Perceived Influence of Cognitive-Behavioural Approaches on Substance Abuse Prevention among Senior Secondary School Students in Rivers State

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Abstract: The study investigated perceived influence of cognitive-behavioural approaches on substance abuse prevention among senior secondary school students in Rivers State. Descriptive survey research design was adopted. The population of the study was 66,164 respondents, which comprised of 32,017 males and 34,147 females. The simple random sampling technique was used to select a sample size of 398 fixed using the Tsaro Yamen Formula. Data was collected through a questionnaire developed by the researchers titled Cognitive-Behavioural Approaches and Substance Abuse Prevention (CBASAP) with a reliability coefficient of 0.83 computed with the Pearson’s Product Moment Correlation test statistic. The research questions were answered using means and standard deviations. The null hypotheses formulated were tested at 0.05 level of significance using the z-test. Results indicated that there is no significant difference in the mean perception of male and female students on the extent to which family-based approach, multi-systemic approach and multi-dimensional approach influence substance abuse prevention among senior secondary school students in Rivers State. Given the enormity of the consequences of substance abuse, the study concluded that cognitive-behavioural approaches addresses a number of psychosocial and behavioural factors that contribute to students’ prevention of substance abuse. The study recommended that schools and parents should focused not only on the physiologic and behavioural impact of substance abuse on the students but also on the application of family-based approach and multi-systemic approach in preventing public health hazards, and that psychological counseling is needed as part of a multi-dimensional approach to the prevention of substance abuse related cases, as to provide education, support, and skill development for students with these challenges.

Keywords: Cognitive-Behavioural Approaches, Substance Abuse, Prevention, Senior Secondary Schools, Students

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INTRODUCTION
Cognitive-behavioural interventions help students to actively participate in their recovery from substance abuse, its addiction and invariably enhance their ability to resist substance use. In such approaches, therapists may provide incentives to remain abstinent, modify attitudes and behaviours related to substance abuse, assist families in improving their communication and overall interactions, and increase life skills to handle stressful circumstances and deal with environmental cues that may trigger intense craving for drugs (Crewe & Krause, 2011). Students
sometimes participate in group therapy and other peer support programs during and following treatment to help them achieve abstinence. Kennedy (2011) asserted that when led by well-trained clinicians following well-validated cognitive-behavioural approaches, groups can provide positive social reinforcement through peer discussion and help enforce incentives to staying off substance and living a substance-free lifestyle. However, group treatment for students carry risk of unintended adverse effects: Group members may steer conversation towards talk that glorifies or extols substance use, thereby undermining recovery goals. Trained counselors need to be aware of that possibility and direct group activities and discussions in a positive direction.

Cognitive-behavioural approaches are based on the theory that learning processes play a critical role in the development of problem behaviours like substance abuse (Yen, 2014). A core element of cognitive-behavioural approaches is teaching students how to anticipate problems and helping them develop effective coping approaches. In cognitive-behavioural approach, students explore the positive and negative consequences of using substances/drugs. They learn to monitor their feelings and thoughts and recognize distorted thinking patterns and cues that trigger their substance abuse; identify and anticipate high-risk situations; and apply an array of self-control skills, including emotional regulation and anger management, practical problem solving, and substance refusal. Cognitive-behavioural approaches may be offered in outpatient settings in either individual or group sessions or in residential settings.

In other words, cognitive behaviour approach is a form of talk therapy based on principles of conditioning and learning that is used to teach, encourage, and support individuals about how to reduce/stop their harmful substance use (Sharpe, 2016). Cognitive-behavioural approaches provide skills that are valuable in assisting students in gaining initial abstinence from substance (or in reducing their substance use) and provides skills to help students sustain abstinence (relapse prevention). Cognitive-behavioural approaches is an umbrella term that encompasses a range of interventions that may be quite different in application and focus. This approach on an individual basis or within small group settings focus more specifically upon accessing those thoughts, moods and behaviours that lead to depression and anxiety (Dickens, 2012). Classically, the type of thoughts indicative of depression focus upon loss, whereas thoughts about threat or challenge are typical in people with anxiety (Sanders & Wills, 2015).

Cognitive therapists will work to develop a conceptualization or formulation that links schemas, salient or triggering events, mood, cognitions and behaviours to explain to the patient how vicious cycles arise that continue to feed negative repetitive thoughts and impact upon mood and, subsequently, behaviour. This may be beyond the scope of your practice, however, and it would be appropriate to work closely with the psychologist within your multidisciplinary team. This approach involves a number of broad methods focusing on breaking the cycle of thoughts and behaviours that may be perpetuating a psychological problem (Sanders & Wills, 2015).

Cognitive-behavioural approaches have had a remarkable influence in the management of emotional disorders since the mid-1910s (Kendall, Vitousek, & Kane, 2011). More recently, Sharpe (2016) and Speckens (2015) implemented a series of randomized control trials which utilized between six and 16 sessions of cognitive-behavioural therapy to demonstrate the effectiveness in managing problems of chronic fatigue and medical patients with unexplained physical symptoms, respectively. Turk and Salovey (2015) describe the following components of cognitive behavioural interventions for people with diverse chronic diseases and physical impairments. The first component involves reconceptualization which aims to shift a patient from automatic and ineffective responses toward systematic problem solving and planning. Problems and issues are recast in forms amenable to solutions, and therapy aims to foster hope,
positive anticipation, and expectations of success. The second component in skills acquisition, fundamental to cognitive-behavioural therapy, is the need to build up the individual's awareness of the relationship between their thoughts, affect, and behaviour. The initial focus is to make explicit the internal dialogue and irrational assumptions. The first stage of cognitive restructuring is to monitor these relationships and evaluate their validity and viability.

The cognitive-behavioural approach addresses a number of psychosocial and behavioural factors that contribute to students’ experience of pain. These techniques have demonstrated clinical utility for students with a wide range of chronic pain syndromes. Psychological counseling as part of a multidisciplinary approach to pain treatment provides education, support, and skill development for students with pain. According to Yen (2014), it improves student abilities to communicate their pain to health care personnel and may be effective in overcoming anxiety and depression. Spiritual counseling may help students who have lost hope, can find no meaning in their lives, or believe they are being punished or have been forsaken by God. They may interpret their pain in light of these feelings. Through counseling, they can regain a sense of worth and belonging. As they recast the pain in its true light, its intensity is often diminished (Peck, 2015).

Cognitive-behavioural approaches are based on the theory that learning processes play a formative role in the development and maintenance of addictive behaviours. These treatments are among the most widely studied. Considering the extensive research that has been conducted in establishing cognitive behavioral approach as an empirically supported treatment and that few differences are found when comparing cognitive behavioural treatments, researchers have suggested that effective elements across cognitive behavioural approaches be combined (Kadden, 2011). Educating the recovering addict about the psychology of addiction and identifying triggers that could cause relapse are key in sustaining a lifestyle that does not involve substance abuse. When the recovering addict is put into a stressful situation the coping mechanisms adopted from cognitive behavioural treatments will help them handle the situation, their feelings, and destructive behaviours when encountering substance abuse. There are three main elements to cognitive behavioural approaches that make this treatment modality effective, they are; functional analysis, coping skills, training, relapse prevention.

**Cognitive-Behavioural Approaches**

4. **Family-Based Approach (FBA)**

In the view of Kendall, Vitousek and Kane (2011), family-based approach to treating adolescent substance abuse highlight the need to engage the family, including parents, siblings, and sometimes peers, in the adolescent’s treatment. Involving the family can be particularly important, as the adolescent will often be living with at least one parent and be subject to the parent’s controls, rules, and/or supports. Family-based approaches generally address a wide array of problems in addition to the young person’s substance problems, including family communication and conflict; other co-occurring behavioral, mental health, and learning disorders; problems with school or work attendance; and peer networks. Research shows that family-based treatments are highly efficacious; some studies even suggest they are superior to other individual and group treatment approaches.

5. **Multi-Systemic Approach (MSA)**

Sharpe (2016) asserted that multi-systemic approach is a comprehensive and intensive family-and community-based treatment that has been shown to be effective even with students whose substance abuse problems are severe and with those who engage in delinquent and/or violent behaviour. In multi-systemic approach, the students’ substance abuse is viewed in terms of
characteristics of the student (e.g., favorable attitudes toward substance use) and those of his or her family (e.g., poor discipline, conflict, parental substance abuse), peers (e.g., positive attitudes toward substance use), school (e.g., dropout, poor performance), and neighborhood (e.g., criminal subculture). The therapist may work with the family as a whole but will also conduct sessions with just the caregivers or the students alone.

6. Multi-Dimensional Family Approach (MDFA)
This is a comprehensive family- and community-based treatment for substance-abusing students and those at high risk for behaviour problems such as conduct disorder and delinquency (Speckens, 2015). The aim is to foster family competency and collaboration with other systems like school or juvenile justice. Sessions may take place in a variety of locations, including in the home, at a clinic, at school, at family court, or in other community locations. Multi-dimensional family approach has been shown to be effective even with more severe substance use disorders and can facilitate the reintegration of substance abusing juvenile detainees into the community.

7. Family Behaviour Approach (FBA)
Family behaviour approach, which has demonstrated positive results in both adults and adolescents, combines behavioural contracting with contingency management to address not only substance abuse but other behavioural problems as well. The student and at least one parent participate in treatment planning and choose specific interventions from a menu of evidence-based treatment options. Therapists encourage family members to use behavioural approaches taught in sessions and apply their new skills to improve the home environment. They set behavioural goals for preventing substance use and reducing risk behaviours for sexually transmitted diseases like HIV, which are reinforced through a contingency management (CM) system. Goals are reviewed and rewards provided at each session.

Despite attempts to limit access to psychoactive substances by young persons, the use of such substances is common among adult, adolescents and growing in some groups. Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs (Baker, Boggs & Lewin, 2011). The most common substance abused are alcohol, marijuana (ganja), bhang, hashish (charas), various kinds of cough syrups, sedative tablets, brown sugar, heroin, cocaine, tobacco (cigarette, gutka, pan masala) etc. Substance abuse is also known as drug abuse. A pharmaceutical preparation or a naturally occurring substance used primarily to bring about a change in an existing process or state (physiological, psychological or biochemical) can be called a substance. Substance abuse leads to substance addiction with the development of tolerance and dependence. Substance abuse criteria include use resulting in inability to meet major role obligations, legal problems, and an increase in risk-taking behaviours or exposure to hazardous situations (Carroll & Onken, 2015). Substance Abuse Prevention, also known as drug abuse prevention, is a process that attempts to prevent the onset of substance use or limit the development of problems associated with using psychoactive's substances (Baker, Boggs & Lewin, 2011). Substance abuse prevention efforts typically focus on children and teens especially 15-35 years of age. Substances typically targeted by preventive efforts include alcohol (including binge drinking, drunkenness and driving under the influence), tobacco (including cigarettes and various forms of smokeless tobacco), marijuana, inhalants (volatile solvents including among other things glue, gasoline, aerosols, ether, fumes from correction fluid and marking pens), cocaine, methamphetamine, steroids, club drugs (such as MDMA), and opioids. Community advocacy against substance abuse is imperative due to the significant increase in opioid overdoses in Nigeria. It has been estimated that about one hundred and thirty individuals continue to lose their lives daily due to opioid overdoses alone. Baker, Boggs and Lewin (2011)
opined that the various plans put in place to prevent substance abuse among students are as follows:

8. **Family based prevention programs**
   Prevention programs can strengthen protective factors among young children by teaching parents better family communication skills, appropriate discipline styles, firm and consistent rule enforcement, and other family management approaches. Research confirms the benefits of parents providing consistent rules and discipline, talking to children about drugs, monitoring their activities, getting to know their friends, understanding their problems and concerns, and being involved in their learning. The importance of the parent-child relationship continues through adolescence and beyond.

9. **School-based prevention programs**
   There are a number of community-based prevention programs and classes that aim to educate children and families about the harms of substance abuse. Schools began introducing substance abuse oriented classes for their students in grades as low as preschool. The inclusion of prevention studies into classroom curriculums at a young age have been shown to help to break early behaviors that could be signs drug abuse in the future. Around 40% of children have tried alcohol by the time that they are ten. There are organizations that educates, advocates, and collaborates to reduce drug and alcohol problems in the state. Some programs may begin by allowing students to be interactive and learn skills such as how to refuse drugs. This is proven to be a more effective method than strictly educational or non-interactive ones.

10. **Community prevention programs**
    Prevention programs work at the community level with civic, religious, law enforcement, and other government organizations to enhance anti-drug norms and pro-social behaviors. Many programs help with prevention efforts across settings to help send messages through school, work, religious institutions, and the media. Research has shown that programs that reach youth through multiple settings can remarkably influence community norms. Community-based programs also typically include development of policies or enforcement of regulations, mass media efforts, and community-wide awareness programs. Increasing health education in the community also plays a role in helping to decrease the consequences of substance abuse.

**Statement of the Problem**
Despite numerous attempts by the World Health Organization over the past two decades to reduce problematic substance abuse, the rate of substance abuse by students continue to rise. Substance abuse are associated with substantial negative correlates, including medical problems, other psychiatric disorders (e.g., depression and anxiety), interpersonal and vocational impairment, and increased rates of suicidal ideation and attempts. The use of alcohol, tobacco, various drugs is a wide spread phenomenon among students. The abuse of psychoactive drugs among students and youths is an issue of national importance. Concerns have focused not only on the physiologic and behavioural impact of substance abuse on the youths but also on the public health hazards, as well as educational sector. Substance abuse is increasing at an alarming rate, causing serious threats to every nation, by deteriorating health, increasing crimes, and hampering productivity, destroying relationships, eroding social and moral values and impeding the overall progress of education. Young people are becoming the largest hostage of the threat of substance abuse and their vulnerability is increasing gradually.

There are an estimated 250 million tobacco users of age 10 and above. Serious public health problems result from alcohol and other drug consumption. Licit substances like tobacco...
and alcohol are widely prevalent, while abuse of illicit substances like cannabis, heroin, other opiates including opium and propoxyphene is recognized throughout the country. The abuse of psychotropic substances and solvents is also increasingly being recognized. Therefore, this study investigated perceived influence of cognitive-behavioural approaches on substance abuse prevention among senior secondary school students in Rivers State and proffered measures to prevent the abuse of substances among senior secondary school students in Rivers State.

**Purpose of the Study**

The purpose of this study was to investigate perceived influence of cognitive-behavioural approaches on substance abuse prevention among senior secondary school students in Rivers State. Specifically, the objectives were to:

1. Ascertain the extent to which family-based approach influence substance abuse prevention among senior secondary school students in Rivers State.
2. Investigate the extent to which multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State.
3. Find out the extent to which multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State.

**Research Questions**

The following research questions were raised to guide the study:

1. To what extent does family-based approach influence substance abuse prevention among senior secondary school students in Rivers State?
2. To what extent does multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State?
3. To what extent does multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State?

**Hypotheses**

The following null hypotheses were developed and tested at the 0.05 level of significance:

4. There is no significant difference in the mean perception of male and female students on the extent to which family-based approach influence substance abuse prevention among senior secondary school students in Rivers State.
5. There is no significant difference in the mean perception of male and female students on the extent to which multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State.
6. There is no significant difference in the mean perception of male and female students on the extent to which multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State.
METHODOLOGY
Descriptive survey research design was adopted. The population of the study was 66,164 respondents, which comprised of 32,017 males and 34,147 females. The simple random sampling technique was used to select a sample size of 398 fixed using the Tsaro Yamen Formula. Data was collected through a questionnaire developed by the researchers titled Cognitive-Behavioural Approaches and Substance Abuse Prevention (CBASAP) with a reliability coefficient of 0.83 computed with the Pearson’s Product Moment Correlation test statistic. The research questions were answered using means and standard deviations. The null hypotheses formulated were tested at 0.05 level of significance using the z-test.

RESULTS

Research Question 1: To what extent does family-based approach influence substance abuse prevention among senior secondary school students in Rivers State?

Table 1: Descriptive Statistics on the Extent to which Family-Based Approach Influence Substance Abuse Prevention among Senior Secondary School Students in Rivers State.

<table>
<thead>
<tr>
<th>S/No</th>
<th>Item</th>
<th>Male (n₁ = 193)</th>
<th>Female (n₂ = 205)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
</tr>
<tr>
<td>1</td>
<td>Family-based approach teaches students rational self-counseling skills.</td>
<td>3.01</td>
<td>1.23</td>
<td>2.90</td>
</tr>
<tr>
<td>2</td>
<td>The approach emphasizes getting better, rather than feeling better.</td>
<td>3.22</td>
<td>1.29</td>
<td>3.21</td>
</tr>
<tr>
<td>3</td>
<td>Family-based approach is very instructive for students.</td>
<td>3.05</td>
<td>0.94</td>
<td>2.77</td>
</tr>
<tr>
<td>4</td>
<td>Recovering addicts learn healthy coping mechanisms that can help prevent relapse and deal with stressful situations.</td>
<td>2.93</td>
<td>1.58</td>
<td>2.93</td>
</tr>
<tr>
<td></td>
<td>Grand Scores</td>
<td>3.05</td>
<td>1.26</td>
<td>2.95</td>
</tr>
</tbody>
</table>

The total sample for male and female used for the study is 398 students with n₁ and n₂ representing the sub-samples for male and female respectively

Decision: Male and female students to a High Extent accepted that family-based approach influence substance abuse prevention among senior secondary school students in Rivers State: $2.50 \leq \bar{x} \geq 3.49$. 

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The data presented in table 1 above shows the mean perception of male and female students on the extent to which family-based approach influence substance abuse prevention among senior secondary school students in Rivers State. From table 1, the grand mean score of 3.05 and a standard deviation of 1.26 were gotten from male students, while the grand mean score of 2.95 and a standard deviation of 1.04 were gotten from female students indicating a consensus that family-based approach influence substance abuse prevention among senior secondary school students in Rivers State.

**Research Question 2:** To what extent does multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State?

**Table 2:** Descriptive Statistics on the Extent to which Multi-Systemic Approach Influence Substance Abuse Prevention among Senior Secondary School Students in Rivers State.

<table>
<thead>
<tr>
<th>S/No</th>
<th>Item</th>
<th>Male (n₁ = 193)</th>
<th>Female (n₂ = 205)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Multi-systemic approach reduces the abuse of substance by students.</td>
<td>X: 3.41</td>
<td>SD: 1.51</td>
<td>High Extent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The structured nature of the approach session reduces the possibility of substance abuse.</td>
<td>X: 3.10</td>
<td>SD: 1.36</td>
<td>High Extent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>It is a prevention strategy in which not much is accomplished by students therapeutically.</td>
<td>X: 2.78</td>
<td>SD: 1.09</td>
<td>High Extent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>It is a gradual approach that helps build confidence of students.</td>
<td>X: 2.60</td>
<td>SD: 0.62</td>
<td>High Extent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Grand Scores</strong></td>
<td><strong>X: 2.97</strong></td>
<td><strong>SD: 1.15</strong></td>
<td><strong>High Extent</strong></td>
</tr>
</tbody>
</table>

The total sample for male and female used for the study is 398 students with n₁ and n₂ representing the sub-samples for male and female respectively.

**Decision:** Male and female students to a **High Extent** accepted that multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State: (2.50 ≤ x ≥ 3.49).

The data presented in table 2 above shows the mean perception of male and female students on the extent to which multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State. From table 2, the grand mean score of 2.97 and a standard deviation of 1.15 were gotten from male students, while the grand mean score of 3.10 and a standard deviation of 1.49 were gotten from female students indicating that multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State.

**Research Question 3:** To what extent does multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State?
### Table 3: Descriptive Statistics on the Extent to which Multi-Dimensional Family Approach Influence Substance Abuse Prevention among Senior Secondary School Students in Rivers State.

<table>
<thead>
<tr>
<th>S/No</th>
<th>Item</th>
<th>Male (n&lt;sub&gt;1&lt;/sub&gt; = 193)</th>
<th>Female (n&lt;sub&gt;2&lt;/sub&gt; = 205)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>The fundamental principle of multi-dimensional family approach is that thoughts (cognitions) cause our feelings and behaviours.</td>
<td>2.72</td>
<td>1.30</td>
<td>High</td>
</tr>
<tr>
<td>10</td>
<td>The approach can be improved with scientific research by students.</td>
<td>2.81</td>
<td>1.54</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Educating students about substance abuse and how they can manage it is an effective way of preventing the relapse</td>
<td>3.05</td>
<td>1.26</td>
<td>High</td>
</tr>
<tr>
<td>12</td>
<td>The approach is fundamental in preventing substance abuse by students.</td>
<td>2.54</td>
<td>1.71</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Scores</strong></td>
<td>2.78</td>
<td>1.45</td>
<td>High</td>
</tr>
</tbody>
</table>

The total sample for male and female used for the study is 398 students with n<sub>1</sub> and n<sub>2</sub> representing the sub-samples for male and female respectively.

**Decision:** Male and female students to a **High Extent** accepted that multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State: \(2.50 \leq \bar{x} \geq 3.49\).

The data presented in table 3 above shows the mean perception of male and female students on the extent to which multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State. From table 3, the grand mean score of 2.78 and a standard deviation of 1.45 were gotten from male students, while the grand mean score of 3.07 and a standard deviation of 1.46 were gotten from female students indicating that multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State.

**Testing of Hypotheses**

**Hypothesis 1:** There is no significant difference in the mean perception of male and female students on the extent to which family-based approach influence substance abuse prevention among senior secondary school students in Rivers State.
Table 4: Test of Difference in the Mean Perception of Male and Female Students on the Extent to which Family-Based Approach Influence Substance Abuse Prevention among Senior Secondary School Students in Rivers State.

<table>
<thead>
<tr>
<th>Gender</th>
<th>x</th>
<th>SD</th>
<th>N</th>
<th>df</th>
<th>α</th>
<th>z-cal.</th>
<th>z-crit.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3.75</td>
<td>2.14</td>
<td>193</td>
<td>296</td>
<td>0.05</td>
<td>1.21</td>
<td>1.96</td>
<td>H0</td>
</tr>
<tr>
<td>Female</td>
<td>3.39</td>
<td>2.33</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Table 4 above shows that the z-calculated value of 1.21 using degree of freedom of 296 at 0.05 level of significance is less than the z-critical value of 1.96 which indicates that the null hypothesis that “there is no significant difference in the mean perception of male and female students on the extent to which family-based approach influence substance abuse prevention among senior secondary school students in Rivers State” is accepted. This implies that male and female students among senior secondary school students in Rivers State are in agreement that family-based approach influences substance abuse prevention among senior secondary school students in Rivers State.

**Hypothesis 2:** There is no significant difference in the mean perception of male and female students on the extent to which multi-systemic approach influence substance abuse prevention among senior secondary school students in Rivers State.

Table 5: Test of Difference in the Mean Perception of Male and Female Students on the Extent to which Multi-Systemic Approach Influence Substance Abuse Prevention among Senior Secondary School Students in Rivers State.

<table>
<thead>
<tr>
<th>Gender</th>
<th>x</th>
<th>SD</th>
<th>N</th>
<th>df</th>
<th>α</th>
<th>z-cal.</th>
<th>z-crit.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3.12</td>
<td>2.06</td>
<td>193</td>
<td>296</td>
<td>0.05</td>
<td>1.07</td>
<td>1.96</td>
<td>H0</td>
</tr>
<tr>
<td>Female</td>
<td>3.46</td>
<td>2.81</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Table 5 above shows that the z-calculated value of 1.07 using degree of freedom of 296 at 0.05 level of significance is less than the z-critical value of 1.96 which indicates that the null hypothesis that “there is no significant difference in the mean perception of male and female students on the extent to which multi-systemic approach influences substance abuse prevention among senior secondary school students in Rivers State” is accepted. This implies that male and female students of senior secondary school students in Rivers State unanimously agreed that multi-systemic approach influences substance abuse prevention among senior secondary school students in Rivers State.

**Hypothesis 3:** There is no significant difference in the mean perception of male and female students on the extent to which multi-dimensional family approach influence substance abuse prevention among senior secondary school students in Rivers State.
Table 6: Test of Difference in the Mean Perception of Male and Female Students on the Extent to which Multi-Dimensional Family Approach Influence Substance Abuse Prevention among Senior Secondary School Students in Rivers State.

<table>
<thead>
<tr>
<th>Gender</th>
<th>$\bar{x}$</th>
<th>SD</th>
<th>N</th>
<th>df</th>
<th>$\alpha$</th>
<th>z-cal.</th>
<th>z-crit.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3.80</td>
<td>2.01</td>
<td>193</td>
<td>296</td>
<td>0.05</td>
<td>1.26</td>
<td>1.96</td>
<td>$H_0$</td>
</tr>
<tr>
<td>Female</td>
<td>3.72</td>
<td>2.33</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Table 6 above shows that the $z$-calculated value of 1.26 using degree of freedom of 296 at 0.05 level of significance is less than the $z$-critical value of 1.96 which indicates that the null hypothesis that “there is no significant difference in the mean perception of male and female students on the extent to which multi-dimensional family approach influences substance abuse prevention among senior secondary school students in Rivers State” is accepted. This implies that male and female students of senior secondary school students in Rivers State are in congruence with the fact that multi-dimensional family approach influences substance abuse prevention among senior secondary school students in Rivers State.

**DISCUSSION OF FINDINGS**

The study investigated the influence of cognitive-behavioural approaches on substance abuse prevention among senior secondary school students in Rivers State and found that family-based approaches influence substance abuse prevention among senior secondary school students in Rivers State. This result agrees with the study conducted by Kendall, Vitousek and Kane (2011), that family-based approach to treating adolescent substance abuse highlight the need to engage the family, including parents, siblings, and sometimes peers, in the adolescent’s treatment. Thus involving the family can be particularly important, as the adolescent will often be living with at least one parent and be subject to the parent’s controls, rules, and/or supports. In other words, this approach generally addresses a wide array of problems in addition to the young person’s substance problems, including family communication and conflict; other co-occurring behavioral, mental health, and learning disorders; problems with school or work attendance; and peer networks. Other research (Turk & Salovey, 2015), show that family-based treatments are highly efficacious; some studies even suggest they are superior to other individual and group treatment approaches.

The study further found that multi-systemic approach influences substance abuse prevention among senior secondary school students in Rivers State. This finding is in line with the view Sharpe (2016) who opined in his study that multi-systemic approach is a comprehensive and intensive family- and community-based treatment that has been shown to be effective even with students whose substance abuse problems are severe and with those who engage in delinquent and/or violent behaviour. In multi-systemic approach, the students substance abuse is viewed in terms of characteristics of the students (e.g., favorable attitudes toward substance use).
and those of his or her family (e.g., poor discipline, conflict, parental substance abuse), peers (e.g., positive attitudes toward substance use), school (e.g., dropout, poor performance), and neighborhood (e.g., criminal subculture). The therapist may work with the family as a whole but will also conduct sessions with just the caregivers or the students alone.

Finally the study found that multi-dimensional family approach influences substance abuse prevention among senior secondary school students in Rivers State. In line with this finding, Speckens (2015) stated in his study that this approach is a comprehensive family- and community-based treatment for substance-abusing students and those at high risk for behaviour problems such as conduct disorder and delinquency. The aim is to foster family competency and collaboration with other systems like school or juvenile justice. Sessions may take place in a variety of locations, including in the home, at a clinic, at school, at family court, or in other community locations. Multi-dimensional family approach has been shown to be effective even with more severe substance use disorders and can facilitate the reintegration of substance abusing juvenile detainees into the community.

CONCLUSION
The findings of this study have revealed that family-based approach, multi-systemic approach, and multi-dimensional family approach significantly influence substance abuse prevention among senior secondary school students in Rivers State. Given the enormity of the consequences of substance abuse, cognitive-behavioural approaches addresses a number of psychosocial and behavioural factors that contribute to students’ prevention of substance abuse. These approaches have demonstrated clinical utility for students with a wide mentality of substance abuse.

RECOMMENDATIONS
Based on the findings of the study, the following recommendations are made;

4. The consequences of substance abuse on the society in general and on students in particular are extremely negative on every aspects of life which needs immediate intervention using family-based approach. Collaborative effort of all stakeholders is needed no one alone can control it.

5. Schools and parents should focused not only on the physiologic and behavioural impact of substance abuse on the students but also on the application of multi-systemic approach in preventing public health hazards.

6. Psychological counseling is needed as part of a multi-dimensional approach to the prevention of substance abuse related cases, as to provide education, support, and skill development for students with these challenges.

REFERENCES


