

Predictors of Adolescent Mental Health Service Utilization in Port Harcourt, Rivers State

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Abstract

Adolescent mental health is a growing public health concern, particularly in low and middle-income countries where access to mental health services remains limited. In Nigeria, mental health challenges such as depression, anxiety, mood changes, and attention deficit hyperactivity disorder (ADHD) are increasingly recognized among adolescents, yet utilization of available mental health services is suboptimal. This study was conducted to explore the frequency and predictors of mental health service utilization among senior secondary school students in Port Harcourt, Rivers State, with a focus on identifying prevailing mental health problems, assessing awareness and use of available services including those routinely provided at the primary health care (PHC) level and examining the socio-demographic and other factors influencing service uptake. This research made use of a descriptive cross-sectional design. There was a total of 299 participants in this survey. Boys and girls enrolled in secondary schools in Port Harcourt, Rivers State, that were sanctioned by the government and had an age range of 11–19 years old made up the research population. We utilised a basic random sampling procedure to pick participants, and we gave each of them 299 copies of a structured, self-administered questionnaire. Data analysis was performed using the Statistical Package for Social Sciences (SPSS), with associations between categorical variables assessed using the chi-square test at a significance level of $p < 0.05$. The findings revealed that while a majority of respondents were aware of the existence of mental health services, only 43.5% reported having utilized such services, indicating a substantial gap between awareness and actual use. Counselling services were the most frequently accessed (27.8%), primarily for issues related to academic stress. Despite 52.5% of students strongly agreeing on the importance of mental health care for adolescents, barriers to utilization persisted. The most commonly cited obstacles included lack of awareness about available services (41.5%), insufficient parental support (22.1%), stigma (7.4%), financial constraints (6.4%), physical distance (3.3%), and a combination of these factors (15.1%). Socio-demographic analysis demonstrated that the educational attainment of fathers ($p = 0.000$) and the occupational status of mothers ($p = 0.000$) were significantly associated with students' use of mental health services, while mothers' education ($p = 0.662$) and fathers' occupation ($p = 0.873$) were not statistically significant predictors. The study underscores a critical gap between awareness and utilization of mental health services among adolescents in Port Harcourt. Addressing barriers such as limited awareness, parental support, stigma, and accessibility especially at the primary health care level (PHC) will be essential to improving mental health outcomes for this population. Targeted interventions that consider parental education and occupation, as well as school-based mental health promotion, are recommended to enhance service uptake and support adolescent well-being.

Keywords: Adolescents, Mental Health, Accessibility, Mental Health Services, Senior Secondary School Students.

1. Introduction

The World Health Organisation (WHO) uses the age range of 10–19 as their definition of adolescence. Adolescence is a precarious time for mental health since it is both a distinct and formative period marked by many physical, emotional, and social changes. Teens who struggle with mental health issues are more likely to experience physical illness, social isolation, discrimination, stigma, trouble in school, and risky behaviour. Common mental health

illnesses in adolescents include anxiety, sadness, ADD/ADHD, and eating disorders. Early therapy may help avoid more severe and long-lasting difficulties as a child grows older, and it is crucial to recognise that mental health is more than just the absence of symptoms (WHO, 2011).

The state of people's mental health is becoming more of a public health issue, especially among young people. It is crucial to recognise mental problems early on since half of them do not get treatment until maturity, and they often manifest by the time a person is fourteen years old (Carlén, 2022). Formal service utilisation and help-seeking are low among adolescents, even though there are effective treatments for many mental health disorders (Deluca, 2022). According to Murray et al. (2018), parents' views could be a significant indicator of whether or not their adolescents seek help for mental health issues. Nevertheless, it has been repeatedly shown that the main obstacles to obtaining care for mental health issues are limited mental health education and concerns about stigma (Deluca, 2022). The purpose of this proposed research is to examine what factors influence the number of times teenagers in Rivers State seek help for mental health issues. This research will look at the contextual variables that influence whether or not teenagers use mental health services, as well as the identified need and enabling factors (Murray et al., 2018).

Because of the myriad of problems that might arise as adults, mental health issues including depression and anxiety are major issues in teenage public health. For example, according to Edet et al. (2022), depression ranks first among the causes of sickness and disability among teenagers. Suicide, which is a result of depression, is the fourth most common cause of death among those aged 15 to 19. If we care about the mental health of our youth and want to save them from having serious difficulties as adults, we must intervene while they are young.

According to Jack-Ide et al. (2013), there is only one mental health facility in Nigeria's Niger Delta area that serves the residents of Rivers State and the neighbouring states: the neuropsychiatric Rumuigbo Hospital. Nevertheless, according to Jack-Ide et al. (2013), there is still a dearth of primary healthcare mental health treatments that rural areas may benefit from. Psychiatric nurses working in a neuro-psychiatric hospital in Port Harcourt, Nigeria, have spoken out about the many obstacles they face on the job, such as a lack of funding and seniority within the Ministry of Health, pervasive stigma, inadequate education and training, and a broken system that fails to address patients' needs at every stage of treatment. Clients' ability to remain in treatment is impacted by the high expense of medications and the insufficient financing for hospital improvements and equipment (Jack-Ide, et. al., 2013). Hence, more resources, more money, and more effective policy execution are required to enhance the delivery of mental health care in Rivers State (Jack-Ide, et. al., 2013).

Beyond that, with 1428 participants ranging in age from 10 to 19, school-based cross-sectional research in Port Harcourt metropolis, Rivers State, Nigeria, discovered that among in-school teenagers, the prevalence of depression was 23.5% (Jack-Ide, et. al., 2013). Teens who scored 18 or higher on the Beck Depression Inventory (BDI) were classified as depressed in the research. The research by Jack-Ide et al. (2013) emphasises the need of better mental health care in addressing the high incidence of depression among teenagers in Rivers State. Port Harcourt, Rivers State, teenage pupils' mental health, self-esteem, and family dynamics will be the focus of the research.

There is a dearth of literature on how young Nigerians see mental health concerns and services, despite the fact that mental illness is common among this demographic (Aluh et al., 2019). Furthermore, there is a lack of data on the factors that prevent adolescents from seeking treatment when they need it, as well as programs that might increase their use of mental health services. The goal of this study is to assess the current state of knowledge about mental health issues and mental health literacy among teenagers in Port Harcourt, Rivers State, and to determine what factors are preventing them from seeking help and what indicators point to potential obstacles to doing so.

It is crucial to intervene early since half of all mental problems manifest by the time a person is 14 years old and most go untreated until they are adults. The purpose of this proposed research is to examine whether factors in Rivers State

influence the number of adolescents who seek out mental health treatment. The aim of the research is to determine the pattern, barriers and predictors of utilization of mental health services among adolescent in Rivers State. The objectives include to determine the pattern of use of mental health services among adolescents among adolescent in Rivers State; to identify the factors that influence the utilization of mental health services among adolescent in Rivers State; to determine the barriers to accessing mental health services among adolescent in Rivers State; to provide recommendations for improving the utilization of mental health services among adolescents in Rivers State based on the study findings. Mental health is a critical aspect of overall health, and it is essential to ensure that adolescents have access to the necessary services to promote their well-being. However, despite the availability of mental health services, many adolescents do not utilize them due to various reasons.

2. Methodology

2.1 Study Area

Decree No. 19, issued on May 31, 1967, during the tenure of General Yakubu Gowon, established Rivers State as one of the 36 states in Nigeria. The states of Imo, Abia, and Anambra form its northern boundary; the Atlantic Ocean forms its southern boundary; Akwa Ibom State forms its eastern boundary; and Bayelsa and Delta States form its western boundaries. Among Nigeria's 36 states, Rivers State occupies the 26th spot with a total land area of 19,077km² (4,276.9sq. miles). Treasure Base of the Nation is the term given to the state (Naluba & Arokoyu, 2015).

Located 40 km upriver of the Bonny River's mouth in the Niger Delta, Port Harcourt is the capital of Rivers State. "Igwu-Ocha" was the indigenous Ikwerre name for Port Harcourt. The Ikwerre and the Okrika Ijaw were the original inhabitants of the land where the British established Port Harcourt in 1913. Lord Fredrick Lugard, the then-British Secretary of State for the Colonies, named the city Port Harcourt after Viscount Harcourt. References: Wokekoro and Owei (2014) and Bisco et al. (2021).

The city of Port Harcourt is made up of the Old Government Residential Area (GRA), which is now known as the European quarters, and the New Layout sections, which are part of the Port Harcourt Local Government Area. Presently, Port Harcourt, the largest city in the country, includes not just Obio-Akpor but also parts of Eleme and Oyigbo LGAs. According to Bodo (2019), the Greater Port Harcourt area is comprised of eight Local Government Areas: Okrika, Obio-Akpor, Ikwerre, Oyigbo, Ogu-Bolo, Etche, Eleme, and Port Harcourt.

2.2 Study Population

The research was place in the Nigerian city of Port-Harcourt in the state of Rivers in West Africa. Members ranged in age from twelve to nineteen and attended secondary schools in Port Harcourt that were recognised by the government. Participating students comprised both males and females. There are around 5,198,716 people living in Rivers State, according to the 2006 census. There are 61 secondary schools in the Port Harcourt LGA and 43 in the Obio-Akpor LGA, all of which are part of the Port Harcourt Metropolis. Adolescents in Nigeria tend to be about 14 years old on average, with around one male for every female. (Volume III of the 2006 Population Distribution).

2.2.1 Inclusion and Exclusion Criteria

Inclusion criteria

1. Students who were enrolled in government approved secondary schools in Port Harcourt.
2. Senior secondary school students aged 11-19 years that were attending school in Port Harcourt, Rivers State.

3. Senior secondary school students who were willing and able to participate in the study and provide informed consent.
4. Administration of questionnaires to both male and female students to give feedback into the predictors of utilization of adolescent mental health services.
5. Senior secondary school students who were able to communicate in English, either written or verbally.

Exclusion criteria

1. Students who were unwilling and unable to participate in the study.
2. Students who were unable to provide informed consent.
3. Students who were unable to communicate in English effectively.

2.3 Study Design

This research, which was conducted using a cross-sectional study design, aimed to examine the factors that influence the use of mental health services among adolescents in Port Harcourt, Rivers State. Since the purpose of this study is to investigate the current factors that influence the utilisation of adolescent mental health services among students in Port Harcourt, Rivers state, secondary schools, rather than to monitor changes over time, this research design is appropriate. Adolescents (11–19 years old) enrolled in senior secondary schools in Port Harcourt, Rivers State, were asked to fill out surveys that asked about their sociodemographic information, racial/ethnic background, mental health awareness, service use, and obstacles to access. This allowed for a comprehensive look at the students' lives and viewpoints.

2.4 Sample Size

The sample size for this study will be calculated with the Cochran Formula, (1977).

$$n = Z^2pq/d^2$$

Where, n = sample size,

Z = z score is usually set at 1.96, which corresponds to the 95% confidence level; Therefore $Z^2 = (1.96)^2 = 3.8416$.

p = 23% which was the estimated population made up of adolescents living in Rivers State as at 2016 (Ogbonna VI et al 2023).

$$23\% = 23/100 = 0.23$$

$$q = 1 - p;$$

$$q = 1 - 0.23 = 0.77$$

$$d = \text{margin of error tolerated at } 5\% = 5/100 = 0.05; \text{ Therefore } d^2 = (0.05)^2 = 0.0025$$

$$\text{Minimum sample size} = 3.8416 \times 0.23 \times 0.77 / 0.0025$$

$$\text{Minimum sample size} = 272$$

$$\text{Allowance for non-response is } 10\% = 27 + 272 = 299$$

Therefore, a total of 299 will be estimated for this study.

2.5 Sampling Methods

A multistage sampling technique was employed to obtain a representative sample of senior secondary school students enrolled in government-approved schools across Port Harcourt, Rivers State. This approach was selected due to its efficiency and suitability for research involving large, geographically dispersed populations, such as school-based student populations.

In the first stage, a comprehensive list of all government-approved senior secondary schools within Port Harcourt was obtained from the Rivers State Ministry of Education. To ensure broad geographic and demographic representation, a predetermined number of schools were selected using simple random sampling. This ensured that every school on the list had an equal probability of being selected, thereby minimizing selection bias and enhancing the representativeness of the sample.

In the second stage, a sampling frame comprising students in Senior Secondary School levels (SS1–SS3), aged between 11 and 19 years, was developed for each selected school. Within each school, students were selected using simple random sampling, with the number of participants drawn from each institution determined through proportionate allocation based on the total student population of that school. This ensured that larger schools contributed more participants than smaller ones, thereby preserving the proportional structure of the overall population.

By combining random selection with proportional representation, this sampling strategy maximized inclusiveness while maintaining methodological rigor. It also ensured that every eligible student had a known and non-zero chance of selection. The use of multistage sampling not only addressed logistical constraints but also reinforced the internal and external validity of the study findings by supporting both randomization and population representativeness.

2.6 Study Tool

Questionnaire: A questionnaire is a structured research instrument consisting of a set of questions designed to gather information from respondents. It can include both closed and open-ended questions, which provide specific answer options, and open-ended questions, allowing for more detailed responses. Questionnaires are commonly used in surveys to collect quantitative and qualitative data efficiently and also cost-effectively from large groups of people. They can be administered in various formats, including online, in-person, or via the telephone, making them very versatile tools for research across different fields.

This study tool was used in this research study and it was structured as a self-administered questionnaire. It was followed with a cover letter which introduced the researcher and stated clearly the purpose for the research. The questionnaire consisted of seven sections namely: A, B, C, D, E, F and G.

Section A: Socio-demographic Characteristics of Respondents

This included variables such as the respondents age, gender, class, ethnic group, religion, mother's education, mother's occupation and that of the father's as well.

Section B: Awareness of Mental Health Services

This section included questions that assessed the level of awareness of the respondents regarding mental health services and its utilization.

Section C: Experience with Mental Health Services

This section focused on the experiences of the respondents as regards utilization of mental health services.

Section D: Barriers to Access of Mental Health Services

This section is focused on the barriers to access of mental health services as it relates to its utilization.

Section E: Accessibility of Adolescent Mental Health Services

This section is focused on accessibility of mental health services to the respondents.

Section F: Attitude Towards Adolescent Mental Health Services

This section is focused on the attitude of the respondents in the utilization of mental health services.

Section G: Affordability of Adolescent Mental Health Services

This section is focused on the affordability of mental health services for the respondents. It covered questions on the financial constraints that prevent access to mental health services.

2.7 Validity/Reliability of Instrument

The questionnaire was pilot tested with high school seniors from schools that were similar to the ones under investigation in order to ensure its reliability and validity. Doing so allowed us to fix any mistakes and check whether the questionnaire was adequate and relevant.

2.8 Data Collection

Passing out surveys to students with predetermined, closed-ended questions was the most effective way to obtain the data needed for the study. In order to facilitate data collecting, the lead investigator trained a research assistant (data collector) who is a university graduate to help administer the questionnaire. After gaining informed permission from the students, the instructors randomly picked the responders from each of the courses (SSS1-3). The surveys were promptly collected from the students after they were finished.

2.9 Data Analysis

The data that was obtained was accurately recorded and coded using an Excel spreadsheet. The data was thoroughly examined using a Microsoft Excel sheet to detect and eliminate any discrepancies, mistakes, or missing information, guaranteeing its accuracy and completeness. Following this, the data was imported into SPSS version 21, a statistical package for social sciences, to conduct the necessary analyses and generate the necessary tables for presentation and debate.

2.10 Ethical Considerations

This information was retrieved from the University of Port Harcourt's Ethics committee. Prior to administering the questionnaire, we ensured that the respondents—both students and school principals—gave their informed permission after thoroughly explaining the study's goals, methods, and any risks involved. Participants were free to withdraw at any moment without penalty, and participation was entirely voluntary.

3. Results and Discussion

3.1 Results and Analysis

The sample size for this research was 280 individuals, and after taking into account a 10% margin of error for non-response, the total sample size was 299. Only 280 of the 299 hard copies of the surveys were returned with full responses, resulting in a response rate of one hundred percent. The questionnaires were distributed in total, and almost all of them were recovered.

3.1.1: Socio-demographic characteristics of the respondents

The socio-demographic characteristics of the respondents are shown in Table 1 below. The findings showed that just 11.4% of the participants were under the age of 13, while 49.8% were in the 13–14 age bracket, 31.8% were in the 15–16 age bracket, and 7.0% were in the 17–+ age bracket. Consequently, it seems that most of the participants were in the 13–14 age bracket. A majority of the responders were men (56.2%), with just a small percentage of females (43.8%). The bulk of the respondents were in SS1 Class, with 45.8% of them, followed by 41.1% in SS2 and 13.0% in SS3. Christian faith was shared by every responder. Of those who took the survey, 3.3% said that their moms had never attended school, 12.4% had completed elementary school, 31.4% had completed high school, 28.1% had completed college, and 24.7% had no idea. That being the case, most of the respondents' moms had completed at least secondary school. There were 5.0% housewives, 69.2% company owners, 14.7% government employees, and 3.0% retirees among the moms. There was a preponderance of moms who were business entrepreneurs among the respondents. Of the people who took the survey, 2.7% had dads who had never attended college, 9.4% had completed elementary school, 29.8% had completed high school, and 33.1% had completed college or university. Consequently, a large percentage of the interviewees' fathers had completed postsecondary education. Only 3.0% of the Fathers were without jobs; 23.7% worked for the government; 57.2% had their own businesses; and 4.3% were in their golden years. As a result, most of the respondents' dads had their own businesses.

Table 1: Socio-Demographic Characteristics of Respondents

Variable	Frequency(N)	Percentage (%)
Age (Years)		
< 13	34	11.4
13-14	149	49.8
15-16	95	31.8
17 and above	21	7.0
Gender		
Male	168	56.2
Female	131	43.8
Class		
SS 1	137	45.8
SS 2	123	41.1
SS 3	39	13.0
Religion		
Christianity	100	100
Mother's Education		
No formal Education	10	3.3
Basic Education	37	12.4
Secondary Education	94	31.4
Tertiary Education	84	28.1
Don't know	74	24.7
Mother's Occupation		
Housewife	15	5.0
Business owner	207	69.2
Civil Servant	44	14.7
Retired	9	3.0
Don't know	24	8.0
Father's Education		
No formal Education	8	2.7
Basic Education	28	9.4
Secondary Education	89	29.8
Tertiary Education	99	33.1
Don't know	75	25.1
Father's Occupation		
Unemployed	9	3.0
Civil Servant	71	23.7
Business owner	171	57.2
Retired	13	4.3
Don't know	35	11.7

3.1.2: Research Question one: What is the pattern of use of mental health services among Adolescents in Port Harcourt, Rivers State?

The analysis of the data regarding the prevalence of mental problems among respondents reveals significant insights into the reasons for utilizing mental health services. Also, the reasons for Utilizing Mental Health Services by the respondents include 12.4% of respondents sought mental health services due to anxiety, 12.7% utilized services for depression-related issues, 12.0% cited family problems as a reason for seeking help. While the highest percentage at 20.7% reported that school-related stress was the primary reason for their use of mental health services. Also, 6.4% of respondents used services for a combination of anxiety, depression, family issues, and school-related stress.

Overall, the data indicates that the majority of respondents turned to mental health services primarily due to school-related stress, highlighting a critical area for intervention and support.

The frequency with which respondents sought out mental health treatments is seen in Table 2 below. Nearly half of those who took the survey were familiar with the mental health resources accessible to teenagers in Rivers State's Port Harcourt. Of them, 19.4% had a passing awareness and 34.4% had no idea. As a result, most people who took the survey were well-informed on the mental health resources available to teenagers in Rivers State. Of those who took the survey, 52.5% were in full agreement that mental health services are crucial for teenagers, 37.5% were in agreement, 6.7% were unsure, 2.0% were opposed, and 1% were very opposed. As a result, most people felt that teenagers need access to mental health treatments. Twenty-one percent received their mental health education in the classroom, fourteen percent from family and friends, seventeen percent from online resources, six percent from community centres, twenty-one percent from medical experts, and five percent from a mix of these sources. The majority of respondents (57%) said that their schools were the primary source for information about mental health services. There was a clear majority of people who had never used mental health services (43.5%), while there were also 43.5 percent who had used them in the past but 56.5 percent who had never used them. The majority of the respondents who have used mental health services, which was 27.8%, had used counselling services. The following percentages: 8.4% for psychiatric services, 11.7% for support groups, 5.0% for others, 44.5% for not using any of these, and 2.7% for psychiatric and support group services combined. By far the most common reasons given by those who have sought mental health assistance are: anxiety (12.4%), depression (12.7%), family problems (12.0%), stress at school (20.7%), and a mix of these factors (6.4%). Thus, due to stress connected to school, the majority of respondents sought out mental health assistance.

Questions	Frequency (N)	Percentage (%)
How aware are you of mental health services available to adolescents in Rivers State?		
Very Aware	138	46.2
Somewhat Aware	58	19.4
Not Aware	103	34.4
Do you believe mental health services are important for adolescents?		
Strongly Agree		
Agree	157	52.5
Neutral	112	37.5
Disagree	20	6.7
Strongly Disagree	6	2.0
	4	1.0
What is your main source of information about mental health services?		
School	86	28.8
Family	44	14.7
Social Media	62	20.7
Community Centres	18	6.0
Health Professionals	65	21.7
None of these	7	2.3
Combination of these	16	5.4
Have you ever utilized mental health services?		
Yes	130	43.5
No	169	56.5
What type of service did you use?		
Counselling	83	27.8
Psychiatric services	25	8.4
Support groups	35	11.7
Others	15	5.0
None of these	133	44.5
Combination of these	8	2.7
What were the reasons for seeking the mental health services?		
Anxiety		
Depression	37	12.4
Family Issues	38	12.7
School related stress	36	12.0
None of these	62	20.7
Combination of these	102	34.1
	19.1	6.4

Table 2: Pattern of use of Mental Health Services

3.1.3: Research Question two: What are the factors that influence the utilization of mental health services among Adolescents in Port Harcourt, Rivers State?

The purpose of this study was to identify the variables that contribute to adolescent mental health treatment use by examining the link between parental education and occupation and service utilisation.

Tables 3a and 3b below demonstrate the correlation between respondents' moms' education level and their use of mental health services. Mothers Education did not significantly affect respondents' use of mental health services, since the P value of 0.662 is higher than the 0.05 threshold of significance. Thus, the mothers' level of education—the majority of whom had completed secondary school—did not play a substantial role in determining whether or not the respondents sought mental health treatment.

Table 3a: Relationship between Mother's Education and utilization of Mental Health services

		Have you ever utilized mental health services					Total
		Yes	No	3	5	6	
Mother's Education	No formal Education	5	5	0	0	0	10
	Basic Education	15	21	0	1	0	37
	Secondary Education	37	56	1	0	0	94
	Tertiary Education	39	44	0	0	1	84
	Don't Know	34	40	0	0	0	74
Total		130	166	1	1	1	299

Table 3b: Relationship between Mother's Education and utilization of Mental Health services

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.152 ^a	16	.662
Likelihood Ratio	10.365	16	.847
Linear-by-Linear Association	.728	1	.393
N of Valid Cases	299		

Table 4a and 4b below shows the relationship between the level of Father's Education of respondents and utilization of mental health services by the respondents. The P value of 0.000 which is less than the 0.05 level of significance indicates that Father's Education had a significant impact on the utilization of mental health services by the respondents. Therefore, the level of Education of the Fathers, majority of whom had Tertiary education was a significant factor influencing the utilization of mental health services by the respondents.

Table 4a: Relationship between Father's Education and utilization of Mental Health services

		Have you ever utilized mental health services					Total
		Yes	No	3	5	6	
Father's Education	No formal Education	4	3	1	0	0	8
	Basic Education	10	18	0	0	0	28
	Secondary Education	38	50	0	1	0	89
	Tertiary Education	45	53	0	0	1	99
	Don't Know	33	42	0	0	0	75
Total		130	166	1	1	1	299

Table 4b: Relationship between Father's Education and utilization of Mental Health services.

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42.263 ^a	16	.000
Likelihood Ratio	13.448	16	.640
Linear-by-Linear Association	.477	1	.490
N of Valid Cases	299		

Table 5a and 5b below shows the relationship between the level of Mother's Occupation of respondents and utilization of mental health services by the respondents. The P value of 0.000 which is less than the 0.05 level of significance indicates that Mother's Occupation had a significant impact on the utilization of mental health services by the respondents. Therefore, the occupation of the mothers, majority of whom were business owners was a significant factor influencing the utilization of mental health services by the respondents.

Table 5a: Relationship between Mother's Occupation and utilization of Mental Health services

		Have you ever utilized mental health services					Total
		Yes	No	3	5	6	
Mother's Occupation	House wife	6	7	1	0	1	15
	Business Owner	90	117	0	0	0	207
	Civil Servant	20	24	0	0	0	44
	Retired	5	4	0	0	0	9
	Don't know	9	14	0	1	0	24
Total		130	166	1	1	1	299

Table 5b: Relationship between Mother's Occupation and utilization of Mental Health services.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	50.395 ^a	16	.000
Likelihood Ratio	18.097	16	.318
Linear-by-Linear Association	.026	1	.873
N of Valid Cases	299		

Table 6a and 6b below shows the relationship between the level of Father's Occupation of respondents and utilization of mental health services by the respondents. The P value of 0.873 which is greater than the 0.05 level of significance indicates that Father's Occupation had no significant impact on the utilization of mental health services by the respondents. Therefore, the occupation of the Fathers, majority of whom were business owners was not a significant factor influencing the utilization of mental health services by the respondents.

Table 6a: Relationship between Father's Occupation and utilization of Mental Health services

		Have you ever utilized mental health services					Total
		Yes	No	3	5	6	
Father's Occupation	Unemployed	4	5	0	0	0	9
	Servant	30	39	0	1	1	71
	Business Owner	76	94	1	0	0	171
	Retired	3	10	0	0	0	13
	Don't know	17	18	0	0	0	35
Total		130	166	1	1	1	299

Table 6b: Relationship between Father's Occupation and utilization of Mental Health services

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.879 ^a	16	.873
Likelihood Ratio	9.715	16	.881
Linear-by-Linear Association	.770	1	.380
N of Valid Cases	299		

3.1.4: Research Question three: What are the barriers to accessing mental health services among adolescents in Port Harcourt, Rivers State?

Table 7a below shows the factors that pose barriers to accessibility of mental health services by adolescents in Port Harcourt, Rivers State. 7.4% of these barriers was attributed to stigma, 41.5% to lack of awareness of mental health services, 3.3% due to the distance to mental health services, 6.4% due to cost of mental health services, 22.1% due to lack of parental support, and 15.1% from the combination of all of these. Therefore, the major barrier to access of

mental health services by adolescents in Port Harcourt, Rivers State was due to lack of awareness of the availability of mental health services.

Table 7a: Barriers to Access of mental health services

Barriers	Frequency (%)	Percentage (%)
Stigma	22	7.4
Lack of Awareness	124	41.5
Distance to services	10	3.3
Cost of service	19	6.4
Lack of parental support	66	22.1
None of these	13	4.3
Combination of all these	45	15.1

Table 7b below shows the factors that could serve as barriers to those who intend to Access mental health services. The result shows that 16.1% strongly agreed that there are not enough mental health facilities in their communities, 32.8% agreed also, 19.7% were neutral, 21.1% disagreed and 10.4% strongly disagreed. Therefore, majority of the respondents agreed that there are not enough mental health services around their communities. 16.4% of the respondents strongly agreed adolescents are not aware of where to find mental health services in Rivers State, 33.8% agreed to this, 21.7% were neutral, 21.7% disagreed, and 6.4% strongly disagreed. Therefore, majority of the respondents agreed that adolescents are not aware of where to find mental health services when they need it in Port Harcourt, Rivers State. 25.4% of the respondents strongly agreed that distance to mental health services made it difficult for adolescents to access mental health services, 37.8% agreed to this, 17.4% were neutral, 14.4% disagreed and 5% strongly disagreed. Therefore, majority of the respondents agreed that distance to mental health facilities make it difficult for adolescents to access mental health services. 26.1% of the respondents strongly agreed that the long waiting time at mental health facilities discourages adolescents from seeking help from such facilities, 34.1% agreed to this, 16.4% were neutral, 13.7% disagreed to this while 9.7% strongly disagreed. Therefore, majority of the respondents agreed that the long waiting times at mental health facilities discourages adolescents from seeking help from such facilities.

Table 7b: Barriers to Access of mental health services

ACCESSIBILITY	SA	A	N	D	SD
There are not enough adolescent mental health facilities in my community	16.1	32.8	19.7	21.1	10.4
Adolescents are not aware of where to find mental health services in Rivers State.	16.4	33.8	21.7	21.7	6.4
Distance to mental health facilities makes it difficult for adolescents to access services	25.4	37.8	17.4	14.4	5.0
The long waiting time at mental health facilities discourages adolescents from seeking help	26.1	34.1	16.4	13.7	9.7

Table 7c below shows the response of respondents on affordability of mental health services being a barrier to access to mental health services. The result shows that 26.1% of the respondents strongly agreed that mental health services are not affordable for most families in Rivers State, 29.8% agreed to this, 24.4% were neutral, 11.7% disagreed while 8% strongly disagreed. 27.4% of the respondents strongly agreed that financial constraints prevent adolescent from accessing mental health services, 42.1% of the respondents agreed to this, 18.7% were neutral, 9% disagreed while 2.7% strongly disagreed. Therefore, majority of the respondents agreed that financial constraints prevent adolescents from accessing mental health services. 22.1% of the respondents strongly agreed that the Government does not provide adequate financial support for adolescent mental health services, 27.4% agreed to this, 25.4% were neutral, 12%

disagreed and 13% strongly disagreed. Therefore, majority of the respondents agreed that the government does not provide adequate financial support for mental health services.

Table 7c: Affordability of mental health services

AFFORDABILITY	SA	A	N	D	SD
Adolescents' mental health services are not affordable for most families in Rivers State	26.1	29.8	24.4	11.7	8.0
Financial constraints prevent adolescents from accessing mental health services	27.4	42.1	18.7	9.0	2.7
The Government does not provide adequate financial support for adolescent mental health services	22.1	27.4	25.4	12.0	13.0

3.1.5 Research Question four: What are the recommendations for improving the utilization of mental health services among adolescents in Rivers State?

Table 8 below shows the response of respondents on recommendations for improving utilization of mental health services. The table shows that 65.2% strongly agreed that mental health facilities for adolescents should be free of charge, 22.7% agreed to this, 8.4% were neutral, 2% disagreed while 1.7% strongly disagreed. Therefore, majority of the respondents strongly agreed to the recommendation that mental health services should be free of charge for adolescents in Rivers State. 50.5% of the respondents strongly agreed that mental health services for adolescents should be readily accessible in all communities, 37.1% agreed to this, 8.4% were neutral, 2.3% disagreed while 1.7% strongly disagreed. Therefore, majority of the respondents strongly agreed to the recommendation that mental health services be readily accessible in all communities in Port Harcourt, Rivers State.

Table 8: Recommendation for improving utilization of mental health services

RECOMMENDATIONS	SA	A	N	D	SD
Mental health services for adolescents should be free of charge.	65.2	22.7	8.4	2.0	1.7
Mental health services for adolescents should be readily accessible in all communities.	50.5	37.1	8.4	2.3	1.7

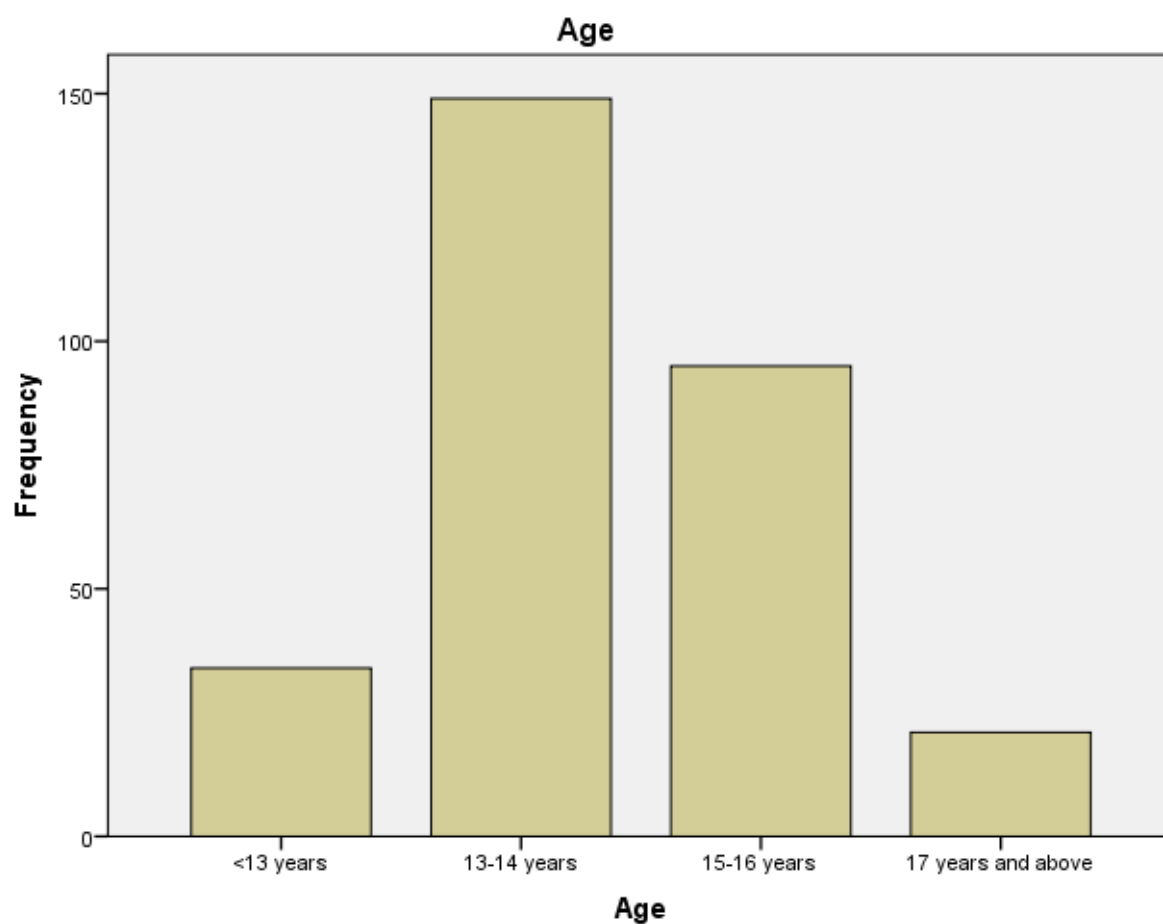


Figure 4.1: Age distribution of the respondents

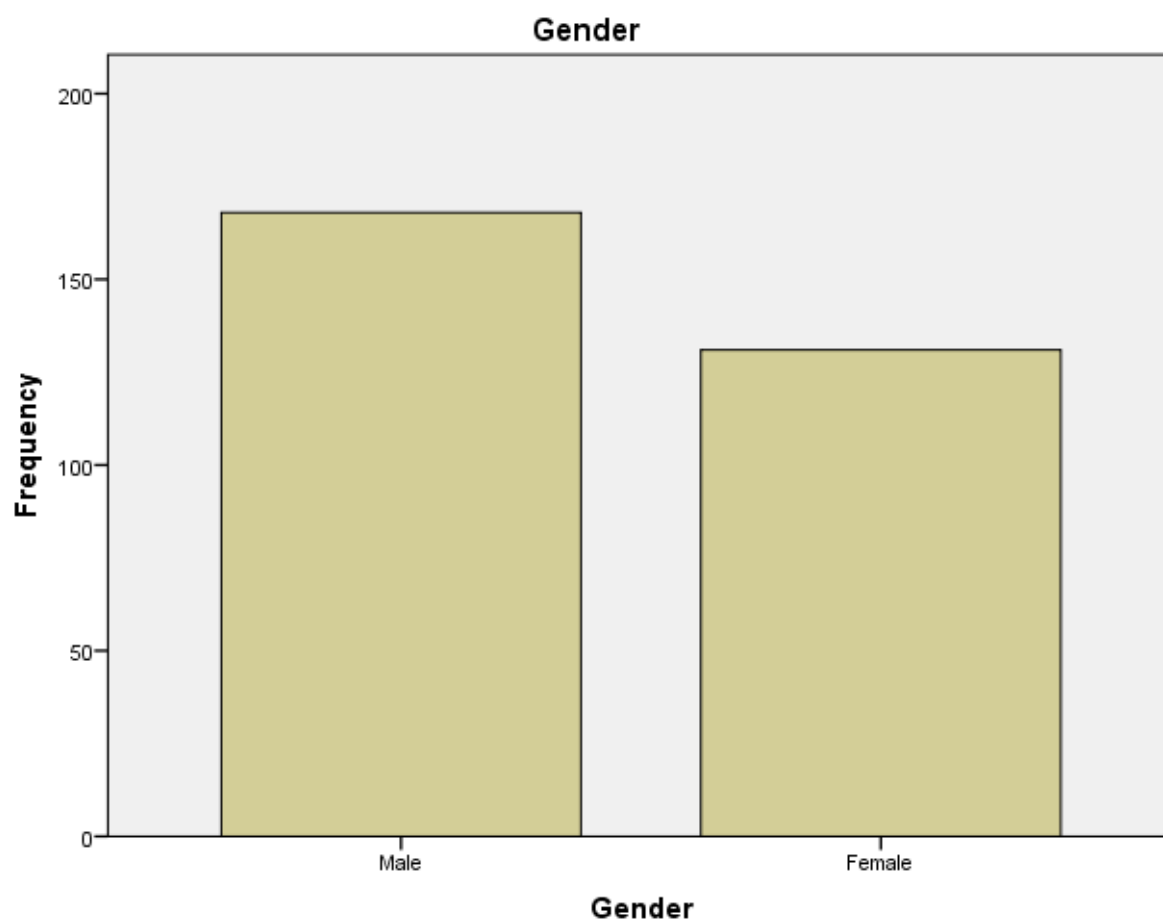


Figure 2: Gender of the respondents

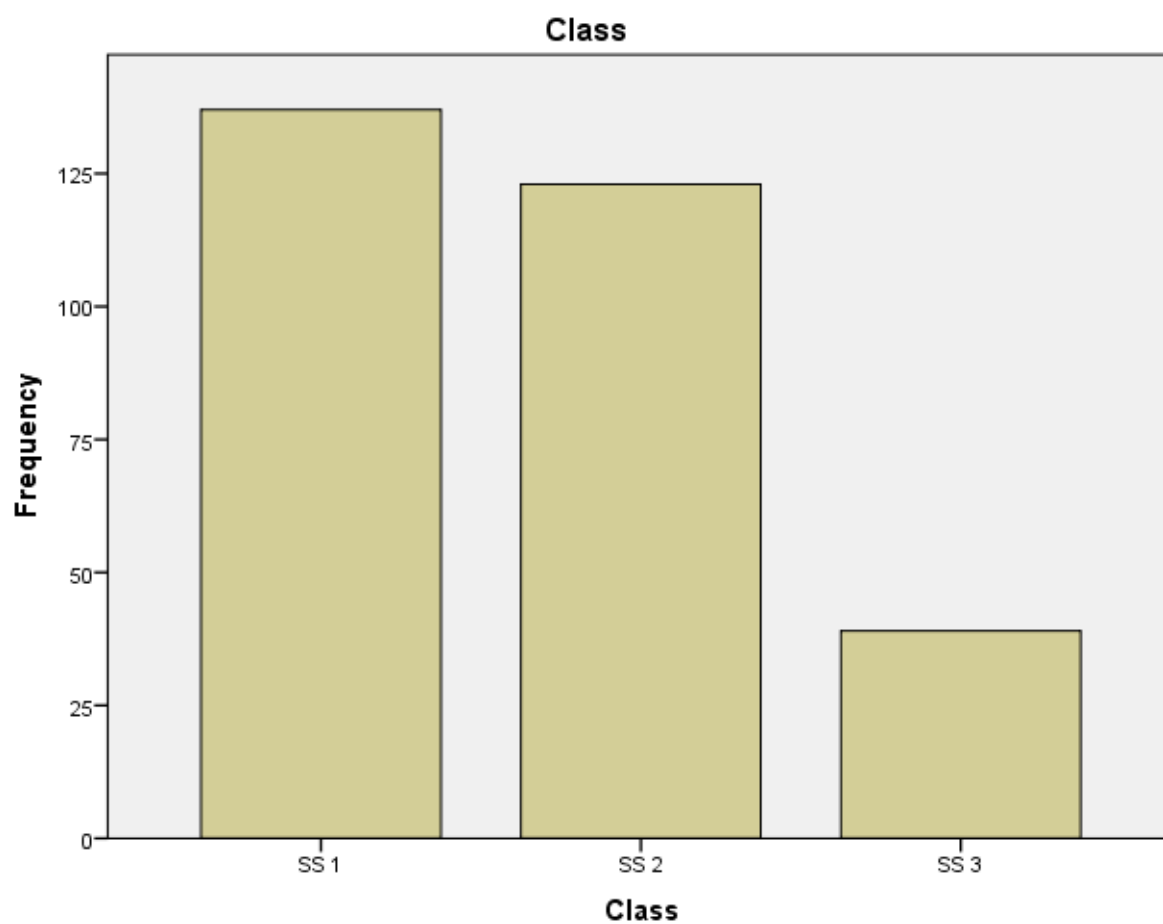


Figure 3: Classes of the respondents

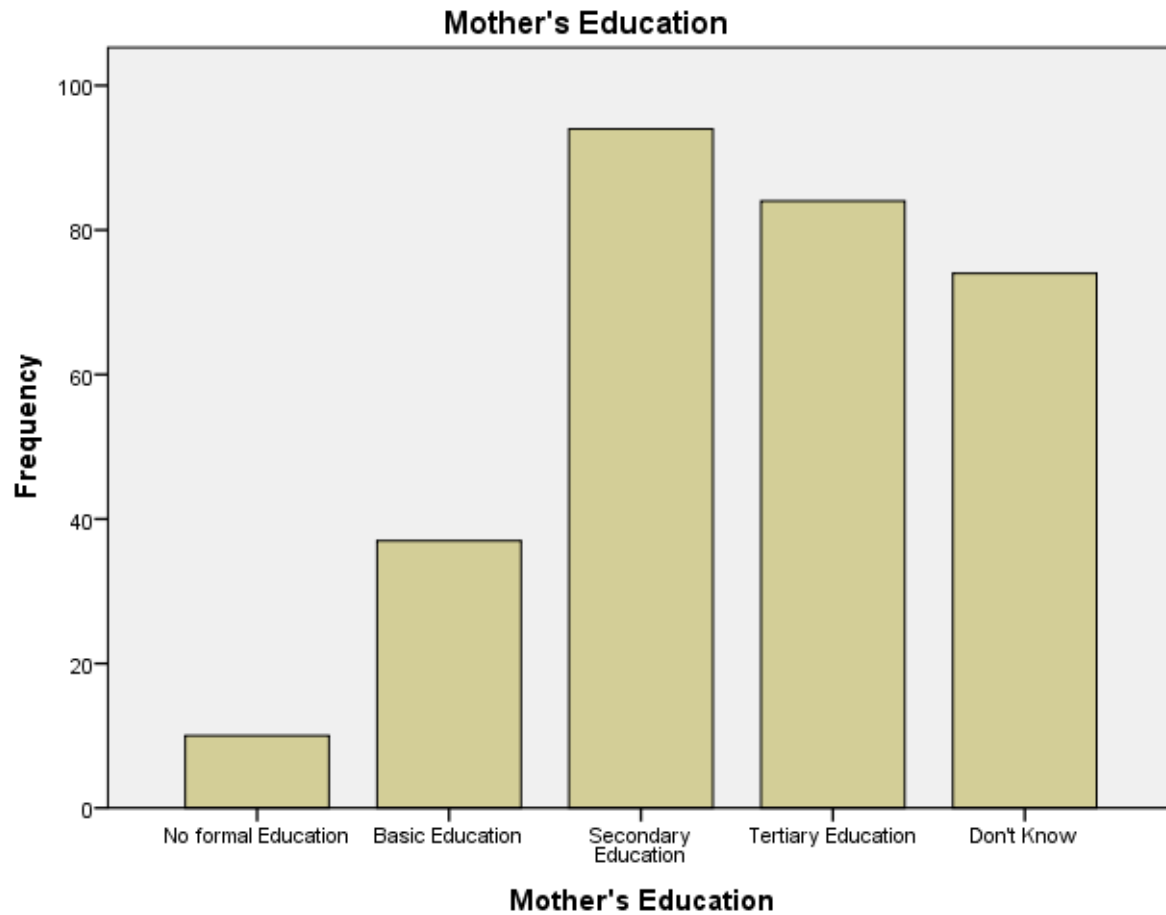


Figure 4: Educational Status of the respondents' mother.

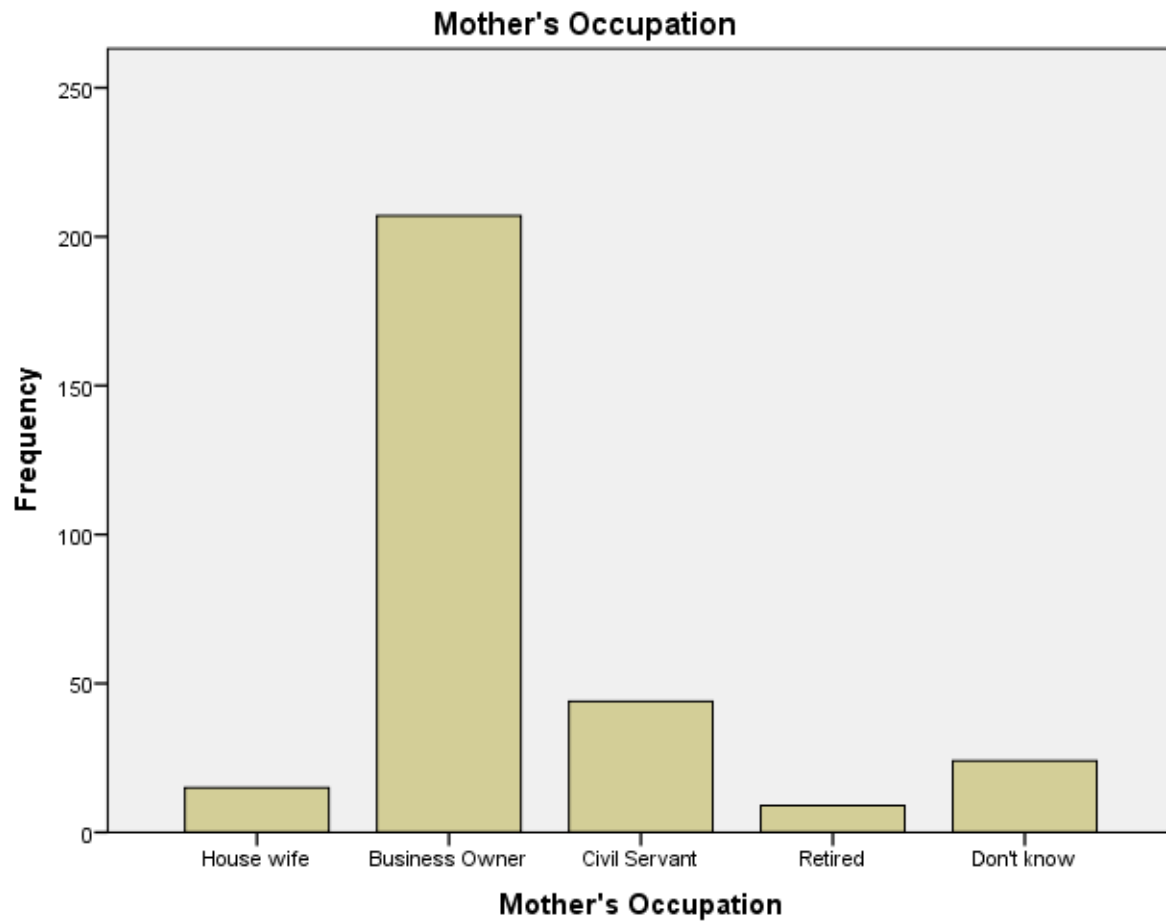


Figure 5: Occupational Status of the respondents' mother.

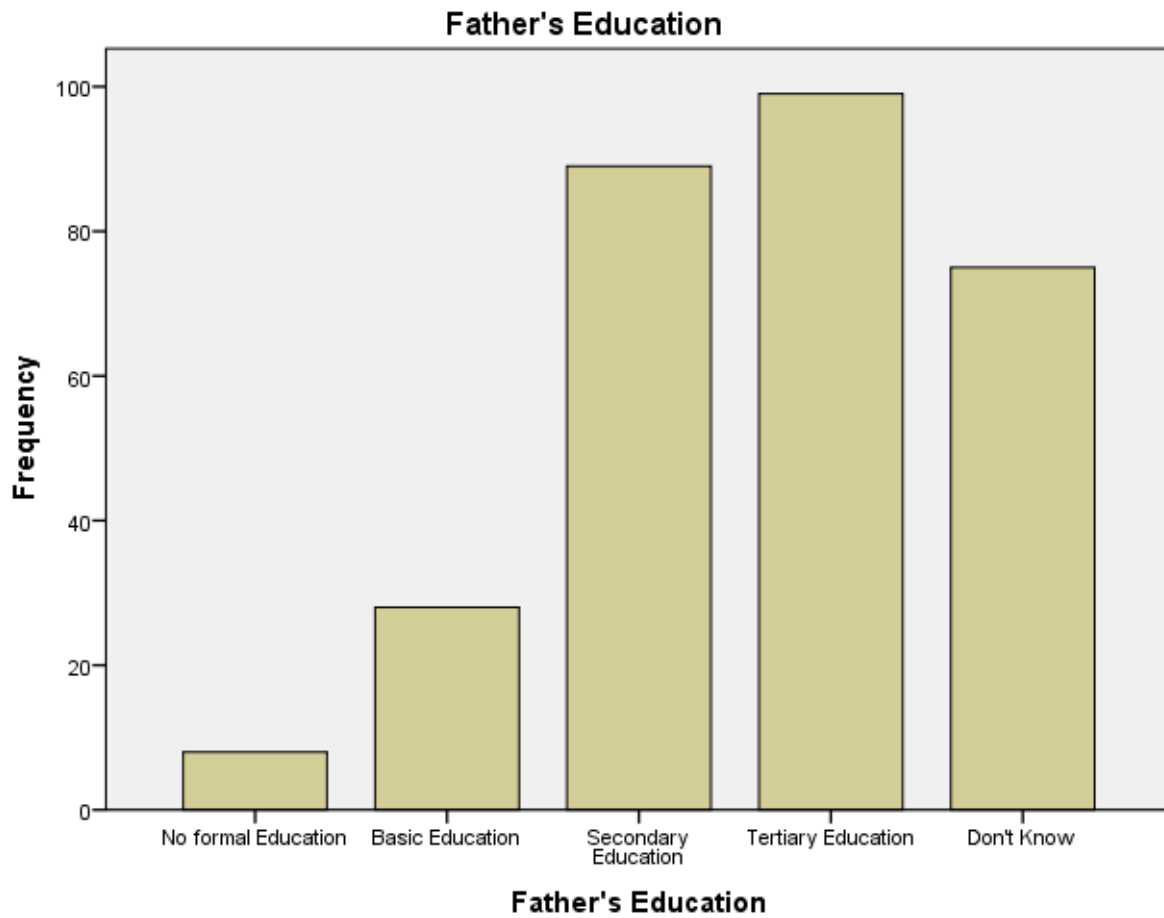


Figure 6: Educational Status of the respondents' father.

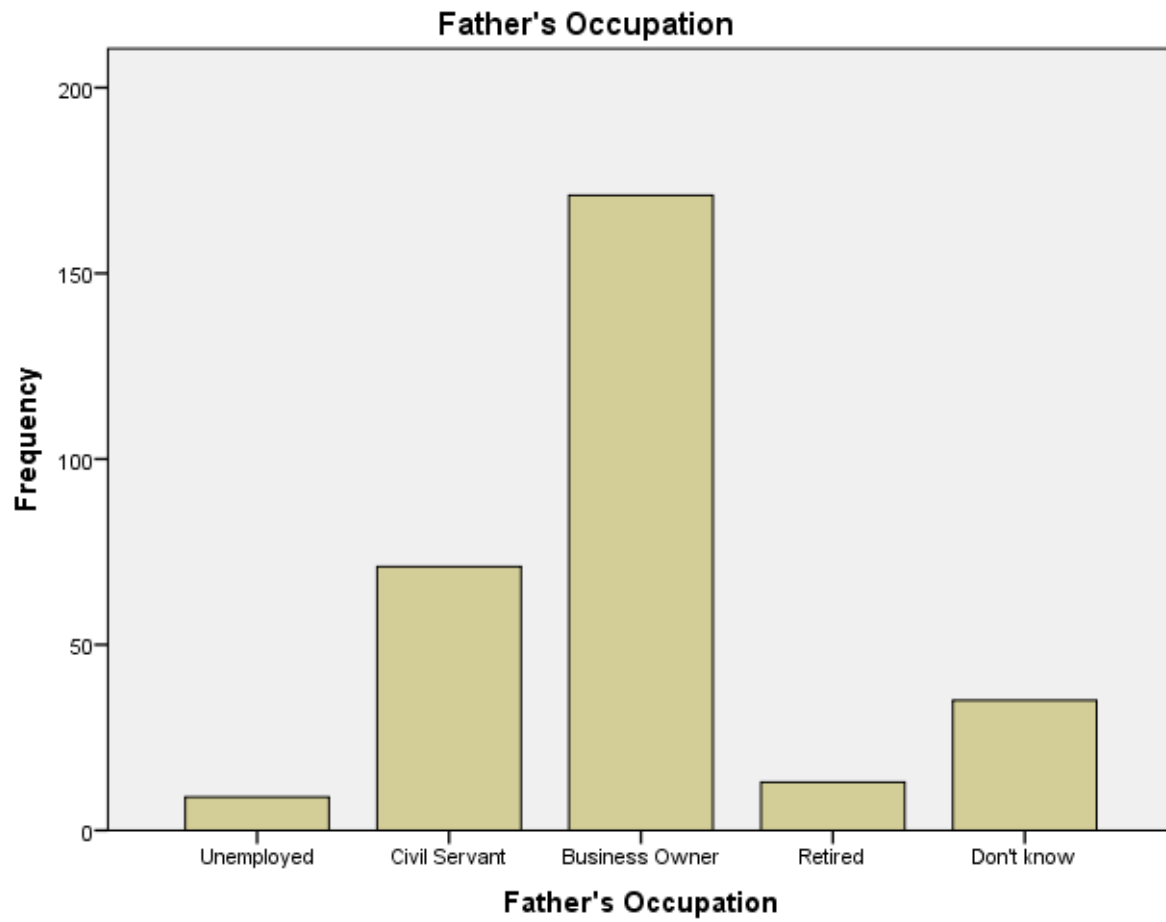


Figure 7: Occupational Status of the respondents' father.

How aware are you of mental health services available for adolescents in Rivers State

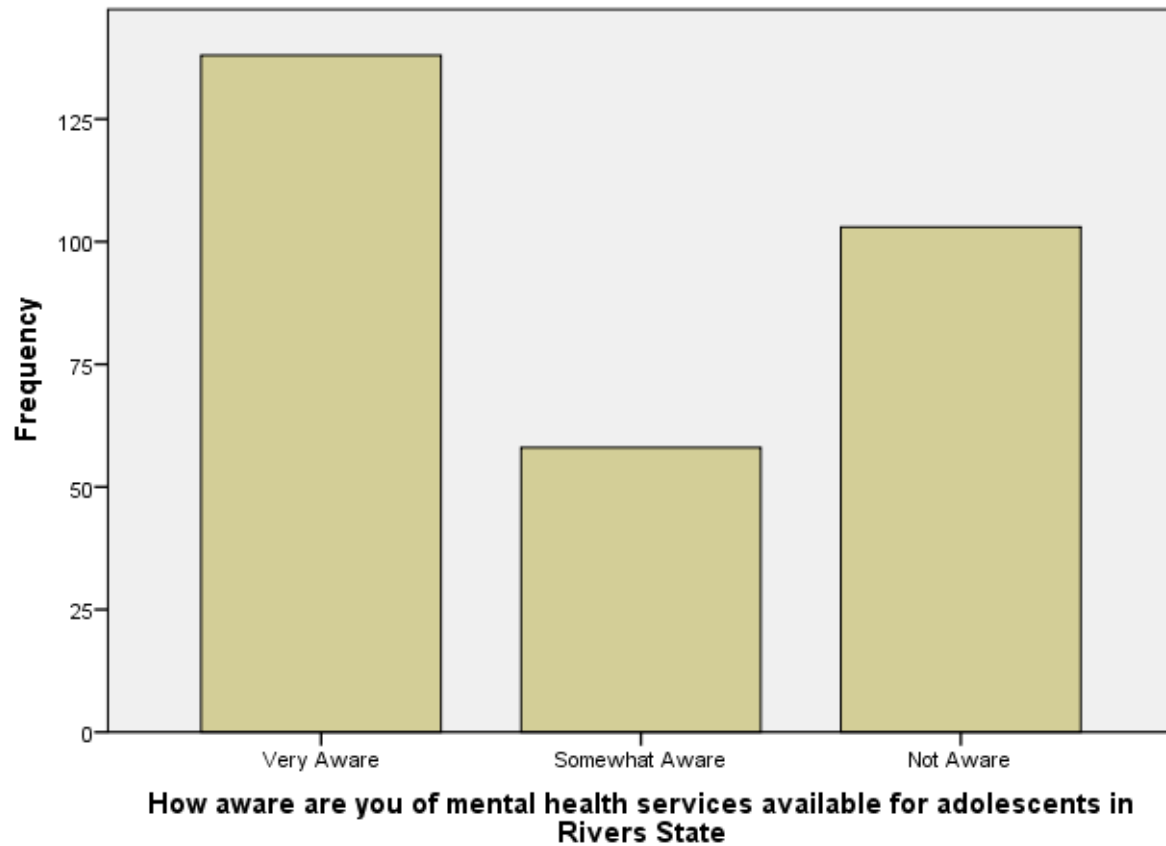


Figure 8: Awareness level of mental health services available for adolescents in Rivers state.

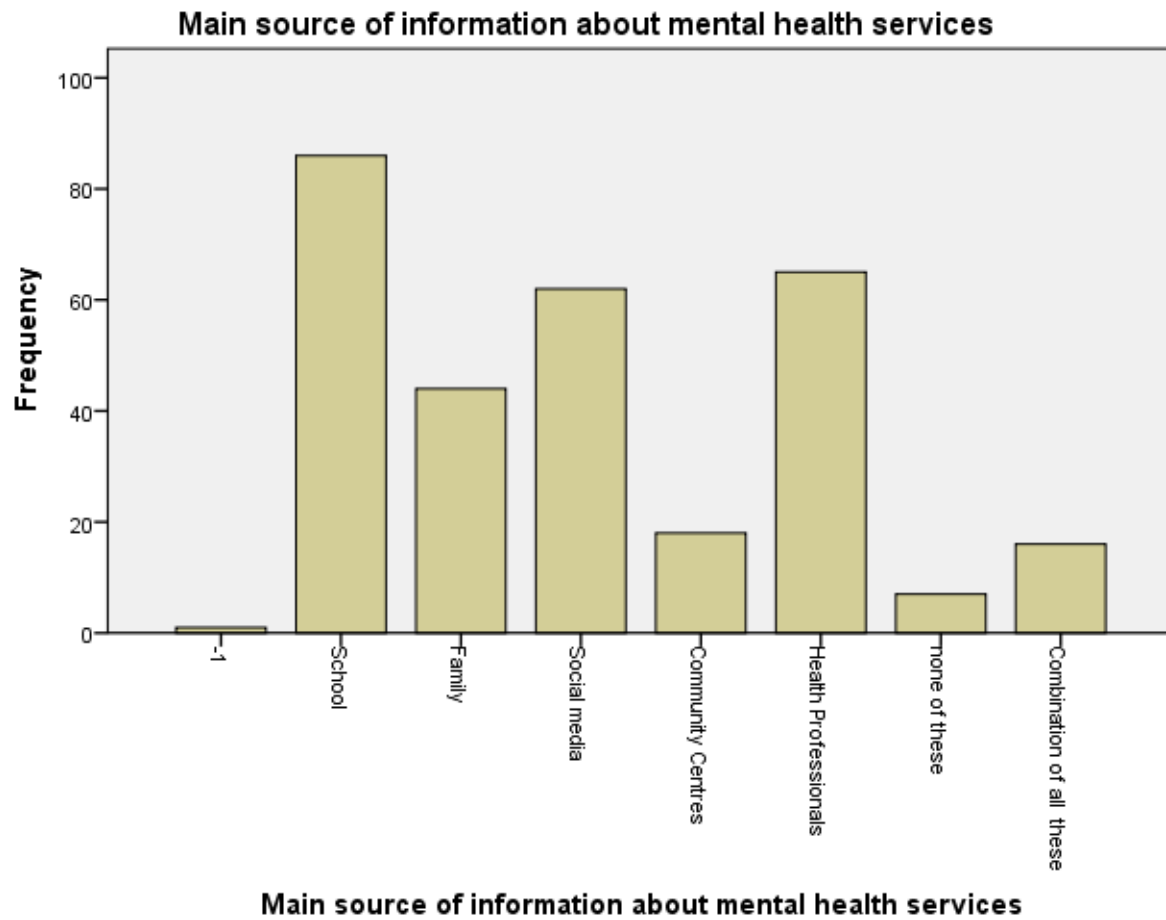


Figure 9: Information source about mental health services.

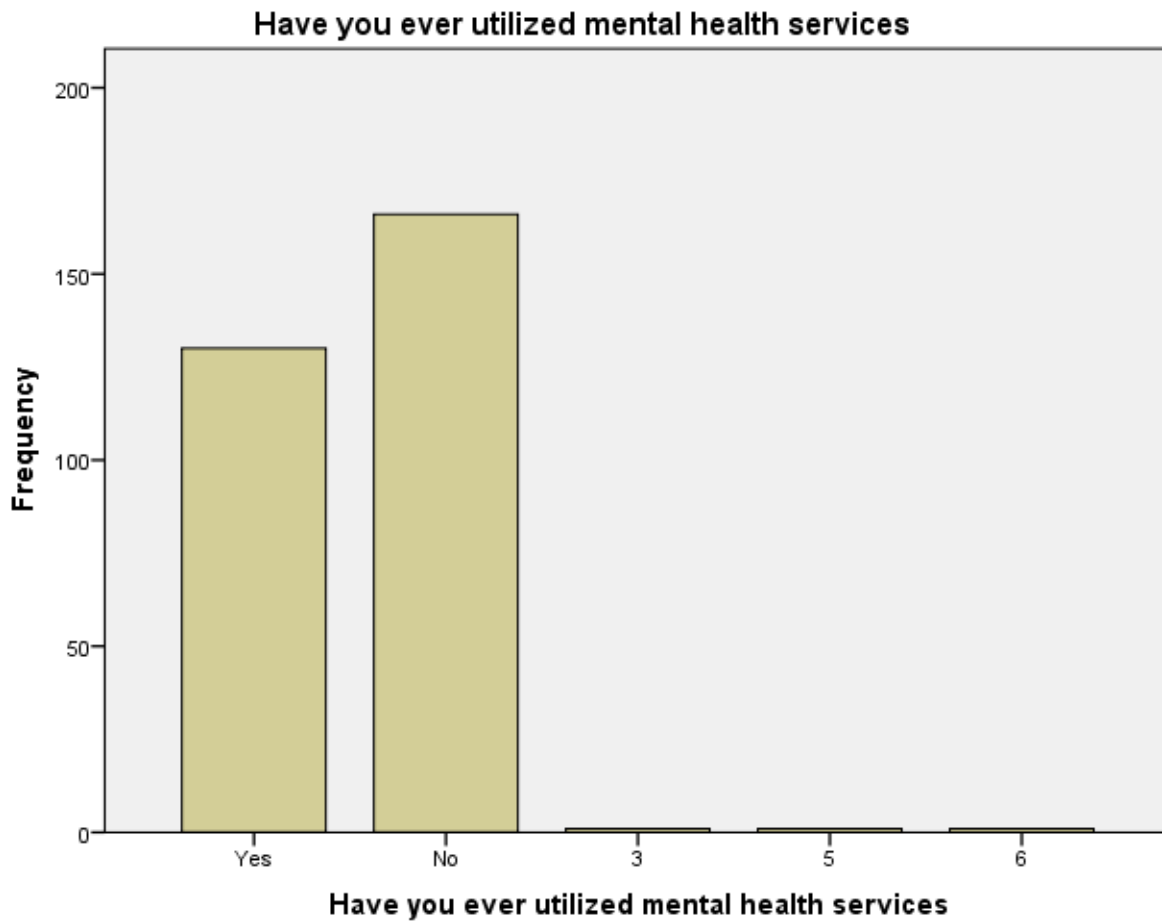


Figure 10: Utilization of mental health services.

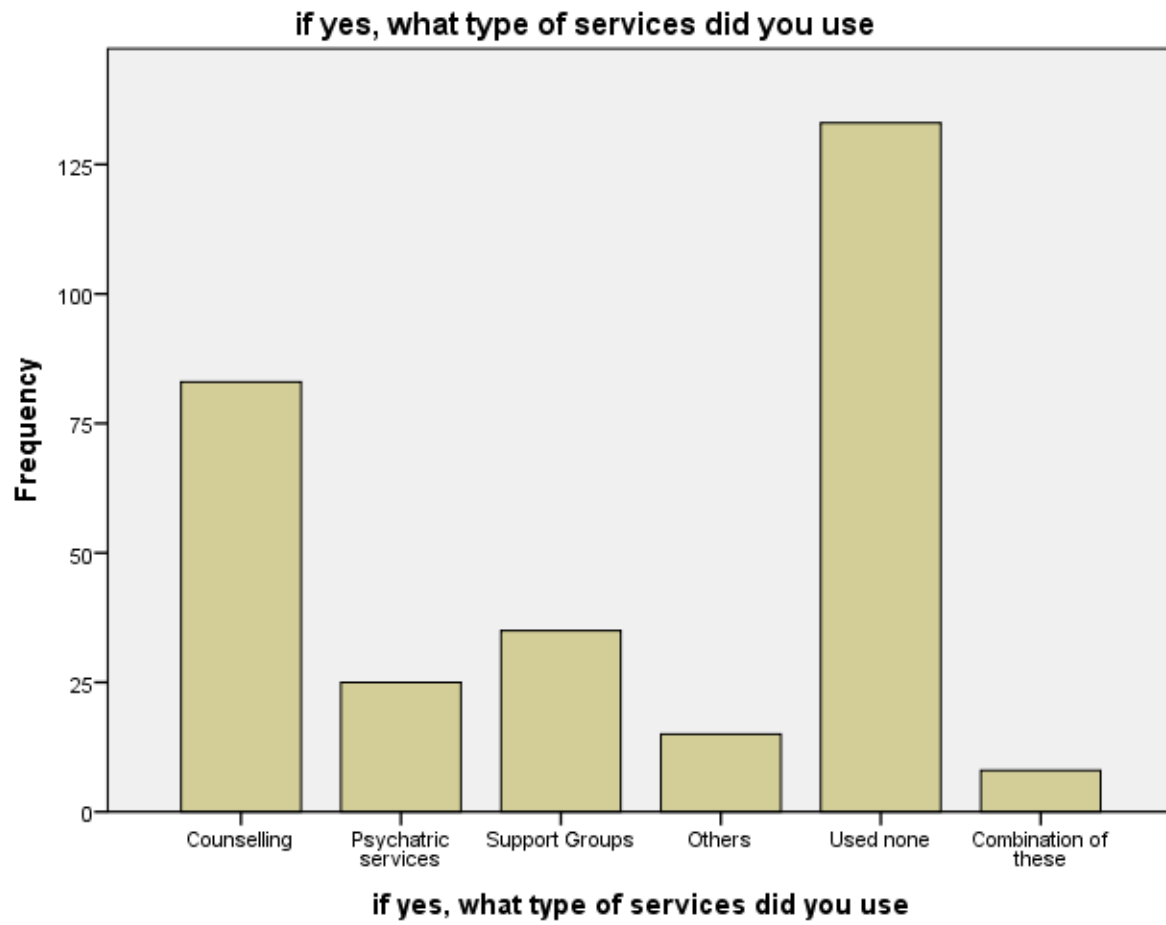


Figure 11: Type of mental health services utilized.

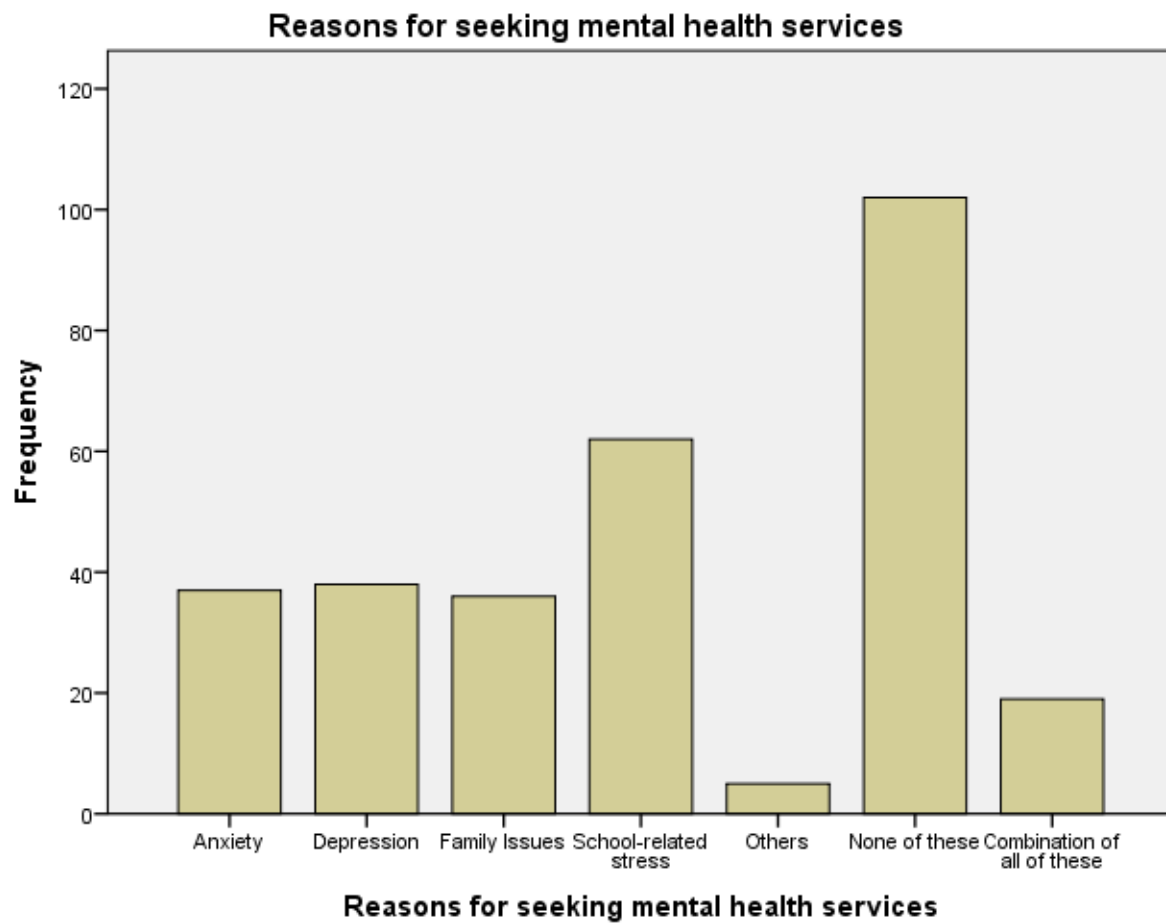


Figure 12: Reasons for mental health services utilized.

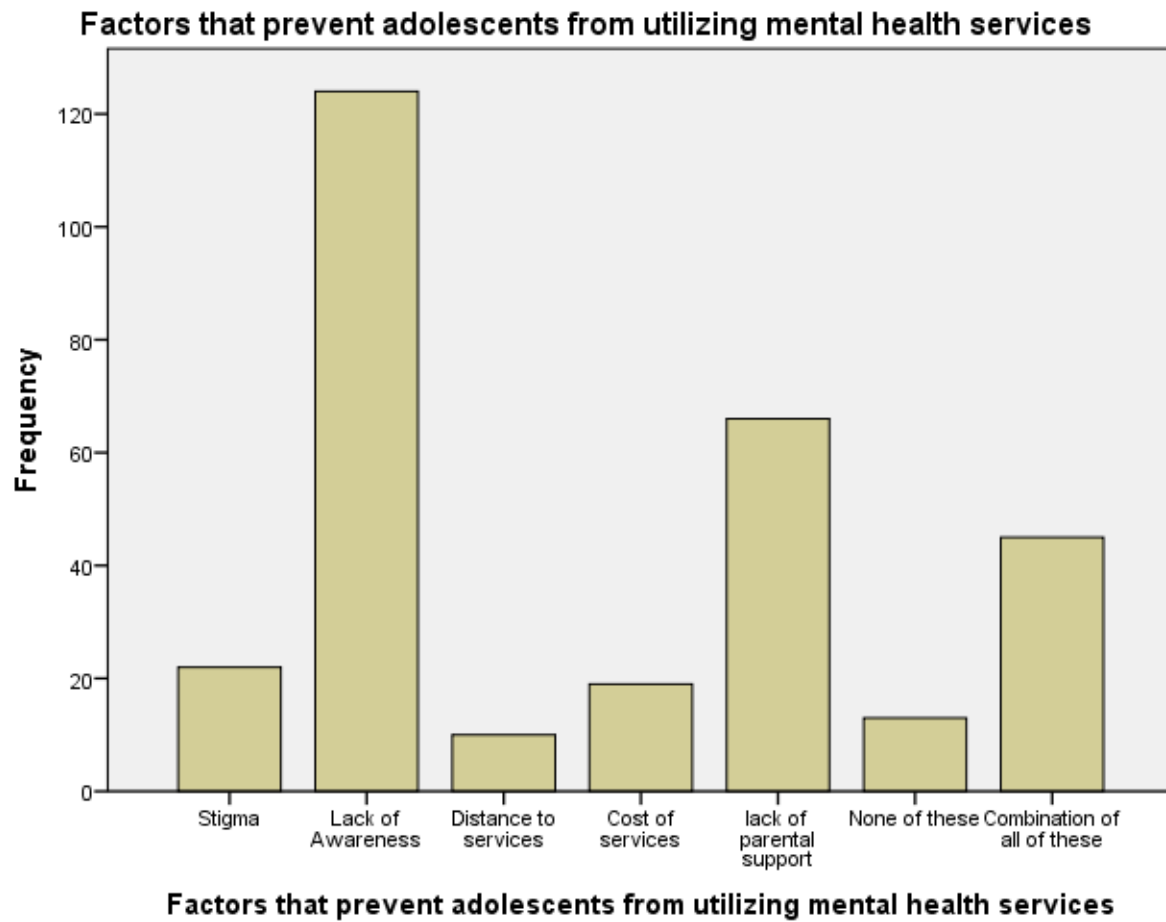


Figure 13: Factors preventing the utilization of mental health services.

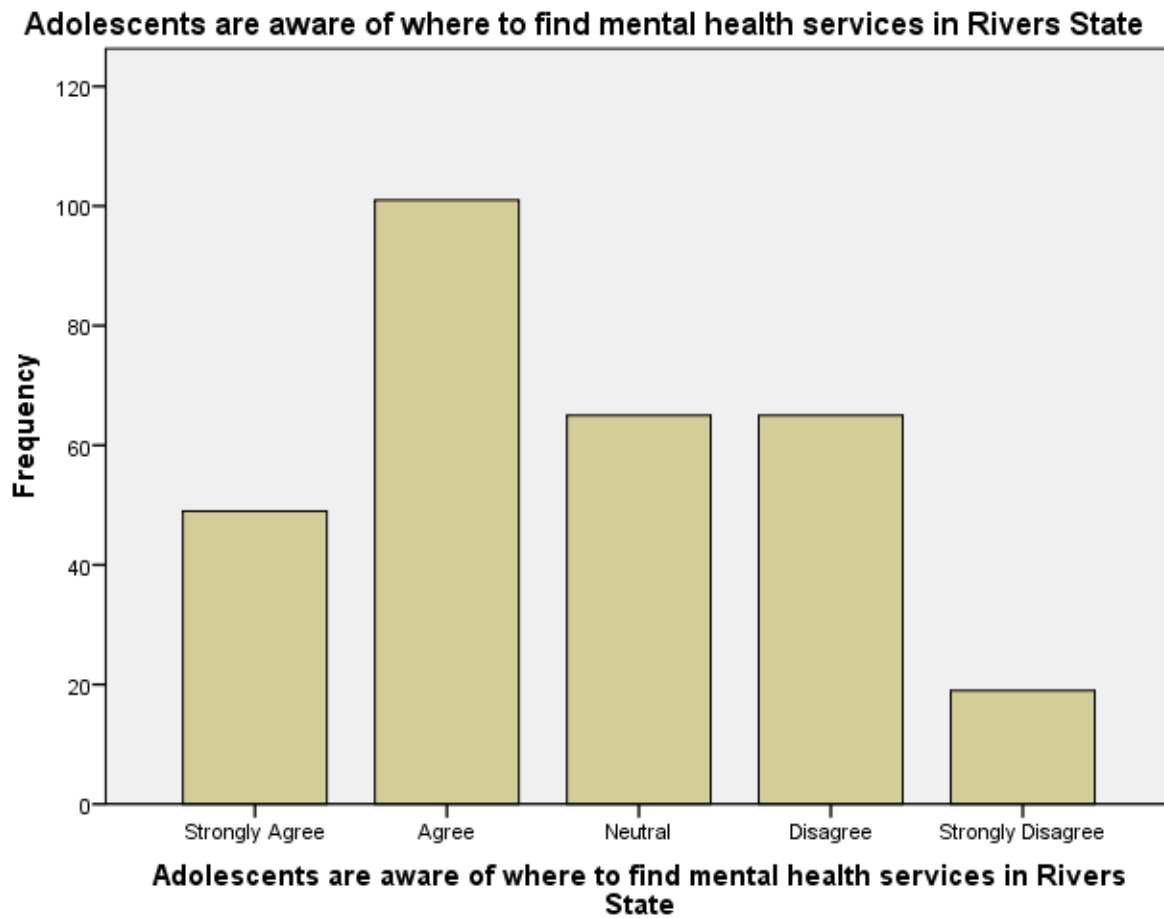


Figure 14: Awareness of mental health services.

Adolescent mental health services are important for improving overall wellbeing

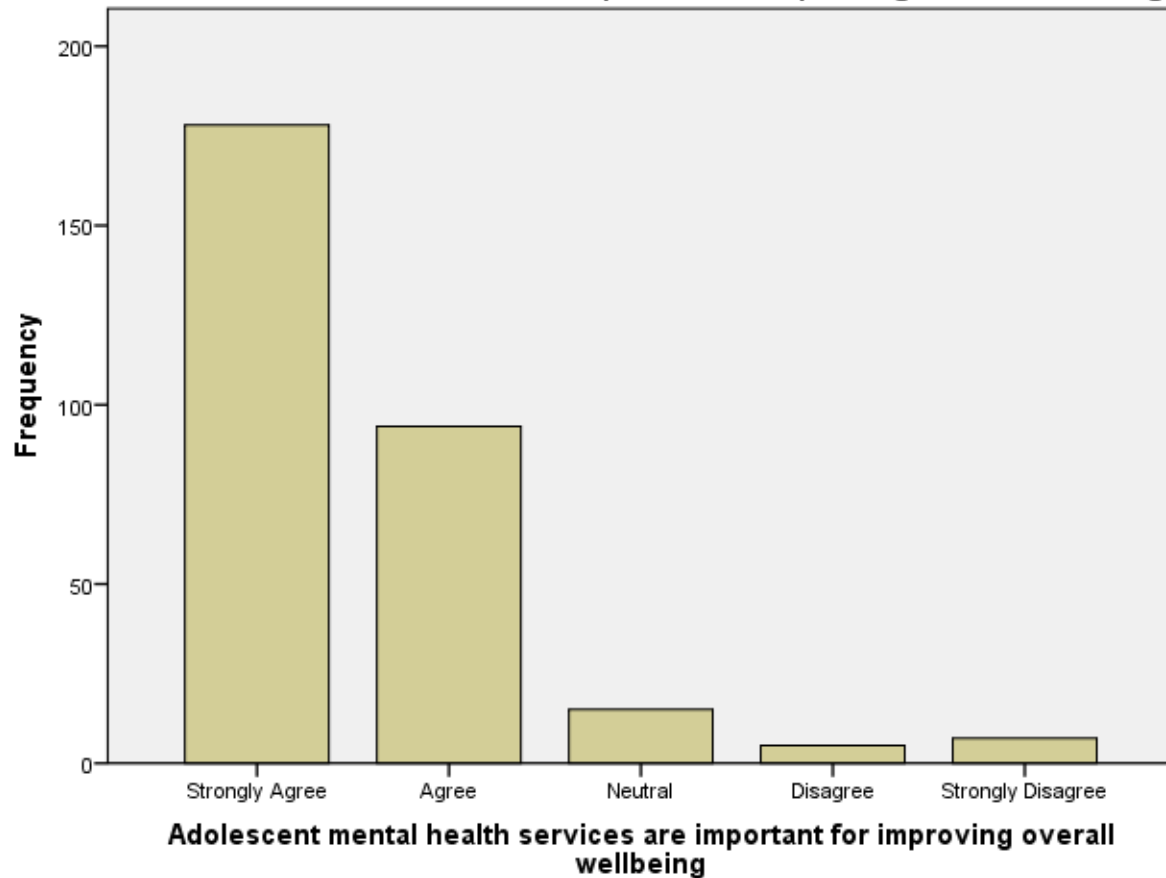


Figure 15: Importance of utilization of mental health services.

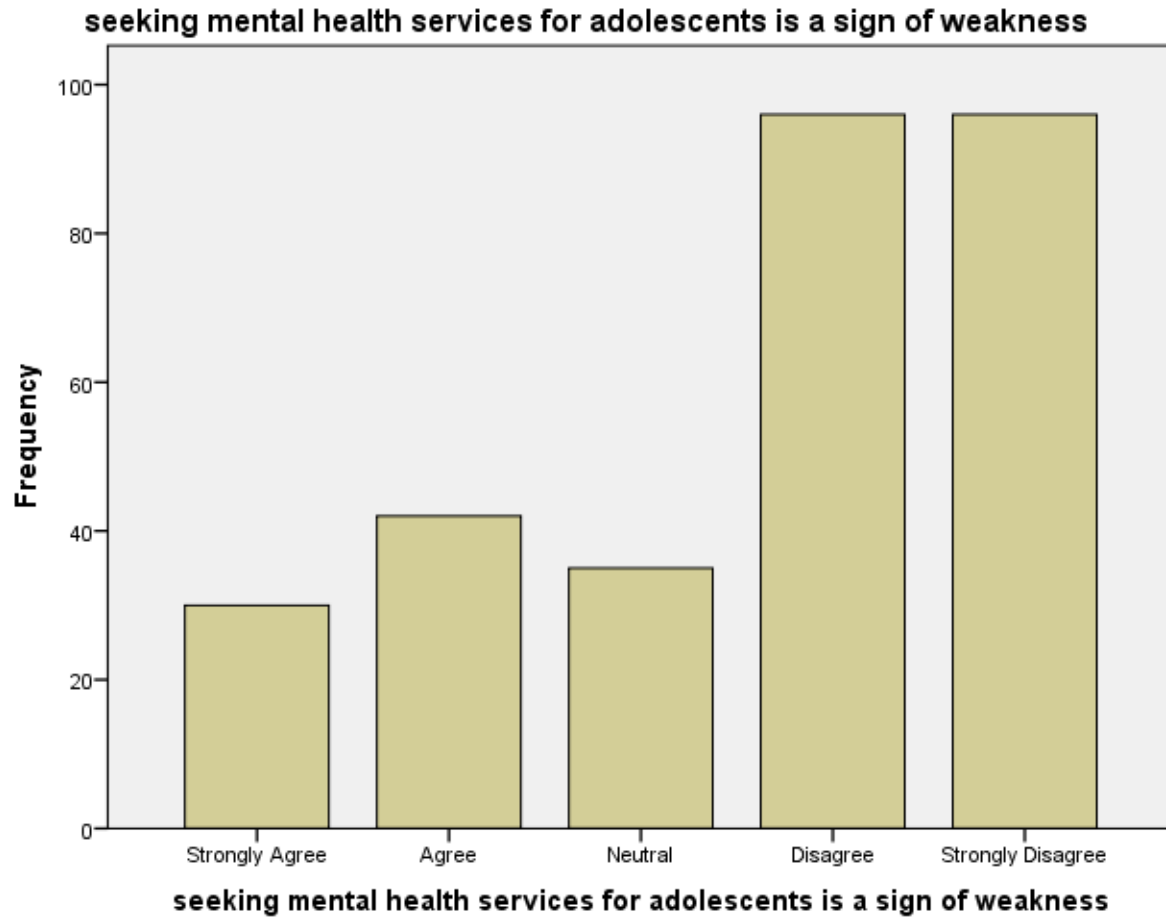


Figure 16: Perception of utilization of mental health services.

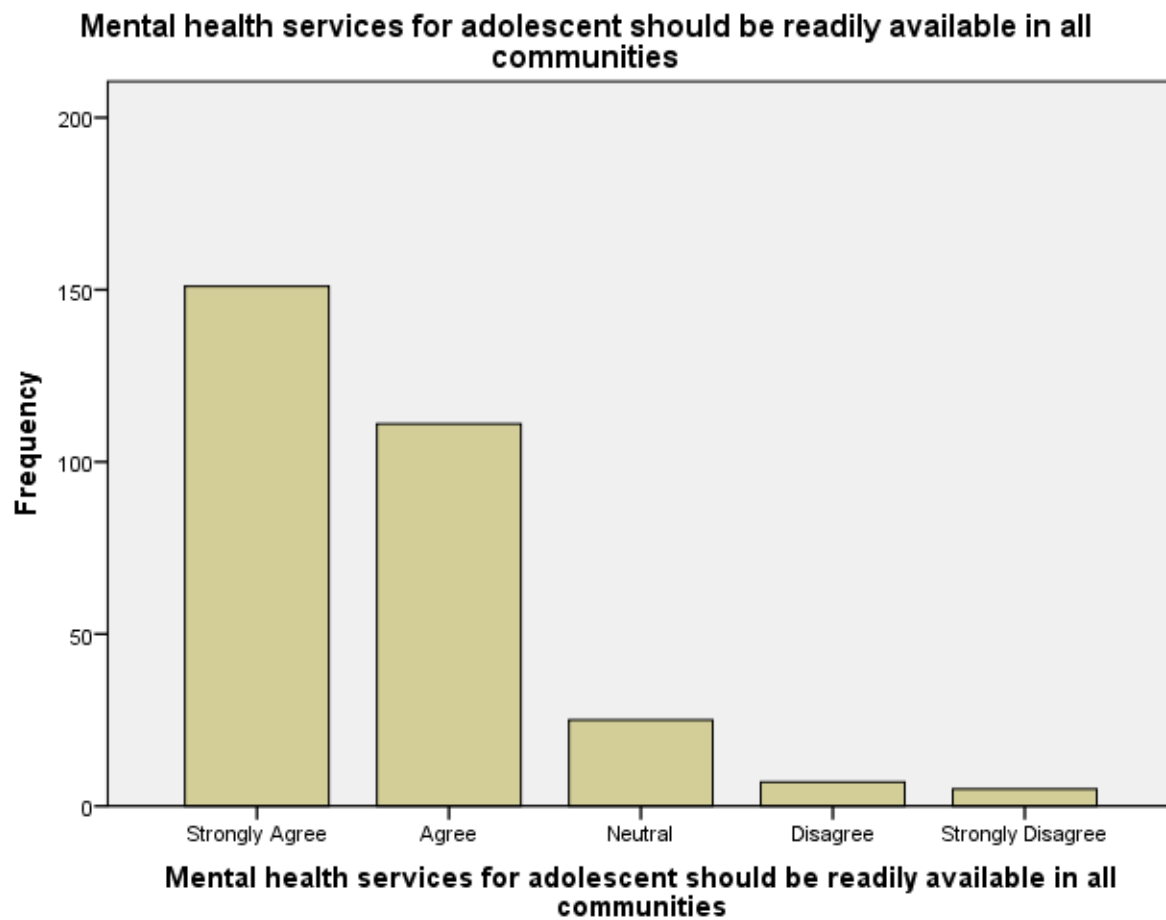


Figure 17: Availability of utilization of mental health services.

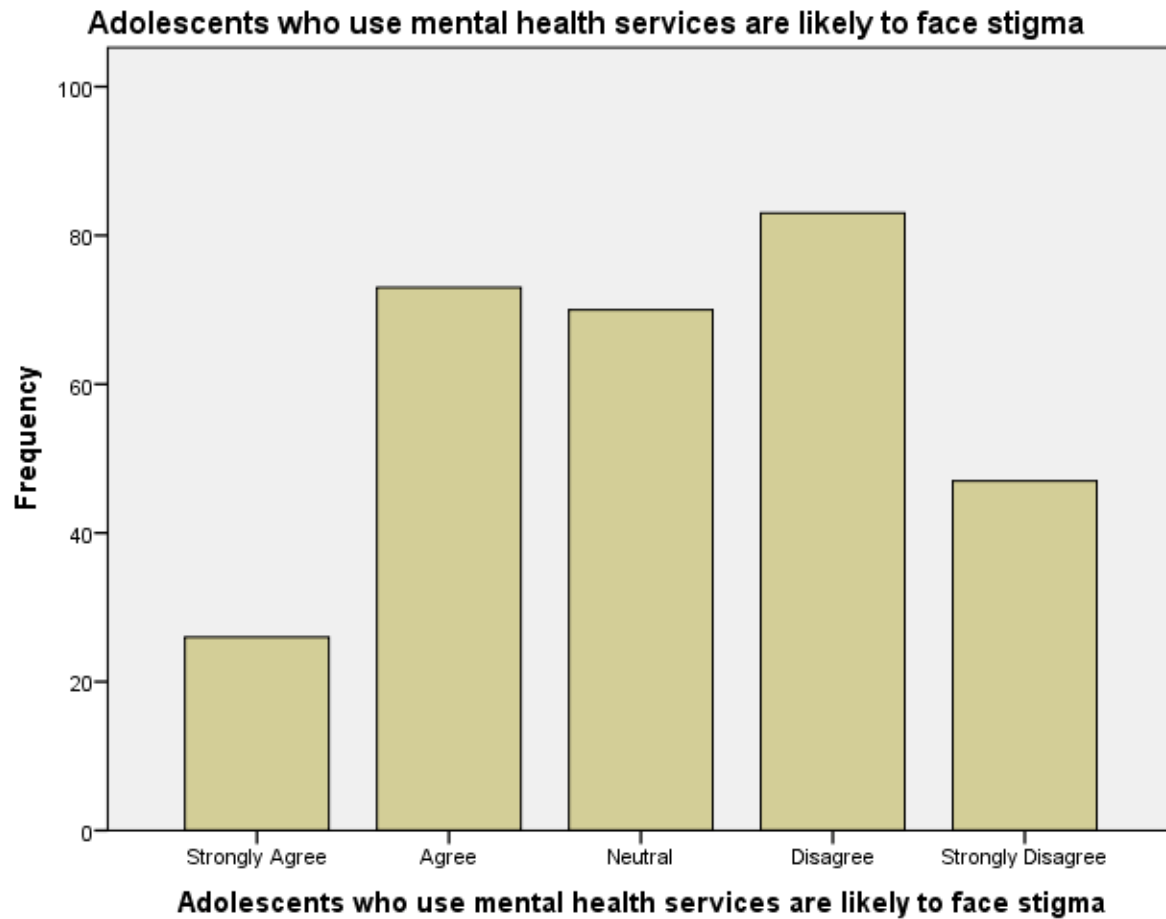


Figure 18: Perception on Stigma for utilization of mental health services.

Financial constraints prevent adolescents from accessing mental health services

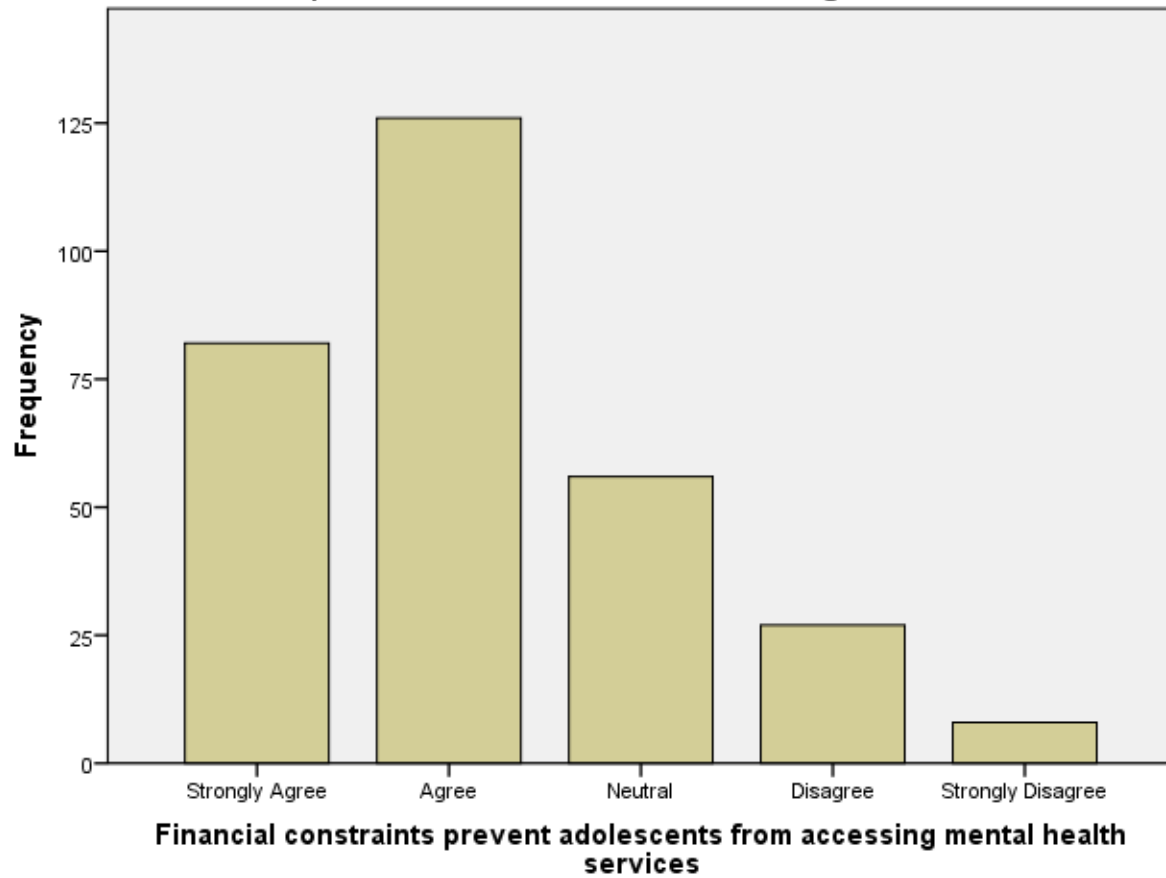


Figure 19: Financial constraints for utilization of mental health services.

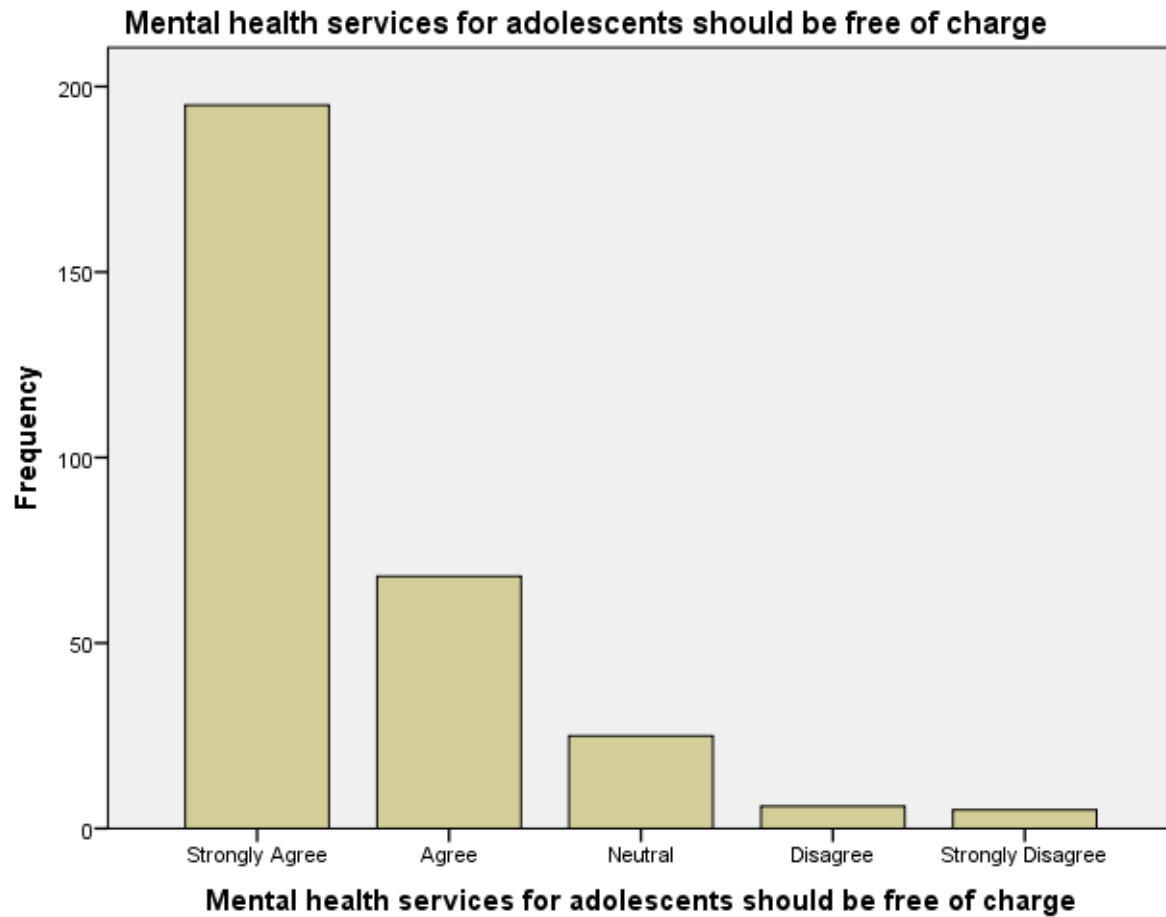


Figure 20: Free utilization of mental health services.

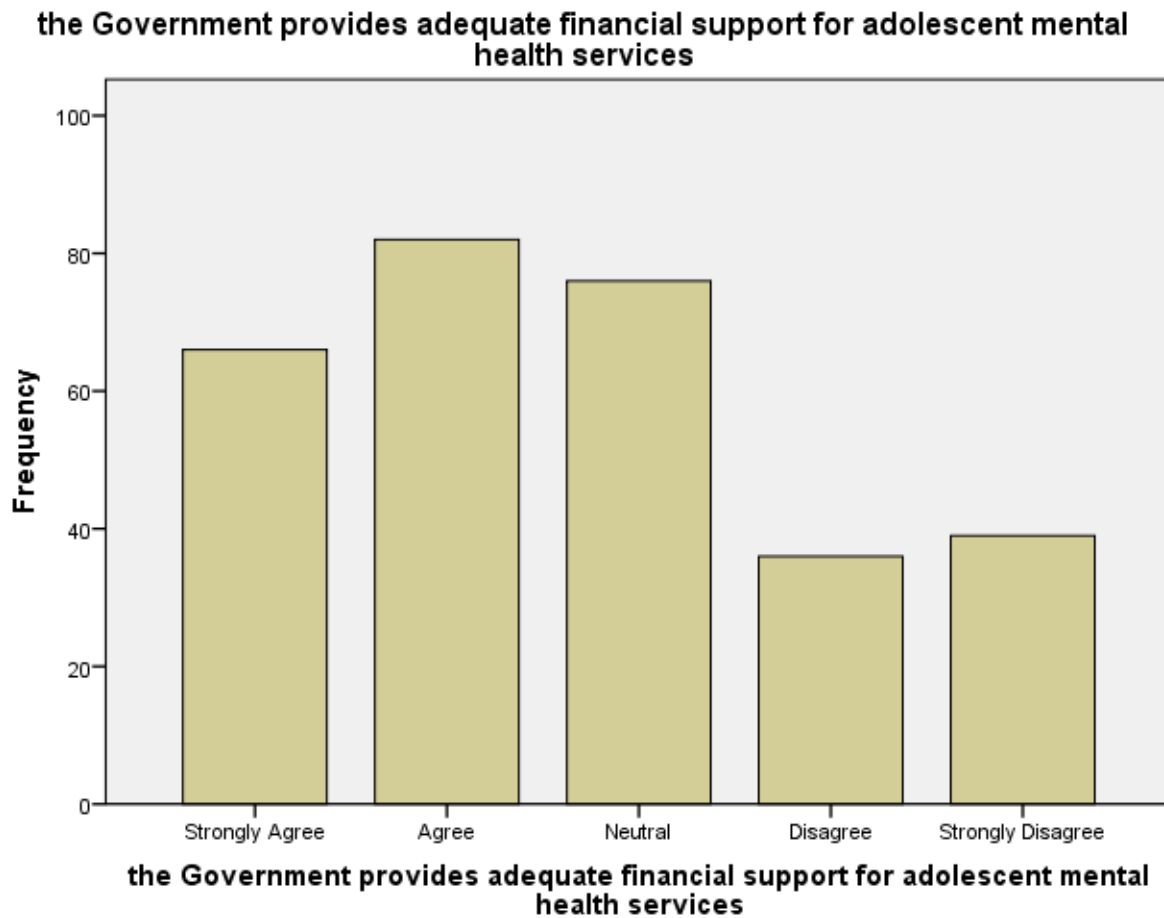


Figure 21: Government supporting the utilization of mental health services.

3.2: Discussion of Findings

3.2.1 Awareness and usage of mental health services

The results of this research show that secondary school students in Rivers State have a high degree of knowledge of mental health services and a good understanding of how important these services are for the overall well-being of adolescents during this formative period. Adolescents' understanding of and access to mental health services has been significantly influenced by their educational experiences; also, social media has served as an excellent platform for disseminating information on this issue. Comparatively, 61% of Bayelsa secondary school pupils surveyed by Jackide et al. (2016) had little or no knowledge of mental health services.

Despite the fact that many teenagers are aware of mental health services, the number of people who actually use them is low, and those who do often seek out therapy. Due to stress from education, most people went to therapy. The findings of this study highlight the importance of school administrators being mindful of the demanding academic schedules that adolescents are expected to follow during this developmental period. Adolescents may not be emotionally or psychologically ready to handle such a heavy workload just yet (Choudhury et al., 2006).

Awareness of mental health services among adolescents in Rivers State appears to be moderate to high, but this awareness does not consistently translate into actual service utilization. Obiechina and Opubo (2019) investigated awareness of health services among sexually abused secondary school teenagers in the Kalabari Kingdom of Rivers State and found a high mean awareness score ($M = 2.62$ on a 3-point scale), indicating that adolescents are generally aware of available health services including counselling, medical investigations, and referral systems. However, despite this awareness, the utilization of these services was low and statistically insignificant ($t(725) = 0.222, p > 0.05$), suggesting a significant gap between knowledge and actual use.

This pattern aligns with findings from the University of Port Harcourt Teaching Hospital (UPTH), where Chukwujekwu (2019) documented that while adolescents constituted over half (51.7%) of psychiatric clinic attendees, the absolute number of adolescent patients over three years was only 149. Given the high prevalence of mental health conditions such as ADHD (22.1%) and depression (20.8%) within this group, the relatively low patient numbers imply underutilization of formal mental health services at the population level.

Similarly, Ogonna, Alabere, and Babatunde (2024) studied access and utilization of reproductive health services (RHS) among urban and rural adolescents in Rivers State and found low utilization rates 25.5% in urban and 22.6% in rural adolescents. Although this study focused on reproductive rather than mental health services, the low utilization rates and the urban-rural disparity provide a useful parallel to mental health service patterns, underscoring systemic challenges in adolescent health service uptake.

In contrast, the Kalabari Kingdom study highlighted that the availability of health facilities (25 government-owned facilities including primary and secondary centers) was adequate, yet service utilization remained low (Gavin Publishers, 2020). This suggests that availability alone does not guarantee usage, emphasizing the role of other intervening factors.

3.2.2 Factors influencing the utilization of mental health services

Results showed that parental education and profession were the most significant socio-demographic variables affecting mental health treatment use. While parental education did have a favourable effect on their children's use of mental health services, maternal education had no effect on their children's use of such services. This might be because dads play a significant role in guiding and teaching their children, and since most of them have completed postsecondary education and are therefore able to impart their knowledge to their offspring. The utilisation, however, was positively affected by mothers' occupations. Most of the women in this study are company owners, so they had plenty of time to care for their children's mental health and help them get treatment when they needed it. Utilization of mental health services among adolescents in Rivers State is influenced by a complex interplay of individual, familial, socioeconomic, and cultural factors.

Obiechina and Opubo (2019) found that awareness alone did not significantly predict utilization among sexually abused teenagers, indicating that knowledge of services must be accompanied by other enabling factors. Similarly, the African Journal of Medical and Public Health Research (2024) noted moderate mental health literacy but low specific knowledge of disorders, which impairs adolescents' ability to seek appropriate care.

Parental attitudes and support are critical determinants. J Adolesc Health (2023) reported that parental denial, lack of communication, and resistance to treatment were major barriers to adolescent mental health service use. This is echoed in reproductive health studies by Ogonna et al. (2024), where parental influence significantly affected adolescents' access and utilization of services.

Economic access to services is a significant predictor of utilization. Ogonna et al. (2024) found that only 3.17% of rural adolescents had economic access to reproductive health services compared to 31.76% in urban areas. This

disparity likely extends to mental health services, which are often concentrated in urban centers like Port Harcourt. The Kalabari Kingdom's dispersed health facilities further complicate access for rural adolescents (Gavin Publishers, 2020).

While Obiechina and Opubo (2019) found maturity did not significantly influence utilization among sexually abused adolescents, Ogbonna et al. (2024) identified the 15-19 age group as a significant predictor of reproductive health service utilization in both urban (cOR=4.32, p=0.001) and rural (aOR=7.65, p=0.003) settings. This suggests older adolescents may have greater autonomy or perceived need, influencing service uptake.

Religious beliefs were significantly associated with stigma and help-seeking behavior in mental health (African Journal of AJMSPHR, 2024), indicating that cultural context shapes attitudes and utilization patterns. Traditional beliefs about mental illness as spiritual afflictions may divert adolescents from formal services.

3.2.3 Barriers to the utilization of mental health services

According to the results, not knowing about mental health services is the biggest obstacle to using them. However, there is still a barrier to parental support for mental health treatments among teenagers, and even though there was excellent knowledge among adolescents, some did not use these services because they were unaware that they existed. This agrees with the findings of Logan and King (2021), who stressed the need for a service-seeking paradigm that is process-oriented. They stressed the need of parents being aware of their children's discomfort and of being able to recognise certain emotional or behavioural issues as the first steps in seeking treatment. The importance of parents' involvement in their children's mental health care use, as well as the impact of certain developmental factors, on this demographic's utilisation of these services cannot be overstated, according to the experts. Distance to mental health services and lengthy wait times at mental health facilities, which are inadequate to begin with, were ranked as the top two obstacles to access to mental health services in this survey. Adolescents also don't know where to turn for mental health help when they need it, so those involved in the field need to do more to reach out to younger people, particularly through social media, which is popular among this age group.

Because mental health treatments were out of reach financially for the majority of families in Port Harcourt, Rivers State, especially among the teenagers, this was a significant impediment to their use. Government funding for mental health care is also lacking. According to Jenkins (2023), governments should prioritise the adoption of mental health policies and their integration into public health and general social policies. This is due to several reasons, including the fact that mental disorders are costly for societies, slow down progress towards other development goals, exacerbate poverty, and disproportionately impact the poor. Mental health is just as valuable as physical health.

Also, these literatures identify several overlapping barriers that impede adolescent mental health service utilization in Rivers State such as:

Stigma and Discrimination:

Stigma from peers, family, and community members is a pervasive barrier. The mental health literacy study (2025) reported that 24.8% of adolescents experienced stigma, primarily from friends (55.9%) and family (30.9%), which discourages disclosure and formal help-seeking. This barrier is consistent across health domains, including reproductive health (Ogbonna et al., 2024).

Parental Barriers:

Parental denial, poor communication, and resistance to treatment were highlighted as significant obstacles (J Adolesc Health, 2023). Adolescents often depend on parental consent and support to access services, making parental attitudes a critical gatekeeper.

Economic Constraints:

Financial limitations restrict adolescents' ability to afford consultations, medications, and transportation. Ogbonna et al. (2024) found rural adolescents particularly disadvantaged economically, with only 3.17% having economic access to services.

Geographic and Structural Barriers:

Rural adolescents face additional challenges due to the uneven distribution of health facilities. The Kalabari Kingdom study (Gavin Publishers, 2020) emphasized that location significantly affects utilization, with primary health centers unevenly spread across LGAs.

Service Quality and Confidentiality Concerns:

Adolescents are sensitive to privacy issues. Concerns about confidentiality and perceived poor quality or adolescent-unfriendly services reduce willingness to seek care (J Adolesc Health, 2023).

Cultural Beliefs and Traditional Practices:

Cultural interpretations of mental illness as spiritual afflictions lead families to prefer traditional or faith-based healers, delaying or replacing formal treatment (African Journal of AJMSPHR, 2024).

Lastly, the reviewed studies collectively reveal that while awareness of mental health services among adolescents in Rivers State is relatively high, actual utilization remains low due to a constellation of influencing factors and barriers. Parental influence, socioeconomic status, geographic location, cultural context, and stigma interplay to shape adolescents' health-seeking behaviors. These findings parallel patterns observed in adolescent reproductive health services, underscoring systemic challenges in adolescent healthcare access in Rivers State.

Addressing these challenges requires integrated strategies that enhance mental health literacy, reduce stigma, engage parents, improve service accessibility and affordability, and respect cultural contexts. Such comprehensive approaches are essential to improve adolescent mental health outcomes in Port Harcourt and the wider Rivers State region.

4. Conclusion

"Predictors of Utilisation of Adolescent Mental Health Services in Port Harcourt, Rivers State" fills a crucial knowledge gap on what variables impact why teenagers in Nigeria seek out mental health care. There are major changes occurring on all levels of development throughout adolescence, including the physical, emotional, and social. Since many mental problems present themselves at this time, the World Health Organisation (WHO) has designated it as a critical era for mental health. A dearth of studies investigating how young Nigerians see and navigate mental health facilities is striking, given the alarmingly high rates of mental illness among this demographic.

The use of mental health services by students in Port Harcourt, Rivers State, who are in their last year of secondary school, was another declared goal of this research. In order to direct this research study, the authors have articulated four research questions. The conceptual, theoretical, and empirical frameworks were used to examine the literature that was relevant to this research. This research used a descriptive cross-sectional approach. The study's population included 299 students, chosen using Cochran's formula, who were senior secondary school students in government-approved secondary schools in Port Harcourt, Rivers State, and whose ages ranged from 12 to 19 (inclusive). All 299 senior high school students who were selected using a basic random selection procedure were asked to fill out the surveys. A self-administered questionnaire with a standardised format was used to gather data. The Statistical Package for the Social Sciences (SPSS) version 23 was used for the analysis of the gathered data. Tables displayed the findings, which were based on data reported as frequencies (N) and percentages (%). As a means of investigating

potential correlations between many categories, a chi-square test was administered. If the p-value at the 95% confidence interval is less than or equal to 0.05, then the observation was considered statistically significant.

A large portion of the senior secondary school students surveyed in this research were aware that Rivers State offers mental health services to teenagers, but the vast majority had never made use of these resources. Another finding from this research was that almost a third of the participants (28.8%) received mental health education in the classroom. Additionally, the results demonstrated that among those who have sought mental health assistance, 12.4% did so due to anxiety, 12.7% to depression, 12.0% to family issues, 20.7% to stress related to school, and 6.4% to a mix of these four factors.

No statistically significant association was found between the level of Mother's education of respondents and mental health service utilisation by the respondents in the study on the factors associated with mental health service utilisation among senior secondary school students. The p-value was 0.662, which is greater than 0.05 at the 95% confidence interval. However, the data also demonstrated a correlation between respondents' mothers' occupations and their use of mental health services. There was a statistically significant relationship between mothers' occupation and their children's use of mental health services ($P = 0.000$, less than the 0.05 significance threshold). Consequently, a substantial component impacting the respondents' use of mental health services was the mothers' employment, with the majority being company owners.

The findings demonstrated a correlation between the respondents' use of mental health services and the degree of education their fathers had. Respondents' use of mental health services was significantly affected by fathers' education ($P = 0.000$, less than the 0.05 threshold of significance). Accordingly, a substantial component impacting the respondents' use of mental health services was the level of education of the fathers, with a majority holding tertiary degrees. Additionally, respondents' use of mental health services was correlated with the degree of their fathers' occupations, according to the data. There was no statistically significant relationship between respondents' use of mental health services and their fathers' occupation ($P = 0.873$, higher than the 0.05 threshold of significance). So, the fact that most of the fathers were company owners had no impact on whether or not their children sought out mental health care.

The following are the limitations of the study:

1. The findings of this research study cannot be generalized to the entire population of senior secondary school students in Nigeria due to the limited geographical scope of the study.
2. The study made use of self-administered questionnaire because of the sensitive nature of the topic and this may have led to social desirability bias.
3. The study design (cross-sectional) only captures data at a single point in time, making it difficult to assess changes over time.

Based on the results of this survey, it seems that most high school seniors in Port Harcourt, Rivers State were aware that mental health treatments were accessible to them. Evidence also suggests that mental health treatments are crucial to the vast majority of Port Harcourt, Rivers's senior secondary school students. Research conducted amongst high school seniors in Port Harcourt, Rivers State, found that the vast majority of participants had never sought out mental health assistance. Students in their last year of secondary school in Port Harcourt were also surveyed to see what variables impact their use of mental health services. The results demonstrated that there was no statistically significant relationship between the respondents' use of mental health services and their mothers' educational attainment. There was a statistically significant correlation between the respondents' use of mental health services and the amount of employment of their mothers. Furthermore, the results demonstrated that respondents' use of mental health services

was significantly affected by the degree of education of their fathers. Interestingly, there was no significant relationship between the respondents' use of mental health services and their fathers' occupations.

Adolescents in Port Harcourt use mental health services influenced by many variables, according to the study's final conclusion. To lessen the stigma and increase treatment utilisation, mental health education and awareness campaigns are essential. The results provide further evidence that increased mental health communication between parents and teenagers may improve outcomes. In order to encourage teenagers to seek treatment, it is crucial that mental health services be readily available and that they may access them without facing stigma. Based on the findings, specific interventions are needed to remove the obstacles that prevent people from seeking mental health care. Fostering a more supportive environment for young person's suffering mental health issues may be achieved by focussing on developing mental health literacy among adolescents and their families and making services more accessible.

The following recommendations can be made from the research:

1. School administrators should organise seminars and workshops to help maintain the awareness that students and parents have already gained about mental health services. These events should promote and reinforce the importance of students and parents using these services. Even though most respondents are aware of these services, it is vital that they do so.
2. Research on the impact of mental health education and parental participation on students' awareness, attitude, and utilisation of mental health services in Port Harcourt, Rivers State, should be conducted in the future.
3. It is the responsibility of local governments and health organisations to make sure that teenagers have easy access to mental health care. As part of this effort, additional mental health professionals will be trained and services will be made available in schools.
4. It is crucial to initiate community and school-wide initiatives to combat the stigma that surrounds mental health. These initiatives may promote open dialogue about mental health and empower young people to get the support they need without feeling stigmatised.
5. It's important for parents to talk to their kids openly about mental health. The indicators of mental health problems and how parents may assist their children would be better understood if schools organised parent-teacher conferences with an emphasis on mental health education.
6. Governmental advocacy for mental health policy is necessary to guarantee that public health agendas prioritise mental health care. Adolescents have special requirements, and lawmakers should know that mental health services must be easily accessible. This has the potential to result in more resources being allocated to programs that support the mental health of adolescents.

The contribution to knowledge lies in the fact that "Predictors of Adolescent Mental Health Service Utilization in Port Harcourt, Rivers State" is a research that adds to what is already known about teenagers' mental health service awareness, attitudes, constraints, and levels of service utilisation. This research has also shed light on the variables that are linked to the use of mental health services by these teenagers.

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