



# PROPENSITY AND PATTERNS OF SUBSTANCE USE DISORDERS IN NIGER DELTA UNIVERSITY, BAYELSA STATE –NIGERIA

BY WISDOM SELEKEKEME KROKEYI, PHD DEPARTMENT OF ECONOMICS, FACULTY OF SOCIAL SCIENCES,

Niger Delta University, Wilberforce Island, Bayelsa State. Email Address: wisdomesele@ndu.edu.ng; selekekeme2000@gmail.com: 234803677252

## ABSTRACT

The study examines explicitly the propensity and patterns of substance use disorders among students of different age groups. The students' propensity to save was analyzed using the ratio of the average amount spent on substance use to the total average income. The patterns of substance use disorders among students of different age groups were examined using frequency and simple percentages, while a one-way ANOVA test and Tukey posthoc test were conducted to determine if there was a statistically significant difference in the patterns of substance use disorders among different student age groups, and which group among the different age groups may differ (significantly) from each other. Empirical results showed that students do have a significant propensity to substance use disorder, and the average propensity to substance use disorder generally increases with age. A marginal propensity to substance use disorder of about 36 percent and 54 percent were found for the student's age groups 24 to 33 years and 34 to 40 years. It was also found that the most common patterns of substance use disorder for every age group of students were smoking and swallowing. Though there are different patterns of substance use disorders, no significant difference in substance use disorders between students' age groups was found. Based on the above, the study recommended sensitization, targeted to students of all age groups to discourage drug use on university campuses. Also, well-designed mobilization and programs should be implemented to reduce the potential for voluntary substance use disorders among students in universities.

Keywords: Disorders, Drugs, Substances, Propensity, Patterns.

## BACKGROUND

- Universities serve as a unique environment and platform for young adults to experience freedom, independence, and social interactions.
  - These factors among others such as academic pressures and other stressors could contribute to the vulnerability of students engaging in substance use.
- In the same vein, it is important to understand the patterns of substance use.
- Patterns of substance use disorder involve examining the types of substances commonly abused, the frequency and intensity of use, and the associated risk factors.

## METHODOLOGY

- This study was conducted in Bayelsa State.
- It is made up of 874,083 males and 830,432 females clustered in eight local government areas (Annual Abstract of Statistics, 2012).

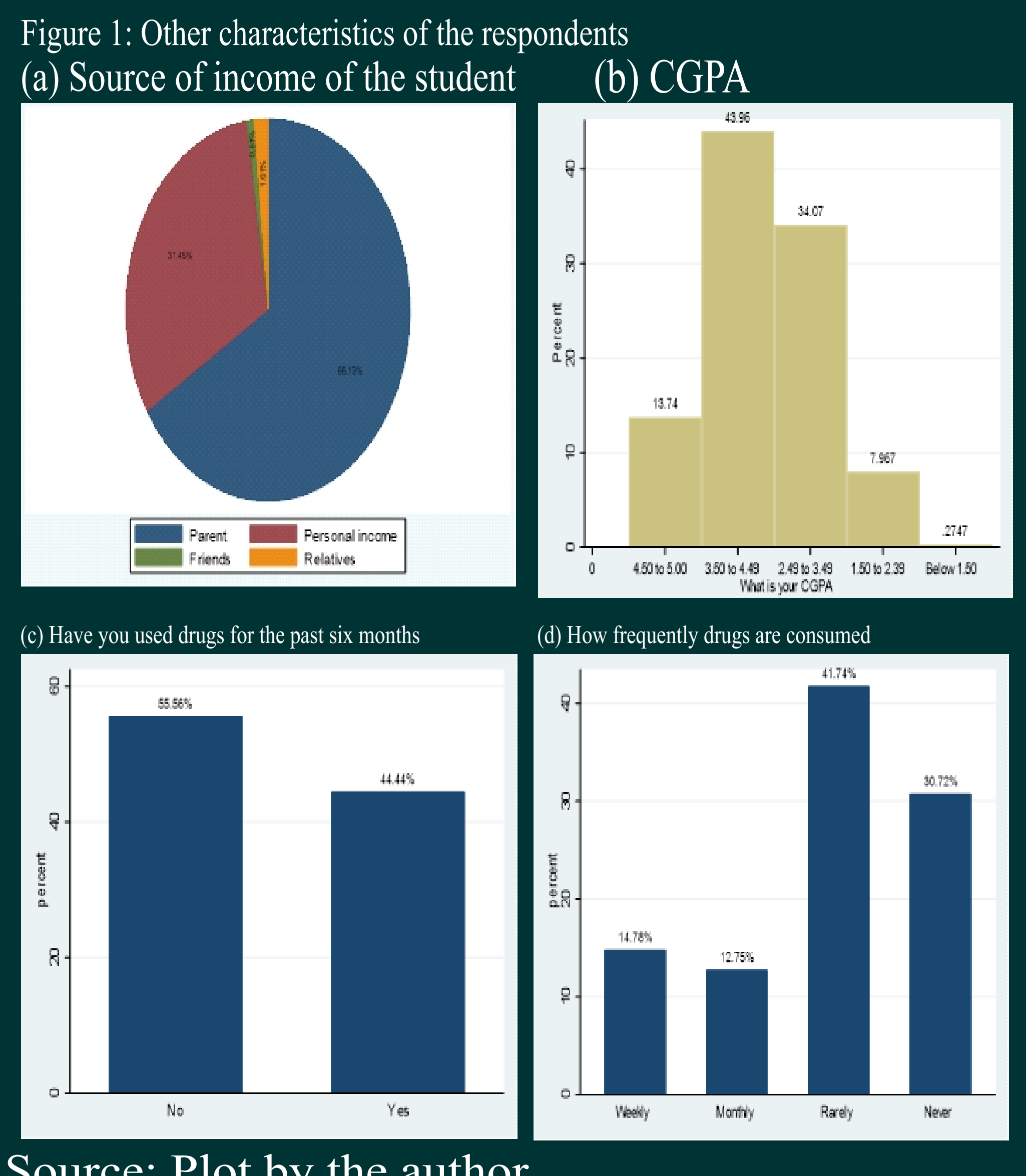
**TABLE 1: DESCRIPTIVE STATISTICS OF THE RESPONDENTS' PROFILES**

	Frequency	Percentage (%)
<b>Gender</b>		
Males	232	59.49
Females	158	40.51
<b>Total</b>	390	100.00
<b>Age Group</b>		
14 – 23 years	236	60.67
24 – 33 years	137	35.22
34 – 40 years	16	4.11
<b>Total</b>	389	100.00
<b>Marital Status</b>		
Single	370	94.87
Married	18	4.62
Divorced	2	0.51
<b>Total</b>	390	100.00
<b>Level of Study of Student</b>		
100 level	15	3.85
200 level	130	33.33
300 level	115	29.49
400 level	107	27.44
Other levels	23	5.90
<b>Total</b>	390	100.00
<b>Faculty of Student</b>		
Faculty of Arts	47	12.05
Faculty of Agriculture	16	4.10
Faculty of Basic Medical Science	34	8.72
Faculty of Clinical Sciences	2	0.51
Faculty of Engineering	65	16.67
Faculty of Management Sciences	47	12.05
Faculty of Sciences	48	12.31
Faculty of Social Sciences	82	21.03
Faculty of Education	37	9.49
Faculty of Pharmacy	12	3.08
<b>Total</b>	390	100.00
<b>Residence of Student</b>		
Off-Campus	274	71.17
Campus	111	28.83
<b>Total</b>	385	100.00

Source: Author's computation from field survey

## 4.2 OTHER CHARACTERISTICS OF THE RESPONDENTS

The other characteristics of the respondents considered are the students' source of income, Cumulative Grade Point Average (CGPA), use of drugs for the past six months, and how frequently drugs are consumed.



## 4.2 STUDENTS' PROPENSITY TO SUBSTANCE USE DISORDERS

The students' propensity to substance use disorders was ascertained. The average propensity to substance use disorders and the marginal propensity to substance use disorders of the students were estimated. The estimates are reported in Table 2.

**TABLE 2: STUDENTS' PROPENSITY TO SUBSTANCE USE DISORDERS BY AGE GROUP**

Age Group	Number of Students Reporting	Percent to Total (%)	(a*) Total Average Income	(b*) Total Average Consumption	(c*) Average Propensity to Consume (%)	(d*) Marginal Propensity to Consume (%)
14 – 23 Years	236	60.67	36,250	10,150	28.00	21 (3.32)
24 – 33 Years	137	35.22	59,400	26,400	44.44	36 (7.90)
34 – 40 Years	16	4.11	98,900	58,050	58.70	54 (6.62)
41 and above	-	-	-	-	-	-
All Students	389	100.00	194,550	94,600	48.63	21 (3.57)

(b\*) Consumption is defined as income spent on drugs per month  
(c\*)  $\frac{\text{Average Consumption}}{\text{Total Average Income}}$   
(d\*) Estimated by regressing current income on consumption  
\* Figures in parentheses are the t-values

Source: Computed by the author

- The majority of the respondents – 60.67 percent agreed to substance use disorder within the period of conducting this study. A marginal propensity to substance use disorder of about 36 percent and 54 percent was estimated for students age groups 24 to 33 years and 34 to 40 years. The propensities estimates, as shown in column (d), are statistically significant with t-statistics of 7.90 and 6.62. Also, students within the age group of 14 to 23 years show a significant marginal propensity of 21 percent. This means that the students do have a significant propensity to substance use disorder.
- The average propensity to substance use disorder, measured as the ratio of the average amount spent for substance use to total average income was 48.63 percent for the total sample of 389 students.
- This means that the average student spends about 48.63 percent of his/her total income within six months.
- The students whose source of income is parents were 246, comprising 66.13 percent of the total sample, those who have personal income were 117 or 31.45 percent, those whose sources of income are friends were 3 or 0.81 percent, while those who depend on relative for income were 6, which is equivalent to

1.61 percent of the total sample. Thus, a majority of the students sampled have parents as their source of income.

As regards the CGPA, 50, or 13.74 percent of the students had having CGPA of between 4.50 to 5.00, 160, or 43.96 percent had a CGPA of between 3.5 to 4.49, while 124, or 34.07 percent had a CGPA of between 2.49 to 3.49. Those whose CGPA was between 1.50 to 2.39 were 29 or 7.97 percent of the total sample, while students below 1.50 were 1 or 0.27 percent of the total sample. Therefore, the majority of the sampled students have a CGPA of 3.50 to 4.49.

200 or 55.56 percent of the students have not used drugs for the past six months, while 160 or 44.44 percent of the students sampled reported to have used drugs for the past six months. Therefore, most of the sampled students have not used drugs for the past six months. Students who used drugs weekly were 51 or 14.78 percent, 44 or 12.75 percent use drugs monthly, 144 or 41.74 percent rarely use drugs, and 106 or 30.72 percent never used drugs. Therefore, the majority of the students sampled rarely used drugs.

## 4.3 PATTERNS OF SUBSTANCE USE DISORDERS AMONG STUDENTS OF DIFFERENT AGE GROUPS

The patterns of substance use disorders among students of different age groups were analyzed and compared. The student age groups compared are 14 – 23 Years, 24 – 33 Years, 34 – 40 Years, and 41 and above. Table 3 reports the results concerning the patterns of substance use disorders among students of different age groups.

Table 3: Substance use disorders through smoking, swallowing, snorting, injecting, and suppositories

	Smoking		Swallowing		Snorting		Injecting		Suppositories	
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
14 – 23 Years	32	28.32	69	61.06	3	2.65	7	6.19	2	1.77
24 – 33 Years	39	48.75	36	45.00	1	1.25	3	3.75	1	1.25
34 – 40 Years	3	42.86	3	42.86	1	14.29	-	-	-	-
41 and above	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>74</b>	<b>37.00</b>	<b>108</b>	<b>54.00</b>	<b>5</b>	<b>2.50</b>	<b>10</b>	<b>5.00</b>	<b>3</b>	<b>1.50</b>

Source: Computed by the author

- The pattern of substance use disorders for the majority of the students between the ages of 14 to 23 years is through swallowing.
- For students who are between the ages of 24 to 33 years, the most common pattern of substance use disorder is smoking.
- None of the students within this age group uses injections or suppositories as a pattern of substance use.
- To determine which group among the different age groups may differ (significantly) from each other, a Tukey posthoc test was conducted. The results are reported in Table 4.

**TABLE 4: ONE-WAY ANOVA AND A TUKEY POST HOC TEST RESULT**

Panel A: One-Way ANOVA Test Result				
Source	Partial (or Marginal) Sums of Squares	Mean Square (MS)	F	p-value
Between groups	3.8007	1.9003	2.79	0.0639
Within groups	134.1992	0.6812	-	-
Total	138	0.6935	-	-
Bartlett's chi2(2) 0.3813 (p = 0.826)				
Panel B: A Tukey Post-hoc Test Result				
	Contrast	Std. err.	Tukey	
			t	p-value
14 – 23 vs 24 – 33	-0.2829	0.1206	-2.35	0.052
14 – 23 vs 34 – 40	-0.2060	0.3214	-0.64	0.798
24 – 33 vs 34 – 40	0.0768	0.3253	0.24	0.970

source: Authors' computation from field survey

## 5. CONCLUSION AND RECOMMENDATIONS

University students in Nigeria, therefore, do have a significant propensity to substance use disorder.

Sensitization, targeted to students of all age groups to discourage drug use is recommended on university campuses.

## REFERENCES...