

# PERCEPTIONS OF ADOLESCENTS AND YOUNG PEOPLE IN KISANGANI REGARDING PSYCHOACTIVE SUBSTANCES

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## Abstract

*The objective of this study was to determine the perceptions of adolescents and young people regarding the use of psychoactive substances in Kisangani. METHODS. We conducted a cross-sectional study from July 1 to October 1, 2023. The study population consisted of adolescents and young people in the city of Kisangani. Using cluster sampling, a cluster effect of 2 was applied to calculate the sample size using the SCHWARTZ formula, resulting in 806 adolescents and young people being selected and interviewed using a questionnaire deployed on Kobocollect. Categorical variables were presented as percentages, and skewed quantitative variables were expressed as medians with interquartile ranges. Sixty-five percent of adolescents and young people have negative perceptions about the benefits of psychoactive substances, 68.73% perceive a negative influence from peers on the use of psychoactive substances, and 70.72% perceive easy access to psychoactive substances in bars.*

*Adolescents and young people in Kisangani have negative perceptions about the benefits of psychoactive substances; they perceive a negative influence from peers and easy access to psychoactive substances. Raising awareness among young people about the dangers of these substances and enforcing the law prohibiting the use and sale of psychoactive substances to minors is essential to reverse the trend.*

**Keywords:** Perceptions, adolescents & young people, psychoactive substances, Kisangani.

## I. INTRODUCTION

The frequency of alcohol, tobacco, and other regulated drug consumption is increasing worldwide. Smoking is rapidly spreading in developing countries and among women. Currently, 50% of men and 9% of women in developing countries smoke, compared to 35% of men and 22% of women in developed countries. (1) Alcohol and tobacco are often at the forefront of consumption. Indeed, not only are both legal and widely available almost everywhere in the world, but their sale is also supported by strong and aggressive advertising and promotion campaigns targeting young people. (2)

Estimates from the UNODC indicate that around 200 million people use some type of illicit substance. In fact, 56% of consumers within the total global population and 3.9% of individuals aged 15 and older have used cannabis at least once between 2010 and 2011. (3)

In many American and European countries, over 2% of young people use heroin and nearly 5% have smoked cocaine at some point in their lives. In Western Europe, 8% of young people and in the United States more than 20% have used at least one type of illicit substance other than cannabis. The use of injectable drugs is also on the rise, with consequences for the spread of HIV infection in an increasing number of countries. (4) The African continent is not exempt from the problem. The World Health Organization has noted a significant increase in alcohol consumption in developing countries in Africa since the early 1990. (5)

Moreover, according to the 2012 report from the United Nations Office on Drugs and Crime, data from 2010 show that cannabis and opioids were the primary types of drugs responsible for a significant portion of treatment requests in Africa. (4)

Heterosexual relationships are the primary mode of HIV transmission in Africa. Nearly 221,000 people who inject drugs live with the virus; the situation is more severe in coastal cities of East Africa, such as Mombasa and Dar es Salaam, where prevalence exceeds 40%, and reaches up to 90% in Mauritius. (5)

A survey conducted in Kivu, D.R. Congo, in 2020 on the prevalence of psychoactive substance use showed that 54.5% of adolescents and young people engage in drug use. The report published in the journal "Maximum" in January 2016 on drugs in the DRC indicates that the national prevalence of drug addiction among young people corresponds to the "very vulnerable country" rating by the United Nations. To date, at least 70% of young people in the popular neighborhoods of Kinshasa are exposed, and about 40% consume a combination of hard drugs and adulterated alcohol. (6)

The main reported adverse health effects include HIV infection and accidents due to the substance's impact on physical coordination, concentration, and judgment, including injuries. Psychoactive substances significantly contribute to the burden of non-communicable diseases such as hypertension and cancers, highlighting the epidemiological transition in D.R. Congo. (6)

The socio-economic damage caused by the abusive use of these psychoactive substances and the resulting dependence remains significant. This misuse destabilizes civil society due to the rise in crime (gang wars, kidnappings, extortion). According to some opinions, many social phenomena experienced in Kinshasa, particularly "kuluna," are the result of a youth enamored with and dependent on psychoactive substances. (7)

Psychoactive substances affect schooling, encourage young people to drop out of school, reduce work performance and productivity. (8)

The literature review informs us that the main and frequent motivations for young people to consume psychoactive substances are either extrinsic, such as curiosity, pleasure, the desire to have a new experience, or to belong to a group; or intrinsic, such as the need to forget conflicts, family problems, or low self-esteem, to transgress prohibitions or challenge authority, and to gain the courage to commit a crime. Finally, there are functional motives based on their dysfunctional perceptions or beliefs, such as enhancing physical or mental abilities to improve sexual, athletic, or academic performance. (9) (14)

Many of our questions remain unanswered regarding the city of Kisangani, where the use of these substances is also commonly observed. In particular, we seek to understand the perceptions of adolescents and young people in Kisangani about psychoactive substances, the prevalence of abusive use among adolescents and young people in the city, the profile of abusive users, the factors associated with this abusive use, the motivations and social consequences of such abuse, as well as effective interventions to prevent the escalation of this issue.

The objective of this study was to describe the perceptions of adolescents and young people in Kisangani regarding psychoactive substances.

## II. MATERIAL AND METHODS

### II.1. MATERIAL

#### 1) Description of the study environment

This study was conducted in Kisangani, the capital of the Tshopo province, a city located in the northeastern part of the Democratic Republic of the Congo. It comprises 6 unstratified urban communes and 67 neighborhoods, consisting of 1,132 administrative blocks and streets. The total population of the city is 1,366,000 inhabitants as of 2022 (World Bank, 2023), with the proportion of adolescents and young people estimated at 32.3% (PNDS, 2013), or 441,218 adolescents and young individuals.

#### 2) Study population

The study population consisted of adolescents and young people aged 10 to 24 years residing in Kisangani.

### II.2. METHODS

#### 1) Type of study and period

This was a cross-sectional study conducted during the period from July 1 to October 1, 2023.

#### 2) Sampling

##### a) Sample size

The sample size calculated using SCHWARTZ's formula ( $n \geq Z^2pq/d^2$ ) for an unknown prevalence of 50% and a precision level of 0.05, while accounting for a cluster effect of 2, resulted in a total of 768 subjects. Increased by 5% (38 subjects) to anticipate the non-response rate, we obtained a total sample size of 806 subjects.

##### b) Sampling technique

We used multistage cluster sampling where communes were primary units:

- At the first stage, 2 municipalities were chosen randomly.
- At the second stage, in each municipality drawn, the list of neighborhoods was drawn up. From this list, 4 neighborhoods per municipality were drawn in a simple random manner.
- At the third level, in each district, the list of streets was drawn up. From this list were drawn in a simple random manner 7 streets.
- Finally, at the fourth level, in each street, a plot survey of households housing adolescents and young people aged 10-24 was drawn up. From this survey, 15 households were drawn systematically until there were 806 respondents. If more than one young person aged 10-24 was found in a selected household, the random choice was made to retain only one.

##### c) Inclusion criteria

Were eligible for the study:

- Adolescents and young people aged 10-24 in selected households;
  - Having lived at least 12 months in the environment;
  - Without mental incapacity preventing participation in the survey
  - Who voluntarily agree to participate in the study
- And for minors, the assent of the young person and/or the consent of the parents obtained.

#### 3) Data collection technique

Data collection in households was done by interviewing young people aged 10-24, based on a questionnaire pre-tested with adolescents and young people aged 10 to 24 in the Kabondo commune, and deployed on Kobocollect after amendment. The collection team was made up of 8 interviewers trained at the rate of one interviewer per neighborhood and 2 supervisors trained at the rate of one supervisor for four interviewers.

The investigators administered the questionnaire on Kobocollect in the local language according to the respondent's usage and then submitted it to the server. The supervisors were responsible for ensuring the effectiveness of the interviewer in the selected streets or blocks, supervising the completion of the questionnaire and validating it before submission to the server.

Two experts from the University of Kisangani, psychologist and sociologist respectively, were used to identify the variables to measure on the social and psycho-affective environment of adolescents and young people.

#### 4) List of variables

Based on the literature review, the following variables were retained:

- Socio-demographic characteristics: sex, marital status, religion, age, educational level, economic level, family structure of origin and occupation.
- Psychosocial environment: perception of the advantages of SPAs, perception of the influence of loved ones and access to SPAs.

#### 5) Data processing techniques and analysis

The data were entered on kobocollect and extracted in Excel then analyzed on Stata 13. Quantitative variables with asymmetric distribution were presented in the form of median and interquartile space, and categorical variables in the form of proportions (%).

**6) Ethical considerations**

After authorization from the Ethics Committee and administrative authorizations, the assent of the minor and consent of the guardian were required. The confidentiality and anonymity of the information were guaranteed. The study had no adverse effects on the health of the participants and no conflict of interest was noted.

**III. RESULTS**

**III.1. SOCIODEMOGRAPHIC AND ECONOMIC CHARACTERISTICS OF THE SURVEYS**

**Table I: Distribution of respondents according to characteristics**

<b>Variable</b>	<b>Wording</b>	<b>Number (%) n = 806</b>
Gender	Male	537 (66,63)
	Female	269 (33,37)
Age	20 years (21 – 17)	
	18 – 24	525 (65,46)
	10 – 17	277 (34,54)
Marital status	Single	590 (73,20)
	Married	118 (14,64)
	Divorced	88 (10,92)
	Widowed	10 (1,24)
Educational level	Low	444 (55,09)
	High	362 (44,91)
Economic level	0,50\$/J (0,66\$ – 0,38\$)	
	Low	788 (97,77)
	High	18 (2,23)
Church attended	Catholic	272 (33,75)
	Revival	164 (20,35)
	Protestant	156 (19,35)
	Any Church	48 (5,96)
	Kimbanguist	42 (5,21)
Occupation	Student	388 (48,14)
	Non-occupation	194 (24,07)
	Employee	147 (18,24)
	Trader	77 (9,56)
Family structure	Single or no parent	462 (68,55)
	Two-parent	212 (31,45)

Primarily, our respondents are male, aged 18 to 24, single, with a low level of education and economic status, attending the Catholic Church, and living without both parents.

**III.2. PERCEPTIONS OF THE BENEFITS OF PSYCHOACTIVE SUBSTANCES**

**Table II: Distribution of respondents according to perceptions of the benefits of psychoactive substances**

<b>Perceptions of the benefits of psychoactive substances.</b>	<b>Yes (%) n = 806</b>
Help someone sleep well.	528 (65,51)
Help someone feel good or cool.	524 (65,01)
Give the courage to express oneself.	504 (62,53)
Increase sexual functions in men.	468 (58,06)
Stimulate appetite for healthy eating.	458 (56,82)
Enhance the ability to work or study.	400 (49,63)
Help someone forget their problems.	400 (49,63)
Help fight against bad spirits (cigarette)	288 (35,73)

Just over three out of five young people (65.51%) have negative perceptions about the benefits of SPA.

### III.3. PERCEPTIONS OF THE INFLUENCE OF PEERS ON THE USE OF PSYCHOACTIVE SUBSTANCES

*Table III: Distribution of adolescents and young respondents according to the influence they experience from their peers on the use of psychoactive substances*

Influence of peers	Yes (%) n = 806
Friends consume these substances	554 (68,73)
Friends accept seeing him consume	554 (68,73)
Can consume in the presence of his friends	544 (67,49)
Friends suggest consuming with them	542 (67,24)
Parents or family members consume	538 (66,75)
Can consume in the presence of his parents	328 (40,69)

More than three out of five young people acknowledge having experienced negative influence or tolerance from peers regarding the use of these substances.

### III.4. OPINION ON EASY ACCESS SITES FOR PSYCHOACTIVE SUBSTANCES

*Table IV: Distribution of respondents according to their opinion on access sites for psychoactive substances*

Site d'approvisionnement	Number (%) n = 806
Terrace/bar (Nganda)	570 (70,72)
Shop	356 (44, 17)
Mourning place	281 (34, 86)
Informal vendors	274 (33,99)
Pharmaceutical outlets	126 (15,63)

#### Regular Access to Psychoactive Substances:

- 70% of young people reported having easy access in snack bars.
- Nearly 40% of young people mentioned access in shops.

#### New Access Locations :

- About 30% of young people identified places of mourning as a new location for accessing and consuming Psychoactive Substances, often in a context of solidarity.

## DISCUSSION

#### Characteristics of the Respondents

Our study shows that the majority of respondents were male, aged 18 to 24, single, with a low level of education and economic status, attending Catholic church, and living without both parents. These characteristics have been observed since 2013 for the youth population in the Democratic Republic of Congo in general, and in Kisangani in particular. (10) (15)

Contrary to the large portion of the Congolese population, which is predominantly female, our study shows a predominance of males, which can be explained by the availability of our respondents. Nearly half of our respondents are students, which is understandable given the chosen age range of 10 to 24 years.

#### Perception of the Benefits of Psychoactive Substances

The proportion of adolescents and young people with a negative perception of the benefits of Psychoactive Substances is 65.51% among our respondents. Bryant, A. L. in "How academic achievement, attitudes, and behaviors relate to the course of substance use during adolescence: A 6-year multiwave national longitudinal study" also found that the majority of adolescents had negative perceptions of the benefits of Psychoactive Substances, which not only influenced their use of Psychoactive Substances during adolescence but also subsequently affected their attitudes and practices as well as their academic journey. Perceptions foster the adoption of behavior. (11) (16)

For his part, already in 2001 in his publication "Using Theory to select messages in antidrug media campaigns Public communication campaigns," Cappella, J. M. argued that negative perceptions of Psychoactive Substances supported their use regardless of age or gender, and that mass communication campaigns were useful in combating drugs. (12) (17)

#### Perception of Peer Influence on the Use of Psychoactive Substances

Just over three out of five respondents in our study, or 68.73%, acknowledged a negative influence from their peers regarding the use of Psychoactive Substances. These data corroborate the work of Capella, Bryant, and Neighbors, who highlighted the high frequency of negative influence among peers or parental tolerance. Furthermore, they noted that a

poor perception of the benefits of Psychoactive Substances and negative influence from peers or parental tolerance were negatively associated with the consumption of Psychoactive Substances. (13) (18) (19)

Behavioral sciences indeed consider peer influence as feedback on the adoption of behavior. This feedback can inhibit disapproved behavior when it involves positive influence from peers, while in the case of negative influence from peers, the effect reinforces the adoption of behaviors such as the use of Psychoactive Substances.

### Opinion on the Accessibility of Psychoactive Substances

Seven out of ten youths (70.72%) in this study reported having regular access to Psychoactive Substances at local bars, and nearly four out of ten reported access in shops.

In the same vein, the work of Paul Levi (2016) specifies that he identified 2,360 consumption and sales sites and networks in the city of Kinshasa alone. He adds that in cities across the Democratic Republic of Congo, young adolescents or minors consume various Psychoactive Substances openly, including tobacco and a potent alcohol known as "Zododo." Traffickers operate small kiosks called "Nganda" or bars, where youths can purchase cannabis without facing any repercussions. (7) (20)

### Limitations of the Study

Ideally, the study would have also identified the factors explaining the abusive use of psychoactive substances among adolescents and youths in Kisangani. This article could follow, although we did not benefit from the necessary temporal relationship between factors and outcomes due to the cross-sectional nature of this study.

### CONCLUSION

The adolescents and youths in Kisangani are predominantly male, aged 18 to 24, single, with low educational and economic levels, attending Catholic Church services, and living without both parents. They hold negative perceptions of the benefits of psychoactive substances and are subjected to negative influences from their peers. They perceive easy access to Psychoactive Substances primarily at terraces (bars) and shops, often in violation of existing laws.

Interventions aimed at raising awareness among youths about the harms of Psychoactive Substances, along with the enforcement of regulations by sellers and law enforcers regarding the use and sale of Psychoactive Substances to minors, will be necessary to reverse this trend.

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