



**SELINUS UNIVERSITY**  
OF SCIENCES AND LITERATURE

**Integrating Psychotherapy and Pharmacotherapy in  
Treatment of Substance-Related and Addictive  
Disorders Among Adolescents Using Drug  
Rehabilitation Services in Accra, Ghana**

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**A DISSERTATION**

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## **DECLARATION**

The dissertation titled “Integrating Psychotherapy and Pharmacotherapy in Treatment of Substance-Related and Addictive Disorders Among Adolescents Using Drug Rehabilitation Services in Accra, Ghana” is submitted for the degree of Doctor of Philosophy in Clinical Psychology, Psychotherapy and Psychopharmacology at the Selinus University. All the books cited in this dissertation and peer reviewed articles and journals used are dully acknowledged. Moreover, all the participants who took part in this study did so willingly and signed the appropriate research informed consent form. “I do herby declare that I am the sole author of this dissertation and its content are only the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere”

## **DEDICATION**

To the staff and students of Regentropfen University College, Kansoe in the Upper East  
Region of Ghana

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My first appreciation goes to the almighty God for guiding me to this level of education. I would also like to express my sincere gratitude to my supervisor, Prof. Salvatore Fava, for his professional guidance, advice, and encouragement goodwill with which he guided this work. I am really grateful.

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## **ABSTRACT**

The purpose of this study is to investigate the effectiveness of integrating psychotherapy and pharmacotherapy in the treatment of substance-related and addictive disorders among adolescents using drug rehabilitation services in Accra, Ghana. The study adopted the quantitative approach to research and the descriptive survey design. A structured questionnaire was used to gather data for the study. A purposive sampling technique was used to sample 130 adolescents using drug rehabilitation services in Accra, Ghana, were used for the study. The analysis of the data reveals that peer pressure, lack of parental supervision, and the availability of drugs and alcohol in the community are perceived as the most significant factors contributing to substance-related addictive disorders among adolescents. The findings suggest that adolescent substance abuse is a complex issue influenced by a combination of social, environmental, and individual factors. Peer influence and parental supervision emerge as critical areas of concern, underscoring the importance of a supportive and vigilant environment in preventing substance-related addictive disorders in adolescents. Addressing these factors holistically is essential for effective prevention and intervention strategies. It is recommended that comprehensive prevention programs be implemented, focusing on enhancing parental involvement, increasing awareness and education about the risks of substance abuse, and providing stronger support systems for adolescents.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Substance-related and addictive disorders among adolescents have become a growing public health concern worldwide (Gearhardt, 2011). The use of drugs and alcohol by adolescents can lead to significant health and social problems, including school failure, violence, mental health problems, and an increased risk of sexually transmitted infections (Okoh, et al, 2022). Adolescents who use drugs and alcohol are also at a higher risk of developing addiction and other substance-related disorders. Globally, drug use is a major contributor to the burden of disease, causing significant physical and mental health problems, and contributing to social problems such as crime and violence (Khan, Mullick & Hussain, 2021).

The World Drug Report by the United Nations Office on Drugs and Crime (UNODC) estimated that approximately 269 million people used drugs worldwide in 2018 (O'Dowd, 2020). According to the Substance Abuse and Mental Health Services Administration (SAMHSA), in the United States alone, approximately 4.5 million adolescents aged 12 to 17 reported past-month use of alcohol, and 1.9 million reported past-month use of illicit drugs. The World Health Organisation asserted that substance abuse is prevalent in Africa, with an estimated 10 to 20 million people having a drug use disorder. Substance abuse is particularly prevalent among young people, with drug use disorders affecting up to 7.5% of adolescents in some African countries (Charlson, 2014).

In many African countries, drug rehabilitation services are available to provide treatment and support for individuals struggling with substance abuse and addiction (Mathers, 2008). However, the most effective approach to treating substance-related and addictive disorders among adolescents is still a subject of debate (Degenhardt, 2013). The integration of psychotherapy and pharmacotherapy has been found to be effective in treating substance-related and addictive disorders among adolescents (Degenhardt et al., 2013). Psychotherapy involves talking therapy,

where the therapist helps the individual to understand and address the underlying issues that may be contributing to their addiction (Pare, 2012). Pharmacotherapy involves the use of medications to help manage the symptoms of addiction and withdrawal. The integration of these two treatment approaches can be particularly effective, as it allows for a holistic approach to addressing substance abuse and addiction (O'Dowd et al., 2020). This approach can help individuals to manage the physical and psychological symptoms of addiction while also addressing the underlying issues that may be contributing to their drug use.

In Ghana, drug rehabilitation services are available for adolescents, but the traditional approach to treatment typically relies on either psychotherapy or pharmacotherapy alone (Perret, Bonevski, McDonald & Abramson, 2016). While both approaches have been shown to be effective in treating substance-related and addictive disorders, integrating these approaches has been suggested as a more effective treatment option. Evidence suggests that the combination of both approaches can lead to a reduction in substance use and relapse rates, as well as improvements in mental health and overall functioning. In response to this growing problem, drug rehabilitation services are available for adolescents in many countries. The traditional approaches to treatment typically rely on either psychotherapy or pharmacotherapy alone. While both approaches have been shown to be effective in treating substance-related and addictive disorders, integrating these approaches has been suggested as a more effective treatment option. However, few studies have examined the effectiveness of this approach among adolescents using drug rehabilitation services in Accra, Ghana. Therefore, the need for effective interventions for adolescents with substance-related and addictive disorders is critical to addressing this global public health concern.

## **1.2 Statement of the Problem**

Substance use and addiction among adolescents are becoming an increasing public health concern in Ghana, especially in Accra, leading to various health and social problems such as school failure, mental health issues, and a higher risk of sexually transmitted infections (Degenhardt, et al.,

2016). In Ghana, substance use and addiction are prevalent among adolescents, with alarming rates of drug abuse, especially among street children and urban youth. The use of illicit drugs, such as marijuana, cocaine, and heroin, is increasingly becoming a norm among adolescents, leading to high rates of morbidity, mortality, and social dysfunction. According to the Ghana Drug Use Survey (GDUS) 2017, the most commonly abused substances among adolescents aged 13-15 years are alcohol (8.8%), tobacco (3.6%), and marijuana (1.5%). Similarly, the National Survey on Drug Use and Health (NSDUH) revealed that 2.7 million adolescents aged 12-17 years in the United States have used illicit drugs in the past month (Ouedraogo, 2018).

Drug rehabilitation services in Accra, Ghana, provide treatment and support to adolescents with substance use and addictive disorders (Ouedraogo et al., 2018). However, treatment outcomes for adolescents with substance use disorders are often unsatisfactory due to various challenges, such as poor adherence to treatment, comorbid psychiatric disorders, and the risk of relapse. Integrating psychotherapy and pharmacotherapy in the treatment of substance-related and addictive disorders is an evidence-based approach that has been shown to improve treatment outcomes and reduce the risk of relapse among adolescents with substance use disorders (Yusoff, 2014). Thus, the traditional drug rehabilitation services in Ghana use either psychotherapy or pharmacotherapy to address substance-related disorders. However, integrating these approaches is suggested as a more effective treatment option as it addresses the complex interplay between psychological, physiological, and social factors contributing to substance use (Khan et al., 2021).

Despite this, there is a lack of research on the effectiveness of integrated treatment for adolescents using drug rehabilitation services in Accra, Ghana. This study aims to fill this gap by exploring the effectiveness of integrating psychotherapy and pharmacotherapy in treating substance-related and addictive disorders among adolescents in Accra, Ghana. The study also aims to identify the barriers and facilitators to integrating these approaches. The findings of this study

will contribute to the development of evidence-based interventions to improve treatment outcomes for adolescents with substance-related and addictive disorders in Ghana.

### **1.3 Purpose of the study**

The purpose of this study is to investigate the effectiveness of integrating psychotherapy and pharmacotherapy in the treatment of substance-related and addictive disorders among adolescents using drug rehabilitation services in Accra, Ghana. It also seeks to explore the impact of this integrated approach on the physical and psychological well-being of adolescents, their adherence to treatment, and their ability to maintain abstinence from drugs after the completion of treatment.

### **1.4 Objectives of the study**

The objectives that guided the study were to:

1. examine the causes of substance-related addictive disorders among adolescents.
2. assess adolescents' perceptions of the effectiveness of psychotherapy and pharmacotherapy in improving their health conditions.
3. identify factors that influence the integration of psychotherapy and pharmacotherapy in the treatment of substance-related addictive disorders.
4. evaluate the effects of psychotherapy and pharmacotherapy on adolescents' mental health.

### **1.5 Research Questions**

The research questions that guided the study were:

1. What the causes of substance-related addictive disorders among adolescents?
2. What are the adolescents' perceptions of the effectiveness of psychotherapy and pharmacotherapy in improving their health conditions?
3. What are the factors that influence the integration of psychotherapy and pharmacotherapy in the treatment of substance-related addictive disorders?
4. What are the effects of psychotherapy and pharmacotherapy on adolescents' mental health?

## 1.6 Research Hypothesis

Ho:

- There is no statistically significant difference in the perceived effectiveness of psychotherapy and pharmacotherapy in improving health conditions among adolescents who actively engage in the treatment compared to those who do not actively participate.
- There are no significant differences among the causes of substance-related addictive disorders.
- There are no significant differences within the adolescents' perceptions regarding the effectiveness.
- There are no significant differences among the factors that influence the integration of psychotherapy and pharmacotherapy in the treatment of substance-related and addictive disorders.
- There are no significant differences among psychotherapy, pharmacotherapy and adolescents' mental health.

Hi:

- There is no statistically significant difference in the perceived effectiveness of psychotherapy and pharmacotherapy in improving health conditions among adolescents who actively engage in the treatment compared to those who do not actively participate.
- There are significant differences among the causes of substance-related addictive disorders.
- There are significant differences within the adolescents' perceptions regarding the effectiveness.

- There are significant differences among the factors that influence the integration of psychotherapy and pharmacotherapy in the treatment of substance-related and addictive disorders.
- There are significant differences among psychotherapy, pharmacotherapy and adolescents' mental health.

### **1.7 Significance of the Study**

The study's significance lies in its potential to contribute to the improvement of drug rehabilitation services in Accra, Ghana, and other African countries. The findings of this study can inform healthcare policymakers, practitioners, and organisations about the effectiveness of integrating psychotherapy and pharmacotherapy in treating substance-related and addictive disorders. The study can also provide insights into the challenges and opportunities associated with implementing an integrated approach to drug rehabilitation services.

### **1.8 Delimitation of the Study**

This study was limited to adolescents aged between 13 to 17 years who are receiving drug rehabilitation services in Accra, Ghana. The study focused on the integration of psychotherapy and pharmacotherapy as the primary treatment approach for substance-related and addictive disorders.

### **1.9 Definition of Terms**

1. **Substance-related and addictive disorders:** These refer to the use of drugs and other substances that result in impaired control, social impairment, and risky use.
2. **Integrated Treatment Approaches:** Integrated treatment approaches refer to therapeutic interventions that combine different modalities, such as psychotherapy and pharmacotherapy, in a coordinated manner to address substance-related disorders among



adolescents. These approaches aim to provide a comprehensive and holistic framework for effective treatment.

3. **Psychotherapy:** Psychotherapy, also known as talk therapy or counselling, involves the use of psychological methods to address emotional and behavioural issues. In the study, psychotherapy refers to therapeutic interventions aimed at helping adolescents with substance-related disorders through dialogue, reflection, and behavioural strategies.
4. **Pharmacotherapy:** Pharmacotherapy involves the use of medications to treat or manage health conditions. In the context of the study, pharmacotherapy refers to the use of medications as part of the treatment plan for adolescents with substance-related disorders, focusing on how medications complement psychotherapeutic interventions.
5. **Cultural Considerations:** Cultural considerations in the study refer to the examination of how cultural factors, specifically within the context of Accra, Ghana, influence the integration of psychotherapy and pharmacotherapy in the treatment of substance abuse among adolescents. This includes an exploration of cultural norms, beliefs, and practices that may impact treatment outcomes.
6. **Accessibility and Utilisation of Drug Rehabilitation Services:** Accessibility and utilisation of drug rehabilitation services pertain to the ease with which adolescents in Accra can access and engage in substance abuse treatment programs. Factors such as geographical availability, affordability, and the willingness of individuals to seek and participate in services are considered in this context.
7. **Adolescent-Specific Treatment Approaches:** Adolescent-specific treatment approaches refer to interventions tailored to meet the unique developmental needs and challenges of adolescents with substance-related disorders. This may include age-appropriate psychotherapeutic and pharmacotherapeutic strategies that consider the distinct characteristics of this population.

8. **Collaboration between Mental Health Professionals and Pharmacists:** Collaboration between mental health professionals and pharmacists denotes the cooperative and communicative relationship between therapists, counsellors, and pharmacists involved in the treatment of substance-related disorders. This collaboration focuses on ensuring effective medication management and adherence within the integrated treatment framework.
9. **Family Involvement and Support:** Family involvement and support encompass the participation of families in the treatment process of adolescents with substance-related disorders. This involves interventions and support systems that engage family members, recognising their role in the overall well-being and recovery of the adolescent.
10. **Barriers to Integration:** Barriers to integration refer to obstacles or challenges faced by healthcare providers and adolescents in the effective implementation of integrated treatment approaches. These barriers may include systemic issues, societal stigmas, or individual factors that hinder the seamless integration of psychotherapy and pharmacotherapy in the treatment of substance-related disorders.
11. **Policy and Regulatory Framework:** Policy and regulatory framework pertain to the set of rules, guidelines, and regulations governing the integration of psychotherapy and pharmacotherapy in drug rehabilitation services for adolescents in Ghana. This includes an exploration of the official guidelines and regulations that shape the provision of integrated treatment within the country.
12. **Community Engagement and Education:** Community engagement and education involve initiatives aimed at involving the community in addressing substance abuse issues and raising awareness about integrated treatment options. This includes the role of community-based organisations and awareness programs in supporting adolescents with substance-related disorders and promoting community-wide understanding of these issues.
13. **Adolescents:** Individuals between the ages of 18 to 25 years.

## **1.10 Organisation of the Study**

Chapter one of the study included the background of the study, problem statement, study's goal, research objectives, research questions, and importance of the study, as well as its delimitation, limitation, definition of words, and how the remaining study is organised. Chapter Two reviewed literature relating to the efficacy of integrated treatment approaches, cultural considerations in treatment, accessibility and utilisation of drug rehabilitation services, adolescent-specific treatment approaches, collaboration between mental health professionals and pharmacists, family involvement and support, barriers to Integration, long-Term Outcomes and Follow-up, Community Engagement and Education, empirical review and the chapter summary. The study's methodology is presented in Chapter three. It examines the techniques the researcher employed to compile the data and respond to the research issues that framed the investigation. The research approach, design, population, sample and sampling techniques, data gathering tools, and data collection process are all discussed. It also outlines the numerous techniques the researcher used to analyse the data gathered. The study's findings, an analysis of them, and discussions are presented in Chapter four. A summary of the entire study is provided in Chapter five. The study's findings are presented, along with any inferences that can be made from them. There are also proposals for further research as well as recommendations for policy and practice.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

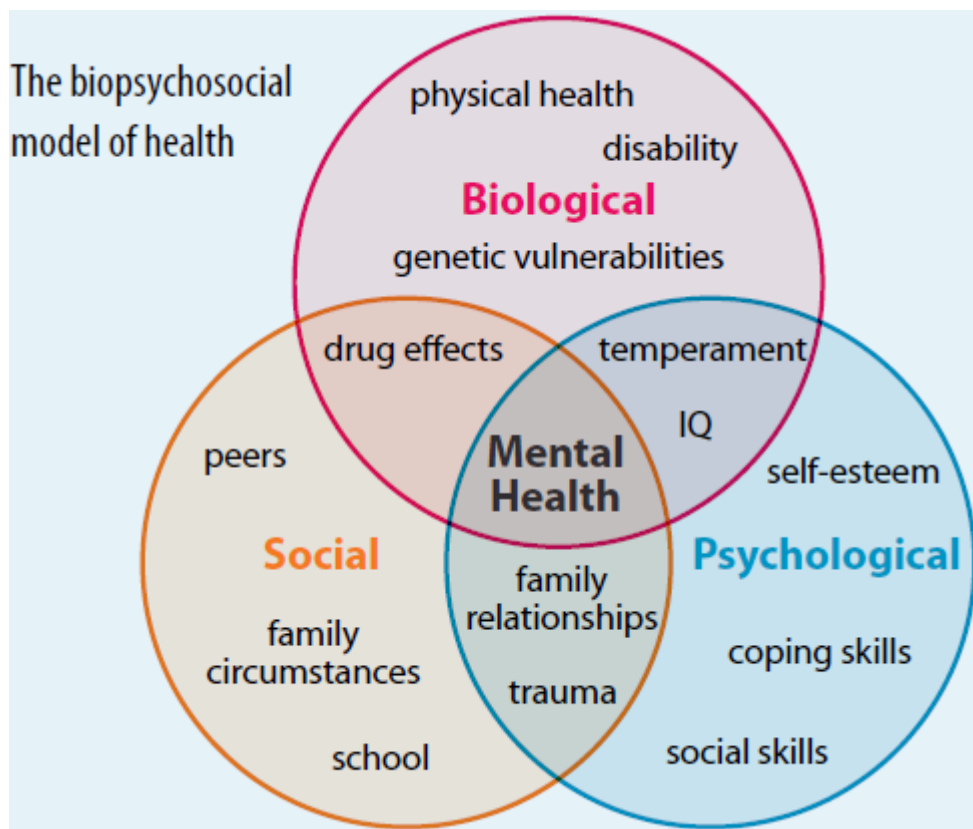
This section reviews the literature on substance-related and addictive disorders among adolescents and the conceptual and theoretical framework. It again looks at factors influencing the integration of treatment approaches, and the perception of psychotherapy and pharmacotherapy.

#### 2.1 Theoretical Framework

This study made use of the biopsychosocial model, which considers the complex interactions between biological, psychological, and social factors in understanding health and illness. The biopsychosocial model was proposed by Dr. George Libman Engel, an American psychiatrist, in 1977. In the case of substance-related and addictive disorders, the biopsychosocial model recognises that both biological and psychological factors contribute to substance use, addiction, and recovery (Hunt, 2014). The model suggests that effective treatment should address not only the physical symptoms of addiction but also the underlying psychological and social factors that contribute to the disorder (Turakhia, 2020). By integrating both psychotherapy and pharmacotherapy, the treatment approach can address both the psychological and physiological aspects of addiction, as well as the social context in which substance use occurs (Sullivan, 2016).

The integration of psychotherapy and pharmacotherapy in the treatment of substance-related and addictive disorders among adolescents in Accra, Ghana can be explained by several theoretical frameworks, including the biopsychosocial model and the transtheoretical model of behaviour change. These frameworks emphasise the importance of addressing the complex interplay between biological, psychological, and social factors in understanding and treating addiction.

## Conceptual framework



**Figure 2.1: The Biopsychosocial Model of Health**

The study adopted the biopsychosocial Model of health. Dr. George Engel created the comprehensive Biopsychosocial Model of Health in the 1970s to explain health and illness. According to this paradigm, biological, psychological, and social factors interact in a complicated way to affect health and well-being. The biopsychosocial model acknowledges the significance of taking a wider range of factors into account when assessing and treating an individual's overall health, in contrast to previous biomedical models that largely concentrated on the biological elements of disease. The following are the main elements of the Biopsychosocial Model:

**Biological Elements:** This component covers the physiological, biochemical, and genetic components of health that are related to the body. It acknowledges the impact of internal body processes and heredity on health consequences.

**Psychological Aspects:** The emphasis of the psychological aspect is on how mental and emotional variables affect health. This covers a person's feelings, ideas, actions, and coping techniques. It is believed that psychological and mental wellness are essential to general health.

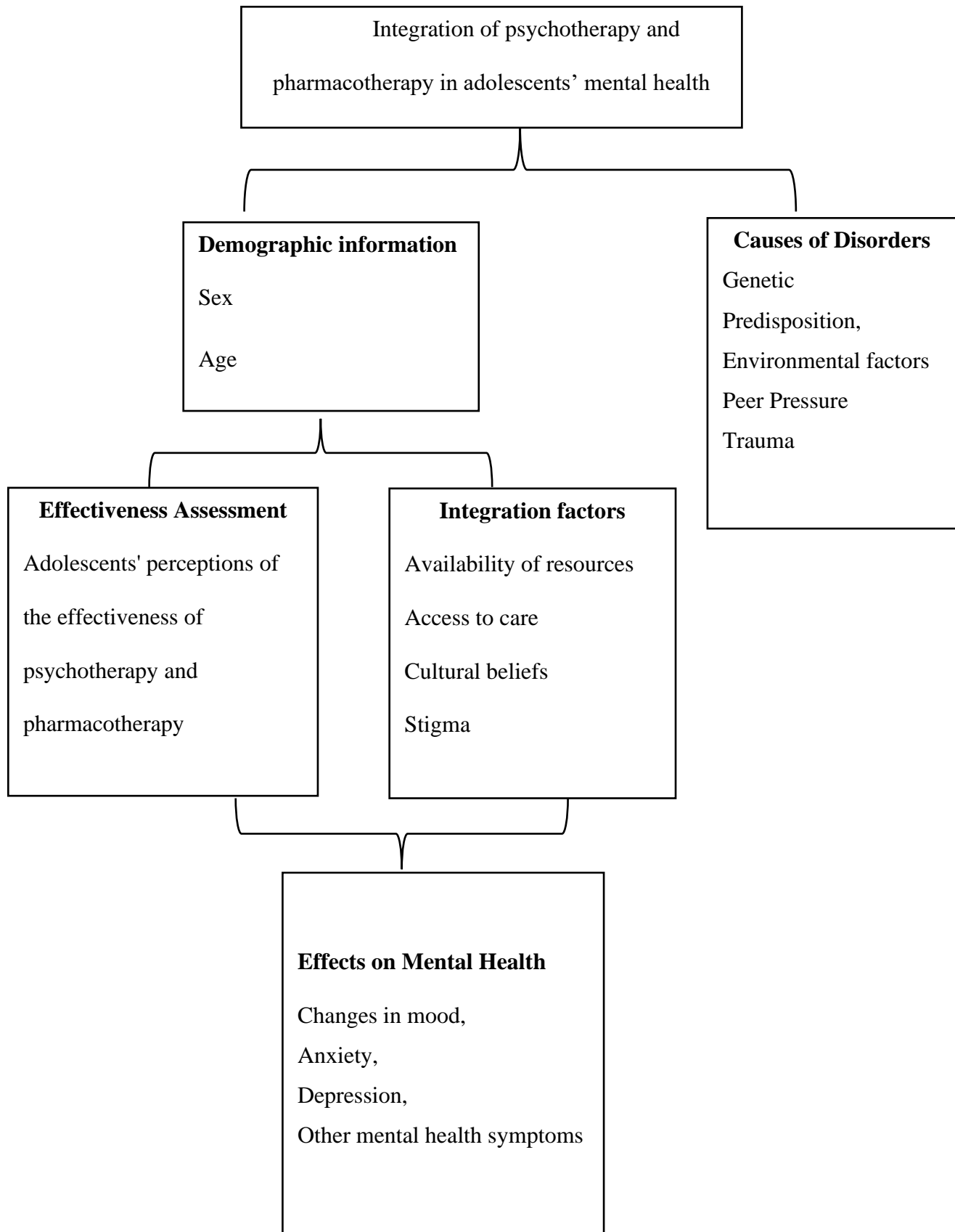
**Social Factors:** These are the ways in which a person's connections, cultural background, social environment, and society standards affect their overall health. Social determinants, including education, family support, financial status, and access to community resources, are acknowledged as critical elements influencing health outcomes.

**Interconnectedness:** The model highlights the interconnectedness and mutual effect between these three components biological, psychological, and social. A person's entire health and well-being may be impacted by changes in one area that have repercussions on other areas.

**Patient-Centered Care:** The Biopsychosocial Model encourages a patient-focused method of medical treatment. It urges medical personnel to consider each person's particular biological, psychological, and social makeup while diagnosing and treating medical disorders. A thorough approach that goes beyond simply treating symptoms is encouraged by the model's adoption of a holistic perspective of health. In determining health outcomes, it considers the larger context of a person's life and experiences.

The Biopsychosocial Model has gained widespread acceptance in the medical community, impacting research, clinical practice, and medical education. In addition to stressing the significance of treating psychological and social issues in addition to physical symptoms to enhance total well-being, it offers a more thorough framework for comprehending the complexity of health.

Based on the psychosocial model, the researcher designed the conceptual framework below.



## **Figure 2.2: Psychotherapy and Pharmacotherapy and Mental Health**

Figure 2.2 shows the association psychotherapy and pharmacotherapy and mental health. The framework identifies factors that influence the integration of treatment approaches and evaluate the effects of treatment on adolescents' mental health. The conceptual framework for this study was guided by the biopsychosocial model and focused on the interplay between biological, psychological, and social factors that contribute to substance-related addictive disorders among adolescents.

The framework is divided into five main sections. Section A sought for demographic information from the respondents. Section B examined causes of substance-related addictive disorders among adolescents. This component explored the biological, psychological, and social factors that contribute to substance-related addictive disorders among adolescents. These factors may include genetic predisposition, environmental factors, peer pressure, and trauma, among others. Section C assessed the effectiveness of psychotherapy and pharmacotherapy in improving their health conditions. This component examined adolescents' perceptions of the effectiveness of psychotherapy and pharmacotherapy in improving their health conditions. The effectiveness of these treatments assessed based on the reduction in substance use, improvements in mental health, and overall functioning. Section D identified factors that influence the integration of psychotherapy and pharmacotherapy in the treatment of substance-related addictive disorders. These factors may include availability of resources, access to care, cultural beliefs, and stigma. Section F evaluated the effects of psychotherapy and pharmacotherapy on adolescents' mental health. This component evaluated the effects of psychotherapy and pharmacotherapy on adolescents' mental health. This included an assessment of changes in mood, anxiety, depression, and other mental health symptoms.

As presented on Figure 2.2, causes of psychotherapy and pharmacotherapy influences the treatment of psychotherapy and pharmacotherapy likewise the perception about psychotherapy and pharmacotherapy, leading to mental health. There is a link among the causes of substance-related



addictive disorders among adolescents and the effectiveness of integrating psychotherapy and pharmacotherapy in treating these disorders.

## **2.2 Efficacy of Integrated Treatment Approaches**

Integrated treatment approaches, combining psychotherapy and pharmacotherapy, have been studied for their efficacy in treating substance-related disorders among adolescents. However, the available evidence is limited and inconclusive. A systematic review of randomised controlled trials (RCTs) found that integrated treatment did not show significant benefits over non-integrated treatment in terms of substance misuse and treatment retention (Chetty et al., 2023). Another meta-review of meta-analyses on psychotherapies for substance use disorders found that psychosocial treatments, including cognitive-behavioural therapy and motivational approaches, showed small to moderate effects in the short term (Dellazizzo et al., 2023). A systematic review on stepped-care models for substance use also highlighted the limited evidence on the efficacy and effectiveness of these approaches (Morse et al., 2023). Furthermore, a systematic review on integrated gender-responsive treatments for women with co-occurring substance use and mental health concerns showed promising results, but there is a lack of studies evaluating treatments in women with severe mental illness (Johnstone et al., 2022). Overall, more research is needed to determine the effectiveness of integrated treatment approaches specifically for adolescents with substance-related disorders.

Interventions that combine counselling, psychoeducation, and medication in drug rehabilitation services have shown positive outcomes in improving medication adherence and patient satisfaction (Bourne et al., 2022). Patient education and counselling have been found to have some positive effects on medication adherence, morbidity, healthcare utilities, and patient satisfaction (Hamel et al., 2020). Simplifying doses has also shown benefits in terms of morbidity and patient satisfaction (Avvisati et al., 2010). Additionally, interventions delivered by pharmacists and nurses have been more effective in improving adherence and outcomes compared to

interventions delivered by general practitioners (Hodgson et al., 2020). However, it is important to note that no single strategy has shown improvement in all settings, and further research is needed with larger sample sizes and longer follow-up durations.

### **2.3 Cultural Considerations in Treatment**

The cultural factors prevailing in Accra, Ghana, hold considerable significance in the amalgamation of psychotherapy and pharmacotherapy for the treatment of substance abuse in adolescents. Practitioners in Ghana encounter various cultural barriers, including the stigma attached to mental illness, linguistic obstacles, and societal norms that dictate hierarchical structures and age-related help-seeking behaviours (Dzokoto et al., 2022). The Kintampo Project, which trained mental health workers in Ghana, has been successful in increasing access to mental healthcare, but it also faced challenges such as accreditation issues and low recognition (Agyekum et al., 2023). Positive Youth Development (PYD) programs in Ghana focus on indicators of thriving and well-being among youth, highlighting the importance of cultural concepts of well-being and social relations (Kabir et al., 2021). The perception of medical students and psychiatry residents in Ghana identified barriers to choosing careers in psychiatry, including myths and stigma surrounding mental health, negative perceptions of psychiatrists, and lack of exposure and education (Kabore et al., 2019). Substance abuse in Ghana is influenced by factors such as family and peer pressure, availability and cost of drugs, and cultural factors, which need to be addressed in interventions.

Formal psychotherapy in Ghana is gaining momentum, but there are concerns about the cultural relevance and adaptation of treatment approaches for Ghanaian clients (Dzokoto et al., 2022). A collaborative research project on the oral history of disability rights in Ghana highlights the need to adapt international research methodologies to Southern socio-cultural contexts (Grischow et al., 2021). Traditional and faith-based healing centres in Ghana have been documented to use potentially traumatising and harmful practices, emphasising the need for trauma-informed mental health services and culturally sensitive interventions (Lambert et al., 2020). The integration

of traditional medicine into the healthcare system in Ghana has created options in health services, but challenges such as poor processing and certification of traditional medicine products and opposition from medical doctors hinder its effectiveness (Ampomah et al., 2021). An intercultural healthcare system in Ghana has the potential to reduce sociocultural and economic barriers to healthcare by fostering an enhanced relationship between culture and healthcare, promoting affordable healthcare, and improving communication between healthcare providers and users (Peprah et al., 2021).

#### **2.4 Accessibility and Utilisation of Drug Rehabilitation Services**

Accessibility and utilisation of drug rehabilitation services vary across different studies. In a study conducted in Gwan-Gwan community, it was found that the majority of participants with disabilities did not have access to rehabilitation centers and did not utilise rehabilitation services (Sumaila et al., 2018). Another study in West Virginia analysed the utilisation of Emergency Medical Services (EMS) among drug overdose decedents. It found that for half of the decedents, their only encounter with EMS was associated with their death, indicating a lack of utilisation of services prior to the fatal overdose (Okorie, 2019). In a study focused on rural families with disabled preschool children, it was found that non-utilisation of services was influenced by factors such as low socioeconomic status, poor educational level of the father, and poor acceptability of services (Bright et al., 2018). A study on drug rehabilitation centers in Cavite found that the centers followed operational management standards but lacked financial support from NGOs for trainings and had limited linkages with local and non-government agencies (Koob & Le Moal, 2008). Overall, these studies highlight the need for easily accessible and quality rehabilitation services in communities to improve accessibility and utilisation.

Drug rehabilitation services for adolescents in Accra have been the focus of several studies. The availability and accessibility of these services have been examined in relation to organisational characteristics and treatment options. Research suggests that the availability of adolescent-only

treatment programs is influenced by factors such as organisational size, location within a hospital setting, center accreditation, adherence to a 12-step treatment model, and reliance on public sources of funding (Senayah et al., 2019). In terms of treatment quality, programs offering more intensive levels of care tend to have higher levels of quality (Russell, 2008). However, there is a need for continued quality improvement efforts in this sector (Etheridge et al., 2001). In terms of overall accessibility, there is limited information specifically on drug rehabilitation services for adolescents in Accra. However, studies have highlighted the importance of addressing communication barriers for young people and adolescents with disabilities in accessing healthcare services in Ghana (Bright et al., 2018).

Factors influencing the utilisation of integrated treatment services, such as stigma, awareness, and socio-economic status, have been examined in the provided abstracts. One study found that integrated care environments and closer proximity of the psychologist improved help-seeking perceptions among those with prior experience with mental health treatment (Hammer et al., 2021). Another study highlighted the importance of forming meaningful therapeutic relationships and the role of integrated treatment in reducing stigma and exclusion linked with using mental health services (Chilton et al., 2020). Additionally, a study on integrated treatment programs for pregnant and parenting women with substance use issues found variability in supportive services provided, such as prenatal and primary care, therapeutic childcare, housing, and transportation support (Watt et al., 2021). The study also found that clients in integrated treatment programs perceived their care more positively compared to clients in standard treatment programs (Tarasoff et al., 2018). However, the impact of factors like stigma, awareness, and socio-economic status on the utilisation of integrated treatment services was not explicitly addressed in the abstracts provided.

## **2.5 Adolescent-Specific Treatment Approaches**

Adolescent-specific treatment approaches for substance use disorders (SUDs) have been developed to address the unique needs of this age group. These treatments aim to improve long-

term abstinence rates among adolescents with SUDs. Integrated treatment targeting both SUD and psychiatric disorders simultaneously has been found to be effective, particularly when combining behavioural and family therapy with motivational interviewing and contingency management (Shumaker, 2017). Psychosocial treatments such as family-based therapy, cognitive behavioural therapy, and multicomponent approaches remain the most effective methods of treatment for adolescent SUDs (Silvers et al., 2019). Adjunctive interventions such as pharmacotherapy, exercise, mindfulness, and recovery-oriented educational centers may also have clinical utility (Lalani et al., 2019). Additionally, digital and culturally based interventions show promise in improving treatment strategies. Adolescent-focused psychotherapy for Anorexia Nervosa (AN) is derived from a self-psychology model and aims to address key deficits in development associated with AN (Fitzpatrick et al., 2010).

Adolescence's developmental susceptibility to substance abuse calls for a multimodal approach to therapy. Targeting maladaptive thought patterns is how Cognitive-Behavioural Therapy (CBT) works, and Motivational Interviewing (MI) increases intrinsic drive to modify substance use behaviours (Brown et al., 2015; D'Amico et al., 2016). Multidimensional Family Therapy (MDFT) is one example of a family-based intervention that acknowledges the impact of family dynamics on teenage substance use and supports long-term recovery (Liddle et al., 2018). Medication-Assisted Treatment (MAT), which makes use of drugs like naltrexone and buprenorphine, has the potential to lessen cravings and withdrawal symptoms from pharmacotherapy (Substance Abuse and Mental Health Services Administration, 2020). Psychotropic drugs such as selective serotonin reuptake inhibitors (SSRIs) are incorporated into pharmacotherapy for co-occurring disorders in order to treat underlying mental health conditions (Wilens et al., 2019). By placing a strong emphasis on collaborative treatment models, integrative approaches promote collaboration between medical doctors, mental health providers, and drug use specialists to holistically address the complex needs of adolescents with substance-related disorders (Ozechowski et al., 2016). This susceptible

population can benefit from a customised approach that promotes long-lasting recovery through the synergistic integration of pharmacotherapeutic and psychotherapy therapies.

Tailored psychotherapeutic and pharmacotherapeutic interventions for adolescents with substance-related disorders have been explored in recent literature. Psychosocial treatments such as family-based therapy, cognitive behavioural therapy (CBT), and multicomponent approaches have been found to be effective in treating substance use disorders in adolescents (Fadus et al., 2019b; Hogue & Liddle, 2009). These interventions aim to achieve abstinence, reduce substance use quantity and frequency, improve functional outcomes, and reduce substance-related harms (Hogue & Liddle, 2009). Additionally, innovative approaches such as digital interventions and culturally based interventions have shown promise in improving treatment strategies (Fadus et al., 2019b). Adjunctive treatments such as pharmacotherapy, exercise, mindfulness, and recovery-oriented educational centers have also been explored and may have clinical utility (Fadus et al., 2019b). However, more research is needed to identify the most effective combinations of behavioural and pharmacologic treatments for different substance use disorders in adolescents (Hogue & Liddle, 2009).

Evidence-based practices that consider the unique developmental needs and challenges of adolescents in Ghana are important for promoting their well-being and addressing specific issues they face. One study found that adolescents in Ghana have a high level of awareness and knowledge of family planning, but their actual family planning practices are poor (Hammer et al., 2021). Another study focused on positive youth development (PYD) and found that factors such as connection and caring were associated with positive mental health outcomes among Ghanaian youth (Russell, 2008). Additionally, there is a need to address menstrual hygiene management challenges among deaf adolescent girls in special schools in Ghana, including improving access to sanitary pads and enhancing the quality of water, sanitation, and hygiene (WASH) facilities (Mprah et al., 2021). Furthermore, evidence-based nursing practice among nurses in Ghana was found to be

suboptimal, highlighting the need for improved integration of scientific evidence into nursing care (Hogue & Liddle, 2009). Finally, the affordability of cigarettes was found to be negatively related to smoking initiation among adolescents in Ghana, suggesting that raising tobacco taxes could deter adolescents from starting smoking (Koob & Le Moal, 2008).

## **2.6 Collaboration between Mental Health Professionals and Pharmacists**

Collaboration between mental health professionals and pharmacists is crucial for improving medication adherence and patient outcomes in mental healthcare (Syrnyk & Glass, 2023). Pharmacists play a key role in medication adherence interventions for mental health patients, working in various settings such as community pharmacies, hospitals, and interdisciplinary mental health clinics (Adam & Keers, 2022). They can improve medication adherence through interventions at transitions of care and by utilising digital health (Dopheide et al., 2022a). However, there are obstacles to pharmacists becoming approved clinicians (ACs) in mental health, including limited patient access and insufficient training opportunities to acquire advanced clinical skills (Romney, 2022). To enhance the role of pharmacists in mental healthcare, it is important to provide extended training programs and expand their roles, such as pharmacist prescribing (Bonner, 2022). Board Certified Psychiatric Pharmacists (BCPPs) are considered the gold standard credential in psychiatric pharmacy and can improve access, safety, and therapeutic outcomes in mental healthcare. Collaborative practice services involving pharmacists can be expanded to increase access to care and improve outcomes in mental health settings. Clinical pharmacists and psychiatric pharmacists can work together with mental health professionals to improve care for children and adolescents with mental health diagnoses, through medication management, monitoring for adverse effects, and education on psychiatric medications.

Collaboration and communication between mental health professionals and pharmacists in the treatment of substance-related disorders have been explored in several studies. One study found that interdisciplinary collaboration between child psychiatrists and mental health pharmacists

improved outcomes, reduced hospital stays, and improved engagement and adherence (Syrnyk & Glass, 2023). Another study highlighted the need for expanded pharmacist roles within multidisciplinary mental health clinics and further training in psychiatric pharmacotherapy to improve medication adherence for mental health patients (Aldhafeeri, 2022). Additionally, a study on healthcare providers' views and experiences in mental healthcare revealed limited interactions between HCPs and pharmacists, emphasising the need for a communication strategy to address mental health issues among healthcare professionals (Bonner, 2022). Furthermore, a study on collaborative practice in treating Diabetes Mellitus patients found that communication between pharmacists and doctors was rare but trust significantly affected collaborative practice (Lu et al., 2021). Overall, these studies emphasise the importance of collaboration and communication between mental health professionals and pharmacists in the treatment of substance-related disorders.

Pharmacists play a crucial role in medication management and adherence. They are responsible for dispensing medication, advising patients on drug interactions and side effects, monitoring medication therapies, and collaborating with other healthcare professionals to optimise patient outcomes (Blenkinsopp et al., 2012). Pharmacists also provide patient education on disease management, medication compliance, and lifestyle modifications, serving as drug information experts. They conduct drug utilisation reviews and provide guidance on appropriate medication selection and dosing (Presley et al., 2023).

Their partnership with healthcare providers in the administration of pharmaceutical therapy guarantees the suitability and efficacy of drug therapy (Carter et al., 2016). Additionally, pharmacists help patients by educating them on the purpose and administration of prescription drugs, enabling them to make well-informed decisions (Schommer et al., 2016). In order to streamline regimens and increase adherence, their work also includes developing adherence



programs, leveraging cutting-edge technologies, and modifying pharmaceutical packaging (Nkansah et al., 2010; Kaae et al., 2014).

In the context of diabetes care, patients and pharmacists both agree that educational-based services and consultation/counselling are important for improving medication adherence (Gu et al., 2023). The psychological contract between patients and hospital pharmacists has a positive effect on medication adherence, highlighting the need for effective management of this relationship (Dovemark, 2013). Pharmaceutical compounding, although underexploited, has the potential to promote medication adherence by customising treatments and supporting initiation, implementation, and persistence of therapy.

Pharmacists play a vital role in the medication management process by recommending appropriate over-the-counter medications, monitoring side effects, and addressing any barriers to adherence. This helps to optimise therapeutic outcomes and ensure patient safety.

## **2.7 Family Involvement and Support**

Involvement and support from family are essential cornerstones of overall well-being, especially when it comes to health and personal growth. Families have a significant impact on a person's values, beliefs, and social behaviours, which affects many facets of their life. Empirical studies have demonstrated that proactive family involvement considerably enhances favorable results in the fields of mental health, education, and healthcare (Jackson et al., 2017; Pellerin, 2016). Family involvement in healthcare is essential for improving medication adherence, fostering a supportive environment, and enabling efficient patient-provider communication (Scholz et al., 2019). Similar to this, families are the main players in education, having an influence on a child's educational path through support, direction, and advocacy (Henderson & Mapp, 2002). Family support is identified as being crucial to the prevention, intervention, and recovery processes in the field of mental health (Gopalan et al., 2010). Acknowledging the critical role that family support and involvement play highlights the relationship between family dynamics and individual well-

being and emphasises the necessity of working together to create positive and long-lasting results in a variety of areas of life.

Family involvement and support are important factors in various domains. In the field of child development and education, family support programs aim to increase parents' self-confidence, knowledge, and skills in their child's development and education. In the context of human resources management, family support has a moderating effect on the relationship between high involvement work systems and employees' sense of work gain, which in turn affects their organisational commitment (Yu & Li, 2022). In the area of early childhood education, high levels of family-school involvement and collaboration are associated with better academic performance and socio-emotional functioning of children, as well as benefits for families and teachers (Otero-Mayer et al., 2022). In the context of family businesses, family involvement can enhance the capacity for innovation and contribute to the competitive advantage of the business (Comin et al., 2022). Finally, in the context of acquired brain injury, family involvement is crucial in providing support and implementing behavioural interventions for individuals with ABI (Fisher et al., 2020).

Family involvement in the integrated treatment of adolescents with substance-related disorders has been shown to have important and lasting impacts on individuals' recovery. Studies have demonstrated that evidence-based family therapies can significantly reduce adolescent drug use, delinquent behaviours, and comorbid mental health problems (Nguyen et al., 2021a). Treatment Family (TF), developed by the United Nations Office on Drugs and Crime (UNODC), aims to make youth substance use disorder (SUD) care more accessible and affordable in low- and middle-income countries. TF has been found to have a positive impact in reducing alcohol consumption and problems related to substance consumption among adolescents with substance-use problems when delivered by practitioners in routine community settings (Dopp et al., 2022). However, challenges in recruiting families and the lack of a continuing care system can compromise the impact of family-based interventions (Sheidow et al., 2021). Long-term availability

of family-inclusive interventions will require collaboration with payors and health systems (Dopp et al., 2022; Nguyen et al., 2021a).

Family-based interventions and support systems play a crucial role in drug rehabilitation services in Accra. These interventions have been found to have numerous benefits, including promoting children's wellbeing and academic outcomes, building the capacity of vulnerable families to care for children, and facilitating the rehabilitation process of drug abusers. Family support, including financial, material, and moral support, has been identified as an important catalyst for quick rehabilitation (Cassidy & Poon, 2019). However, there are also challenges that inhibit the effectiveness of family support services, such as inadequate funding, clients' attitudes, and poor interagency collaboration. It is important for rehabilitation officers and policy makers to recognise the significance of professional relationships and family support in the rehabilitation process.

## **2.8 Barriers to Integration**

Integration of different services and disciplines faces various barriers. In the field of behavioural health and substance abuse services, the lack of financial incentives and administrative advantages hinder the integration of standalone medical and behavioural health operations (Zimmerman, 1981). In the context of residential segregation, physical barriers in urban space and municipal boundaries contribute to higher levels of segregation and its persistence (Tress et al., 2007). In integrative landscape research projects, barriers to integration include the additional time needed, difficulty in coping with different academic traditions, lack of common terminology, geographical distance, and conflicts in problem formulation and project start times (Nitzkin, 1980). Physical barriers in the urban environment, such as highways and dead-end streets, reinforce or exacerbate residential segregation in Rustbelt cities (Auschra, 2018). In inter-organisational healthcare collaboration, barriers to integrated care include administration and regulation, funding,

inter-organisational dynamics, organisational factors, service delivery, and clinical practices (Wilson, 2017).

Psychotherapy and pharmacotherapy integration in the treatment of substance-related disorders among adolescents faces several barriers. These barriers include concerns about long-term consequences and medication dependence, negative side effects or lack of perceived effect of medications, forgetting to take medication, and feelings of not being oneself due to medication intake (Dikec et al., 2022). Other barriers include insurance limits on sessions/length of stay and low reimbursement, staff turnover, low family engagement, and low internal motivation (Dopheide et al., 2022b). Language barriers, mistrust, and lower socio-economic status also contribute to disparities in treatment retention (Acevedo et al., 2020). Additionally, there is a need for more research to identify effective intensive behavioural interventions for alcohol use disorder and the most effective combinations of behavioural and pharmacologic treatments for opioid, alcohol, and cannabis use disorders (Hamel et al., 2020). Despite these barriers, psychosocial treatments such as family-based therapy and cognitive behavioural therapy remain the most effective methods of treatment for adolescent substance use disorders (Fadus et al., 2019a).

Adolescents and healthcare providers face challenges in accessing and implementing integrated treatment approaches. For healthcare providers, discomfort with discussing sensitive topics such as gender identity, sexuality, and mental health poses a barrier to effective care delivery (Coret et al., 2022). Inadequate training and education, suboptimal ward environments, and lack of community resources also contribute to care gaps (Shumaker & Kelsey, 2020). On the other hand, adolescents identified areas for improvement including the use of correct gender pronouns, more privacy, similar-age roommates, and age-appropriate leisure activities during hospitalisation (Merikangas et al., 2010). Additionally, workflow challenges, lack of protocols, and limited availability of services were identified as barriers to implementing a mental health referral system in primary care settings. Collaborative relationships between adolescents, caregivers, and providers

are crucial for enhancing treatment compliance, but maintaining good communication and relationships can be challenging (Song & Omar, 2009). Integrating behavioural health into primary care settings has the potential to address these challenges and improve outcomes for adolescents and young adults.

## **2.9 Long-Term Outcomes and Follow-up**

Integrated treatment for substance-related disorders in adolescents has shown varying long-term outcomes. Graduates of long-term semi-residential treatment programs have higher rates of continuous abstinence compared to nongraduates (Finch et al., 2020). However, there is a need for intensive support following treatment discharge to improve educational attainment, employment prospects, and decrease deviant behaviours (Thomasius et al., 2022). The overall prognosis for substance use disorders in children and adolescents is negatively affected by individual traits, mental comorbidities, socioeconomic disadvantage, and parental substance use disorders (Arria et al., 2021). Treatment completion rates for children and adolescents range from 60% to 65%, with 20% to 40% of patients maintaining abstinence six months after treatment (Dopheide et al., 2022b). More research is needed to understand the long-term outcomes of adolescents attending community-based drug treatment programs. The use of medication-assisted treatment (MAT) for substance use disorders in adolescents is less common but should be considered as part of a multidisciplinary approach.

Follow-up care and relapse prevention strategies are crucial in the Ghanaian context. Research has shown that the rate of relapse to substance abuse remains high, with an average of 75% relapsing within 3-6 months after treatment (Appiah, 2020). In a study conducted at a Psychiatric Rehabilitation Unit in Ghana, it was found that 65% of people with substance use disorders relapse within one year after treatment (Appiah et al., 2018). The study also identified key themes in relapse prevention strategies, including clinical strategies and self-initiated tactics (Weobong et al., 2023). Access to quality mental health services in Ghana is poor, with severe

challenges in the provision of mental healthcare, including weak supervision of mental health professionals and limited access to psychotropic medications and psychological treatments (Carlson & Ellis, 2004). Effective treatment interventions for couples require follow-up procedures and explicit attention to change to maintain successful outcomes (McCarthy, 1999). In cognitive-behavioural couples sex therapy, relapse prevention techniques are integral to maintaining sexual desire, and the use of booster and follow-up sessions is important for accountability and therapeutic goals.

## **2.10 Policy and Regulatory Framework**

Policy factors can have a significant impact on the implementation and sustainability of integrated treatment approaches. One aspect that can lead to failure is the presence of unachievable goals or timelines, as well as poor policy design (Sharifi et al., 2023). Additionally, the selection of incorrect types of processes can also contribute to policy failure in integrated approaches (VanDevanter et al., 2020). In terms of implementation, multi-sector and multi-level issues can arise, leading to policy process failure (Cornejo et al., 2016). Politics also play a role, with political gain and blame avoidance by key decision-makers contributing to failure in integrated approaches (Vince, 2015). The Australian experience with the Oceans Policy demonstrates the importance of having an institutional model that can deal with multiple issues, jurisdictions, and sectors holistically for successful implementation (Van Wamel et al., 2015). Overall, policy factors such as goal setting, policy design, process selection, and institutional capacity are crucial in determining the success and sustainability of integrated treatment approaches.

## **2.11 Community Engagement and Education**

Community engagement and education regarding substance abuse and integrated treatment options are important initiatives in addressing the complex issue of substance use disorders. One approach is the Icelandic Prevention Model (IPM), which takes a system-level approach to prevent substance use and promote wellness in youth (Halsall et al., 2022). Another initiative is the

community-based treatment and care for juvenile substance abuse in Korea and Japan, which includes treatment programs, preventive education, and early intervention (Park, 2022). Additionally, a multidisciplinary mobile team project for addiction (SIMA) in Switzerland aims to provide coordinated needs-based treatment for individuals with severe substance use problems (Sloas et al., 2017). Integrated care, which combines mental health and addiction treatment, is gaining attention globally, but is challenging to implement in the Middle East due to cultural issues (Morandi et al., 2017). These initiatives highlight the importance of community involvement, education, and collaboration in addressing substance abuse and providing integrated treatment options.

Supporting teenagers with substance-related illnesses is greatly aided by community-based groups and awareness campaigns. Research has demonstrated that these interventions are efficacious in mitigating health-risk behaviours, such as drug and alcohol misuse, risky sexual conduct, and substance abuse (Nedungadi et al., 2023). For instance, a research conducted in Vietnam discovered that the Treatment Family program, created by the UN Office on Drugs and Crime, enhanced parent-child contact and satisfied the need for assistance among teenagers suffering from drug use disorders and their families (Nguyen et al., 2021b). Similarly, by teaching life skills and encouraging the development of cognitive and social abilities, community development programs can lower a number of health risk behaviours in teenagers, including substance misuse (Yamin et al., 2022). Furthermore, community coalitions have been shown to be successful in decreasing teenage drug and alcohol use, according to a systematic review (Hutchison & Russell, 2021). These results, taken together, highlight the significance of community-based treatments and education campaigns in the management of adolescent substance use problems.

## **2.12 Chapter Summary**

Chapter Two of the literature review explores various themes related to the treatment of substance-related disorders among adolescents. The literature examines the efficacy of integrated

treatment approaches. This involves a comprehensive review of studies assessing the effectiveness of integrating psychotherapy and pharmacotherapy in addressing substance-related disorders in adolescents. Additionally, the outcomes of interventions that combine counselling, psychoeducation, and medication in drug rehabilitation services are explored, shedding light on the holistic impact of integrated approaches. This section investigates how cultural factors influence the integration of psychotherapy and pharmacotherapy in the treatment of substance abuse among adolescents. Furthermore, it explores studies that delve into the cultural relevance and adaptation of treatment approaches within the Ghanaian context, emphasising the importance of tailoring interventions to align with cultural norms and values.

A critical evaluation is conducted to assess the availability and accessibility of these services, considering factors such as stigma, awareness, and socio-economic status. This exploration aims to identify barriers to entry and challenges in ensuring that integrated treatment services are widely accessible to the target population. Moving forward, the literature review explores adolescent-specific treatment approaches. This section delves into research on tailored psychotherapeutic and pharmacotherapeutic interventions specifically designed to address the unique developmental needs and challenges of adolescents with substance-related disorders in Ghana. By identifying evidence-based practices, the review aims to contribute to the development of effective and targeted treatment strategies.

The literature further focused on reviewing studies that highlight the importance of effective communication and collaboration between therapists, counselors, and pharmacists. Understanding the role of pharmacists in medication management and adherence becomes crucial in ensuring a cohesive and comprehensive treatment approach. This section examines the impact of family participation in integrated treatment for adolescents with substance-related disorders. It explores family-based interventions and support systems within the context of drug rehabilitation services in



Accra, emphasising the holistic nature of treatment that extends beyond the individual to include the family unit.

The study identifies and analyses obstacles to the effective integration of psychotherapy and pharmacotherapy in the treatment of substance-related disorders among adolescents. Challenges faced by both healthcare providers and adolescents in accessing and implementing integrated treatment approaches are explored, paving the way for potential solutions. Continuing, the literature review investigates the long-term outcomes and follow-up care for adolescents who have undergone integrated treatment for substance-related disorders. This theme explores the importance of sustained care and relapse prevention strategies within the Ghanaian context, shedding light on the durability and lasting impact of integrated treatment approaches. The study reviewed literature on the understanding of how policy factors influence the implementation. Understanding how policy factors may influence the implementation and sustainability of integrated treatment approaches provides a broader perspective on the systemic context of adolescent substance abuse treatment.

Finally, the chapter concludes by exploring community engagement and education initiatives. This theme investigates the role of community-based organisations and awareness programs in supporting adolescents with substance-related disorders. By fostering a collaborative and informed community approach, these initiatives play a crucial role in complementing formal treatment strategies and promoting a comprehensive understanding of substance abuse within the community.

## CHAPTER THREE

### METHODOLOGY

#### 3.0 Overview

In order to obtain the answers to the various research questions and hypotheses that served as the study's compass, this chapter examines the numerous techniques and methodologies employed to collect data. As a result, this current chapter shows research approach, research design, population, the sample and sampling technique, the instruments utilised for data collecting, the piloting of instruments, procedures for data collection procedure and analysis.

#### 3.1 Research Approach

The study used the Quantitative approach. To test hypotheses and provide research questions, the quantitative approach is a research process that involves gathering and evaluating numerical data (Creswell, 2013). Creswell further outlined some of the advantages of a quantitative study as follows:

More objectivity and trustworthiness of the study findings are made possible by the quantitative approach's use of numerical data, which removes subjectivity from the research process.

**Generalisability:** Because statistical analysis can shed light on the traits and patterns of entire groups, the quantitative approach enables the application of study results to bigger populations.

**Precision:** The quantitative approach's use of statistical analysis allows for a precise measurement of the correlations between variables, which makes it possible to identify subtle but important effects.

**Replicability:** The quantitative approach enables the replication of research results because it uses numerical data and statistical analysis to create a transparent and repeatable framework for data gathering, analysis, and interpretation.

In comparison to other research methods, quantitative research has a number of advantages, including the ability to measure phenomena precisely, the ability to use statistical analysis to test

hypotheses, and the ability to produce unbiased, trustworthy results that can be applied to larger populations. It is crucial to remember that quantitative research has drawbacks as well, such as the potential for lacking depth in the investigation of complex phenomena and the potential for missing significant aspects that cannot be measured (Creswell & Creswell, 2017).

### **3.2 Research Design**

Based on the approach, the study adopted the descriptive survey design. Amedahe and Gyimah (2003) indicated that descriptive survey design makes use of techniques involving data collection through assessments, questionnaires, observations, scales of attitudes, and review of teaching documents. Descriptive designs are administered to participants to obtain data on beliefs, attitudes, perceptions, habits, or features of a sample as representative of the entire population, according to Creswell (2008), and these data are considered primary data. A survey design was also chosen for this research because it is considered a successful and cost-effective data collection tool.

The process of gathering data for a descriptive survey study has a lot of benefits since it allows for a very multidimensional method and multiple perspectives on the data (Hale, 2011). In order for scholars to observe how others perceive an event, it can also remove obstacles to rigid academic approaches. Descriptive research, as indicated by Fraenkel and Wallen (2009), generates a sizable number of replies from a huge number of individuals at once, offers a meaningful representation of events, and aims to explain people's views and behaviour based on the information acquired at the moment. They went on to say that specific questions that are of particular interest to and value to researchers can be used with greater assurance when using the descriptive research methodology.

Respondents might not always be truthful, which is a drawback of the descriptive approach. They respond with the information they believe the researcher wants to hear. The observer's paradox, which states that if a participant is aware that they are being watched, they may alter their

behaviour, was also a feature of descriptive research. Furthermore, surveys are frequently designed so that the respondent's choices are restricted to those made by the researcher. Although limiting the response options helps the researcher collect data, it does not provide participants with any flexibility if their answers do not fall within the predetermined range. This could result in the data collection process leaving out important information (Dickson & Mitchelson, 2007).

### **3.3 Research Setting**

The settings of the study in the Greater Accra region of Ghana and the study areas in the region for the conduct of the research were Drug Treatment and Rehabilitation Centre, Pantang Psychiatric Hospital, Accra, Addictive Disease Centre, Korle-Bu Teaching Hospital, Accra, Drug Treatment, Rehabilitation and Recovery Centre, Accra Psychiatric Hospital, Accra.

### **Population, Inclusion and Exclusion Criteria**

The population of interest for this study included all adolescents (male and female) with substance-related and addictive disorders between the ages of 18- and 25-years using drug rehabilitation services in the study areas at the time of the data collection. Clients who are below 18 or above 25 years old were excluded from the study to ensure that clients' responses reflect their experiences.

Population, in the words of Polit and Hungler (1999), refers to all cases that satisfy a predetermined set of requirements. In other words, the target group about which the researcher is interested in learning more so that inferences can be drawn. It essentially represents the bigger group in which the researcher is interested.

### **3.4 Sampling Technique and Sample Size**

Hair (2000) explained a sample as a small group of individuals or objects from a targeted population for a study. Additionally, according to Kamangar and Islami (2013), sampling is the act of selecting a sample of persons from the target population that are statistically representative.

Purposive sampling technique was used to sample the respondents. A sample of 130 adolescents using drug rehabilitation services in Accra, Ghana, were used for the study. The respondents were be selected using a convenience sampling technique.

According to Groves (2006), the right sample size for a survey is dependent on several variables, including the amount of precision necessary, the population's diversity, and the difficulty of the research questions. He points out that for some studies, a sample size of under 100 may be adequate, especially if the population is homogeneous and the research objectives are straightforward.

### **3.5 Research Instrument**

A self-developed close-ended questionnaire was used for the study. A self-administered questionnaire is an appropriate data collection tool for this study because it enabled the researcher to gather information from a large sample size quickly. The questionnaire was designed to elicit information on the effectiveness of the integrated approach, the respondents' adherence to treatment, and their ability to maintain abstinence from drugs after the completion of treatment.

#### **3.5.1 Questionnaire**

The questionnaire was given to the adolescents using drug rehabilitation services. Because all respondents could read and understand the questionnaire's questions, the researcher opted for it above other instruments. Additionally, it gave the researcher the chance to produce the numerical data required to test the theory. The ability to collect data from a vast population and their low cost are two benefits of using questionnaires. One drawback of surveys, according to Fraenkel and Wallen (2009), is that the respondents might decide to skip some of the questions or choose not to return the form. Most of the respondents might interpret some of the questions incorrectly, which would alter the study's conclusions.

The researcher used the respondents' candid comments and explanations of crucial points to overcome this problem. To acquire information for the study, the researcher

modified the questionnaire created by Schmidt, et al (2009). The 5-point Likert scale was chosen by the researcher over the 4-point version. Even though there is no agreement on whether a 5-point Likert scale is better than a 4-point scale. A 5-point scale, however, may be more accurate and dependable than a 4-point scale, according to some studies.

A 5-point scale offers a neutral middle that enables respondents to express their ambivalence or lack of opinion on a particular topic, which is one explanation for this. Because respondents are less likely to select extreme responses when a neutral choice is presented, this midway can also lessen response bias. For instance, Westerman and Yamamoto (2007) examined the validity and reliability of using a 4-point scale against a 5-point scale to gauge customer happiness.

In comparison to the 4-point scale, they discovered that the 5-point scale had higher reliability and validity, indicating that it was a more effective assessment tool.

The two scales were also contrasted in research by Chang and Lee (2007) that looked at employee satisfaction. They discovered that the 5-point scale was more informative than the 4-point scale and had higher reliability and validity. A 5-point scale may also be preferable because it allows for greater response differentiation and more in-depth analysis of the data. Results could be less accurate if respondents had fewer alternatives on a 4-point scale to indicate their ideas.

In conclusion, although there is no unambiguous agreement regarding the superiority of a 5-point scale over a 4-point scale, some research indicates that a 5-point scale may be more dependable, valid, and yield more nuanced results.

### **3.5.2 Strengths and weakness of the instruments**

**Questionnaire:** Chaleunvong (2009) wrote that a questionnaire is a data collection tool in which written questions are presented that are to be answered by the respondents in written form. The questionnaire was used in this study for the following reasons:

- (a) **Economical:** With the questionnaire, the expenses and time involved are reduced.
- (b) **Uniformity of questions:** The same set of questions was given to each of the sampled respondents. The questions were designed in the same way with the same instructions. This makes the questionnaire produce data which is more comparable to the information obtained through other instruments.
- (c) **Standardisation:** This deals with the highly structured nature and conditions by which the questionnaire is answered and probably controlled. If this is done, then we can say the questionnaire is standardised. The same will be done by the researcher to ensure the standardisation of the instruments. Cook (2011) added that the questionnaire allows comparisons to be made with other sets of data and provides easy replication of the research.

However, a study by Cook (2011) cautions that when respondents do not understand the questions, they give different answers than those required by the researcher. Also, with a questionnaire as a data collection instrument, the researcher cannot follow up with probing questions to gain richer data. Again, as the questionnaire cannot be explained to participants, it could be confusing to respond when participants do not understand the content. Finally, when closed questions are used, they limit the response rate of the participants' views and opinions.

### **3.6 Validity of Instruments**

It is crucial to guarantee the validity and dependability of the instrument used to gather the data in every research project. Furthermore, for a study's findings to be accepted as accurate, the measurement process itself must first be trustworthy.

According to Joppe (2000), validity refers to "the ability of a research instrument to measure that which it was designed to assess or the veracity of the study findings" (p.1). The self-developed instrument was put through expert validation (Lafaille & Wildeboer, 1995) by my supervisor to guarantee face validity or the extent to which an instrument measures what it is designed to

measure, content validity, and format of the instrument. These suggestions were taken into account, and the required modifications were made to the instruments to ensure their validity.

### **3.7 Reliability of Instruments**

According to Wang (2006), reliability provides information on whether the instrument is consistently collecting data. To determine the reliability of my research instruments, the instrument was piloted at the Accra Psychiatry hospital the Greater Accra region was chosen because it shares common features with the selected rehabilitation centre. Data gathered during the pilot study is coded in the SPSS version 27, and the Cronbach Alpha value was calculated. In general, the Cronbach alpha value was 0.76. therefore, based on the study of Griethuijesen et al (2014) the instruments are valid, as he indicated that a Cronbach alpha coefficient of 0.6 is acceptable and valid.

### **3.8 Data Collection procedure**

The study incorporated primary data. Primary data is typically defined as information acquired from a source that has not been analysed before being used in the current investigation. A structured questionnaire was used to collect quantitative data from the respondents. The questionnaire will consist of five sections.

An introductory letter was obtained from the faculty of psychology of the University. The letter of introduction stated the purpose of the research and the respondents were asked to give their consent and co-operation. Copies were later sent to the heads of the hospitals for their endorsement in order to gain access to the respondents to facilitate the study. With this, the researcher then obtained permission to administer the questionnaire to the respondents at their convenience, waiting for collection.

### **3.9 Data Analysis Plan**

Data gathered for the study was analysed using the Statistical Package for the Social Sciences (SPSS) software version 27. The quantitative data will be analysed using descriptive



statistics and inferential statistics such as (chi-square tests, and logistic regression analysis) to examine the association between the integrated treatment approach and treatment outcomes. Responses from the respondents were coded and entered into the software for analysis. Results were presented in tables and graphs for discussion.

### **3.10 Ethical Considerations**

The study obtained ethical clearance from the Ghana Health Service Ethical Review Committee before data collection. Informed consent was obtained from all the respondents. Confidentiality and anonymity will be maintained throughout the study.

There are laid down principles and guidelines for conducting studies in an ethically appropriate manner which require researchers to obtain approval from ethics committee or equivalent and from the participants (Halai, 2006). Based on this premise, the following ethical considerations suggested by Creswell (2012) for conducting mixed methods research were used for this study.

Informed consent was sought after carefully and truthfully informing respondents about the purpose of the study (Gilbert, 2017).

Every respondent has the right to privacy, according to the survey. The respondent has the right to choose when, when, who to reveal their attitudes, beliefs, and behaviour to, and to what extent (De Vos, et al., 2012). This study took seriously privacy, a primordial value, a basic human right, and its corollaries, anonymity, and confidentiality (Cohen et al., 2011). The names of the responders were kept hidden.

Following Gray's (2011) guidance, participants were ensured of their anonymity and confidentiality, both in terms of their names and the information they had submitted, during the actual data collection. This crucial protection was implemented to ensure that the unethical practice of identifying respondents' names was avoided unless respondents agreed to it. Respondents were

assured that their replies would be treated with strict secrecy and used solely for the purposes of this study.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.0 Introduction**

In this chapter, the focus is the presentation of the research findings and subsequent discussions. The results are organised based on the categories of the interviews and test that were administered to the participants. Through a systematic analysis of the data collected, key themes and patterns emerged from the interviews and questionnaire are identified and presented. Following the presentation of the results, the discussions explored deeper into the implications and interpretations of the findings.

#### **4.1 Demographics of respondents**

Understanding the demographic characteristics of respondents is crucial for contextualising research findings and assessing their generalisability. This section provides a detailed overview of the demographic profile of the participants in the study. By examining key variables such as age, gender, educational level, and religious affiliation, we can gain insights into the composition of the sample and its potential impact on the study's outcomes. This demographic analysis helps to ensure that the findings are interpreted within the proper context and highlights any demographic factors that may influence the research results. The following data outlines the distribution of respondents across these categories, offering a comprehensive view of their socio-economic and cultural backgrounds.

**Table 1: Demographic of Respondents**

<b>Demographic of Respondents</b>		<b>Frequency (%)</b>
<b>Age</b>	Below 20 years	11 (8.5)
	20- 24 years	25 (19.2)
	25 – 30 years	24 (18.5)
	31 years and above	70 (53.8)
<b>Gender</b>	Male	86 (66.2)
	Female	44 (33.8)
<b>Educational level</b>	Basic School	63 (48.5)
	High School	48 (36.9)
	Tertiary	19 (14.6)
<b>Religion</b>	Islam	43 (33.1)
	Traditional Religion	21 (16.2)
	Christianity	66 (50.8)

The demographic data reveals several key insights about the respondents. A majority of the participants are aged 31 years and above, accounting for 53.8% of the sample. This indicates that older individuals are more prevalent in the survey, while those aged 20-24 years and 25-30 years make up 19.2% and 18.5%, respectively. The smallest group is comprised of individuals below 20 years, representing only 8.5%. This age distribution suggests that the findings may be more reflective of the experiences and perspectives of older individuals, potentially limiting the applicability of the results to younger age groups.

In terms of gender, there is a noticeable imbalance, with males comprising 66.2% of the respondents compared to 33.8% females. This gender disparity could influence the study outcomes, particularly if the research topic is sensitive to gender differences or experiences.

Educationally, the majority of respondents have completed basic school (48.5%), followed by high school graduates at 36.9%. Only 14.6% of the respondents have achieved tertiary education. This distribution indicates that the sample largely consists of individuals with lower to mid-level educational backgrounds, which may affect their engagement with complex issues and perspectives.

Regarding religion, Christianity is the predominant faith among the respondents, with 50.8% identifying as Christian. This is followed by 33.1% who practice Islam and 16.2% who adhere to traditional religions. The religious composition of the sample reflects a Christian majority, which could influence responses related to cultural or religious practices.

Overall, the demographic profile highlights an older, predominantly male, and less formally educated group with a strong Christian majority. These factors should be taken into account when interpreting the study's findings and considering their broader implications.

## **4.2 Research Question One**

What the causes of substance-related addictive disorders among adolescents?

Substance-related addictive disorders among adolescents represent a critical public health issue with profound implications for individuals and society. Understanding the underlying causes of these disorders is essential for developing effective prevention and intervention strategies. This research question seeks to explore and identify the various factors contributing to the development of substance-related addictive disorders in adolescents. By investigating these causes, the study aims to uncover the complex interplay of biological, psychological, social, and environmental influences that drive substance abuse among young people. Addressing this question will provide valuable

insights into the root causes of adolescent addiction, inform targeted approaches to mitigate these issues, and ultimately contribute to healthier outcomes for affected individuals.

**Table 2: Causes of Substance-Related Addictive Disorders Among Adolescents**

<b>STATEMENT</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b><math>\bar{x}</math></b>
	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(Std)</b>
<b>Substance abuse is often linked to peer pressure during adolescence</b>	7 (7.1)	1 (1.0)	1 (1.0)	33 (33.7)	56 (57.1)	4.33 (1.08)
<b>Lack of parental supervision contributes to the development of substance-related addictive disorders in adolescent.</b>	3 (3.1)	3 (3.1)	2 (2.0)	47 (48.0)	43 (43.9)	4.27 (0.89)
<b>Adolescents with a family history of substance abuse are more prone to developing addictive disorders themselves.</b>	2 (2.0)	11 (11.2)	9 (9.2)	45 (45.9)	31 (31.6)	3.94 (1.02)
<b>Exposure to media influence, such as movies and music glorifying substance use, plays a significant role in adolescents addictive behaviours.</b>	4 (4.1)	11 (11.2)	9 (9.2)	46 (46.9)	28 (28.6)	3.85 (1.09)
<b>Academic stress is a contributing factor to the onset of substance-related addictive disorders among adolescent.</b>	8 (8.2)	18 (18.4)	19 (19.4)	35 (35.7)	18 (18.4)	3.38 (1.21)
<b>The availability of drugs and alcohol</b>	4	11	7	36	40	3.99

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<b>in the community increases the</b>	(4.1)	(11.2)	(7.1)	(36.7)	(40.8)	(1.14)
<b>likelihood of adolescent addictive</b>						
<b>disorders.</b>						
<b>Mental health issues, such as</b>						
<b>depression and anxiety, are</b>	2	8	10	48	30	3.98
<b>significant substance-related</b>	(2.0)	(8.2)	(10.2)	(49.0)	(30.6)	(0.96)
<b>addictive disorders in adolescents</b>						
<b>Lack of awareness and education</b>						
<b>about the risks of substance abuse</b>						
<b>contributes to the prevalence</b>	4	2	11	52	29	4.02
<b>addictive disorders among</b>	(4.1)	(2.0)	(11.2)	(53.1)	(29.6)	(0.93)
<b>adolescent.</b>						
<b>Genetics factors play a role in making</b>						
<b>certain individuals more susceptible</b>	9	10	24	36	19	3.47
<b>to substance-related addictive</b>	(9.2)	(10.2)	(24.5)	(36.7)	(19.4)	(1.19)
<b>disorders during adolescence.</b>						
<b>Inadequate support system and</b>						
<b>resources for adolescents with</b>						
<b>substance abuse issues contribute to</b>	3	14	12	42	27	3.78
<b>the persistence of addictive</b>	(3.1)	(14.3)	(12.2)	(42.9)	(27.6)	(1.10)
<b>behaviours.</b>						

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The analysis of the data provided reveals several insights into the factors contributing to substance-related addictive disorders in adolescents. The statement "Substance abuse is often linked to peer pressure during adolescence" received strong agreement from respondents, with 57.1% strongly agreeing and 33.7% agreeing, leading to a high mean score of 4.33 (Std = 1.08). This indicates that peer pressure is perceived as a significant factor in substance abuse among adolescents. Literature supports this finding, as peer influence is well-documented as a major factor in adolescent behaviour particularly in risk-taking activities like substance use (Steinberg, 2008).

The lack of parental supervision was also identified as a critical factor, with 43.9% of respondents strongly agreeing and 48% agreeing, resulting in a mean of 4.27 (Std = 0.89). This suggests that inadequate parental oversight is closely associated with the development of addictive behaviours in adolescents. Research consistently shows that parental involvement and supervision are key protective factors against adolescent substance abuse (Dishion & McMahon, 1998).

The statement regarding adolescents with a family history of substance abuse being more prone to developing addictive disorders received a mean score of 3.94 (Std = 1.02). Although the agreement was strong (45.9% agreed, 31.6% strongly agreed), the variation in responses suggests that while family history is recognised as a risk factor, other variables may also play significant roles. Genetic predispositions combined with environmental factors are often cited in literature as contributing to substance abuse risk (Kendler et al., 2003).

Exposure to media influence, such as movies and music that glorify substance use, was rated with a mean of 3.85 (Std = 1.09). This finding indicates that while media is considered influential, it may not be the primary factor driving substance abuse. However, studies have shown that media portrayal of substance use can normalise these behaviours, particularly in impressionable adolescents (Strasburger, 2009).



Academic stress was perceived as a moderate contributing factor, with a mean score of 3.38 (Std = 1.21). This lower score, coupled with the spread of responses (19.4% neutral, 18.4% strongly agree), suggests that while academic stress is recognised, it is not as strongly linked to substance abuse as peer pressure or lack of parental supervision. Nonetheless, academic stress has been associated with various mental health issues, including substance abuse as a coping mechanism (Sinha, 2008).

The availability of drugs and alcohol in the community was rated with a mean of 3.99 (Std = 1.14). The strong agreement (40.8%) indicates that easy access to substances within the community is a significant concern for adolescent addiction. This aligns with studies showing that the availability of substances in the community increases the likelihood of use among adolescents (Hawkins et al., 1992).

Mental health issues, such as depression and anxiety, were strongly associated with substance-related addictive disorders, with a mean of 3.98 (Std = 0.96). This suggests a recognition of the link between mental health and substance abuse, which is well-supported by literature that highlights the co-occurrence of these conditions (Mojtabai et al., 2014).

The lack of awareness and education about the risks of substance abuse was also seen as a significant factor, with a mean score of 4.02 (Std = 0.93). This underscores the importance of preventive education in mitigating substance abuse risks. Educational interventions have been shown to reduce substance abuse by increasing awareness of its dangers (Cuijpers, 2002).

Genetic factors were recognised but with more varied opinions, reflected in a mean score of 3.47 (Std = 1.19). While genetics are acknowledged as playing a role, the mixed responses indicate that this factor might be perceived as less controllable compared to social and environmental influences. Genetic predispositions to substance abuse are indeed significant, but they often interact with other factors (Goldman et al., 2005).

Finally, inadequate support systems and resources for adolescents dealing with substance abuse were moderately associated with persistent addictive behaviours, with a mean score of 3.78 (Std = 1.10). This suggests a need for better support structures to address substance abuse issues, which is consistent with research advocating for comprehensive support systems to aid recovery and prevention (Dennis et al., 2003).

Overall, the analysis indicates that peer pressure, lack of parental supervision, and the availability of substances in the community are perceived as the most significant factors contributing to adolescent substance abuse. This aligns with the broader literature on adolescent risk behaviours, emphasising the need for multi-faceted prevention strategies.

### **4.3 Research Question Two**

What are the adolescents' perceptions of the effectiveness of psychotherapy and pharmacotherapy in improving their health conditions?

Assessing the perceptions of adolescents regarding the effectiveness of psychotherapy and pharmacotherapy is crucial for understanding how these treatment modalities impact their health and well-being. Adolescents often face unique challenges in managing their mental health conditions, and their perspectives on various therapeutic interventions can provide valuable insights into the efficacy and acceptability of these treatments. This research question aims to explore how adolescents perceive the effectiveness of psychotherapy and pharmacotherapy in addressing their specific health conditions. By examining their views and experiences, the study seeks to evaluate the perceived benefits and limitations of these approaches, which can inform improvements in treatment strategies and enhance support for young individuals navigating mental health challenges. Understanding these perceptions is essential for tailoring interventions to better meet the needs of adolescents and improve overall treatment outcomes.

**Table 3: Adolescents' Perceptions of The Effectiveness of Psychotherapy and Pharmacotherapy**

<b>STATEMENT</b>	<b>VL</b>	<b>L</b>	<b>N</b>	<b>H</b>	<b>VH</b>	<b><math>\bar{x}</math></b>
	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(Std)</b>
<b>How would you rate the effectiveness of psychotherapy in improving your health condition?</b>	5 (5.1)	5 (5.1)	10 (10.5)	46 (46.9)	32 (32.7)	3.97 (1.05)
<b>To what extent do you believe that pharmacotherapy is effective in addressing your health condition?</b>	2 (2.0)	5 (5.1)	8 (8.2)	53 (54.1)	30 (30.6)	4.06 (0.88)
<b>How confident are you in the positive outcomes of psychotherapy for your health condition?</b>	0 (0.0)	8 (8.2)	14 (14.3)	41 (41.8)	35 (35.7)	4.05 (0.91)
<b>In your opinion, how effective is pharmacotherapy in manging and improving your specific health issues?</b>	6 (6.1)	12 (12.1)	14 (14.3)	40 (40.8)	26 (26.5)	3.69 (1.17)
<b>To what degree do you have perceived psychotherapy as valuable component of your overall health treatment plan?</b>	6 (6.1)	7 (7.1)	14 (4.3)	48 (49.0)	23 (23.5)	3.76 (1.08)
<b>How much improvement do you associate with undergoing psychotherapy for your health condition?</b>	8 (8.2)	9 (9.2)	17 (17.3)	44 (44.9)	20 (20.4)	3.60 (1.16)
<b>Considering your personal experience, how effective do you find</b>	4 (4.1)	10 (10.2)	18 (18.4)	41 (41.8)	25 (25.5)	3.74 (1.08)

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<b>pharmacotherapy in alleviating symptoms related to your health condition?</b>						
<b>In your view, how crucial is psychotherapy in maintaining long term well-being and health?</b>	5	9	10	50	24	3.81
	(5.1)	(9.2)	(10.2)	(51.0)	(24.5)	(1.07)
<b>How satisfied are you with the results of pharmacotherapy in manging your health condition?</b>	7	6	13	45	27	3.80
	(7.1)	(6.1)	(13.3)	(45.9)	(27.6)	(1.13)
<b>Overall, how would you rate the combined impact of and psychotherapy pharmacotherapy on your health condition?</b>	4	6	9	42	37	4.04
	(4.1)	(6.1)	(9.2)	(42.9)	(37.8)	(1.04)

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The data analysis reveals that psychotherapy is perceived as an effective method for improving health conditions, with a significant portion of respondents rating its effectiveness as high. This finding aligns with literature that highlights the benefits of psychotherapy, particularly in treating mental health disorders, where it has been shown to lead to meaningful improvements in patient outcomes (Cuijpers et al., 2016).

Pharmacotherapy was rated slightly higher in terms of effectiveness, with respondents expressing strong confidence in its ability to address health conditions. A substantial majority rated pharmacotherapy as highly effective, reflecting its established role as a primary treatment option, especially for conditions with significant biological components, such as depression and anxiety disorders (Rush et al., 2006).

Respondents also expressed high confidence in the positive outcomes of psychotherapy, with many believing in its benefits. This is supported by literature, which emphasises the importance of the therapeutic alliance and the quality of the therapeutic process in determining the success of psychotherapy (Horvath & Symonds, 1991).

In terms of managing specific health issues, pharmacotherapy received generally favorable ratings, although slightly lower than those for psychotherapy. This finding is consistent with literature suggesting that pharmacotherapy is particularly effective when used in combination with other treatment methods, offering a more comprehensive approach to health management (Davidson, 2010).

The value of psychotherapy as part of an overall health treatment plan was recognised by respondents, who rated it as a valuable component. This perception aligns with the growing emphasis on holistic and integrated care approaches, where psychotherapy plays a crucial role in addressing mental and emotional health (Lambert, 2013).

When it comes to the improvement associated with undergoing psychotherapy, responses were more varied. While many respondents acknowledged the benefits, the extent of perceived improvement varied, reflecting differences in individual experiences and the nature of the health conditions being treated (Berman et al., 1985).

The effectiveness of pharmacotherapy in alleviating symptoms was generally viewed positively, with respondents finding it effective, particularly in symptom management. This is consistent with the literature that supports the role of medication in providing symptomatic relief in conditions like anxiety and depression (Geddes et al., 2003).

Respondents also recognised the crucial role of psychotherapy in maintaining long-term well-being, with many seeing it as essential for sustaining health over time. This aligns with

literature that emphasises the importance of psychotherapy in preventing relapse and fostering long-term psychological resilience (Hofmann et al., 2012).

Satisfaction with the outcomes of pharmacotherapy was high among respondents, indicating a general contentment with the results of their medication. This satisfaction is supported by studies showing that pharmacotherapy can lead to significant improvements in health conditions when appropriately managed (Lam et al., 2006).

Finally, the combined impact of psychotherapy and pharmacotherapy was rated highly, with respondents generally believing that the integration of both approaches provides the most effective treatment. This supports the literature advocating for combined treatment approaches, where the synergy of pharmacotherapy and psychotherapy often yields better outcomes than either method alone (Fava et al., 1994).

#### **4.4 Research Question Three**

What are the factors that influence the integration of psychotherapy and pharmacotherapy in the treatment of substance-related addictive disorders?

The integration of psychotherapy and pharmacotherapy in treating substance-related addictive disorders represents a multifaceted approach aimed at addressing both the psychological and physiological aspects of addiction. Understanding the factors that influence this integration is essential for optimising treatment efficacy and improving patient outcomes. This research question seeks to identify and analyse the key factors that impact how effectively psychotherapy and pharmacotherapy are combined in the treatment process. These factors may include the collaboration between healthcare professionals, the quality of communication, patient motivation, and the availability of resources, among others. By investigating these elements, the study aims to provide a comprehensive overview of the dynamics that affect the successful integration of these

therapeutic modalities. This understanding will be crucial for developing more effective and holistic treatment plans for individuals struggling with substance-related addictive disorders.

**Table 4: Factors Influencing Integration of Psychotherapy and Pharmacotherapy In Substance-Related Addictive Disorder Treatment**

STATEMENT	SD (%)	D (%)	N (%)	A (%)	SA (%)	$\bar{x}$ (Std)
<b>The collaboration between therapists and prescribing physicians of essential for the effective treatment of substance-related addictive disorders.</b>	2 (2.0)	4 (4.1)	3 (3.1)	48 (49.0)	41 (41.8)	4.24 (0.86)
<b>Clear communication between the psychotherapist and prescribing physician positively influences the pharmacotherapy treatment.</b>	1 (1.0)	6 (6.1)	7 (7.1)	46 (46.9)	38 (38.8)	4.16 (0.88)
<b>Adequate training and education for both therapists and prescribing physicians contribute to successful integration in the treatment of addictive disorders.</b>	2 (2.0)	4 (4.1)	11 (11.2)	33 (33.7)	48 (49.0)	4.23 (0.95)
<b>Patient willingness and motivation play a significant role in the successful integration of psychotherapy and pharmacotherapy for substance-related addictive disorder</b>	4 (4.1)	1 (1.0)	8 (8.2)	26 (26.5)	59 (60.2)	4.38 (0.98)
<b>The availability of a variety of</b>	1	5	7	54	31	4.11

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<b>pharmacotherapeutic options enhances the flexibility of treatment plans in substance-related addictive disorders.</b>	(1.0)	(5.1)	(7.1)	(55.1)	(31.6)	(0.82)
<b>The compatibility of psychotherapy and pharmacotherapy approaches is crucial for the overall effectiveness of the treatment.</b>	0	5	11	48	34	4.13
	(0.0)	(5.1)	(11.2)	(49.0)	(34.7)	(0.81)
<b>Support from family and friends positively influences the integration of psychotherapy and pharmacotherapy in treatment addictive disorders.</b>	3	3	10	35	47	4.22
	(3.1)	(3.1)	(10.2)	(35.7)	(48.0)	(0.97)
<b>The stigma associated with either psychotherapy or pharmacotherapy hinders their effective integration in treating substance-related addictive disorders.</b>	2	11	12	40	33	3.93
	(2.0)	(11.2)	(12.2)	(40.8)	(33.7)	(1.05)
<b>Adequate monitoring and adjustment of medication during psychotherapy contribute to better treatment outcomes for addictive disorders.</b>	3	5	9	43	38	4.10
	(3.1)	(5.1)	(9.2)	(43.9)	(38.8)	(0.98)
<b>The integration of psychotherapy and pharmacotherapy is essential for addressing both the psychological and physiological aspects of substance-related addictive disorders.</b>	2	4	10	42	40	4.16
	(2.0)	(4.1)	(10.2)	(42.9)	(40.8)	(0.92)

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The data indicates a strong consensus on the importance of collaboration between therapists and prescribing physicians in treating substance-related addictive disorders. A significant majority of respondents (90.8%) agree or strongly agree that this collaboration is crucial, with a mean score of 4.24 (Std = 0.86). This finding aligns with existing literature, which emphasises the need for a multidisciplinary approach in addiction treatment to address the complex interplay of psychological and physiological factors (O'Brien, 2008). Effective communication between the psychotherapist and prescribing physician is also highly valued, with 85.7% of respondents supporting its positive influence on pharmacotherapy outcomes ( $\bar{x} = 4.16$ , Std = 0.88). This reinforces the importance of clear communication channels in ensuring coordinated and effective treatment (McLellan, 2017).

Moreover, the data highlights the role of adequate training and education for both therapists and prescribing physicians in successful treatment integration, with 82.7% of respondents agreeing ( $\bar{x} = 4.23$ , Std = 0.95). This underscores the need for continuous professional development in the field of addiction treatment (Miller & Carroll, 2006). Patient willingness and motivation are identified as critical factors in the successful integration of psychotherapy and pharmacotherapy, with 86.7% of respondents agreeing or strongly agreeing ( $\bar{x} = 4.38$ , Std = 0.98). This finding supports the literature, which suggests that patient engagement is pivotal in achieving positive treatment outcomes (Prochaska & DiClemente, 1983).

The availability of diverse pharmacotherapeutic options is seen as enhancing treatment flexibility, with 86.7% of respondents indicating agreement ( $\bar{x} = 4.11$ , Std = 0.82). This suggests that a personalised approach to pharmacotherapy, tailored to individual needs, is crucial for effective treatment (National Institute on Drug Abuse, 2020). The compatibility of psychotherapy and pharmacotherapy is also deemed crucial, with 83.7% of respondents agreeing ( $\bar{x} = 4.13$ , Std = 0.81). This aligns with the notion that an integrated treatment approach is essential for addressing both psychological and physiological aspects of addiction (Weiss, 2010).

Support from family and friends is another significant factor, with 83.7% of respondents agreeing that it positively influences the integration of treatment approaches ( $\bar{x} = 4.22$ , Std = 0.97). This highlights the importance of a supportive social environment in recovery (Laudet, 2003). However, the stigma associated with either psychotherapy or pharmacotherapy is recognised as a barrier, with a lower mean score of 3.93 (Std = 1.05) and 74.5% of respondents acknowledging its impact. This reflects ongoing challenges in overcoming societal perceptions to ensure comprehensive care (Corrigan, 2004). Finally, adequate monitoring and adjustment of medication during psychotherapy are considered vital for better treatment outcomes, with 82.7% agreeing ( $\bar{x} = 4.10$ , Std = 0.98). This emphasises the need for a dynamic and responsive treatment plan that adapts to patient progress (Lingford-Hughes et al., 2012).

#### **4.5 Research Question Four**

What are the effects of psychotherapy and pharmacotherapy on adolescents' mental health? Evaluating the effects of psychotherapy and pharmacotherapy on adolescents' mental health is essential for understanding how these treatment modalities impact the psychological well-being of young individuals. Adolescence is a critical period characterised by significant emotional and developmental changes, and mental health issues during this time can profoundly affect an individual's overall functioning and quality of life. This research question seeks to explore how psychotherapy and pharmacotherapy influence various aspects of mental health in adolescents, including symptom relief, emotional regulation, and overall psychological resilience. By examining these effects, the study aims to provide insights into the effectiveness of these treatments in addressing adolescent mental health issues, guiding clinical practices, and informing the development of tailored interventions that can better support young people in managing their mental health challenges.

**Table 5: Effects of Psychotherapy and Pharmacotherapy on Adolescents' Mental Health**

<b>STATEMENT</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b><math>\bar{x}</math></b>
	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(Std)</b>
<b>Psychotherapy has helped me develop better coping skills for managing stress and emotional challenges.</b>	5 (5.1)	3 (3.1)	5 (5.1)	41 (41.8)	44 (44.9)	4.10 (0.99)
<b>Pharmacotherapy has been effective in reducing specific symptoms associated with my mental health conditions.</b>	5 (5.1)	3 (3.1)	11 (11.2)	46 (46.9)	33 (33.7)	4.01 (0.86)
<b>Through Psychotherapy, I have gained a better understanding of my thoughts, emotions and behaviours.</b>	2 (2.0)	2 (2.0)	10 (10.2)	38 (38.8)	46 (46.9)	4.27 (0.88)
<b>Medications prescribed for my mental health has helped stabilise my mood</b>	5 (5.1)	5 (5.1)	13 (13.3)	37 (37.8)	38 (38.8)	4.00 (1.09)
<b>Psychotherapy has improved my communication skills, allowing me to express myself more effectively.</b>	5 (5.1)	3 (3.1)	11 (11.2)	39 (39.8)	40 (40.8)	4.10 (0.99)
<b>Pharmacotherapy has positively impacted my ability to concentrate and focus.</b>	0 (0.0)	5 (5.1)	20 (20.4)	42 (42.9)	31 (31.6)	4.01 (0.86)
<b>I feel a sense of empowerment and control over my life through engaging in Psychotherapy.</b>	2 (2.0)	6 (6.1)	13 (13.3)	40 (40.8)	37 (37.8)	4.06 (0.97)
<b>Medication has helped regulate my sleep patters, contributing to improve overall well-being.</b>	2 (2.0)	8 (8.2)	14 (14.3)	32 (32.7)	42 (42.9)	4.06 (1.04)

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<b>The combination of psychotherapy and</b>						
<b>pharmacotherapy has provided a more</b>	2	2	10	34	50	4.31
<b>comprehensive approach to addressing my</b>	(2.0)	(2.0)	(10.2)	(34.7)	(51.0)	(0.89)
<b>health mental health.</b>						
<b>Integrating psychotherapy and</b>						
<b>pharmacotherapy has been crucial for the</b>	2	5	15	25	51	4.20
<b>long-term management of my mental</b>	(2.0)	(5.1)	(15.3)	(25.5)	(52.0)	(1.01)
<b>health condition.</b>						

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The data indicates a positive response to both psychotherapy and pharmacotherapy in managing mental health conditions. Psychotherapy is highly regarded for its role in enhancing coping skills and self-understanding. A substantial majority of respondents (86.7%) reported that psychotherapy has significantly improved their ability to manage stress and emotional challenges (mean = 4.10, SD = 0.99) and has provided a deeper understanding of their thoughts, emotions, and behaviors (mean = 4.27, SD = 0.88). This supports the extensive literature demonstrating that psychotherapy, particularly cognitive-behavioral therapy (CBT), is effective in improving coping strategies and emotional regulation (Beck, 2011).

Pharmacotherapy is also recognised for its effectiveness in managing specific symptoms and enhancing overall functionality. Respondents noted that medications have been effective in reducing symptoms (mean = 4.01, SD = 0.86), stabilising mood (mean = 4.00, SD = 1.09), and improving concentration and sleep patterns (mean = 4.01 and 4.06, respectively). These findings align with research showing that pharmacological treatments, such as antidepressants and mood stabilisers, can significantly alleviate symptoms and enhance daily functioning (Muench & Hamer, 2010).

The integration of psychotherapy and pharmacotherapy is seen as highly beneficial. A majority (85.7%) of respondents believe that combining these treatments offers a more comprehensive approach to mental health management (mean = 4.31, SD = 0.89) and is crucial for long-term management (mean = 4.20, SD = 1.01). This reflects evidence from studies that suggest integrated treatment approaches often result in better outcomes compared to singular treatments, as they address both psychological and physiological aspects of mental health disorders more effectively (Cuijpers et al., 2014).

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.0 Introduction

This chapter gives a summary of the major findings, conclusions drawn from the findings, and recommendations.

#### 5.1 Key findings

1. The analysis of the data reveals that peer pressure, lack of parental supervision, and the availability of drugs and alcohol in the community are perceived as the most significant factors contributing to substance-related addictive disorders among adolescents. Additionally, mental health issues, such as depression and anxiety, and the influence of media are also recognised as important contributing factors. Genetic predispositions and inadequate support systems, while acknowledged, are viewed as less influential compared to social and environmental factors.
2. The analysis of the data shows that both psychotherapy and pharmacotherapy are perceived as effective in managing health conditions, with a slightly higher preference for pharmacotherapy among the respondents. A significant majority rated both treatments as highly effective, particularly in improving symptoms and contributing to overall health. The combination of psychotherapy and pharmacotherapy was also rated positively, indicating that many respondents believe an integrated treatment approach provides the best outcomes for managing their health conditions.
3. The analysis reveals a strong consensus among respondents on the importance of integrating psychotherapy and pharmacotherapy in treating substance-related addictive disorders. A significant majority believe that collaboration between therapists and prescribing physicians, clear communication, and patient motivation are essential for successful treatment outcomes. Additionally, the availability of diverse pharmacotherapeutic options and the

support from family and friends are recognised as crucial factors in enhancing treatment effectiveness. However, stigma associated with these treatments remains a barrier to their successful integration.

4. The analysis reveals that both psychotherapy and pharmacotherapy are highly valued in managing mental health conditions. Psychotherapy is recognised for significantly improving coping skills and self-understanding, with 86.7% of respondents acknowledging its effectiveness in managing stress and emotional challenges. Pharmacotherapy is also effective in symptom reduction, mood stabilisation, and enhancing concentration and sleep patterns. Furthermore, integrating psychotherapy and pharmacotherapy is viewed as crucial for comprehensive and long-term management, with 85.7% of respondents supporting this combined approach.

## **5.2 Conclusions**

The findings suggest that adolescent substance abuse is a complex issue influenced by a combination of social, environmental, and individual factors. Peer influence and parental supervision emerge as critical areas of concern, underscoring the importance of a supportive and vigilant environment in preventing substance-related addictive disorders in adolescents. Addressing these factors holistically is essential for effective prevention and intervention strategies.

Also, the findings suggest that a combined approach of psychotherapy and pharmacotherapy is highly valued by individuals managing health conditions. While both treatment modalities are individually effective, their combination is perceived as offering the most comprehensive and effective solution. This conclusion supports the existing literature that advocates for integrated treatment plans, which leverage the strengths of both psychotherapy and pharmacotherapy to achieve better health outcomes.

The data underscores the critical need for an integrated approach in treating substance-related addictive disorders, combining both psychotherapy and pharmacotherapy. Effective treatment relies

heavily on collaboration between healthcare providers, clear communication, and the active involvement of patients in their treatment plans. Despite the recognised benefits of this integration, societal stigma continues to impede its effectiveness, highlighting the need for broader efforts to reduce negative perceptions associated with these treatment methods.

The findings underscore the importance of both psychotherapy and pharmacotherapy in the effective management of mental health conditions. Psychotherapy is particularly beneficial for developing coping skills and understanding mental processes, while pharmacotherapy effectively addresses specific symptoms and improves overall functionality. The combination of both approaches provides a more holistic treatment strategy, enhancing long-term outcomes and addressing various aspects of mental health.

### **5.3 Recommendations**

1. It is recommended that comprehensive prevention programs be implemented, focusing on enhancing parental involvement, increasing awareness and education about the risks of substance abuse, and providing stronger support systems for adolescents. Additionally, communities should work to reduce the availability of drugs and alcohol, and mental health services should be made more accessible to address the underlying issues that contribute to substance abuse.
2. Healthcare providers should consider adopting and promoting integrated treatment plans that combine psychotherapy and pharmacotherapy, especially for conditions where both mental and physical health are impacted. This approach would likely enhance patient satisfaction and treatment effectiveness, leading to better long-term health outcomes. Additionally, further education and awareness programs could be beneficial in reinforcing the value of combined treatments to both patients and healthcare professionals.
3. To improve the treatment outcomes for substance-related addictive disorders, it is recommended that healthcare providers strengthen their collaborative efforts and



communication strategies. Training programs should be enhanced to equip therapists and prescribing physicians with the skills needed for successful treatment integration. Additionally, efforts should be made to educate the public and reduce the stigma surrounding these treatments, thereby encouraging more individuals to seek and adhere to integrated care plans. Finally, treatment plans should be tailored to individual patient needs, ensuring a flexible and responsive approach to care.

4. It is recommended that treatment plans for mental health conditions incorporate both psychotherapy and pharmacotherapy to leverage the benefits of each approach. Health professionals should ensure that these therapies are integrated seamlessly, with adequate coordination between therapists and prescribing physicians. Additionally, continued research and education on the combined use of these treatments should be promoted to optimise patient outcomes and enhance the overall effectiveness of mental healthcare.



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## **APPENDIX A**

### **QUESTIONNAIRE**

I am a student of Selinus University and undertaking this project in fulfillment of the requirements for the degree of Doctor of Philosophy in Clinical Psychology, Psychotherapy and Psychopharmacology in the department of clinical psychology, Psychotherapy, and Psychopharmacology. The questionnaire is to collect data on “Integrating Psychotherapy and Pharmacotherapy in Treatment of Substance-Related and Addictive Disorders among Adolescents Using Drug Rehabilitation Services in Accra, Ghana.” The data to be collected is for academic purposes and all information provided shall be treated as confidential.

#### **SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**

1. Age:
2. Gender: Male [ ] Female [ ]
3. Educational Level: None [ ] Basic [ ] Secondary [ ] Tertiary [ ]
4. Religion: Christianity [ ] Islam [ ] Traditional Religion [ ] Others [ ]
5. Do you frequently seek the help of a therapist for psychotherapy and pharmacotherapy in improving your health conditions? Yes [ ] No [ ]

**SECTION B: CAUSES OF SUBSTANCE-RELATED ADDICTIVE DISORDERS  
AMONG ADOLESCENTS**

Instructions: Please indicate your level of agreement with each statement by selecting the appropriate response on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

<b>Statement</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
Substance abuse is often linked to peer pressure during adolescence.					
Lack of parental supervision contributes to the development of substance-related addictive disorders in adolescents.					
Adolescents with a family history of substance abuse are more prone to developing addictive disorders themselves.					
Exposure to media influence, such as movies and music glorifying substance use, plays a significant role in adolescent addictive behaviours.					
Academic stress is a contributing factor to the onset of substance-related addictive disorders among adolescents.					
The availability of drugs and alcohol in					



the community increases the likelihood of adolescents developing addictive disorders.					
Mental health issues, such as depression and anxiety, are significant contributors to substance-related addictive disorders in adolescents.					
Lack of awareness and education about the risks of substance abuse contributes to the prevalence of addictive disorders among adolescents.					
Genetic factors play a role in making certain individuals more susceptible to substance-related addictive disorders during adolescence.					
Inadequate support systems and resources for adolescents with substance abuse issues contribute to the persistence of addictive behaviours.					

**SECTION C: ADOLESCENTS' PERCEPTIONS OF THE EFFECTIVENESS OF  
PSYCHOTHERAPY AND PHARMACOTHERAPY**

Instructions: Please indicate your perception of the effectiveness of psychotherapy and pharmacotherapy in improving your health condition by selecting the appropriate response on a scale from 1 (Very Low) to 5 (Very High).

<b>Statement</b>	<b>Very Low</b>	<b>Low</b>	<b>Neutral</b>	<b>High</b>	<b>Very High</b>
How would you rate the effectiveness of psychotherapy in improving your health condition?					
To what extent do you believe that pharmacotherapy is effective in addressing your health condition?					
How confident are you in the positive outcomes of psychotherapy for your health condition?					
In your opinion, how effective is pharmacotherapy in managing and improving your specific health issues?					
To what degree do you perceive psychotherapy as a valuable component of your overall health treatment plan?					
How much improvement do you associate with undergoing psychotherapy for your health					

condition?					
Considering your personal experience, how effective do you find pharmacotherapy in alleviating symptoms related to your health condition?					
In your view, how crucial is psychotherapy in maintaining long-term well-being and health?					
How satisfied are you with the results of pharmacotherapy in managing your health condition?					
Overall, how would you rate the combined impact of psychotherapy and pharmacotherapy on your health condition?					

**SECTION D: FACTORS INFLUENCING INTEGRATION OF PSYCHOTHERAPY AND PHARMACOTHERAPY IN SUBSTANCE-RELATED ADDICTIVE DISORDER TREATMENT**

Instructions: Please indicate your level of agreement with each statement by selecting the appropriate response on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

<b>Statement</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
The collaboration between therapists and prescribing physicians is essential for the					

effective treatment of substance-related addictive disorders.					
Clear communication between the psychotherapist and prescribing physician positively influences the integration of psychotherapy and pharmacotherapy in treatment.					
Adequate training and education for both therapists and prescribing physicians contribute to successful integration in the treatment of addictive disorders.					
Patient willingness and motivation play a significant role in the successful integration of psychotherapy and pharmacotherapy for substance-related addictive disorders.					
The availability of a variety of pharmacotherapeutic options enhances the flexibility of treatment plans in substance-related addictive disorders.					
The compatibility of psychotherapy and pharmacotherapy approaches is crucial for the overall effectiveness of the					

treatment.					
Support from family and friends positively influences the integration of psychotherapy and pharmacotherapy in the treatment of addictive disorders.					
The stigma associated with either psychotherapy or pharmacotherapy hinders their effective integration in treating substance-related addictive disorders.					
Adequate monitoring and adjustment of medication during psychotherapy contribute to better treatment outcomes for addictive disorders.					
The integration of psychotherapy and pharmacotherapy is essential for addressing both the psychological and physiological aspects of substance-related addictive disorders.					

**SECTION E: EFFECTS OF PSYCHOTHERAPY AND PHARMACOTHERAPY ON  
ADOLESCENTS' MENTAL HEALTH**

**Instructions:** Please indicate your level of agreement with each statement by selecting the appropriate response on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Psychotherapy has helped me develop better coping skills for managing stress and emotional challenges.					
Pharmacotherapy has been effective in reducing specific symptoms associated with my mental health condition.					
Through psychotherapy, I have gained a better understanding of my thoughts, emotions, and behaviours.					
Medication prescribed for my mental health has helped stabilise my mood.					
Psychotherapy has improved my communication skills, allowing me to express myself more effectively.					
Pharmacotherapy has positively impacted my ability to concentrate and focus.					

I feel a sense of empowerment and control over my life through engaging in psychotherapy.					
Medication has helped regulate my sleep patterns, contributing to improved overall well-being.					
The combination of psychotherapy and pharmacotherapy has provided a more comprehensive approach to addressing my mental health.					
Integrating psychotherapy and pharmacotherapy has been crucial for the long-term management of my mental health condition.					