousness. After you leave here, when you are no longer with me, those beliefs, feelings, and actions will continue to exert the same influence on your thoughts, feelings, and actions. You will feel the same about yourself when you are at home or work as you do when we are together.

   Disengagement – This was the stage where the hypnotic trance was terminated, and the participant was brought out of a trance state. It is as direct as asking the participant to come out of the trance state by opening his eyes at the count of five, and the hypnotherapist counted from one to five, and the participants opened their eyes.

3.4 Ethical Considerations

The use of incentives and compensation has been controversial in research. Adejumo (2012) argued that inducement is required to recruit and or retain research participants, particularly in a clinical setting, but the value should not be large as to compromise the integrity of voluntary informed consent. For this study, ethical approval was obtained from the ethical committee of the Lagos State University Teaching Hospital, Ikeja. For phase two of the research, Five Hundred Naira worth of toiletries, in addition to condoms donated by The Lagos State Ministry of Health, was given to each participant

as an incentive. Seeds of RDS for the research were given a token of a Hundred Naira mobile phone recharge card for each person they recruited.

For phase three, lunch and transport were provided for each participant per session, whether in the experimental or control group. This is because they came from different parts of the metropolis to reduce the dropout rate. The use of hypnosis to retrieve repressed memories has sparked debate. This can lead to false memories being formed or severe negative reactions being elicited. In the current research, this is not possible because hypnotherapy focuses on therapy rather than repressed memories. Other possible side effects of hypnotherapy include anxiety or panic, dizziness, headaches, and nausea. However, these reactions are infrequent. For ethical reasons, a medical officer was present to witness every session of hypnotherapy in this study for prompt management.

3.5 Statistical design

The study's hypotheses were subjected to statistical analysis using the Statistical Package for Social Sciences (SPSS) version 20. Hypotheses 1 and 2 were tested using Linear Multiple Regression Analysis, and Hypotheses 3,4 were tested using a t-test for independent groups while Hypotheses. Hypotheses 5 & 6 were tested using multiple regression analysis, and Hypotheses 7 and 8 were tested using Analyses of Covariance (ANCOVA).

CHAPTER FOUR

RESULTS

This chapter deals with data analysis and interpretation of the findings. Specifically, the study provides answers to Eight research hypotheses. The statistical tests used include Pearson Product-Moment Correlation, t-test for independent groups, paired sampled t-test, One-way Analysis of Variance (ANOVA), Multiple Regression Analysis for testing the composite relationship of the independent variables and Analysis of Covariance (ANCOVA)

Table 4.1: Zero-order correlation showing the relationship between occupational stress, Severity of Substance Use, Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness on depression.

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Depression	10.30	4.23	-										
2. Occupational stress	38.50	5.25	.18**	-									
3. Severity Substance use	14.12	12.99	.04	-.03	-								
4. Heroine	4.93	5.22	.05	-.01	.81**	-							
5. Cannabis	3.77	4.72	-.02	-.06	.79**	.51**	-						
6. Alcohol	5.99	6.53	.07	.01	.84**	.49**	.47**	-					
7. Extraversion	6.00	1.29	.01	.14*	-.19**	-.14*	-.26**	-.09	-				
8. Agreeableness	6.39	1.80	.12	.18**	-.27**	-.24**	-.22**	-.20**	.100	-			
9. Conscientiousness	6.47	1.41	-.09	.03	-.11	-.04	-.11	-.12	.03	.01	-		
10. Neuroticism	7.23	1.30	-.07	-.01	-.05	.04	-.13	-.04	.05	.05	.07	-	
11. Openness	7.37	1.34	.08	.05	.01	.10	-.09	-.01	.17*	-.02	.08	.26**	-

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

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

There was no significant positive relationship between severity of substance use ($r = .04$, $p>.05$), extraversion, $r = .01$, $p>.05$), agreeableness ($r = .12$, $p>.05$), conscientiousness ($r = -.09$, $p>.05$), neuroticism $r = -.07$, $p>.05$), Openness to experience ($r = .08$, $p>.05$) and depression. The result implies that an increase or decrease in the severity of substance use, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and openness to experience did not significantly relates to an increase or decrease in depression. Table 4.1 reveals a significant positive relationship between occupational stress ($r = .18$, $p<.01$). The result indicates that sex workers with a high level of occupational stress significantly report a high level of depression.

Table 4.2: Zero-order correlation showing the relationship between occupational stress, Severity Substance use, Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness on suicidality

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11
Suicide	38.10	3.94	-										
Occupational stress	38.5	5.25	.02	-									
The severity of Substance Use	14.19	12.99	-.09	-.02	-								
Heroine	4.93	5.22	-.06	-.01	.81**	-							
Cannabis	3.77	4.72	-.05	-.06	.79**	.51**	-						
Alcohol	6.00	6.53	-.11	.01	.84**	.49**	.47**	-					
Extraversion	6.00	1.29	-.05	.14*	-.19**	-.14*	-.26**	-.09	-				
Agreeableness	6.39	1.80	.10	.18**	-.27**	-.24**	-.22**	-.20**	.10	-			
Conscientiousness	6.47	1.41	.04	.03	-.11	-.04	-.11	-.12	.03	.01	-		
Neuroticism	7.23	1.30	-.07	-.01	-.05	.04	-.13	-.04	.05	.05	.07	-	
Openness	7.37	1.34	-.16*	.05	.01	.10	-.09	-.01	.17*	-.02	.08	.26**	-

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

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

Table 4.2 reveals a significant inverse relationship between openness to experience (r=-.16, p<.05). The result indicates that an increase in openness to experience significantly reports a decrease in suicidality. There was no significant positive relationship between severity of substance use (r = .02, p>.05), extraversion (r = -.05, p>.05), agreeableness (r = .10, p>.05), conscientiousness (r = .04, p>.05), neuroticism r = (-.07, p>.05) and suicidality. The result implies that an increase or decrease in the severity of substance use, extraversion, agreeableness, conscientiousness, and neuroticism did not significantly relate to an increase or decrease in suicidality among FSWs.

Hypothesis One: stated that occupational stress, personality traits, and severity of substance use would jointly and independently predict depression among FSWs. The hypothesis was tested with multiple regression analysis, and the results were presented in table 4.3.

Table 4.3: Summary of Multiple Regression Analysis Showing the occupational stress, Severity of Substance use, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience on depression

Predictors	**β**	**t**	**P**	**R**	**R^2**	**F**	**P**
Occupational stress	.160	2.363	<.05				
Severity Substance use	.059	.845	>.05	.26	.07	2.19	<.05
Extraversion	-.023	-.337	>.05				
Agreeableness	.113	1.624	>.05				
Conscientiousness	-.089	-1.331	>.05				
Neuroticism	-.091	-1.329	>.05				
Openness	.105	1.513	>.05				

The result revealed that occupational stress, Severity of Substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience have a joint influence on depression (R^2 = 0.07, F (7,216) = 2.19, p<.05). When combined, occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience accounted for 7% of the change observed in the self-report depression. The result further revealed that only occupational stress (β = .16, t=2.36, p<.05) independently predicted depression, while the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were not significant independent predictors of depression. The result indicates that sex workers with a high level of occupational stress reported a significantly higher level of depression. The stated hypothesis is, therefore, partially accepted.

Hypothesis Two: stated that occupational stress, personality traits, and severity of substance use would jointly and independently predict suicidality among FSW. The hypothesis was tested using multiple regression analysis. The results are presented in Table 4.4.

Table 4.4: Summary of multiple regression Analysis Showing occupational stress, Severity of Substance use, Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to experience on suicidality.

Predictors	**β**	**t**	**P**	**R**	**R^2**	**F**	**P**
Occupational stress	.019	.277	>.05				
Severity Substance use	-.073	-1.032	>.05	.21	.05	1.48	>.05
Extraversion	-.046	-.660	>.05				
Agreeableness	.085	1.211	>.05				
Conscientiousness	.046	.680	>.05				
Neuroticism	-.040	-.575	>.05				
Openness	-.145	-2.071	<.05				

The result revealed that occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience did not have a joint influence on suicidality (R^2 =.05, F (7,216) = 1.48, p>.05). When combined occupational stress, Severity Substance use, Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to experience accounted for 5% of the change observed in the self-report suicidality. This revealed that only openness to experience (β = -.15, t=-2.07, p<.05) significantly and independently predicted suicidality. This implies that only sex workers with a high level of openness to experience significantly reported a lower level of suicidality. The hypothesis is thus partially accepted.

Hypothesis Three stated that young FSWs would have significantly lower scores on depression than their older counterpart. This hypothesis was tested using the t-test for independence, and the result is presented in Table 4.5.

Table 4.5: t-test summary table showing the difference between young and old respondents on depression.

	Age	**N**	$\overline{X}$	**Std**	**df**	**t**	**P**
Depression	Young	184	9.84	3.93	222	-3.64	<0.05
	Old	40	12.45	4.92			

Table 4.5 shows that young FSWs (M=9.84, S. D= 3.93) significantly reported lower scores on depression compared to their older counterparts (M=12.45, S.D. =4.92). Young FSWs significantly reported a lower level of depression ($t(222) = -3.64$, $p<.05$) than the older FSWs. This implies that age significantly influences depression among FSWs. The hypothesis is thus accepted.

Hypothesis Four: states that young FSWs would report lower scores on suicidality than their older counterpart. This hypothesis was tested using the t-test for independence, and the result is presented in Table 4.6.

Table 4.6: t-test summary table showing the difference between young and old respondents on suicidality.

	Age	N	$\overline{X}$	Std	Df	t	P
	Young	184	38.47	2.99			
Suicidality	Old	40	36.38	6.56	222	3.11	<0.05

Table 4.6 shows that young FSWs (M=38.47, S. D = 2.99) significantly reported higher scores on suicidality compared to their older counterparts (M=36.38, S.D. =6.56). Young FSW significantly reported a higher level of suicidality ($t(222) = 3.11$, $p<.05$) than the older FSW. This implies that age significantly influences suicidality among FSWs. The hypothesis is therefore rejected.

Hypothesis Five: states that age, duration of sex work, and educational level would significantly jointly and independently predict depression among FSWs. The hypothesis was tested with Multiple Regression analysis, and the results are presented in Table 4.7.

Table 4.7: Summary of Multiple Regression Analysis Showing the age, duration of sex work, and educational level on depression

Predictors	β	t	P	R	R^2	F	P
Age	.19	2.72	<.05				
Duration of sex work	.24	3.48	<.05	.37	.14	11.46	<.05
Educational level	-.14	-2.20	<.05				

The result revealed that age, duration of sex work, and educational level have a joint influence on depression (R^2 = 0.14, F (3,220) = 11.46, p<.05). When combined age, duration of sex work, and educational level accounted for 14% of the change observed in the self-report depression. This revealed that the collective presence of age, duration of sex work, and educational level significantly influence depression. The result further revealed that age (β = .19, t=2.72 p<.05), duration of sex work (β = .24, t=3.48 p<.05) and educational qualification (β = -.14, t=-2.20; p<.05) were significant independent predictors of depression. The result indicates that older sex workers with a long duration of sex work and the lowest level of education reported a higher level of depression. The stated hypothesis is therefore accepted.

Hypothesis Six: stated that age, duration of sex work, and educational level would significantly jointly and independently predict suicidality among FSW. This was tested using multiple regression analysis. The results are presented in Table 4.8.

Table 4.8: Summary of multiple regression analysis showing the age, duration of sex work, and educational level on suicidality

Predictors	β	t	P	R	R^2	F	P
Age	-.154	-2.149	<.05				
Duration of sex work	.054	.774	>.05	.27	.07	5.86	<.05
Educational level	-.201	-3.023	<.05				

The result revealed that age, duration of sex work, and educational level have a joint influence on suicidality (R^2 = 0.07, F (3,220) = 5.86, p<.05). When combined age, duration of sex work, and educational level accounted for 7% of the change observed in the self-report suicidality. This revealed that the collective presence of age, duration of sex work, and educational level significantly influence suicidality. The result further revealed that age (β = -.15, t=-2.15, p<.05) and educational qualification (β = -.20, t=-3.02; p<.05) have significant independent influence on suicidality. While the duration of sex work (β = .05, t=0.77, p>.05) has no significant independent influence on suicidality. The result demonstrates that sex workers who are younger and had the lowest level of education significantly reported a higher level of suicidality. The hypothesis is thus accepted.

Table 4.9: One-way ANOVA showing the influence of duration of sex work on depression

Source	S.S.	Df	MS	F	Sig.
Between Groups	361.422	3	120.474	7.298	<.05
Within Groups	3631.935	220	16.509		
Total	3993.357	223			

*(F (3, 220) = 7.30, p<.05).

Table 4.10: Descriptive statistics showing mean difference and post hoc analysis of duration of sexual work on depression

Variables	N	Mean	SD	1	2	3	4
1-4 years	180	9.69	3.97	-			
5-9 years	34	12.50	4.32	-2.81*	-		
10-14 years	3	14.00	5.20	-4.31*	-1.50	-	
15 years and above	7	13.86	4.88	-4.17*	-1.35	0.14	-

*. p<.05.

Descriptive analysis and post hoc analysis revealed that sex workers who had between 10-14 years and 15 years and above sex worker experience significantly reported a higher level of depression compared to those who had between 1-4 years and 5-9 years of sex worker experience.

Table 4.11: One-way ANOVA showing the influence of duration of sex work on suicidality.

Source	S.S.	Df	MS	F	Sig.
Between Groups	18.704	3	6.235	.398	>.05
Within Groups	3443.135	220	15.651		
Total	3461.839	223			

*. (F (3, 220) = 0.40, p>.05).

Table 4.12: Descriptive statistics showing the mean difference in duration of sex work on suicidality

Variables	N	Mean	SD
1-4 years	180	38.18	3.60
5-9 years	34	37.47	5.79
10-14 years	3	39.00	0.00
15 years and above	7	38.57	1.13

*. p>. 0.05.

Descriptive analysis revealed that sex workers with short years of experience were not significantly different in the level of suicidality compared to those with long years of experience.

Hypothesis 7 states that participants in the experimental group exposed to hypnotherapy will report lower scores on depression tendencies than participants in the control group. This hypothesis was tested with the Analysis of Covariance (ANCOVA), and the result presented in Table 4.13

Table 4.13a: Descriptive statistics showing the mean difference in depression level between the experimental and control group

Group	Mean	S.D.	N
Experimental	17.7500	2.12132	8
Control	30.2500	5.25765	8
Total	24.0000	7.52773	16

The descriptive statistics show the mean difference of depression post-test scores. It was revealed that participants in the experimental group (Hypnotherapy) ($\bar{x}$ = 17.75, S.D. = 2.12) reported a lower level of depression compared to those in the control group ($\bar{x}$ = 30.25, S.D. = 5.26).

Table 4.13b: Summary of ANCOVA showing the effectiveness of hypnotherapy on depression

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	727.541[a]	2	363.770	38.617	.000	.856
Intercept	21.091	1	21.091	2.239	.158	.147
Depression pre	102.541	1	102.541	10.885	.006	.456
Group	681.687	1	681.687	72.366	.000	.848
Error	122.459	13	9.420			
Total	10066.000	16				
Corrected Total	850.000	15				

a. R^2 = .856 (Adjusted R^2 = .834)

The Analysis of Covariance (ANCOVA) between-subjects effects intervention (hypnotherapy) results reveals that there was a statistically significant difference in the post-intervention score of depression among female sex workers when adjusted for the pre-test score of depression, $F(1, 33) = 72.37$, $p < .01$, partial $\eta^2 = .84$. This implies that participants exposed to hypnotherapy significantly had reduced level of depression. This hypothesis is therefore accepted.

Hypothesis 8 stated that participants in experimental groups exposed to hypnotherapy would report lower scores on suicidality than participants in the control group. This hypothesis was tested using Analysis of Covariance (ANCOVA), and the result is presented in Table 4.14.

Table 4.14a: Descriptive statistics showing the mean difference between the experimental and control groups on suicidality

Group	Mean	S.D.	N
Experimental	10.8750	2.69590	8
Control	74.8750	18.77261	8
Total	42.8750	35.49812	16

The descriptive statistics show the mean difference of post-test scores on suicidality. The results show that participants in the experimental groups ($\bar{x}$ = 10.88, S.D. = 2.30) reported a lower level of suicidality than those in the control group ($\bar{x}$ = 74.88, S.D. = 18.77).

Table 4.14b: Summary of ANCOVA showing the effectiveness of hypnotherapy on suicidality.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	17883.408[a]	2	8941.70	114.15	.000	.946
Intercept	65.43	1	65.43	.84	.377	.060
Suicide pre	1499.41	1	1499.41	19.14	.001	.596
Group	16547.70	1	16547.70	211.25	.000	.942
Error	1018.34	13	78.33			
Total	48314.00	16				
Corrected Total	18901.75	15				

a. R^2 = .946 (Adjusted R^2 = .938)

The Analysis of Covariance (ANCOVA) between-subjects effects: intervention (hypnotherapy) results show that there was a statistically significant difference in the post-intervention level of suicidality among female sex workers when adjusted for the pre-test score of suicidality, $F(1, 33) = 211.25$, $p < .01$, partial $\eta^2 = .94$. This implies that participants exposed to hypnotherapy significantly had reduced level of suicidality. The hypothesis is therefore accepted

CHAPTER FIVE
DISCUSSION

5.1 Discussion

This study explored the psychosocial variables that predict depression and suicidality and the efficacy of hypnotherapy as an intervention tool among brothel-based female sex workers. It was conducted in three phases; where in the first phase, a qualitative design was used. A sequential exploratory mixed method was used in the second phase, while the third phase was an experimental design.

The first hypothesis stated that occupational stress, personality traits, and severity of substance use would jointly and independently predict depression among FSWs. The result revealed that occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience have a joint influence on depression. When combined, occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience accounted for 7% of the change observed in the self-report of depression. The result further revealed that only occupational stress significantly and independently predicted depression, while the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were not significant independent predictors of depression among FSWs. The result indicates that sex workers with a high level of occupational stress reported a significantly higher level of depression. The result is in line with the study by Hayes, Douglas, and Bonner (2015) that found that occupational stress has some negative consequences, including burnout which has long-lasting effects on the individual with impacts on workplace performance and culture. Other impacts of stress include but are not limited to intention to leave the workplace, reduced quality of life (Mosadeghrad, Ferlie, & Rosenberg, 2011), lower job satisfaction (Cheng, Liou, Tsai, & Chang, 2015), and impaired job performance (Nabirye, Brown, Pryor, & Maples, 2011).

On the other hand, Bienvenu *et al*. (2004) argued that a single neurotic trait was not associated with depression. As a result, a study of neuroticism's various features would

be of interest. The association between extraversion and major depressive disorder is well-documented. Numerous studies have found a link between depression and a lack of extraversion. Openness and the findings of either Kotov, Gamez, Schmidt, and Watson (2010) or Klein *et al*. (2011) were discovered (2011). People with clinical depression were found to be more open to feelings in a study (Bienvenu *et al*., 2004). Carrasco Ortiz and del Barrio Gándara found a separate link in their research in 2007. The fact that so many people participated in the research suggests that openness to one's emotions may be associated with major depressive illness. Conscientiousness, like Openness, has received minimal support because of its association with depression.

In addition, studies by Oldenburg *et al*. 2014; Rael and Davis 2017; Shen *et al*. 2016; Yuen *et al*. 2016 reported that depression is consistently associated with risky behaviours such as abusing substances, suggesting that untreated depression may increase sex workers' risk of HIV and sexually transmitted infections (STI) and transmissions.

As an example, Bienvenu *et al*. (2004) discovered a relationship between low assertiveness, a component of extraversion, and melancholy. Hayward *et al*. (2011) reached the same conclusion, but they also found that positive emotions and activities can help alleviate depression. However, Naragon-Gainey *et al*. (2009) found no evidence of a connection between extraversion and depression.

The second hypothesis states that occupational stress, personality traits, and severity of substance use will jointly and independently predict suicidality among FSWs. The result of this study revealed that occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience did not have a joint influence on suicidality. When combined with occupational stress, Severity Substance use, Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to experience accounted for 5% of the change observed in the self-report suicidality. This shows that the collective presence of occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience have no significant influence on suicidality. The result further reveals that only openness to experience significantly and independently predicted suicidality, while occupational stress, the

severity of substance use, extraversion, agreeableness, conscientiousness, and neuroticism were not significant independent predictors of suicidality among FSW. The result shows that those sex workers with a high level of openness to experience significantly reported a lower level of suicidality. According to Bryan, Clemans, Leeson, and Rudd (2015) research on 54 acutely suicidal U.S. troops, those with a history of multiple suicide attempts had the most severe suicidal thoughts and chronic stressors. This suggested that the degree of suicidal thoughts was linked to chronic but not acute stress. Study results from Gradus, Smith, and Vogt (2015) found that both family support and family stress were directly linked to an increased risk of suicidal ideation.

According to Uwakwe and Gureje (2011), there was a higher prevalence of DSM-IV illnesses in suicide attempters compared to non-attempters. There were also more comorbid illnesses in those who had attempted or relapse more than once. Suicide attempters had three or more co-occurring disorders in 11% of cases, compared to 0.4% of those who had never attempted suicide. Even though mood disorders may significantly affect what happens after a suicide attempt, it seems that comorbidity explains most of the link between anxiety disorders and suicide outcomes and almost all of the link between psychoactive substance use disorders and suicide outcomes. As a result, the authors concluded that people with mental and substance abuse problems are more likely to kill themselves.

Research conducted in 2017 by McClure looked at the correlations between suicidal thoughts and personality traits among elderly participants in the community. For the study, 106 older people (mean age of 74.2, SD 5.8), including 78 female participants, participated. In this study, most individuals appeared to be emotionally and psychologically well-balanced. Higher levels of suicidal ideation were linked to lower levels of extraversion in this group of older individuals. Particularly strong connections with suicidal ideation have been found between high levels of extraversion and socially prescribed perfectionism. A study conducted among Kenyan secondary school children by Agwaya, Aloka, and Raburu (2015) found a link between personality subtypes and behavioural issues. The results showed that pupils with an extroverted personality subtype were more likely to participate in behaviour problems than those with an introverted personality subtype.

A study by Raymond and his colleagues (2014) and their colleagues (2014) discovered that suicidal ideation was inversely correlated with extraversion and neuroticism and that the two were also inversely correlated. Suicidal ideation and personality were strongly linked in both groups of participants, according to Iliceto, Fino, Sabatello, and Candilera (2014), who conducted a study utilising multi-group confirmatory factor analysis. Three hundred sixteen young adults and three hundred and thirty-nine older people participated in the study.

The third hypothesis states that young FSWs will have significantly lower scores on depression than their older counterpart. The study results show that young FSWs significantly reported lower scores on depression compared to their older counterparts. Young FSWs significantly reported a lower level of depression than the older FSWs. This implies that age significantly influences depression among FSWs. older FSWs are more prone to depression because the older FSWs experience a higher level of stress attached to the work. This could be explained by the information obtained during the focused group discussion that sex workers tend to earn less as they grow older and become less physically attractive. They have to hustle more and do more to cope with economic challenges and personal responsibilities. Popoola, (2013), in his study, found that most sex workers in Nigeria got into the profession for socio-economic. This is also supported by Alobo and Ndifon (2014), who found that it is the harsh economic situations faced by many women that force them into sex work. When economic fortunes in the trade dwindle continually with age and perception is clouded with feelings of hopelessness and helplessness, depression is inevitable.

The fourth hypothesis states that young FSWs will report lower scores on suicidality than their older counterpart. The result shows that young FSWs significantly reported higher scores on suicidality compared to their older counterparts. Young FSWs significantly reported a higher level of suicidality than the older FSWs. This implies that age significantly influences suicidality among FSWs. Considering that sex work is a trade that is highly stigmatised, it will make sense to assume that many females in the trade do so because they feel pressured by socio-economic pressures, which sex work is seen as a means of meeting and not a preferred work. Perhaps as the sex workers get older in the trade, the level of acceptance increases, thereby reducing suicidality.

Kubler-Ross (1969) proposed that when people go through unpleasant experiences, they usually go through a circle of grief. They start from denial, then to anger, followed by bargaining, after which they proceed to depression. Successful resolution of depression brings the individual to acceptance. Though this theory was originally for grief and dying, the findings of this study could suggest that older female sex workers have passed through these stages and have come to acceptance which may be why their scores on suicidality are significantly lower than that of the younger sex workers who still struggle with the pains of being sex workers. It will make an interesting study to investigate this.

The fifth hypothesis states that age, duration of sex work, and educational level will significantly jointly and independently predict depression among FSWs. The result revealed that age, duration of sex work, and educational level jointly influence depression. When combined, age, duration of sex work, and educational level accounted for 14% of the change observed in the self-report depression. This revealed that the collective presence of age, duration of sex work, and educational level significantly influence depression. The result further revealed that age, duration of sex work, and educational qualification significantly influence depression. The result indicates that older sex workers with a longer duration of sex work with the lowest level of education significantly reported a higher level of depression. FSWs with a low level of education and spent long years in the profession and getting older with less income from the profession reported a higher level of depression.

Descriptive analysis and post hoc analysis revealed that sex workers who had primary school certificates and Ordinary Level (O'Level) certificate qualifications reported a significantly higher level of depression compared to those with the highest level of educational qualifications. Further analysis revealed that sex workers who had between 10-14 years and 15 years and above sex worker experience significantly reported a higher level of depression compared to those that had between 1-4 years and 5-9 years of sex worker experience. The result shows that there was a significant influence of educational qualification on depression.

The sixth hypothesis states that age, duration of sex work, and educational level will significantly jointly and independently predict suicidality among FSWs. The result revealed that age, duration of sex work, and educational level jointly influence

suicidality. When combined, age, duration of sex work, and educational level accounted for 7% of the change observed in the self-report suicidality. The result further revealed that age and educational qualification have a significant independent influence on suicidality. At the same time, the duration of sex work showed no significant independent influence on suicidality. The result demonstrates that sex workers who are younger and had the lowest level of education significantly reported a higher level of suicidality. Sex workers with shorter years of experience were not significantly different from their counterparts with longer years of experience on suicidality. There was a significant influence of educational qualification on suicidality.

Descriptive analysis and post hoc analysis revealed that sex workers with OND levels of education significantly reported a higher level of suicidality than those with primary, secondary, and degree qualifications. Madsen *et al*. (2013) found that higher education predicted suicide after discharge among hospitalised psychiatric patients who had attempted suicide the previous year. Agerbo (2007) found in the first-hospitalised cohort of psychiatric patients that postgraduate education, employment, high income, and marriage were risk factors for suicide within five years after discharge. Moreover, this elevated risk was related to a subsequent loss of an intimate relationship, job, or income during the follow-up. An alternative hypothesis could include a survival bias among individuals with low socio-economic status if those dying by suicide were less likely to be admitted due to marginalisation.

The Seventh hypothesis states that participants in experimental groups exposed to hypnotherapy will report lower scores on depression symptoms than those in the control group. The result showed that hypnotherapy has a significant influence on depression. Further observation of the difference of means showed that participants in the experimental groups significantly reported a lower level of depression than those in the control group. This indicates that the depressive level of the sex workers significantly reduced with exposure to hypnotherapy. The hypothesis is thus accepted. This is consistent with the findings of Setyadi, Murti and Demartoto (2016), who tested the efficacy of hypnotherapy on depression, anxiety and stress in people living with HIV/AIDS and found hypnotherapy to be effective on depression, anxiety and stress at the post-test compared to the control group.

The Eighth hypothesis states that participants in experimental groups exposed to hypnotherapy will report lower scores on suicidality than participants in the control group. The result showed that hypnotherapy has a significant influence on suicidality. Further observation of the difference of means showed that participants in the experimental groups significantly reported a lower level of suicidality than those in the control group. This indicates that the suicidality level of the sex workers significantly reduced with exposure to hypnotherapy. The hypothesis is therefore accepted. Hence, there is the need to show the interconnectedness of the variables.

Figure 5.1 shows the relationships of the variables and their connectivity to one another. The independent variables (*psychological*) - personality traits, severity of substance use and perceived occupational stress; (*social*) age, duration of sex work and educational levels and (*Intervention*) hypnotherapy influence the dependent variables-depression and suicidality

Figure 5.1 Interaction of variables of the study

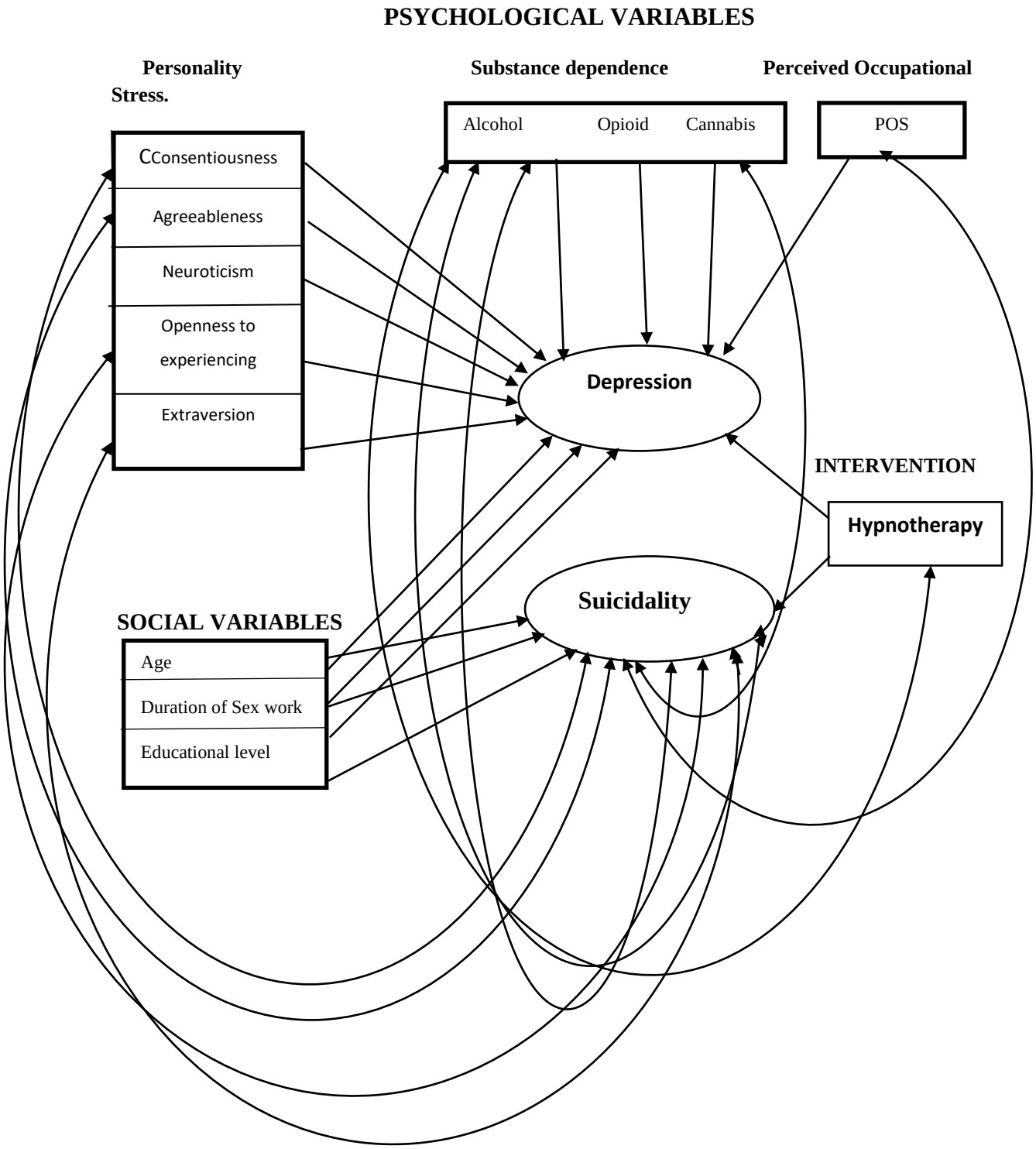

FIGURE 5.1: Flowchart showing the interconnectedness of the independent variables -*psychological* perceived occupational stress, personality traits, and substance dependence, *social* age, duration of sex work, and educational level and intervention *hypnotherapy* on the dependent variables d*epression* and *suicidality*.

CHAPTER SIX
SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1. Summary

The study investigated predictors of psychological distress among female sex workers. The study concluded that there was a significant positive relationship between occupational stress. There was no significant positive relationship between the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, and depression. In addition, there was a significant inverse relationship between openness to experience. The result indicates that increased openness to experience was significantly associated with decreased suicidality. There was no significant positive relationship between the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and suicidality. The result implies that an increase or decrease in the severity of substance use, extraversion, agreeableness, conscientiousness, and neuroticism did not significantly relate to an increase or decrease in suicidality among FSWs.

However, occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience jointly predicted depression. Only occupational stress significantly and independently predicted depression, while the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were not significant independent predictors of depression among FSWs. This means that sex workers with a high level of occupational stress significantly reported a higher level of depression. Furthermore, occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience did not jointly predict suicidality, while only openness to experience significantly and independently predicted suicidality. Occupational stress, the severity of substance use, extraversion, agreeableness, conscientiousness, and neuroticism were not significant independent predictors of suicidality among FSWs. This demonstrates that sex workers

with a high level of openness to experience significantly reported a lower level of suicidality.

Young FSWs significantly reported a lower level of depression than older FSWs. This implies that age significantly influences depression and suicidality among FSWs. In addition, age, duration of sex work, and educational level have jointly predicted depression. The result further revealed that age, duration of sex work, and educational qualification significantly influence depression. Older sex workers had a long sex work experience, and the lowest educational level significantly reported a higher level of depression. Age, duration of sex work, and educational level have a joint influence on suicidality.

The result demonstrates that sex workers who are younger and had the lowest level of education significantly reported a higher level of suicidality. There was a significant influence of the duration of sex work on depression. Further analysis revealed that sex workers who had between 10-14 years and 15 years and above sex worker experience significantly reported a higher level of depression compared to those who had between 1-4 years and 5-9 years of sex worker experience. There was no significant influence of the duration of sex work on suicidality. Sex workers with short years of experience were not significantly different in the level of suicidality compared to those with long years of experience.

Also, there was a significant influence of educational qualification on depression. Sex workers with primary school certificates and O'level qualifications reported a significantly higher level of depression than those with higher educational qualifications. Furthermore, there was a significant influence of educational qualification on suicidality. Descriptive analysis and post hoc analysis revealed that sex workers with OND levels of education significantly reported a higher level of suicidality than those with primary, secondary, and degree qualifications. FSW in the experimental groups significantly reported a lower level of depression and suicidality than those in the control group. There was a significant difference in depression and suicidality levels at the pre-test and post-test. This indicates that the depression and suicidality levels of the sex workers significantly reduced with exposure to hypnotherapy.

6.2. Conclusion

The female sex workers' levels of occupational stress demonstrate the scope of the problem, and the risk factors found in this study indicate where remedies might be focused. Female sex workers experiencing high levels of stress should be monitored and supported. According to the conclusions of this study, depression and suicidality are more common among female sex workers than in the general population. Personality traits can explain why people are depressed and suicidal, but they do not always stop sex workers from taking their own lives.

One major implication of the findings of this study is the effect of having a vulnerable population like female sex workers who are depressed on the general population. Lawoyin, Okhakhume, Adejuwon, Osinowo, and Asekun-Olarinmoye (2004) reported that one in every three female sex workers in Nigeria is HIV positive, and more than half of their male partners also positive for HIV. This showed that partners of brothel sex workers and their clients are at a high risk of HIV infection. The investigation of suicidality and depression and its comorbidity with attitudes and traits that either buffer or enhance its likelihood is an important research endeavour. Exposure of sex workers to hypnotherapy significantly reduced depression and suicidality.

6.3 Limitations of the Study

In the course of carrying out this study, the researcher encountered the following limitations:

Choice of Brothels for the Study: The choice of brothel-based female sex workers for this study makes it difficult to generalise findings on other sea workers. The brothel workers boast of their superiority over the freelancers and street sex hawkers, who they say are even more prone to violence, kidnapping, and ritual murders. If these assertions are reliable, the prevalence of depression and suicidality would be much high among other sex workers. Also, sex workers in brothels live under strict rules, and in most of the brothels where the study was conducted, the use of narcotic drugs and substances is prohibited. Sex workers found to engage in them were sent out of the brothels. This further limit the ability to generalise findings to other sex workers who are at liberty to use any kind of substance, which in turn affects their judgment, making them more prone to depression suicidality.

Resistance of Respondents: Some participants were unwilling to respond to the researcher's efforts and incentives, despite the study's best attempts. They generally believe that anyone coming from outside their 'world' and not a client is an enemy. Their suspiciousness makes them feel that outsiders like the researcher and his team might be investigators sent to arrest or publish their activities, thereby exposing them to their family and friends. This placed a limit on the number of willing respondents.

COVID-19 Pandemic: The study would have been able to cover a follow-up period for the experimental phase to observe the sustainability of the efficacy of hypnotherapy. This could not be done as the government closed down public places like brothels, and inmates used for the experimental phase dispersed to different locations, some out of the metropolis to be close to their families and loved ones. This was a major limitation to the study as it could not monitor differences over a follow-up period

6.4. Recommendations

From the result of the findings, the following recommendations are hereby made.

1. According to Obarisiagbon and Obarisiagbon (2015), while sex work is a crime in the Northern part of Nigeria, the criminality of sex work is ambiguous in the South. The Law criminalises the ownership of brothels and the involvement of underaged and activities of pimps. It is recommended that the government develop a clear policy on sex work in Lagos State. The absence of a clear policy on this exposed sex workers to police brutality as insecurity. It is a common practice that police officers carry out raids on sex workers and charge them for aimless wondering to extort money from them, only to repeat the raid at another time. The absence of a clear policy also exposes the sex workers to violence from some clients who unleash violence on the sex workers boasting that they can do nothing because they are sex workers.
2. Considering the enormous risk of a depressed and suicidal sex worker to the general population, it is recommended that the government makes it a priority to establish safe homes for adequate rehabilitation of sex workers who intend to quit the trade. There is presently no rehabilitation centre dedicated to such a cause.

3. It is further recommended that more effort be given to women's empowerment. Financial reasons drive most women who are into sex work. Since there is gender inequality in the distribution of job opportunities, many females are driven into sex work as a perceived easier way to earn a living. Job creation and empowerment in favour of women will reduce sex work among young women thereby reducing suicidality more profoundly in younger female sex workers as revealed in this study.
4. The government, non-governmental organisations (NGOs), and society should be able to come up with holistic policies, programs, and strategies that will reduce or curb the practice, even if it is outrightly terminated. Such measures would be the evolvement of awareness programs that would essentially focus on enlightening society about the dangers inherent in sex work. Undoubtedly, the information acquired will be of immense benefit to them, especially those already seeking to exit from the job.
5. Sex workers who are depressed and hopeless could call in and receive psychological first aid anonymously in an atmosphere devoid of stigma and judgment. It is further recommended that toll-free telephone lines should be provided and managed by mental health professionals dedicated to helping sex workers who are in psychological distress. Sex workers can then be referred to appropriate organisations and agencies for more practical help.
6. Finally, the study recommends that government should provide more job opportunities for young individuals. Given the current lack of support in areas such as housing, finance, and job largely contributes to the involvement of young females in sex work and the occupational hazards it causes, sex workers are predisposed to mental health issues such as depression and suicidality.

6.5. Contributions to Knowledge

This research work set out to investigate the psychosocial predictors of depression and suicidality among female sex workers based in brothels in the Lagos metropolis of Nigeria. One significant contribution to knowledge is that its findings have added to available information on depression and suicidality among sex workers in Lagos, Nigeria. Another significant contribution is the methodology used in the study. Before this study, it was difficult to get a scale measuring occupational stress among sex workers. This study led to the development of the Sex Work Stress Questionnaire

(SWSQ) developed by the researcher. This is another significant contribution to knowledge.

The introduction of respondent-driven sampling proved to be very effective in this research among female sex workers and shows that the adoption of this sampling method will work effectively among the vulnerable population and other populations of interest that are usually difficult to reach by other means. The results showing the efficacy of hypnotherapy in depression and suicidality is a breakthrough in knowledge, particularly in this part of the world where very little is known about hypnotherapy and its efficacy in ameliorating emotional and behavioural conditions. One more contribution to knowledge is that its findings are a valuable tool for advocacy for improving the mental and psychological well-being of female sex workers in particular and women in Lagos and Nigeria in general.

6.6. Suggestions for Further Studies

For further research in this area, researchers are encouraged to increase the sample size and geographical spread based on the enumerated limitation. This will provide an avenue to compare data collected from other parts of the country on depression and suicidality among sex workers. Secondly, it is suggested that other researchers interested in working among sex workers should include other sex workers like the ones that hawk sex on the street at night, corporate sex workers who give sex in exchange for the patronage of their financial institutions, among others, and the sophisticated ones who use digital means like social media to market their services.

Suicidality is a continuum comprising of suicidal ideation, plan, and, finally, execution. For further research in these fields, it will be interesting to look into these different stages of suicidality and see how these stages define the suicidality profile of the population. This was a limitation in this study and is suggested for inclusion in further studies in the field.

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APPENDIX

INFORMED CONSENT FORM

IRB research approval number: **_: LREC/06/10/1327_____**

Title of the research: Psychosocial Predictors of Depression and Suicidality and Efficacy of Hypnotherapy among Brothel Based Female Sex Workers in Lagos Metropolis, Nigeria

Name(s) and affiliation(s) of researcher(s) of applicant(s): This study is being conducted by Leonard Chukwuka Okonkwo of the University of Ibadan, Ibadan.

Sponsor(s) of research: This study is sponsored by the researcher.

Purpose(s) of research:

The purpose of this research is to examine the psychosocial factors that predict depression and suicidality and test the efficacy of hypnotherapy as a psychological intervention tool among female sex workers that operate from brothels in the Lagos metropolis.

The procedure of the research, what shall be required of each participant, and the approximate total number of participants that would be involved in the research:

Participants in this study will be given questionnaires to respond to determine the demographic and psychosocial predictors of depression and suicidality. An estimated 200 participants will be selected using the respondent-driven sampling method. Snowball sampling (having people recommend others they know) is combined with participants in the study sampling (RDS) in the RDS. With a statistical model that adjusts the population to account for the fact that the sample was acquired in a non-random manner, these individuals, in turn, refer those they know, and so on. The research instrument will be administered with an informed consent form attached. Consenting participants will only endorse the form with their first name, signature, and date. Data collected at this stage will be analysed, and the statistical effects of each independent factor will be determined on baseline measurements of the dependent factors.

In the third stage, the data gathered from the previous stages will be used to determine participants who will participate in hypnotherapy as an intervention for depression and suicidality. A conference hall in a central place in Lagos will be used. The choice of the hall will be based on suitability and availability for intervention purposes.

Participants who meet the inclusion criteria for the third phase will be randomly selected into two groups by balloting. Two research assistants will be given a box each. From the bag, the two assistants will draw out simultaneously each folded name and drop it into their respective boxes until all names have been separated into the two boxes. Those in Box A will be in the experimental group, while those in Box B will be in the control group. Only the experimental group will receive the intervention.

The hypnotherapy will be administered on a group basis. To check in for the intervention, participants must sign a Check-In form. There will be different Check-In forms for each group. To enable the researcher, to eliminate the possibility of new persons joining at any stage of the intervention and confounding the result of the research, a register will be opened for each group, and all participants will sign against their assigned number each time they come for an intervention. The intervention will be administered over a proposed period of 8 weeks of 1 meeting in a week for the experimental group only. Immediately after the intervention, the post-test measurement will be taken for both experimental and control groups.

All participants in the intervention will be followed up for a month. Follow-up data on, depression and suicidality will be taken at the end of one month post-intervention. One month is proposed to reduce the dropout rate as sex workers are known to be highly migrant, moving from one brothel to another in search of better accommodation within their range of affordability. The follow-up data collection is to determine whether the effects of the interventions were a halo effect or real effects that last.

Expected duration of research and participant(s)' involvement: While the whole research is expected to last for six months, participants in the cross-sectional phase are only required to fill out the study questionnaire. Participants in the third phase of the study will be required to in the study for three months. Two months for the intervention phase and one month for the post-intervention follow-up. Each session for the intervention phase is expected to last for one hour.

Risk(s): This study may involve minimal risk.

Participant costs, if any, for participating in the research:

You'll only have to pay for your own time if you participate in this study.

Benefit(s):

This study aims to find what factors contribute to depression and suicidality and effective psychological treatment to ameliorate these conditions. It is hoped that

hypnotherapy will offer hope for a more effective treatment for depression and suicidality.

Confidentiality:

All information collected in this study will be given code names. This cannot be linked to you in any way and your name or any identifier will not be used in any publication or reports from this study.

Voluntariness:

Please understand that your participation in this research is entirely voluntary.

Alternatives to participation:

Since participation in this study is voluntary, you can choose to withdraw from participation at any time in the course of the study.

Consequences of participants' decision to withdraw from research and procedure for orderly termination of participation:

Please also understand that you can choose to withdraw from the research at any time without any consequence

What happens to research participants and communities when the research is over?

During this research, you will be informed about any information that may affect your continued participation. The outcome of this research will be made known through journal publications.

Any apparent or potential conflict of interest:

There is no conflict of interest in this research.

Statement of the person obtaining informed consent:

I have fully explained this research to _____ and have given sufficient information, including risks and benefits, to make an informed decision.

DATE: _____ SIGNATURE: _____

NAME:

_____

Statement of the person giving consent:

I have read the description of the research or have had it translated into a language I understand. I understand that my participation is voluntary. I know enough about the purpose, methods, risks, and benefits of the research study to judge that I want to take part in it. I understand that I may freely stop being part of this study at any time. I have received a copy of this consent form and an additional information sheet to keep for myself.

DATE: _____ SIGNATURE: _____

NAME: _____

Detailed contact information including contact address, telephone, fax, e-mail and any other contact information of researcher(s), institutional HREC and head of the institution:

This research has been approved by the Health Research Ethics Committee of the Lagos State University Teaching Hospital and the Chairman of this Committee can be contacted at Research Ethics Office, Lagos State University Teaching Hospital, Lagos State. In addition, if you have any questions about your participation in this research, you can contact the principal investigator, Leonard Chukwuka Okonkwo at the Psychology Unit, Department of Psychiatry, Lagos State University Teaching Hospital, Ikeja Lagos. Or Department of Psychology, University of Ibadan, Ibadan. The phone is 08039663031. Email: drlennylenny@yahoo.com

QUESTIONNAIRE

DEPARTMENT OF PSYCHOLOGY
FACULTY OF THE SOCIAL SCIENCES
UNIVERSITY OF IBADAN

Dear Respondent,

This questionnaire is designed to examine some predictors of psychological distress among sex workers in Lagos. The research work is for academic purpose and responses are confidential. Please answer truthfully. Your name and address are not required. There are no right or wrong answers as your response will be seen as your own perspective to life.

Thank you.

SECTION A

1. Age_____
2. Tribe : (1)Hausa/Fulani (2) Yoruba (3) Igbo (4) Middle Belt (5) South-South (6) Others Specify _____
3. Religion: (1) Christianity (2) Islam (3) Traditional (4) Other religion specify_____ (5) No religion
4. Marital Status: (1) Single (2) Married (3) Divorced/ separated (4) Widowed (5) Cohabiting
5. Any other occupation: (1) Artisan (2) Small scale business (3) Civil service (4) Others. Please specify_____
6. Duration in SW_____
7. Highest Educational cert. (1) Primary School Cert. (2) WAEC/NECO (3) ND (4) HND/Bachelors and above

SECTION B

INSTRUCTION: The following are the statements on how you might have felt or acted under this situation. Check the box next to each question to indicate how often you've felt this way in the last week

		Rarely or none of the time, less than 1 day	**Some or a little of the time, between 1-2 days**	**Occasionally or a moderate amount of time between 3-4dayd**	**Most or all of the time between 5-7 days"**
8	Things that normally don't upset me worried me.				
9	I had a hard time focusing on the task at hand.				
10	I felt depressed				
11	I felt that everything I did was an effort				
12	I felt hopeful about the future				
13	I felt tearful				
14	My sleep was restless				
15	I was happy				
16	I felt lonely				
17	I could not 'get going'				

SECTION C

INSTRUCTION: In the past one month did you

		YES	NO	POINTS
18	Suffer any accidents?			
18a	Plan or intend to hurt yourself in the accident either passively or actively?			
18b	Did you intend to die as a result of the accident?			
19	Think that you would be better off dead or wish you were dead?			1
20	Want to harm yourself or to hurt or to injure yourself			2
21	Think about suicide?			6
Y1	Occasionally?			
	Often			
	Very often			
	Mild			
	Moderate			
	Severe			
Y2	Can you control these impulses and states that you would not act on them during this program? (score 8 if the response is No)			8
22	Have a suicide plan?			8
23	Take any active steps to prepare to injure or prepare for a suicide attempt in which you expected or intended to die?			9
24	Deliberately injure yourself without intending to kill yourself?			4
25	Attempted suicide?			
	Hoped to be rescued/survived			
	Expected/ intended to die			10
26	In your lifetime, did you ever make a suicide attempt?			4

SECTION D

INSTRUCTION: The following statements describe different situations that are considered **stressful** in the course of your work. Please read each statement carefully and tick a corresponding response as it best applies to you.

Key: Strongly Disagree (**SD**), Disagree (**D**), Neutral (**N),** Agree (**A**), Strongly Agree (**SA**)

		SD	**D**	**N**	**A**	**SA**
27	Overloaded at work, unable to complete tasks as a Sex Work during an average day					
28	Manager/ pimp don't care much about when you are sick					
29	There are better jobs you could be doing instead of Sex Work					
30	Repetitive or highly boring routine					
31	you spend much money to avoid being sick because of the job					
32	Worry about poor savings when you stop Sex Work					
33	Concern about not earning much					
34	Need extra effort to get ahead					
35	The monotonous pace of work					
36	Hope for better income is limited					
37	You are not suited for Sex Work yet in it					
38	No one recognizes what you do as a job					

SECTION E

1. **INSTRUCTION**: The following questions are about your drug/ substance use. For each of the five questions, please indicate the most appropriate response, as it applied to your use of codeine, tramadol, or heroine in the past month.

NOTE- When reading out the questions below, replace drug with the name of the principal opiate for the research e.g heroin, codeine, tramadol, etc

		Never/almost never	**Sometimes**	**Often**	**Always/Nearly always**
39	Do you think your use of drugs was out of control?				
40	Did the prospect of missing a fix (or dose) make you anxious or worried?				
41	Did you worry about your use of (drug)?				
42	Did you wish you could stop?				
		Not Difficult	Quit difficult	Very difficult	Impossible
43	How difficult did you find it to stop or go without (drug)?				

2. **INSTRUCTION**: NOTE: When reading out the questions below, replace drug with cannabis

		Never/almost never	**Sometimes**	**Often**	**Always/Nearly always**
44	Was your drug use, in your opinion, out of hand?				
45	The thought of not getting your fix (or dose) made you nervous or uneasy.				
46	Did you have any concerns regarding your (drug) use?				
47	Have you ever wished that you could put an end to it?				
		Not Difficult	Quit difficult	Very difficult	Impossible
48	How difficult did you find it to stop or go without (drug)?				

1. **INSTRUCTION**: Read questions as written. Record answers carefully. Begin the AUDIT by saying

"Now I am going to ask you some questions about your use of alcoholic beverages during this past year."

Explain what is meant by alcoholic beverages by using local examples of beer, wine, vodka, etc. Code answers in terms of standard drinks. Place the correct answer number in the box at the right.

49. How often do you have a drink containing alcohol?

(0) Never [Skip to Qs 9-10]

(1) Monthly or less(2)2 to 4 times a month(3) 2 to 3 times a week(4)4 or more times a week

50. How many drinks containing alcohol do you have on a typical day when you are drinking?

(0) 1 or 2(1) 3 or 4(2) 5 or 6(3) 7, 8, or 9(4) 10 or more

51. How often do you have six or more drinks on one occasion?

(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

52. How often during the last year have you found that you were not able to stop drinking once you had started?

(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

53. How often during the last year have you failed to do what was normally expected from you because of drinking?

(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

54. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

55. How often during the last year have you had a feeling of guilt or remorse after drinking?

(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

56. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

(0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily

57. Have you or someone else been injured as a result of your drinking?

(0) No (2) Yes, but not in the last year (4) Yes, during the last year

58. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?

(0) No (2) Yes, but not in the last year (4) Yes, during the last year

SECTION F

INSTRUCTION: How well do the following statements describe your personality?

	I see myself as someone who	**Strongly disagree**	**Disagree a little**	**Neither agree nor disagree**	**Agree a little**	**Strongly agree**
59	Is reserved					
60	Generally trusting					
61	Tends to be lazy					
62	Relaxed, handles stress well					
63	Has few artistic interests					
64	Is outgoing, sociable					
65	Tends to find faults in others					
66	Does a thorough job					
67	Gets nervous easily					
68	Has an active imagination					

Would you like to receive help on issues covered in the questionnaires? If yes, please write your contact phone number here----------

Thank you

HYPNOTHERAPY MANUAL FOR PHASE THREE

THE INDUCTION SCRIPT

HYPNOTHERAPY MANUAL

Session One

Start by taking some deep breaths and relax. Now close your eyes and imagine a wall in front of you. Whatever kind of wall it is is not important as long as you can write on it. See it and if you can't see it, imagine it. See it in your mind's eye. As you begin to see the wall, imagine the colour of the wall as black. If you can not see it, imagine it. Now imagine a piece of chalk and an eraser. On a table close to the wall. What I want you to do now is to image a circle drawn in chalk on the black wall with an 'X' in drawn inside the circle.

The next assignment is for you to erase the ‘X’ inside the circle but do it carefully so that you do not damage the circle because the X touches the circle at four points. My suggestion is for you to use the edge of the eraser to carefully erase the ends of the X where they meet the circle. Do it on the first, then the second, third and fourth. When you are done, you can neatly erase the two lines that make the X on the circle.

Now you have erased the X in the cycle and the circle and the circle is blank. Next step, I want you to draw a capital letter A inside the circle, then erase it. Now make a B. Erase it. Then a C then erase it.

In a moment when I instruct you to continue drawing the alphabet, I want you to do so without paying further attention to me or what I am saying. I will be talking of course, but don't pay any attention to me until you have drawn the letter Z. After you have drawn the letter Z and erased it lift up your index finger on your right hand and then you can listen to me again.

Now you can continue drawing the alphabets from where you stopped but pay no further attention to me until you have finished drawing the letter Z

Every letter you draw takes you deeper and deeper in relaxation. The closer you get to the letter Z, the deeper you go in relaxation. The more letters you erase, the deeper you will go in trance. I am talking to your subconscious mind because your conscious mind can hear me. All you have to do is to draw your alphabet and erase your alphabet till you get to the letter Z.

(After the index finger has been raised)

Now you are in a deep trance. Deeper than you have ever gone before.

Deepener

I will be silent for a few minutes, and you will go even deeper with every second of silence.

(Post-hypnotic suggestions on ego strengthening is offered).

Disengagement

Now its time to bring you back to the room at the count of 5. I am going to count from Five to one and on the count of one you will open your eyes and back to the room. I start counting now… Five, four…, three…, two… , one and back to the room feeling refreshed and relaxed

Session Two

Please take a deep breath through your nose, hold it for a few seconds and breath out slowly through your mouth as you close your eyes. I want you to imagine that your eyes are so relaxed that you cannot open then and if you can open them, you have not entirely relaxed. With your feet on the floor, you will relax even more deeply. Feel connected to the floor is connected to you. As you connect to what I am saying, you will relax even more. Do not bother about where your mind is wondering to. It is normal for your mind to wander from place to place as it meanders through beautiful places where you can find peace.

Deepener

Now take a deep breath and go deeper.

Take another deep breath and go even deeper.

Hypnotic suggestion on depression

Disengagement.

Now I will snap my fingers three times and at the third time open your eyes gently and come back to the room.

Snap finger three times and the participant is back to the room and out of trance.

Session Three

I want you to look for a spot on the wall. It can be a crack on the wall or the corner of a picture frame and just fix your eyes on it. As you fix your eyes you can see that the crack or frame begins to move, left right, left right. Gradually, your eyes are becoming tired and your eyes are beginning to close. Just let them close.

Deepener

Now imagine that you are on a storey building by the staircase. When I instruct you, you will walk down the stairs one by one and every step you take, you will go deeper and deeper

Now, take the first step, then the second slowly as you go deeper and deeper until you get to the ground floor. You are now on the ground floor, sitting on a chair, feeling relaxed and peaceful. I will be silent for a moment and every second of silence you will go deeper and deeper.

Hypnotic suggestions on suicidality

Disengagement

I will count from one to five and at the count of five, you will open your eyes feeling relaxed and peaceful. I start counting now. One…, two…, three…, four…and five …back to the room feeling relaxed and peaceful

Session Four

Seven plus or minus two

Good, simply permit yourself to be pretty much as apathetic as you need to be... listening unobtrusively to my voice... and keeping in mind that you're listening

unobtrusively to my voice focusing for a couple of seconds on your relaxing... breathing gradually and consistently, similarly like you were sound sleeping, or professing to be sound snoozing... also, envisioning, maybe, exactly the way in which agreeable you could look while you're loosening up there in the seat... involving the force of your psyche to see yourself to your eye... and afterward utilizing the force of your psyche to do whatever needs to end up making you look significantly more loose… .yet contemplating your breathing, ensuring that every breath in endures a similar timeframe as the final gasp in... furthermore, every breath outwards endures a similar time span as the final gasp out... despite the fact that every breath in will likely be marginally more limited than every breath out...and while you're contemplating your breathing, seeing, maybe, the heaviness of your head against the rear of the seat... despite everything listening discreetly to my voice... And keeping in mind that you're listening discreetly to my voice, it perhaps that you'll become mindful that you've neglected to contemplate your relaxing... however, that is okay, you can essentially begin reconsidering your breathing while you're listening discreetly to my voice and what I'm expressing to you here.....and in brain science, there's a standard called... seven give or take two...and that implies that the vast majority can imagine seven things at the same time... give or take two... so you ought to have the option to consider no less than five things all simultaneously... my voice... the dauntlessness of your breathing...the weight of your head against the rear of the seat... also, how you could look from an external perspective... also, that is four things... so you can imagine those four things while you're paying attention to the music I'm playing behind the scenes... so that is five things, presently... also, I keep thinking about whether you can contemplate those five things and afterward simultaneously notice the manner in which your feet feel on the hassock of the seat... also, maybe the way that your arms feel... furthermore, that is seven things now... my voice... the heaviness of your head against the rear of the seat... the music playing behind the scenes... they way you look while you're unwinding... also, your relaxing... also, your arms... also, your feet on the stool... also, I keep thinking about whether you can now add an presently add something eighth into all of that... I keep thinking about whether your brain is sufficiently strong to consider seven in addition to one thing... adding in, maybe, an attention to the temperature of the room...

and afterward testing to see whether you can add one more contribution to your faculties... so that you're considering NINE things at the same time... that is seven in

addition to two... pondering that multitude of eight contributions to your faculties and afterward perhaps adding a familiarity with the manner in which your eyes feel while you're contemplating that large number of different things...

the heaviness of your head... your relaxing... the music behind the scenes... how you look from an external perspective... the temperature of the room... your feet on the stool... your arms... my voice... furthermore, how your eyes feel... The heaviness of your head... your relaxing... the music behind the scenes... how you look from an external perspective... the temperature of the room... your feet on the ottoman... your arms... my voice... what's more, how your eyes feel... also, obviously, when anyone thinks about everything, what they are truly doing is filtering round them in a steady progression... rapidly... so rapidly, maybe you're considering them at the same time... also, in the realm of computers, that would be called timesharing... dividing your accessible assets among the various errands you are endeavouring to play out at the same time... also, that is the reason certain individuals can imagine just five things... since it's the restriction of their memory... while others can really imagine nine things... what's more, I can't help thinking about how well your memory is filling in as you battle to recall those nine things... the heaviness of your head... your relaxing... the music behind the scenes... how you look from an external perspective... the temperature of the room... your feet on the hassock... your arms... my voice... also, how your eyes feel... Also, presently you can figure how great it will feel...when you essentially permit yourself to consider just the main thing of all...

focusing every one of your energies onto that one most significant thing of all...which will be so natural to consider, now that you will permit yourself to consider just something single rather than nine... also, that one thing is the way great it feels to consider just something single... thinking how loosened up you can be presently... that you're just reasoning of how loosened up you could get a kick out of the chance to be... loosening up to you... also, in your body... don't bother thinking anything by any stretch of the imagination, truly... don't bother doing anything... no one needing anything and no one anticipating anything... what's more, literally nothing at all for you to do but to... relax.

DEPRESSION: THAT WAS YESTERDAY

When you let yourself float and drift, any lingering sounds fade into the background. All of your attention is fixed on met, any lingering sounds fade into the background. All of your attention is fixed on me. I think it's important to cement in your mind three ideas regarding depression. Because that is the subject of our investigation, and each statement about discouragement is the unvarnished truth to you.At this time, the most important thing is that you have earned the right to be here. That's because you're just like everyone else. Like the trees and the stars, you are an offspring of the cosmos. You're lucky to be here, and whether or not it's clear to you, everything in the universe is unfolding just as it should. This will allow you to accept that there is a bigger plan at work than any of us, and will ultimately provide you with peace of mind.If you truly want it, you can achieve a state of inner peace and satisfaction. to the next point, in fact.

Since everything in the cosmos is part of an overarching design, any misfortune that occurs outside of disasters is ultimately the result of subconscious decisions made by the individual. which brings us to the next point. We unintentionally bring our own bad luck on ourselves.At the present time, the electro-synthetic balance of the brain reflects every feeling of the mind. Prolonged feelings of sadness are associated with the emergence of an artificial irregularity that, in most cases, corrects itself. Based on my professional experience, I can usually determine which patients will respond better if I start them on medicines right away and which will do OK without any assistance. In any case, you'll prevail over your grief. When happiness finally returns, it may only last a few short hours or even minutes, and then sadness may set in once again, making it days or weeks before you feel happy again. It's possible that you'll experience about six of these waves of euphoria and depression before the negative effects finally subside.

The third and last issue concerns the passage of time and the absolute necessity of living in the here and now. The third raw truth is the importance of soaking in every moment of the here and now. As an example, maybe you felt down and disheartened the day before, but today is a new day. Consistency is the best possible beginning. Every day is a fresh beginning, and every morning is a clean slate. To put it simply, today is a monumental day for us. The past is history now. Living in the past blunts the

sharpness of our creative mind, so we can't afford to do so if we want to go forward. Yesterday's events can still teach us something useful, just as any other experience can provide us with examples and insights.

In light of this, consider the words of Longfellow: "Nor view the permanent past as utterly spent, as entirely futile, if ascending on its catastrophe areas, finally, to something nobler we achieve." Have you ever felt like things were closing in on you because of sadness, disillusionment, and disappointment and thought, "I wish I could get a break, a chance to start from the very beginning again"? Take Walter Mallone's advice regarding an open door into account at that time: "When I pound and forget that you're inside, they say I don't come anymore, yet I stand outside your door every day, urging you to rise and fight another day." However, if you're buried underground, don't wring your hands and cry. Those who confidently assert, "I can!" borrow my map. "No invincible had ever fallen so low in the face of shame and come back to take care of business." The sun set yesterday, hidden by the cityscape.

The day had brought nothing but disappointment, and the gloomy sky and absence of stars in the atmosphere just added to your feelings of despair and hopelessness. You open your eyes to the sunlight streaming in through the window today, and you realize that another day is almost here, another opportunity to build upon the insights you've gained from past setbacks. Now, we're all here for a purpose: to usher in a new epoch in a grander scheme that transcends humanity and all of our individual lives. Whether we like it or not, this global order, or vitality, will continue. When we face life all in all and attempt to comprehend that each experience is driving us towards fulfilment of that arrangement, when we require every day and try to make the most of it, things turn out okay. Someone has told us to turn on so that life can happen, hopeful listeners. You haven't been listening with optimism so far. Truly, you have not been paying attention. You have been focusing on your concerns, and as long as you focus on an issue, then, at that point, you have an issue, since you are what you concentrate your brain upon.

You are what you are enormously worried about. Presently, when you let go of that worry, when you let go of that issue, by changing your reasoning, when you say, "To hell with the issue!" then you start to see the answer to your concern, on the grounds that your psyche is free, and thusly, when your brain is free, you can use it to be successful in making it work. You should say from this point forward, "I let go of my

downturn." I create and keep a cheerful demeanour every day. "Every day I reject the negative and see the positive no matter what." Because the main reason you have remained discouraged is that you have not progressed in learning how to manage your negative thoughts in order to allow in the positive thoughts of truth, love, and trust, Consistently is a test, another potential opportunity to demonstrate what you can do in general: be a devotee of truth, love, and trust that you don't have to feel vulnerable and sad, that you can isolate and recognize the huge difference between those events in your day-to-day existence and your reaction to them, for they are boundlessly unique. They are not similar by any means, and you should isolate yourself from those occasions in your day-to-day existence and your response to them. The issue isn't whether you want a new position, whether your significant other or better half has gone or left, whether another person did well or wrong, whether you did well or wrong, or the horrible things that happened in your life. It isn't any of those things whatsoever. It is your response to them. It is the sentences you say in your mind, for example, "Gracious, my better half is no more!" "I can't survive without him!" Or, "I have a horrible aggravation in my back!" "At absolutely no point will I ever carry on with an ordinary life in the future!" That is actually the issue. When you give yourself those negative contemplations, then you will undoubtedly feel discouraged, so you need to figure out how to turn those sentences around, totally turn them around: "Alright, so I committed an error, yet I will not in the future." Or, "Alright, so my better half kicked the bucket and I miss her, yet I can begin once again with another life." Whatever you say to yourself regarding those previous things makes you discouraged in light of the fact that you have not figured out how to turn them around, and when you are discouraged, when you are out of brain, you are dead! That is demise! Recall Parcel's significant other was told, "Don't think back, for you will transform into a mainstay of salt!" However, she just needed to think back. Presently, you should not think back. You are through thinking back. You can experience the exact second you are living, and you can experience that without limit and appreciate it with the appropriate reasoning. Hasn't there ever been a craving, a desire to achieve something you'll never achieve? Contemplate that. Require every day as it comes and partake in the daylight, the melody of the birds, and the chuckling of the youngsters. See that large number of positive things?

Allow each day to completely swarm out the previous distresses. Recall that "he that ascends the stepping stool should start at the primary bar"—Robert Scott said that. The Chinese say, "A 1,000-mile venture starts with one stage." As we seek higher and more expansive vision, each new day becomes the next crosspiece upwards, another valuable opportunity to transcend previous distresses, disappointments, dejections, and disappointments to a world made new, as the Oriental writer urges: "Look well, thusly, right up 'til now. “Look, everything was fine until today.

Now, I believe you should picture a sign draping directly in front of you, with three words on it: This happened just yesterday. The day before yesterday was the worst. Yesterday, when you failed to change your mind, you made a big mistake. The day you stopped trusting me was yesterday. As for yesterday, when you failed to start over as you should have, that is now the past. You made a mistake yesterday, when your selfish thoughts prevented you from considering the needs of others and how you could be of assistance to them. It was just yesterday that you realized your words were inappropriate. That moment when you knew you'd done something wrong was just yesterday. What happened yesterday. Yesterday, you hated yourself, but today is a clean slate, and every day is a brand-new world, and yesterday isn't lost. It's not like that, because in the end, the catastrophe zones will help you do something better. As you realize this and let the warmth of truth, love, and trust fill your heart, you relax completely, knowing that there is a plan for you and that, whether or not you understand it, you must go through the challenges you are facing in order to reach your full potential and complete your life's mission. After all, you have the resources and strength to go through any experiences you want, so you should let yourself be in charge of your own life and feelings; after all, the dawn of a new day is always just around the corner. In any event, whatever you need can be found on any given tier of the mountain. recently, when your focus shifted away from the happiness of others and toward your own, and toward your own gratification. Yesterday you made a mistake, but that was in the past. That moment when you realized you'd said something you shouldn't have happened yesterday. The moment you realized you had done some less-than-desirable actions was yesterday. What happened yesterday. What happened yesterday, when you disdained yourself, is in the past. Today is a new day, and the past isn't entirely useless. No need to go to the battlefield of your mind; it's there that you'll find the strength to achieve greatness. As you realize this truth and feel the glow of

truth, love, and trust coursing through your heart, you relax completely, certain that there IS a game plan for you and that, regardless of how you don't comprehend, you should go through these open doors for development that you are going through, to fulfil that plan. The dawn of a new day just follows the night, and you are, by coincidence, fully equipped to go through whatsoever experiences you genuinely need to go through. A mountain range would be incomplete without its valleys, but topographically speaking, the world is flat.

Aside from its correlation with night time, the sun's quality wouldn't matter. Rather than reacting unjustly to problems and frustrations of the past, we might better organize our lives by focusing on contrast. There's a sign right in front of your eyes, just like there was a sign yesterday telling you to look for it. Every day is a new beginning, and every morning is a world made new, and this is one more day for you, and one more morning day to live without horror, frustration, and disillusionment, a day when you can wake up and face the world without fear, without frustration, and without disillusionment.

Only in comparison to the night time darkness would the sun's brightness be meaningful. Only by comparison can we make sense of life; you should not react negatively to the problems and setbacks of the past, but rather, you should use them as a signpost for moving forward. You can read the sign in front of your eyes, and it says that happened yesterday. Every day is a new beginning, and this is another day for you—a day without misery, a day without dissatisfaction, a day without disappointment, a day wherein you are mended since you have surrendered your conscious control over your negative emotions and thoughts. You lift those concerns off your shoulders and drape them upon that sign. You are no longer engaging in interactions with them. Those negative beliefs are not based on actual experiences, thus you are dealing with it by changing your perspective. It is how you respond to these situations that determines how you feel, and you have finally decided to stop letting the negative ideas that drag you down and wear you out control how you spend your days, hours, minutes, and seconds. You'll learn to relax easily, secure in the knowledge that you've done all you can and will continue to do so.

Session Five

THE ERICKSONIAN EARLY LEARNING SET

I keep thinking about whether you can sit back in your seat… . with your feet level on the floor… . truth be told. Also, your hands on your thighs. Truth be told. What's more, permit your eyes to close. Presently I believe you should realize that you don't have to talk… you don't have to move … you don't have to stand by listening to y voice… because your oblivious brain can hear me… .for your oblivious psyche… .truly has nothing of significance to do… because the significant thing is the tuning in by your oblivious brain.

Presently… There are sure changes occurring in you… which you are ignorant… and you can meander what those changes are. Currently your breathing has changed. Your breath has changed. It has dialled back. What's more, your pulse has dialled back. What's more, presently I'm about to converse with you.

When you previously went to class, I couldn't say whether it was nursery or grade school? However, you needed to get familiar with the letter set … and taking a gander at that large number of letters appeared to be an unfavourable errand. Furthermore, you needed to get familiar with the contrast between 'A' and a 'B' […] a 'B' and a 'D' […] an 'M' and a 'W' […] a 'P' and a 'Q'. Also, you needed to realize each of the 26 letters. In capitalized. And afterward, you needed to learn text and that appeared to be an unrealistic errand… yet you did it, by creating pictures of those letters in your brain. Both upper and lower case. Furthermore, that has been a super durable discovering that has remained with you for your entire life. Also, you can learn different things like how to tackle issues. With this early realizing… that you did as a kid. Furthermore, I believe you should realize that you have a ton of capacities that you know nothing about. Capacities which you have utilized, to learn different errands, different things, to take care of issues as you are growing up. What's more, you have gone on up until this day. What's more, I believe you should realize that you can tackle the issue which you are encountering now.

What's more, you can return to your oblivious psyche which is a tremendous stockroom of all that you have at any point learned. The oblivious brain contains every one of the capacities. Some of which you know of...but most you don't know about.

Request that your unconscious mind go through its flies and take a gander at the issue that you are encountering now… survey that issue. Your way of behaving.

For your unconscious mind has been safeguarding you. Furthermore, let it assess a choice that it made in your experience growing up, in your puberty. A choice made by a lot more youthful individual, however viewing at it as a grown-up. Also, when it understands with your grown-up mind… that this conduct is as of now excessive… it can begin to chip away at that way of behaving. Also, I don't have any idea what new or elective arrangements that it will think of now or the days in front of tackling that issue. In any case, you can be confident that it will. Furthermore, you may not actually know about it. Simply appreciate it.

So require the following couple of months and essentially unwind and partake in this insight… realizing that your oblivious psyche can come to an answer and resolve these issues. What's more, essentially unwind. Truth be told. What's more, your oblivious brain can keep on dealing with an answer for this issue. Furthermore, you can be shocked. At the options at which it picks. As it keeps on doing this even after you are abnormal from this extremely charming daze… you really want not know about it.

I believe you should stir… at the count of 1. I will count in reverse from 5 to 1 and on the count of 1 open your eyes, reorienting yourself to this overall setting. Feeling alert and ready to go and ready as though you had a few hours of serene rest. What's more, you can likewise feel astonished at the manner in which you feel. Anticipating the remainder of the day. I will count now. 5… 4… 3… 2… .1 (getting progressively stronger) Totally alert and caution.

Session Six

STRESS Alleviation

Track down an agreeable spot to plunk down or rests, where you wouldn't be upset. Be certain never to tune in, if you are driving. You can decide later to reorient yourself to develop into full cognizant familiarity with how much better you feel, or you can float off to rest in the event that it is your typical sleep time and notice the feeling of energy when you wake in the first part of the day.

During this season of unwinding, you can move at if out of the blue it was fundamental, you would in a split second ended up being wild conscious and alert,

however for the present, you can unwind and appreciate and experience of inner concentration; where there is no correct way and there is no incorrect way, to encounter this sense immediately of your thinking floating off to no exceptional spot, or perhaps some extraordinary quiet spot, perhaps some place you know, perhaps some tranquil quiet spot in you. A position of quiet mindfulness in you, however what you truly need; quiet in your life. Furthermore, in the event that any meddlesome idea were to float in, don't battle it, permit yourself to completely see it.

Notice the tones, the signs and the feels that go close by. What's more, presently, let that variety blur into a sort of Serbian tone, very much like an old photo. Presently drive it away from you. Thereabouts.

Further…

Further away.

So it decreases… and more modest… and more modest.

Increasingly more irrelevant at this point.

What's more, I keep thinking about whether you can, at the present time channel the variety totally. So it becomes straightforward. So you can see directly through it.

Notice the amount it appears to be so more straightforward to manage it. Manage it smoothly and coolly.

Coolly… .. also, tranquilly.

What's more, as it appears to expect undeniably less significance now, it might satisfy you to realize that you have acquired an instrument, to recoil outlandish mountains into reasonable minutes.

See through those sham considerations and see them for the overstating cheats that they are.

Furthermore, utilizing your breathing now, in an exceptionally delicate way.

You can allow the body to find its own regular cadence, breathing serenely… Breathing easily… . Just normally… … , time permitting… . furthermore, in your own specific manner.

What's more, I'm interested to know how soon you will start to envision that the air around you is a wonderful variety. A shade of harmony… . of quiet… . of solace… ..

Furthermore, presently, start to envision that your brain and body are straightforward. What's more, you can see and feel that awesome shade of harmony… of quiet… of solace.

What's more, look a little nearer now. Notice any region now, with encompassed undesirable strain. Notice the shade of that strain , and presently with each outward breath, just breath that tone away. Allow it to stream away from your body.

Believe it or not.

As though the breathing that goes to any region, with the merest integrity of consideration simply relax the variety, and blurs it away.

Furthermore, whenever you need to feel more settled… feel more loose… you should simply breath any superfluous, undesirable consideration.

Breath in the harmony.

Breath in the quiet. Also, partake in the unwinding. Also, is it bad to realize that your body can utilize your own regular breathing, to dial back, quiet down, and partake in the rest. What's more, partake in the solace spreading the entire way through, all over. Right down, from the highest point of your head, to the actual tip of your toes.

Or on the other hand might it at some point be from the tip of your toes, to the highest point of your head.

Serene at this point? Also, have you at any point puzzled over whether it is that tranquillity of your psyche which carries harmony to your body. Or on the other hand whether it is the harmony and quiet of your body that brings you genuine serenity.

Furthermore, does it come at the same time, or does it come piece by piece and calm to you.

Also, feeling more at simple at this point.

This might be an opportunity to diversely check things out.

Time to make a stride back.

Envision that you would be able. Wouldn't you be able to?

Make a stride just external yourself.

Step back and consider, similar to a truly old buddy, how that individual that seems as though you is taking care of things.

Believe it or not.

Have great check out at this point. What do things resemble, according to this viewpoint. Is there anything that should be changed, to make less tension.

Presently, move somewhat further away, here. How do things appear according to this changed perspective? What could you at any point share with yourself that puts an alternate inclination on this? How does that sound?

Presently move back much further and get a touch more far off on things. How can it feel now when you are more separated?

Do see how much agreeable it can feel to make a stride back. Remove a stage. Notice any change you need to make in this present circumstance.

Transform your perspective. Change your reaction.

Presently mess with those valuable experiences as you step once more into your body.

Truth be told.

Engrossing the learning into that extraordinary spot in you. Your profound internal psyche. Where you store all your exceptional interior assets.

Isn't it good to realize that you have every one of the assets you want?

Cool. Quiet. Solace and certainty.

Every day could be all the more tranquilly. Every day could be all the more without hesitation. Adapting to everything. Adapting to everyone with a cool, completely relaxed way.

Furthermore, presently with this inward quiet, you might get a kick out of the chance to envision yourself taking care of circumstances that once may be of cause discomforting your day to day routine with quite a lot more certainty. With a great deal more quiet. With greater separation as well.

Notice the manner in which you look. The manner in which you hold yourself in a certain simple loosen up way.

Truly feel how you are more agreeable in yourself all around. Pay attention to the quiet and trust in your voice.

Truth be told.

Furthermore, I can't help thinking about what it would resemble when you think back, having rolled out this improvements and you miracle to realize that you knew naturally to take control very to you and appreciate adapting to everything, everyone, each circumstance consistently, with quiet, effortlessly, with certainty, with sureness which you generally have the decision to remain in charge of your feelings.

Furthermore, discussing decision, presently you could decide whether you need to at any point return to full cognizant mindfulness at the present time, of how great life can be, now that you feel more and more quiet, simply by counting from one to ten. Each number that you count bringing you increasingly wide conscious, so when you reach a number, you are completely totally alert. Or on the other hand of cause, you can decide to float off to rest, with a great liberating sensation, appearing in the information that when you wake in the first part of the day, you will feel the feeling of good faith and the feeling of energy, that stays with you, all through each moment of the day.

For Session Seven, repeat session One

For Session Eight, repeat session Two