



# PREVALENCE OF MENTAL DISORDERS IN A PRISON POPULATION IN RWANDA

Kigali, December 2018



## Aknowledgements

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Barbara Hintermann

President DiDé



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# **CHAPTER 1: Introduction**

## **1.1. Background of the study**

According to R. Doron (1991:107) incarceration is defined as “as an act of social restraint that isolates the detainees from the community, and put them away from the public world.” Detainees are under the control of the administration that assumes and controls their lives, their relations, S. Royer (2010) precisely say that “the prison is a place of arrest.”

The prevention of freedom brings them to full submission on structures and rules put together by the prison administration. Detainees have no intimate life, and in reality nothing belongs to them.

Seena Fazel, John Danesh (2002) worked on 23000 prisoners. They brought 62 surveys from different European countries. They found out that 3.7% of men and 4% of women are psychotic; 10% of men and 12% of women suffer from severe depression, 65% of men and 42% of women have personality issues. According to Shader (1994), the prevalence of trauma in prison has increased from 5 to 10% in the United States.

In Rwanda, ARCT (2011) has conducted a study on evaluation on the need and interventions in the mental health in prisons (the case

of Kigali Central Prison). Participants have confirmed the existence of mental problems in this prison:

Mourning the fact that they have not accepted their sentences, and also for having separated from their families.

Post-traumatic stress; use of drugs and alcohol; depression, psychosis, etc.

Severe depression was observed at 100% in women who did abortion or killed their new-borns, 93.75 for prisoners who have murdered a family member, and 85.18% for prisoners of genocide crimes.

**What are psychological effects on the person who is incarcerated?**

The feeling of being profoundly hated because of their crimes, that the justice system and society never forgive them. The feeling of being abandoned and annihilated because of their crimes: There is a conflict between the relationship of the one committed a crime, and the relationship with their behaviour.

The feeling of being inadequate: The loneliness and the abandonment in which detainees live create a feeling of incompleteness and of revolt (“you committed a crime, therefore

you are cut off the society, and that's why you are alone, in your four walls"). This feeling will last for ever.

Destruction of personality (emotional struggles, without forgetting sexual issues, sleeplessness, food, and medical problems)

A high level of dehumanization leads to dependency and become slaves to daily or annual routines, without any possibilities for positive change. Being in a constant state of bitterness, discouragement, and what worse, loss of true-self is.

Loss of family bond: separated from spouses and children (severe and unjust punishment, and victims with less or no hope of restoration).

The immensity of mental health has not attracted the attention of those who are responsible of prison system. Or the situation is unavoidable if they want the prison system maintain its corrective nature, and that of working towards social reintegration of ex-detainees.

## **1.2. Problem statement and rationale**

Since 2006, there exist a protocol of partnership which was signed between the former Rwanda Ministry of Interior and Security and the Dignity in Detention Foundation (DiDe); a partnership which allows the latter to implement psychosocial mental health projects

in detention prisons in Rwanda. Under this partnership, between 2006 and 2010, Dignity in Detention Foundation implemented Minors' Care' from French Endadrement des Mineurs (ENCADEMI)' which aimed at providing mental health and psychosocial, education, and professional training. The first project of this kind started with minors incarcerated in the Central Prison of Muhanga/ Gitarama. After the complete relocation of all condemned minors to the Eastern Province (Nyagatare), in 2011, DiDe Foundation implemented Phase I of its mental health and education project in the convicted Minors Rehabilitation Center of Nyagatare.

Phase II of the project of three years commenced in July 2014 and ended in June 2017. The annual timeline of the project had multiple activities planned, including the training of psychologists working in prisons across the country in:

- The use of diagnostic tools, treatment and monitoring of persons in psychological difficulties ;
- The psychological support for minors through « one-on-one interviews », « narrative group » and « theatre – forum » in detention centers.

In fact, for the sake of sustainability, Rwanda Correctional Services (RCS) and Dignity in Detention Centers agreed to the transfer of competences, now especially in technical capacity building of

psychologists serving in prisons through training and clinical supervision.

Besides training sessions of psychologists serving in prisons, the clinical multiple/cases/situations which were analyzed demonstrated, empirically, the depth and complexities of mental health problems. This is at the core of our decision to conduct in depth study aiming at the evaluation of psychological and psychiatric problems in Rwandan detention centers.

If this study alone does not motivate the need to improve the psychological life of inmates in Rwandan prisons, it should subsequently, serve at simplifying, codifying, and facilitating the psychosocial interventions in detention centers.

It is important to emphasize that this study was conducted in a favorable environment, whereby, in its structure and protocols, the Prisons' Administration has integrated in its mission, and the humanization of detention milieu and a preparation of social reintegration.

### **What are psychological effects linked to the person's incarceration?**

There exists a deep sentiment of feeling hated because of his/her mistakes, a belief that the society may never pardon. The feeling of

being rejected and ostracized/annihilated due to his/her mistakes: there is confusion between the relation with the offended, and the relation with his/ her behavior.

The feeling of being misunderstood: Loneliness and abandonment under which the prisoner lives create a misunderstanding and a revolt « you messed up, therefore you are taken out of society and you have to be alone between these four walls ». This revolt remains forever.

The destruction of personality (Affective-will and emotions-intellect without forgetting sexual related problems, sleep, food, and medical problems).

A very high depersonalization becomes parasite and he/she has to submit daily to this routine for many years, without the real possibility to take initiative and positively transform his/her personality. A constant state of bitterness, of discouragement, and worse, the anesthesia of the real-Self- a prerequisite for recidivism (birth of the primitive dimension).

The destruction of a family set-up: spouses separated, children separated (A deep feeling of unjust punishment which creates new victims for the system who will never have the right for reparation).

The mental health component has not necessarily focused its attention on institutions which have prisons under their portfolio. Yet, this is a compulsory component, if prisons have to maintain their **correctional nature** and this has to be done with a perspective of a thorough work geared towards freed prisoners' **social reintegration**.

**In this respect, this study will seek to systematically answer the following questions:**

1. What types of psychological and psychiatric troubles observed in Rwandan prisons?
2. What the prevalence of psychological and psychiatric troubles observed in Rwandan prisons?
3. What are possible consequences in the life of the prisoner and his/her social reintegration after release?
4. What preventive measures and means to respond to psychological and psychiatric troubles that are put in place in prisons? What measures which are in place now?

### **1.3. Study objectives**

- ✓ Identify the psychological and psychiatric disorders observed in Rwandan prisons;
- ✓ Evaluate the prevalence of these disorders in Rwandan prisons;



- ✓ Provide psychological tools for the diagnosis and treatment of psychological and psychiatric disorders in Rwandan prisons;
- ✓ Set up a design of prevention and management of psychological problems in Rwandan prisons.

## **CHAPTER 2 : METHODOLOGY**

### **Research Design**

In order to cover the proposed objectives for this study, a quantitative design was privileged. This research design helped researchers to establish whether there are or not any type of psychological problem and their severity, moderate or weak levels. Data were collected through a self-reported and semi-structured questionnaire.

### **Population**

Participants in this study are prisoners who are incarcerated in the following locations: Huye, Rwamagana, Nyarugenge (1930), Rusizi, Musanze for men, and Nyarugenge and Ngoma for women and Nyagatare for minors. We have decided to work at least with half of the prisons that are in Rwanda. For those working with men, we have chosen one prison in every province as well as the City of

Kigali, and for women we have chosen two prisons that house them ( Gikongoro and Ngoma), and we have as well included the one minor prison ( Nyagatare). Personal team of psycho-medico social (doctors, nurse, and social assistants) form a second source of information in regard to complete data collected from prisoners.

### **Inclusion criteria**

#### *Detainees:*

- ✓ Being imprisoned for at least 6 months
- ✓ Absence of physical or medical conditions which would impede the data collection
- ✓ Voluntarily agree to participate in the study

#### *Psycho-medico Staff:*

- ✓ Working experience in prisons at least 1yr
- ✓ Being available and agreed to participate in the study
- Exclusion criteria: out of above inclusion criteria

## 2.1. Sample size

### Sample:

- ✓ *Prisoners*: was calculated according to Yamane (1967)'s formula

$[n = N/1 + N(e)^2]$ ; *n*= Sample Size, *N*= Population and *e* = Error Margin

By using this formula

$$N= 55.704 \quad e=.04$$

$$n= 757 \text{ (M= 550, F= 44 and minors= 163)}$$

- ✓ *Staffs*: 3 staffs/prison, Total: 28 staffs

### Stratified sampling:

- ✓ Men; Huye= 194, Rwamaganaa= 203, Nyarugenge = 57, Rusizi= 61, and Musanze= 35.
- ✓ Women: Nyamagabe= 44
- ✓ Minors: Nyagatare Juvenile Prison =163

**Simple random sampling**, specifically the step technique

The sample size was calculated based on three categories of the study population namely: men (N=51.402), women (N=4.079), and

minors (N=223)] in order to have a representative sample for each category. Therefore, we obtained 397, 364 and 143 individuals, respectively for men, women and minors, using Yamane (1967) formula, giving us a total of 904 participants. It is a simplified version of the formula to calculate the sample size.

### **Sampling Procedures**

Once the total number of participants (n) was calculated for each category, we randomly determined the number of candidates for each pre-selected prison. This way, a stratified sampling technique allowed us to calculate the exact proportion of the subjects for each prison. In the same vein, we found 139, 147, 40, 44, and 24 for men respectively in Huye, Rwamagana, Nyarugenge, Rusizi, and Musanze prisons. With regards to women, we have maintained 248 and 116, respectively drawn from Nyamagabe and Ngoma prisons; while for minors, we maintained 143 from Nyagatare prison.

The random sampling which is based on a random selection of individuals from a population of the study to be part of the sample was considered. It consists of selecting individuals without prior knowledge or any particular criteria, provided they selected individuals represent the subjects among population of study. These specificities allow researchers to use statistical criteria which in return help to aggregate findings vis-à-vis the error margin chosen

for the sample. This sampling was chosen because the random nature of the selection gives equal chances to all individuals. (Or a known likelihood) to be part of the sample which will be quantified. Definitely, this sampling technique guaranteed the generalization quality of the findings to the general study population (inferential statistics)

Specifically, the simple random sampling, which requires a list of all candidates of the population at hand was applied. This random selection consisted of choosing individuals such that each member of the main population had equal chances to be included in the sample.

How did it work? From the list of all individuals, in this case prisoners, a required number of candidates were selected to be included in the sample. The -random- selection will be done following the « **la technique des Pas – Steps Technique** ». This technique was used filling a list of prisoners as follow:

- (1) We took the prisoners list of those who were present, and numbered them in the order of one to n;
- (2) We counted the total number.
- (3) To have the « Step », we divided the total number of prisoners with the sample size for each prison (for example, the total number of minors was 223 divided by 143 who were to be surveyed, and this gave us  $1.6 = 2$ ).
- (4) The « Pas or step

» was therefore 2, i.e. we drew one individual in 2. (5) To have the first individual we randomly picked one number between 1 & 2 either by using two pieces of papers or by asking a volunteer in the group to pick a number between 1 and 2. We then picked (2). (6) We surrounded the number of the person selected then we jumped two persons to pick the next candidate who was number 4. (7) Researchers repeated the same process until they reached the end of the list. Any candidate who did not consent was not selected and replaced by the one who was willing. Additional information was collected from psycho-socio and medical staffs of each prison. Researchers interviewed the nurses and physicians and the social worker of each prison. In each prison, the latter randomly chose three persons. This imply that, in total, researchers interviewed 28 persons.

- **Data collection processor:**
- ✓ Translation and validation of tools in kinyarwanda
- ✓ Ethical approval
- ✓ Coaching and training of tools to enumerators

- ✓ Pre-test
- ✓ Dispatching of enumerators in prisons
- ✓ Introduction, presentation and sampling process
- ✓ Eventuality of psychological support if emotional crisis

**Data analysis:** data entry, and statistical analysis by SPSS 20.

## **2.2. Data Collection Tools**

### **The Mini International Neuropsychiatric Interview, version 5 (MINI)**

The MINI is a diagnostic structured questionnaire which allows exploring in a standard way the major psychological problems vis-à-vis the DSM-V (Sheehan et al., 2016). The subject must respond to precise questions by « Yes » or « No » answers, following time and frequency criteria. The MINI is divided in modules identified by letters, each one corresponding to a diagnostic category. At the end of each module, one or multiple diagnostic cases allow to indicate whether diagnostic criteria are reached or not. However, this tool

was used to evaluate emotional, anxiety, psychosis, somatization and sexual problems.

## **2.3. Data Collection Process**

### **Translation Process**

#### **1. Step One**

The translation of the scales and questionnaires in Kinyarwanda was carried out by five clinical psychologists who are perfect trilingual (Anglophone, Francophone and Kinyarwandophones). The retained version for the research was a result of this consensual triangulation. This consensual version was retranslated into English by a bilingual translator. The version obtained was compared to the original version by a bilingual clinical psychologist. Lastly, our research team confirmed the relevance of the four tools for data collection purposes.

#### **2. The Administration of the Translated Tool on Incarcerated Population**

### **Data Collection**



Prior to data collection, clinical psychologists enumerators were recruited, trained about how to use questionnaires. Once the authorization to collect data was granted, enumerators were sent in their assigned detention centers. They were accompanied and introduced by social workers or psychologists who serve in prisons. Data collection commenced by the enumerators introduction, the objective of the visit, and a brief on ethical considerations. Once the written consent was signed by the participant, data collection proceeded. Two enumerators were assigned at each prison in order to attend to any eventuality of an emotional crisis, could it occur during the exercise.

## **2.4. Data Analysis**

Quantitative data collected through the questionnaire were recorded and analyzed with SPSS 20.0. Parametric statistical tests were administered to compare ordinarily distributed data, and non-parametric statistical tests for non-ordinary data. Linear regression was used to examine scores which predict psychological problems among participants. Certain demographic variables such as sex, age, marital status, etc. were taken into consideration during statistical analyzes.

## CHAPTER 3: RESULTS AND DISCUSSION

### 3.1 Respondents' socio-demographic Information

#### 3.1.1 Response Rate

The sample size was 757 while the number of returned were 726 resulting in a response rate of 95.9%. The distribution of the respondents across the seven prisons were as presented in Figure 1

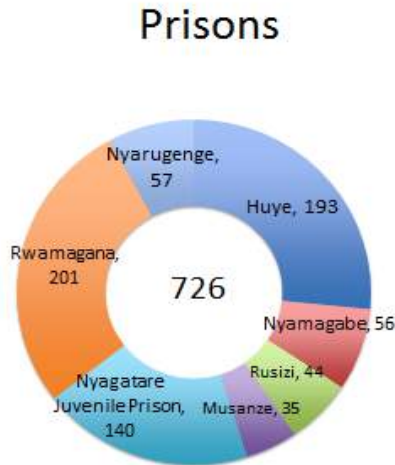


Figure 1. Distribution of Respondents by Prison

#### 3.1.1 District of Origin

Findings on the origin of the respondents indicate that all provinces had prisoners (see Figure 2). However, Huye had the largest number

of prisoners participating in this study (103) followed by Gisagaara with 49 respondents. Other districts recoding at least 40 respondents were Gatsibo (40), Nyamasheke (40), and Rwamagan (42). Notably, these districts Gisagara, Gatsibo, and Huye are from Southern province while Rwamagana and Nyamashe are from Eastern Province. On the other hand, districts with up to 10 respondents were Gicumbi (4), Musanze (10), Ngororero (9), Nyabihu (7), Rubavu (6), Rulindo (9) and Rutsiro (4). The districts recording low number of prisoners were from Northern Province and Western Province. Gicumbi, Musanze and Rulindo are from the Northern Province while the rest are from the western province.

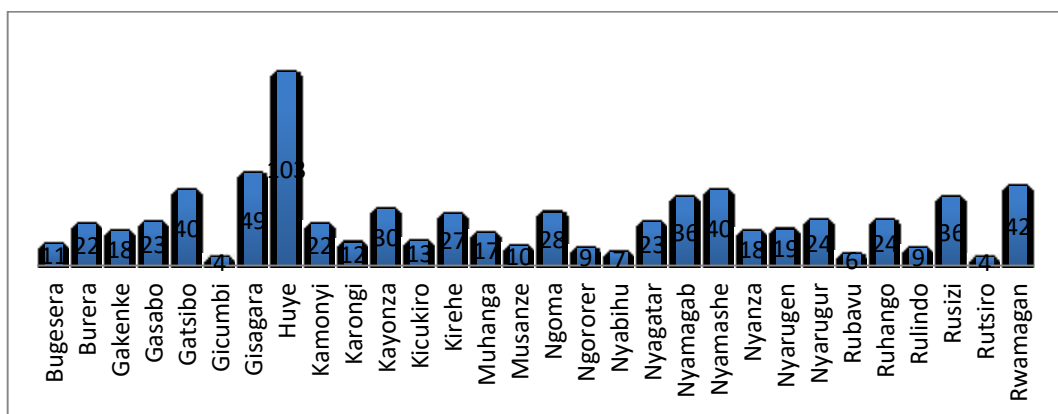


Figure 2. District of respondent's origin

### 3.1.2 Gender

This study established that an overwhelming majority of the respondents 92.0% (668) were male while 8.0% (68) were female (see figure 3).

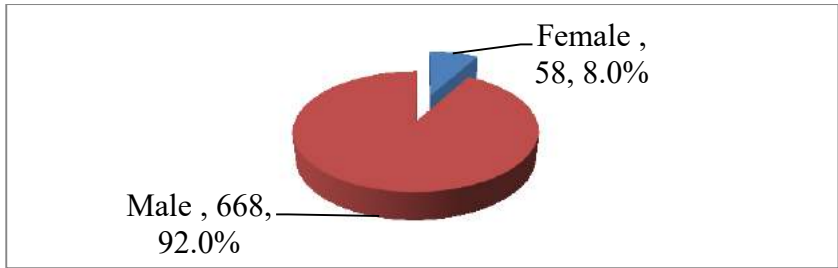


Figure 3. Gender of respondents

### 3.1.3 Age Category

Findings on the age distribution of the respondents are presented in figure 4.

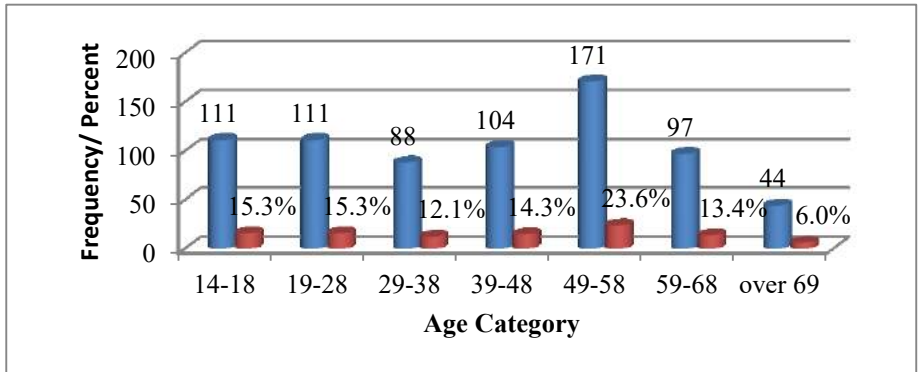


Figure 4. Respondents' Age Categories

From the study findings, respondents aged between 49 and 58 years were nearly 24% (171). This was followed by juvenile respondents, aged between 14-18 years, and those aged between 19 and 28 years who were equally represented in the sample (15%). Respondents aged 29 to 38 were 12.1% (88) while those aged 39-48 years were

14.2% (104). Respondents aged 59 to 68 and above 69 were 13.4% (97) and 6.1% (44) respectively. These findings show a comparable distribution of respondents across different age categories with an exception of those aged between 49 and 58 and above 69 categories which recorded the highest (23.6%) and representation in the sample respectively (6.1%).

### 3.1.4 Marital Status

Study findings presented in table 1 reveals that the majority of respondents (43.9%, 319) were married followed by those who were single (36.1%, 262). Another 9.9% of the respondents (72) were widowed while those that were in illegal marriages were 7.0% (51). Respondents who were either divorced or separated were 3.0% (22). These findings show that the married and singles formed the majority of interviewed prisoners (up to 80%). This implies that most of the prisoners were either single or married.

**Table 1. Respondents' Marital Status**

Status	Frequency	Percent (%)
Single	262	36.1
Married	319	43.9
Widowed	72	9.9
Illegal marriage	51	7.1
Divorced/Separated	22	3.0
Total	726	100.0

### 3.1.5 Respondents' Previous Occupation

It was important to find out the prisoners' former occupation. Study findings on previous occupation presented on Figure 5 show that farmers represented 55.0% (399) of the respondents, followed by self-employed at 20.0% (145). Students and civil servants were 11.0% (80) and 8.0% (58) of the respondents respectively while

prisoners who came to jail without prior employment represented 6% (44). From these findings it is clear that most of the prisoners were either farmers or self-employed before being imprisoned.

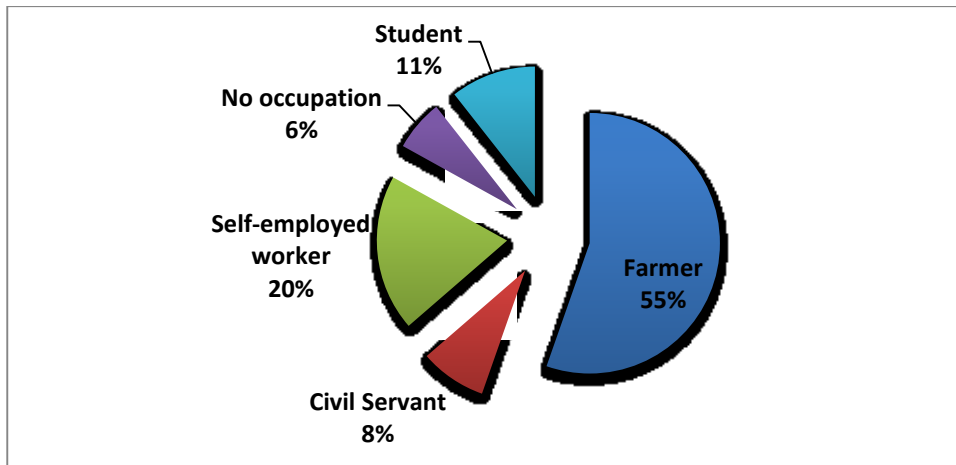


Figure 5. Previous Occupations

### 3.1.6 Education Level

Results on the education level of the respondents are presented in Figure 6. From the findings, respondents without any formal education (illiterate) were 24.0% (174), while primary education recorded a response of 59.0% (428). Secondary and postsecondary education recorded 14.0% (102) and 3.0% (22). This implies that most of the prisoners at least had basic education with the majority having attained primary education.

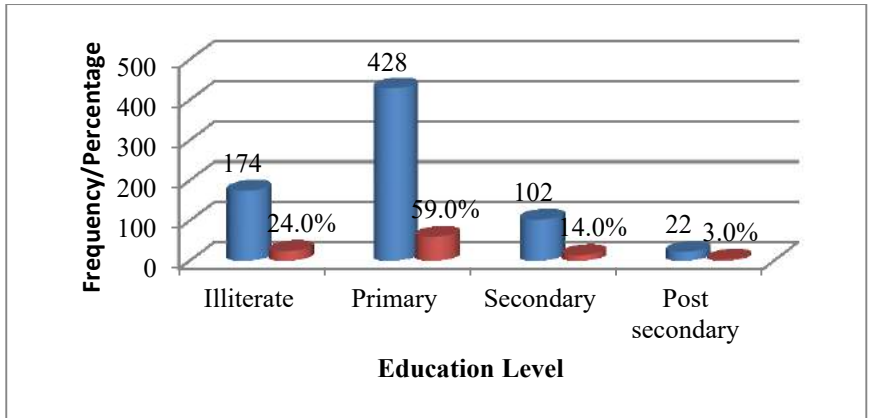


Figure 6. Respondents' Education

### 3.1.7 Guilty Plea/Confess

This study sought to find out whether the respondents made guilty pleas or confessed of the offences or not. The majority of the respondents (62.9%, 457) confessed the offences they were judged with while 37.1% (269) did not (See figure 7). This implies that the majority of the prisoners made guilty pleaded guilty to the offences they were convicted of. On the other hand the significant number of prisoners (37.1%) who had been convicted did not confess to the offences they were judged with.

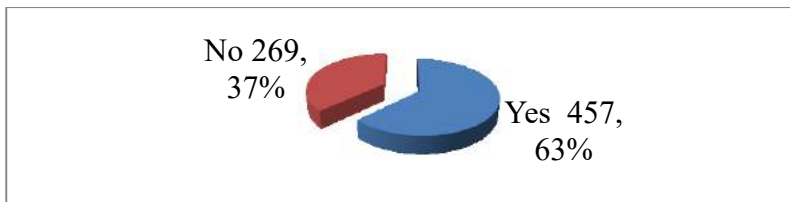


Figure 7. Whether the Respondents were Guilty

### 3.1.8 Offences

The distribution of participants' offences are presented in figure 8.

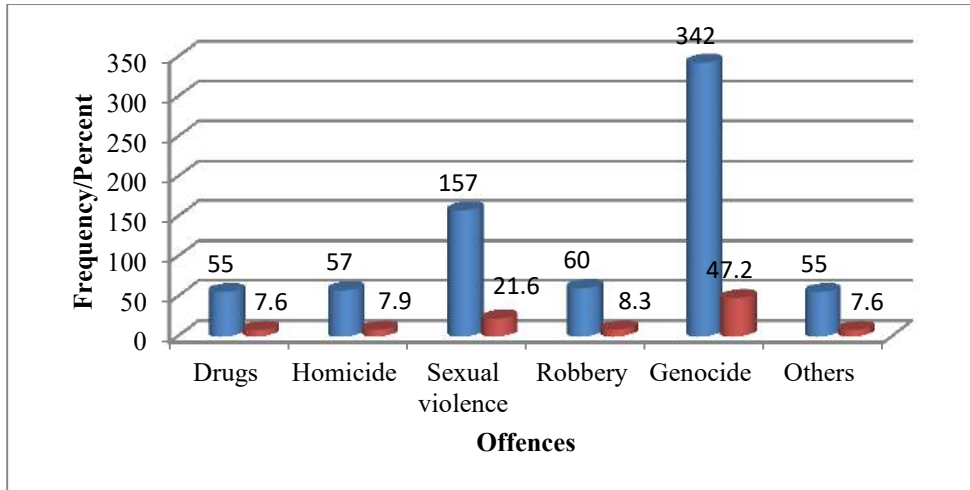


Figure 8. Offences

From the findings, the majority of the respondents (47.2%, 342) were in prison as a result of Genocide perpetrated against Tutsi in 1994 offence followed by sexual violence 21.6% (157). Drug related offence and other offences were equally represented in the sample with a rate of 7.6% (55) while homicide and robbery were 7.9% (57) and 8.3% (60) respectively.

### 3.1.9 Time Spent in Prison

Findings on the time spent in prison showed that, adult prisoners had spent at least 6 months to 278 months (SD=85) with a mean of 95 months. From these findings it is clear that on average the respondents had been in prison for at least six months and an average period of 8 years (96 months).

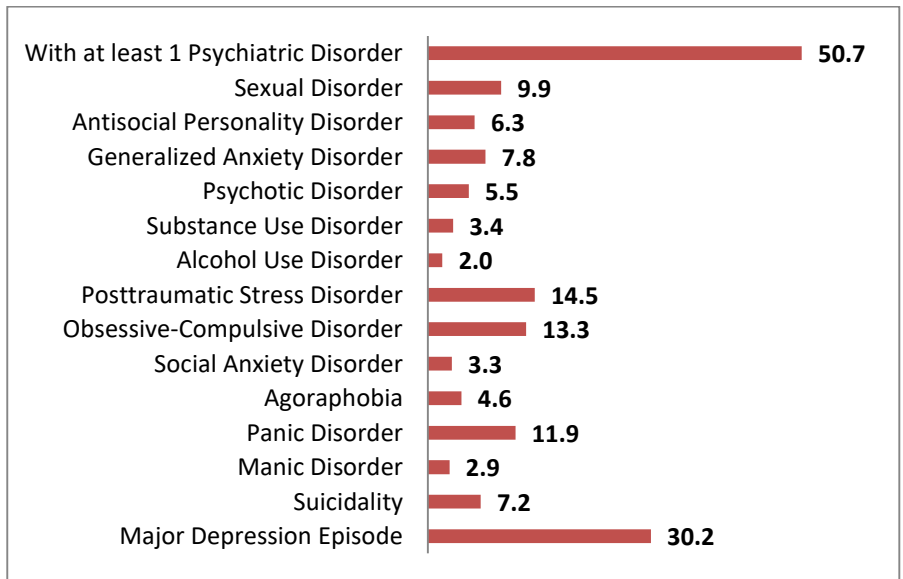


## Prevalence of Mental Disorders among Adult Prisoners in Rwanda

This study sought to establish the prevalence of mental disorders among prisoners in Rwanda. Tools used for different for adult and juvenile prisoners. This section presents findings on the prevalence of mental disorders among the 615 adult prisoners.

### 3.1.1 Overall Prevalence of Mental Disorders among Prisoners in Rwanda

The findings are presented in Figure 9.



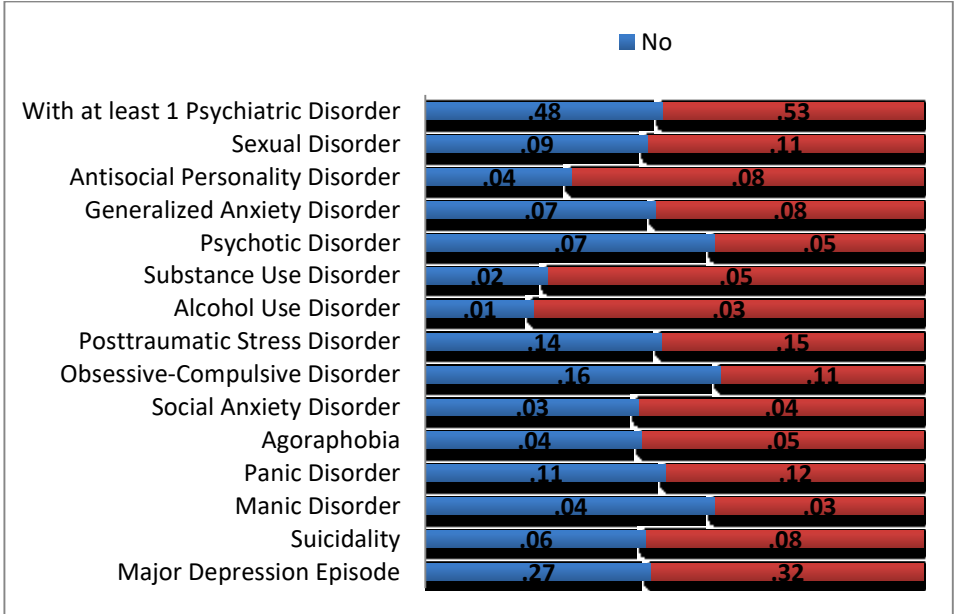
**Figure 9. Prevalence of Mental Disorders among Prisoners in Rwanda**

Study results on the prevalence of mental disorders revealed that, up to 50.7% (316) had at least one of the fourteen mental disorders

assessed. Findings on the prevalence of individual mental disorder showed that the most prevalent mental disorder among the prisoners was major depression episode (30.2%, 189) followed by posttraumatic stress disorder (14.4%, 91), obsessive-compulsive stress disorder (13.3%, 83) and panic disorder (11.9%, 74) in that order. On the contrary, the least prevalent disorders among the adult prisoners were substance use disorder (3.4%, 22), alcohol use disorder (2.0%, 13), social anxiety disorder (3.3%, 21), and manic disorder (2.9%, 18).

### 3.1.2 Prevalence of mental disorders by Plea/Confession status

The findings on the probability of a disorder conditional on guilty plea or confession are presented in figure 10.



**Figure 10. Prevalence of mental disorders by Guilty Plea/Confession status**

Guilty plea status (yes: plead guilty versus no: did not plead guilty) was significantly associated with Antisocial Personality Disorder (OR=2.50,  $p = .018$ ) and Substance Use Disorder (OR=3.13,  $p = .042$ ). The proportion of prisoners having Antisocial Personality Disorder (8%) and Substance Use Disorder (5%) among those who plead guilty was respectively two and three times higher compared to those who did not plead guilty (4% and 2%).

For most of remaining mental disorders, their presence was equally distributed among those who plead guilty and those who did not with a slightly higher prevalence among those who plead guilty. For example, the proportion of prisoners with at least 1 psychiatric disorder was 53% among those who plead guilty while it was 48% among those who did not ( $OR = 1.30, p = .354$ ). Without being statistically significantly different, the proportion of disorder presence is substantially higher among those who plead guilty compared to those who did not for Major Depression Episode (32% versus 27%), Suicidality (8% versus 6%), Panic disorder (12% versus 11%), Agoraphobia (5% versus 4%), Posttraumatic Stress Disorder (15% versus 14%), Alcohol Use (3% versus 1%), Generalized Anxiety Disorder (8% versus 7%) and Sexual Disorder (11% versus 9%).

Though not statistically significantly different, slightly higher prevalence was observed among those who did not plead guilty compared to those who plead guilty only for Manic Disorder (4% versus 3%), Obsessive Compulsive Disorder (16% versus 11%), and Psychotic disorder (7% versus 5%).

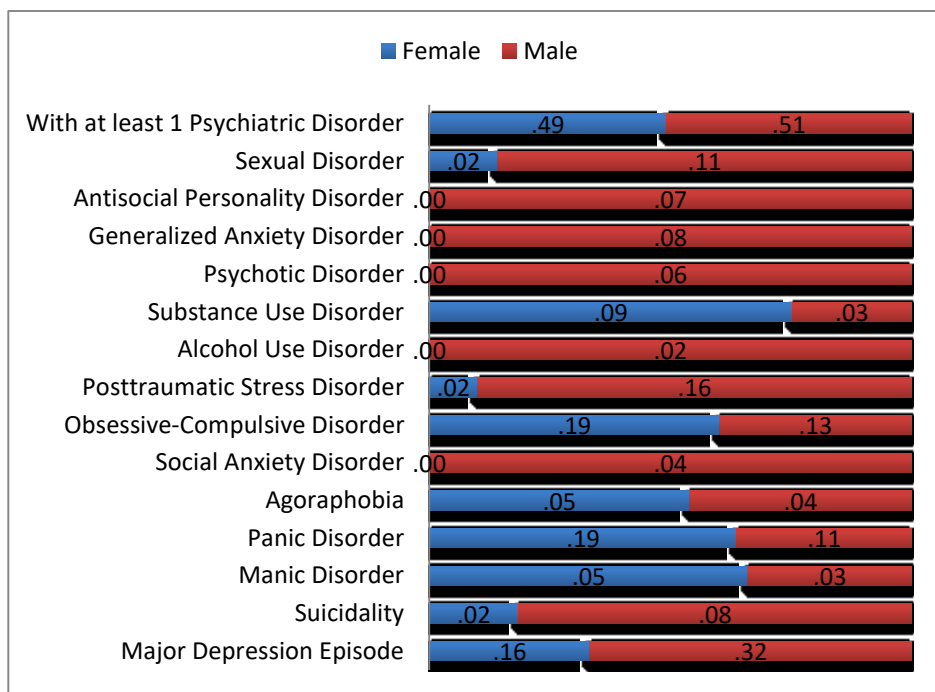
### **3.1.3 Prevalence of mental disorders by Gender**

The prevalence of mental disorders by gender is presented in the figure 11. As can be seen, the study findings on the probability of having a disorder conditional on gender revealed that both females and males had at least one disorder at 49% and 51% respectively. This implies that both genders were equally predisposed to mental disorders ( $p = .061$ ).

Major Depression Episode, Posttraumatic stress disorder, Substance Abuse disorder were the only mental disorder statistically significantly different conditional to participants' gender.

When it comes to Major Depression Episode, males were two times more exposed than females (OR = 2.245,  $p = .015$ ). With regards to Posttraumatic Stress Disorder males were ten times more likely to have it compared to females (OR = 10.51,  $p = .021$ ).

Lastly, for the chances of having Substance Abuse Disorder, the likelihood was higher among women than their males counterparts (OR = .31,  $p = .027$ ).



**Figure 11. Prevalence of mental disorders by Gender**

### 3.1.4 Prevalence of mental disorders by Previous Occupation

Five categories of occupation or employment status namely farmers, civil servants, self-employed, no occupation, and students were explored. Figure 12 present the probability of having a disorder conditional on previous occupation.

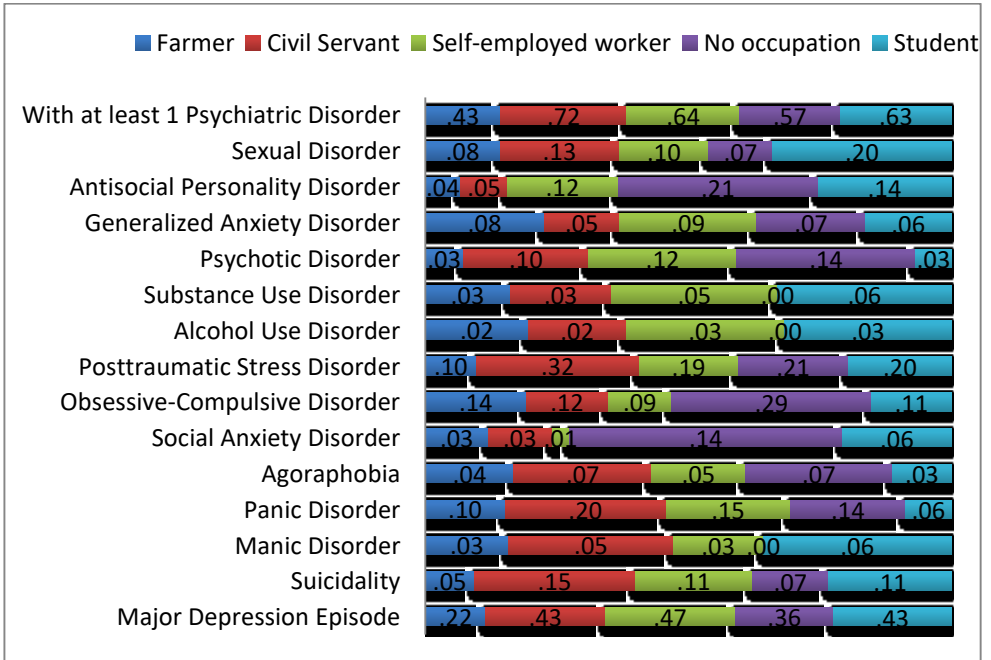


Figure 12. Probability of having a Disorder Conditional on Previous Occupation

Five out of 14 assessed disorders were statistically significantly associated with the prisoners' type of occupation before imprisonment (previous occupation): Major Depression Episode ( $p < .001$ ), Posttraumatic Stress Disorder ( $p < .001$ ), Antisocial Personality Disorder ( $p < .001$ ), Suicidality ( $p = .019$ ) and Psychotic Disorder ( $p < .001$ ). The remaining disorders were equally distributed according to prisoners' previous occupation.

- Major Depression Episode

While 22% of prisoners who were farmers before imprisonment were found to have Major Depression Episode, this rises to 36% from prisoners who had no occupation, 43% for civil servants and for students and 47% for self-employed workers. Compared to farmers, civil servants and self-employed workers were respectively nearly four and three times more exposed to develop Major Depression Episode ( $OR = 3.7, p = .003$ ).

- Posttraumatic Stress Disorder

Posttraumatic Stress Disorder was mostly prevalent among prisoners who were previously civil servant (32%) and less prevalent among those who were farmers (10%), with the other employment categories falling in between these two extremes. Prisoners who were Civil servant and self-employed workers were respectively four ( $OR = 4.23, p < .001$ ) and two times ( $OR = 2.15, p = .009$ ) more likely than farmers to develop Posttraumatic Stress Disorder.

- Antisocial Personality Disorder

Those who had no occupation before imprisonment had the highest rate of Antisocial Personality Disorder (21%) followed by those who were students (14%) and those who were self-employed (12). Antisocial Personality Disorder were least present among farmers (5%) and civil servants (5%). Those who were without occupation, students and self-employed are respectively seven (OR = 6.91,  $p = .002$ ), four (OR = 4.22,  $p = .009$ ) and 3 (OR = 3.36,  $p = .002$ ) times as likely as farmers to develop Antisocial Personality Disorder.

- Suicidality

The highest rate of Suicidality was observed among prisoners who were civil servant before their imprisonment (15%). Farmers and those who had no occupation reported the lowest rate of Suicidality of respectively 5% and 7%. Both self-employed workers and students' previous occupation categories fell in between these two extremes with the rate of 11%. The likelihood of having Suicidality presence was four (OR = 3.70,  $p = .003$ ) and three (OR = 2.54,  $p = .017$ ) times higher respectively for civil servant and self-employed workers than for farmers. Those who had no occupation and students do not statistically significantly differ with farmers in developing Suicidality with respectively OR = 1.61,  $p = .654$  and OR = 2.70,  $p = .088$ .



- **Psychotic Disorder**

The rate of Psychotic Disorder was higher among prisoners who had no occupation (14%). That rate decreased slightly to become 12% and 10% among respectively self-employed workers and civil servants. The lowest rate of Psychotic Disorder was observed among farmers and students who both reported 3%. Psychotic Disorder was five times more likely to happen in the prisoners who had no occupation (OR = 5.32,  $p = .041$ ), four times in self-employed workers (OR = 4.23,  $p = .001$ ) and three times in civil servant (OR = 3.55,  $p = .015$ ) than in the farmers' category.

### **3.1.5 Prevalence of mental disorders by Age Category**

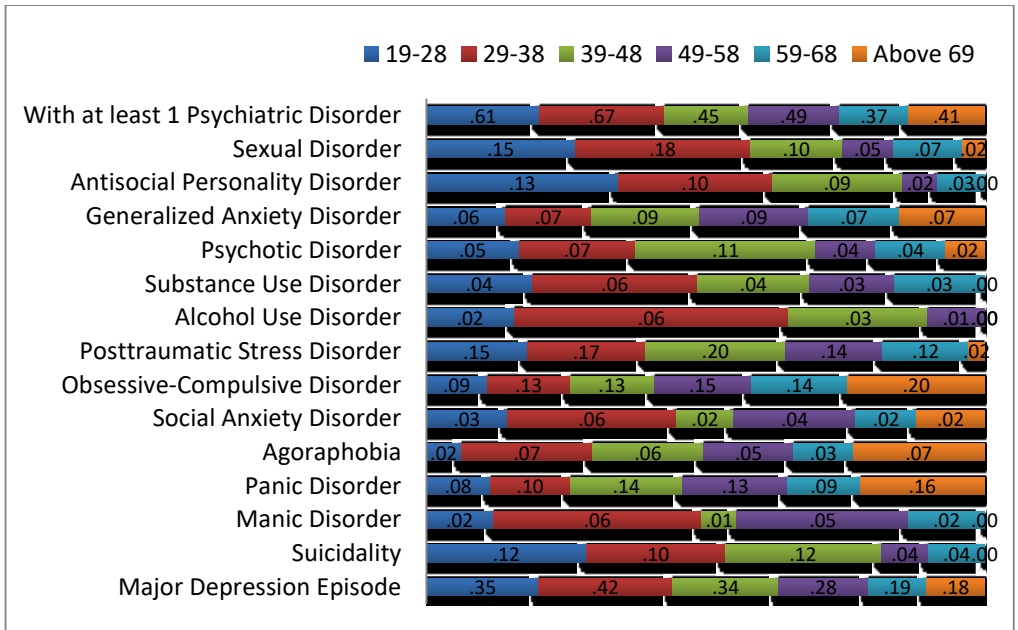
Findings in Figure 13 indicate that the probability of having at least one disorder varies across ages. Findings indicate also that older inmates between 59-68 years of age and those above 69 were less likely to have at least one psychiatric disorder (37% and 41% respectively), while those in younger age brackets 29-38 and 19-28 were more likely to have at least one psychiatric disorder (67% and 61% respectively). Compared to inmates aged between 19-28, those aged between 49-58 and 59-58 were respectively nearly three (OR = .29,  $p = .004$ ) and six (OR = .12,  $p = .042$ ) times less exposed to have at least one mental disorder (OR = .29,  $p = .004$ ).

In addition to having at least one mental disorder, major depression episode ( $p = .004$ ) and antisocial personality disorder ( $p = .022$ ) were statistically significantly associated to the prisoners' specific age category.

The prevalence situation of Major Depression Episode was almost similar to the one described above for having at least one mental

disorder with those in younger age brackets 29-38 and 19-28 reporting the highest prevalence rates of 42% and 35% respectively while older inmates between 59-68 years of age and those above 69 were less likely to have Major Depression Episode (19% and 18% respectively). Compared to prisoners aged 19-28, those falling in the three intermediates age categories between 29 and 58 did not differ in terms of the likelihoods of having Major Depression Episode. Contrary, those who were aged between 59-68 years of age and those above 69 were 2.5 times (OR = .040,  $p = .006$  and (OR = .39,  $p = .034$ ) as less likely as prisoners aged 19-28 to develop Major Depression Episode.

In the same way, Antisocial Personality Disorder was most prevalent among the younger prisoners aged between 19-28 (13%). This prevalence rate decrease as the age range increased in such way that no prisoner aged 69 and above presented Antisocial Personality Disorder. Compared to prisoners aged 19-28, those falling in the two intermediates age categories between 29 and 48 did not differ in terms of the likelihoods of having Antisocial Personality Disorder. Contrary, those who were aged between 49-58 years of age and those between 59-68 were respectively six times (OR = .017,  $p = .0062$ ) and 4.5 times (OR = .21,  $p = .022$ ) as less likely as prisoners aged 19-28 to develop Antisocial Personality Disorder.



**Figure 13. Probability of having a Disorder Conditional on Age Category**

### 3.1.6 Prevalence of mental disorders by Marital Status

Findings in figure 14 indicate that that single (62%) and inmates who were in illegal marriages (52%) reported the highest prevalence rate of having at least one of the fourteen assessed mental disorder. Married ones and widows followed with respectively 47% and 45%. The category of divorced/separated prisoners was the least affected in terms of having at least one psychiatric disorder.

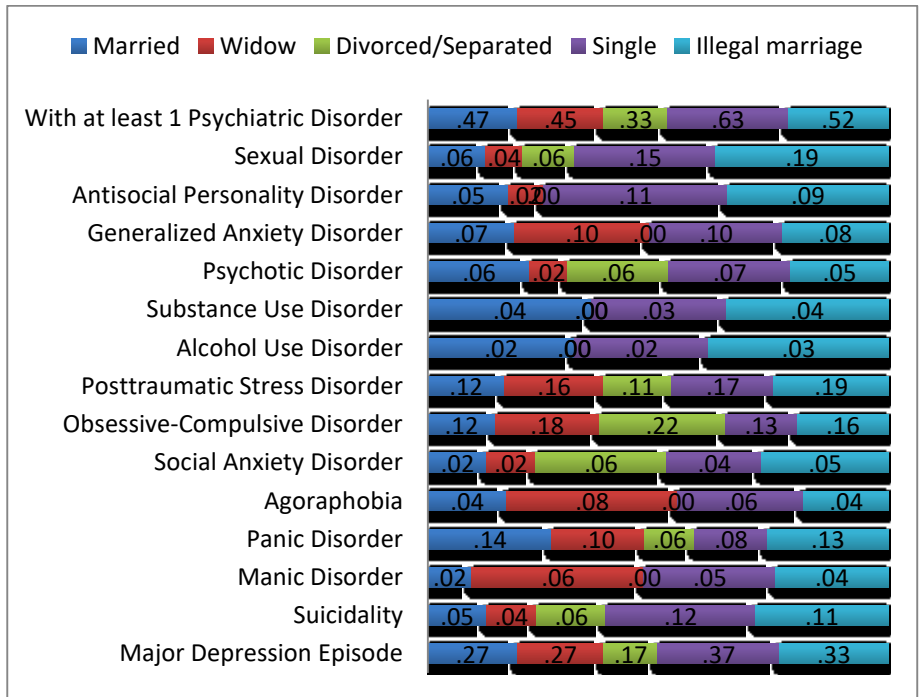


Figure 14. Probability of having a Disorder Conditional On Marital Status

Suicidality ( $p = .045$ ) and having at least one mental disorder ( $p = .001$ ) were the only conditions significantly associated with prisoners' marital/civil status. Further, the findings indicate that the probability of having a disorder with regards to marital status is statistically equally distributed among civil status categories. For example, as can be seen on figure 14, the prevalence of Major Depression Episode range between 37% among single prisoners and 17% among divorced/separated with other marital status ranging in-between those extremes.

With regards to suicidality, the highest rates were observed among single unmarried prisoners (12%) and among those who used to illegally cohabit with a partner before imprisonment (11%). Compared to those two groups, relatively lower rates of suicidality were observed among divorced (6%) married (5%) and widows (4%).

Suicidality was about three times more likely to happen in the prisoners who were single ( $OR = 2.79, p = .005$ ) than in married prisoners. There was no significance difference in the likelihoods of having suicidality between married, widow ( $OR = .87, p = .857$ ) and divorced/separated prisoners ( $OR = .1.20, p = .861$ ).

### **3.1.7 Prevalence of mental disorders by Offence**

The proportion of prisoners presenting a mental disorder in each offence category is shown in the figure 15. For example, as can be seen on the figure, 70% of prisoners charged with sexual violence related offences had at least one of the fourteen mental disorders screened through this study. This highest prevalence rate was followed by homicide (69%) and robbery (62%) related offences.

Prisoners charged with drugs and offences categorized as “others” had comparably average prevalence rate of 48% while prisoners charged with genocide related offences had the lowest prevalence rate (42%).of having at least one of the fourteen mental disorders.

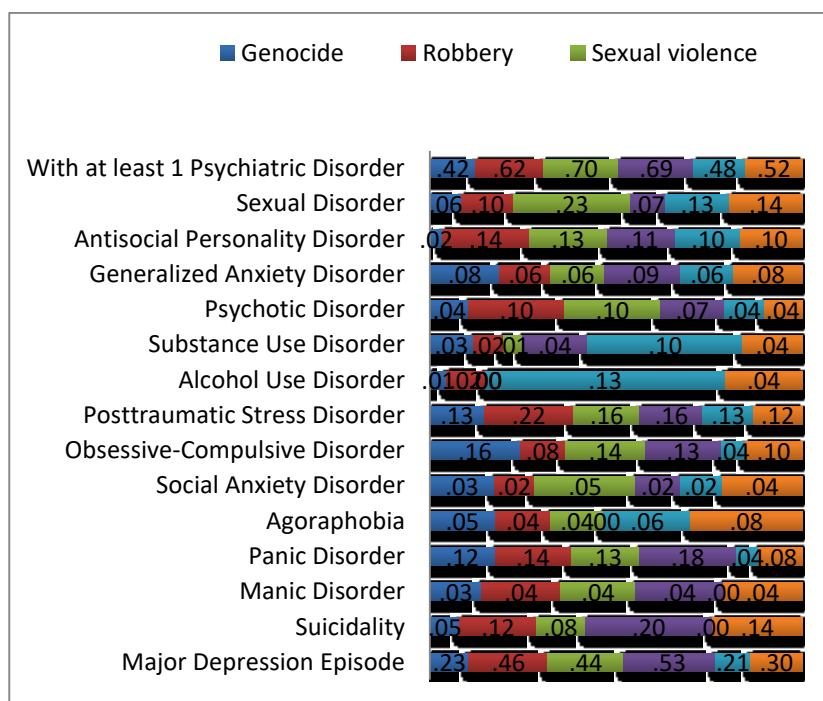


Figure 15. Probability of having a Disorder Conditional on Offence

Four out of 14 assessed disorders were statistically significantly associated with the prisoners’ category of offence: Major Depression Episode ( $p < .001$ ), Antisocial Personality Disorder ( $p = .001$ ), Suicidality ( $p = .008$ ) and Alcohol Use Disorder ( $p = .008$ ).

- Major Depression Episode

More than a half of prisoners who committed Homicide (53%) reported having Major Depression Episode. This rate decreased to 46%, 44% and 30% respectively for robbery, sexual violence related offences and in offences categorized as “others”. Major Depression Episode was least present among prisoners charged with Drug related offences (21%) and Genocide (23%). Prisoners charged with Homicide, Robbery and Sexual Violence related offences were respectively about four (OR = 3.87,  $p < .001$ ), three (OR = 2.88,  $p < .001$ ), and two (OR = 2.69,  $p = .001$ ), times as likely to present Major Depression Episode as prisoners charged with Genocide related offences. Compared to the latter offence category, there was no significance difference in the likelihoods of presenting Major Depression Episode for drug related offences (OR = .89,  $p = .759$ ) and in offences categorized as “others” (OR = 1.55,  $p = .183$ ).

- Antisocial Personality Disorder

Robbery and sexual violence related offences reported the highest rate of prisoners presenting Antisocial Personality Disorder (14% and 13%). Prisoners charged with Homicide, Drug and Others reported an almost equally rate of presence of Antisocial Personality Disorder (11%, 10% and 10% respectively). Prisoners charged with Genocide related offences were the least affected by Antisocial Personality Disorder (2%). Prisoners charged with robbery, sexual violence, homicide, drug related offences and “other offences” were respectively about eight (OR = 7.79,  $p < .001$ ), seven (OR = 6.94,  $p < .001$ ), six (OR = 5.98,  $p = .003$ ), six (OR = 5.56,  $p = .005$ ) and five (OR = 5.20,  $p = .007$ ) times as likely to be diagnosed as having Antisocial Personality Disorder as prisoners charged with Genocides related offences.

- Suicidality

Prisoners charged with homicide excluding genocide related offences were the one to present the highest prevalence rate of suicidality (20%). Offences categorized as “others”, robbery, sexual violence and genocide related offences followed with a suicidality prevalence rate of respectively 14%, 12%, 8% and 5%. No prisoners charged with drug related offences were diagnosed as having suicidality in this study. Prisoners charged with homicide, others and robbery related offences were respectively 5.09 ( $p < .001$ ), 3.24 ( $p = .014$ ), 2.78 ( $p = .043$ ) times more likely to present suicidality than prisoners charged with Genocide related offences.

- Alcohol Use Disorder

Prisoners charged with Drug related offences were the one to present the highest prevalence rate of Alcohol Use Disorder (13%). A prisoner charged with Drug related offences was 16.14 times ( $p < .001$ ) more likely to have Alcohol Use Disorder than the one charged with genocide related offences. No prisoner charged with sexual related offence had Alcohol Use Disorder. A relatively low prevalence rate of Alcohol Use Disorder was found among prisoners charged with offences categorized as “others” (4%), robbery (2%) and genocide (1%).



### **3.1.8 Prevalence of mental disorders by perceived Coping situation**

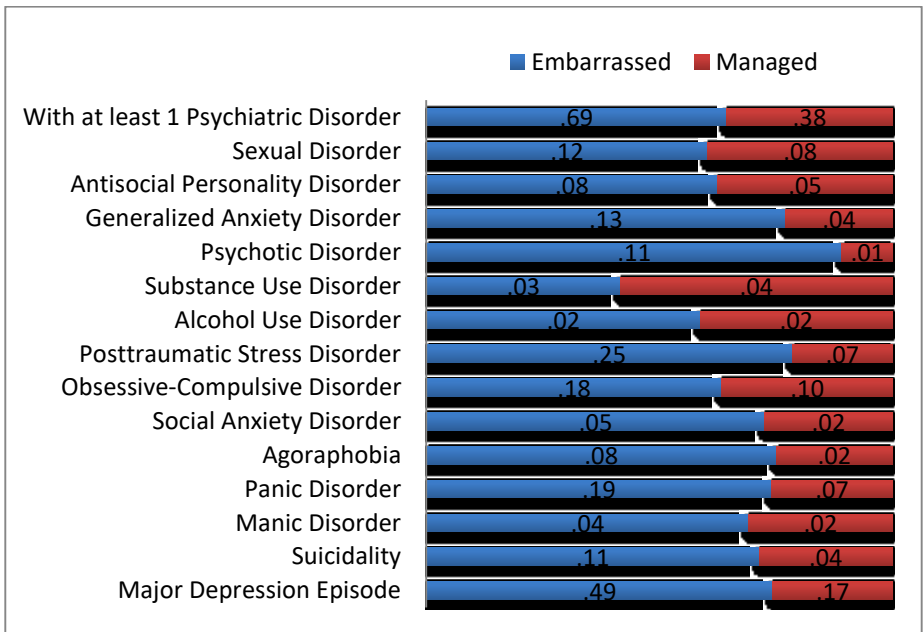
The Prevalence of mental disorders by perceived Coping situation is presented in figure 16. Nine out of fourteen assessed mental disorders were significantly associated with the subjective perception of whether the prisoner has managed to cope with prison life or were embarrassed with it ( $p < .001$ ). The association was in the sense that higher prevalence rate of disorders were present among those who were embarrassed about their prison life as opposed to those who manage. Respondents who were embarrassed or did not cope with prison life were more prone to mental disorders than those who managed to cope. For example, as can be seen on figure 16, those who were embarrassed had 69% as a prevalence rate of having at least one mental disorder while those who managed had a rate of 38%.

The most visible difference between prisoners who coped and those who are still embarrassed was observed on Psychotic Disorder with 11% (embarrassed) versus 1% (managed). Psychotic disorder was nine times more likely to be diagnosed among prisoners who expressed to be embarrassed about prison life compared to those who said they have managed to cope with prison life (OR = .11,  $p < .001$ ).

Major Depression Episode and Posttraumatic Stress Disorder followed in showing a significant prevalence difference between the prisoners who were embarrassed about their prison life and those who manage to cope. Each of the two disorders was about five times more prevalent among those who were embarrassed about their

prison life compared to those who manage to cope (OR = .22,  $p < .001$ ).

Similarly, the prevalence of generalized anxiety disorder, agoraphobia, panic disorder, social anxiety disorder, suicidality and obsessive compulsive disorder was respectively 3.47 times ( $p < .001$ ), 3.18 times ( $p = .005$ ), 3.16 times ( $p < .001$ ), 2.75 times ( $p = .034$ ), 2.69 times ( $p = .002$ ) and 1.90 times ( $p = .007$ ).



**Figure 16. Probability of having a Disorder Conditional on Coping**

### 3.3. Prevalence of Mental Disorder among Children

#### 3.3.0 Children’s socio-demographic characteristics

##### 3.3.0.1. District of Origin

This section presents findings on the prevalence of mental disorders among the 111 juvenile prisoners. As can be seen on Figure 17, they came from 27/30 Rwandan Districts. Kicukiro, Nyabihe and Rutsiro Districts was not represented in the sample. It can also be observed that Gatsibo Districts, where the prison is located, had the highest number (n= 7) followed by Burera with 7 juvenile prisoners.

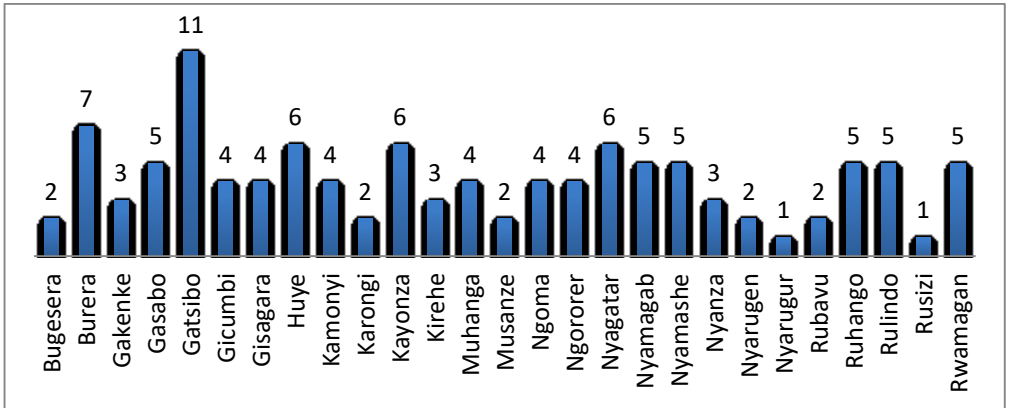


Figure 17: District of Origin of children prisoners

##### 3.3.0.2. Age

The distribution of the juvenile prisoners’ age is presented in Figure 18. As per the inclusion criteria, the minimum age was 14 while the maximum was 18. The majority of children randomly selected to participate in this study were 17 or 18 years old. Respondents aged 14, 15, and 16 were respectively 3, 11 and 15 representing 2.7%; 9.9% and 13.5% of the sample.

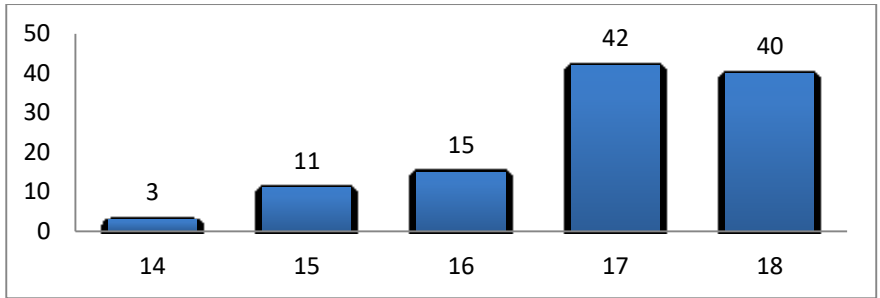


Figure 18: Age of the children Prisoners

### ***3.3.0.3. Sentence and Time in Prison***

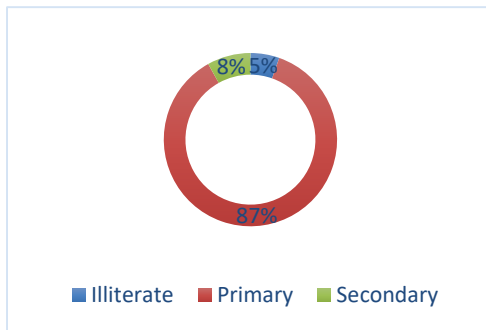
The children prisoners had sentences ranging from 12 to 180 months (SD = 38.92). The average number of months in prison was 63 months. Further, this study established that the children prisoners had been in prison for 6 to 54 months (SD 7.56). The average time spent in prison was 16 months (SD = 7.56). The majority of children (11%) included in the study had spent 10 months in the prison (Mode = 10).

### ***3.3.0.4. Previous Occupation***

Findings on previous occupation showed that the majority of children prisoners (62.2%) were not attending school before imprisonment while those who were attending it were 37.8 % (30).

### 3.3.0.5. Education

Study findings about the highest level of formal education attained are presented in figure 19. The figure reveals that the majority of children prisoners (87%, 96) had attained primary education with a minimal number being illiterate (5%, 6). Those who attained secondary education represented 8% (9) of the children sample.



The figure reveals that the majority of children prisoners (87%, 96) had attained primary education with a minimal number being illiterate (5%, 6). Those who attained secondary education represented 8% (9) of the children sample.

Figure 19: Education Level of the Children Prisoners

### 3.3.0.6. Offences

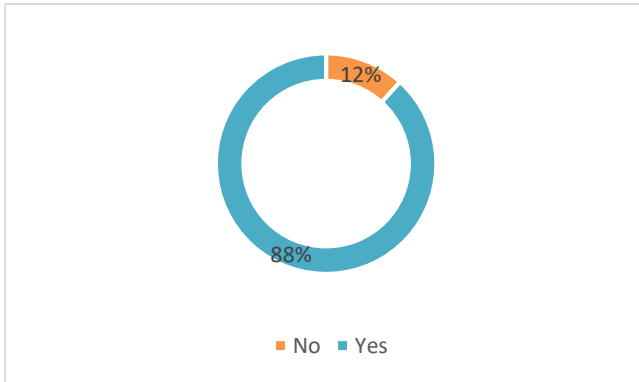
Findings on the nature of offences presented in table 2 show that most of the children prisoners (70.3%, 78) were in prison as a result of sexual offences while another 29.7% (33) were judged of other offences. The other offences committed by children prisoners included drugs and homicide which recorded an equal prevalence rate of 8.1% (9), Robbery (9.0%, 10) and genocide (0.9%, 1).

Table 2: Children prisoners' Offences

Offence	Frequency	Percent (%)
Drugs	9	8.1
Homicide	9	8.1
Sexual violence	78	70.3
Robbery	10	9.0
Genocide	1	0.9
Other	4	3.6
Total	111	100.0

### 3.3.0.7. Guilt Plea

As can be seen on Figure 20, the children prisoners who had pled guilty of the offence were 12% (13) while those who did not were



88%

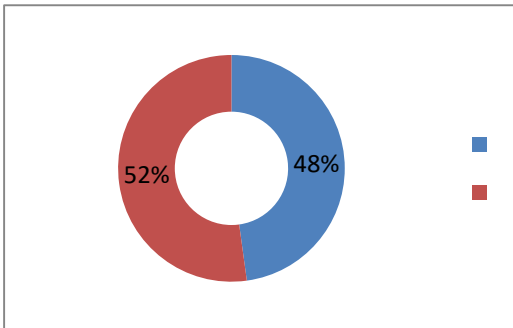
(98).

Figure 20:  
Children  
prisoners'  
Guilt Plea  
situation

### 3.3.0.8. Coping with Prison

#### Life

Participants were asked whether they felt embarrassed or managing their life in prison. Study results presented in Figure 21



reveals that, according to a self-perception report, 71.2% (79) of the respondents felt they were managing while 28.8% (32) were embarrassed.

Figure 21: Situation of Coping with Prison life for Children Prisoners

### 3.3.0.9. Being Visited

The respondents were asked whether they were being visited. From the findings presented in figure 22, 52% (58) of the respondents were frequently visited while 48% (53) were not visited or rarely visited.

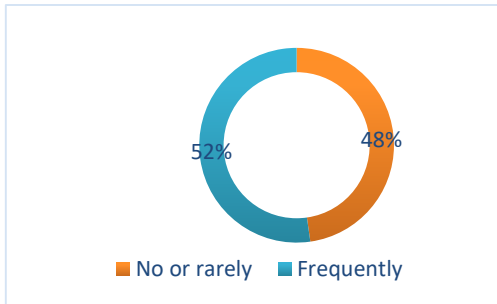


Figure 22: Visit frequency for children Prisoners

### 3.3.1. General Prevalence of Problems among Children

Study findings on the prevalence of behavior problems among children are presented in figure 23.

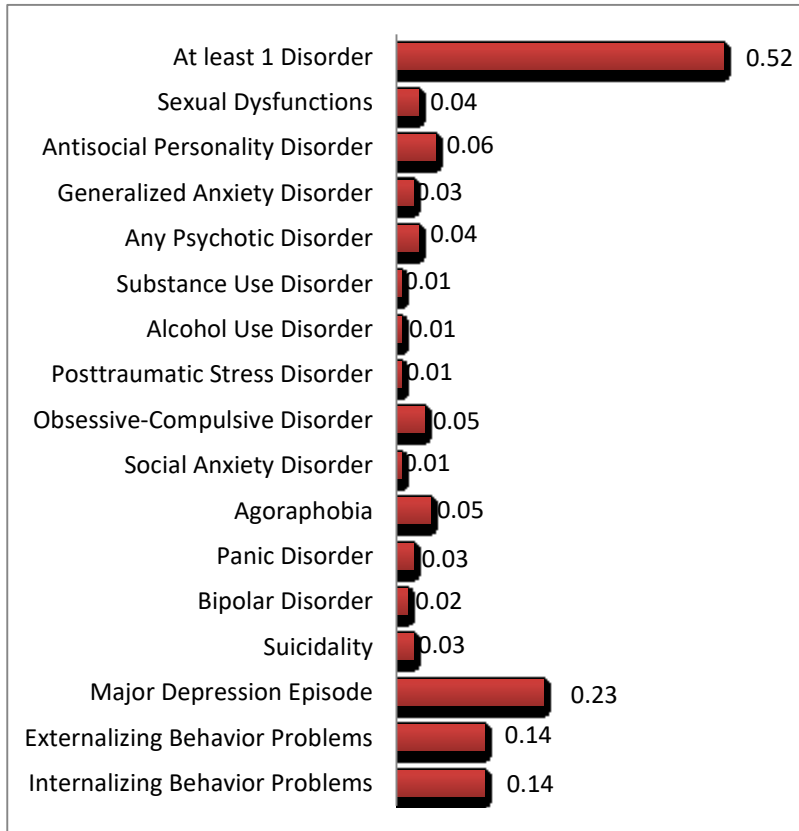


Figure 23: Prevalence of mental disorders and behavioral problems among Children Prisoners



Study results on the prevalence of mental disorders among children prisoners revealed that, up to 52% had at least one of the 16 mental disorders and behavioral problems assessed. The most prevalent mental disorder among children was major depression episode (23%) followed by externalizing and internalizing behavior problems with a rate of 14% each. Anti-social personality disorder (6%), Obsessive-compulsive disorder (5%) and agoraphobia (5%) were other dominant disorders among children. On the contrary, the least prevalent disorders among the children prisoners were substance use disorder (1%), alcohol use disorder (1), posttraumatic stress disorder (1%) and social anxiety disorder (1%).

### **3.3.2 Prevalence of mental disorders and behavioral problems by Offence**

The prevalence of mental disorders by offence is presented in the figure 24. As can be seen, the study findings on the probability of having a disorder conditional on children's offences (sexual offences versus others) revealed that the rate of having at least one disorder were slightly higher (59%) among those who committed "other offences" than those who committed sexual offences (47%). However, further analysis showed that this difference was not statistically significant ( $p = .254$ ) and therefore both offence categories are equally predisposed to develop at least one mental disorders.

A similar pattern of having a slightly higher but statistically non-significant prevalence of mental disorder or behavioral problem among children prisoners who committed other offences compared to those who committed sexual related offences was observed for antisocial personality disorder (9% versus 5%,  $p = .438$ ); obsessive compulsive disorder (6% versus 4%,  $p = .610$ ); suicidality (6%

versus 1%,  $p = .197$ ) and externalizing disorder (22% versus 11%,  $p = .141$ ).

Different pattern in which children who committed sexual related offences have more mental health disorders and behavioral problems than those who committed other offences was also observed. However, these differences were also not statistically significant. This include major depression episode (19% versus 26%,  $p = .399$ ), agoraphobia (3% versus 7%,  $p = .482$ ) and sexual dysfunction (3% versus 4%,  $p = .833$ ) and internalizing behavior problems (13% versus 15%,  $p = .768$ ).

The last instance was the one where a disorder was completely absent in one category of children's offences while prevailing for another. This is the case of generalized anxiety disorder and any psychotic disorder which were present only among children who committed sexual related offences, respectively at a rate of 3 and 4%. At the contrary, substance use disorder (3%), posttraumatic stress disorder (3%), social anxiety disorder 6% and bipolar disorder (6%) were only present among children who committed offences other than those related to sexual offences.

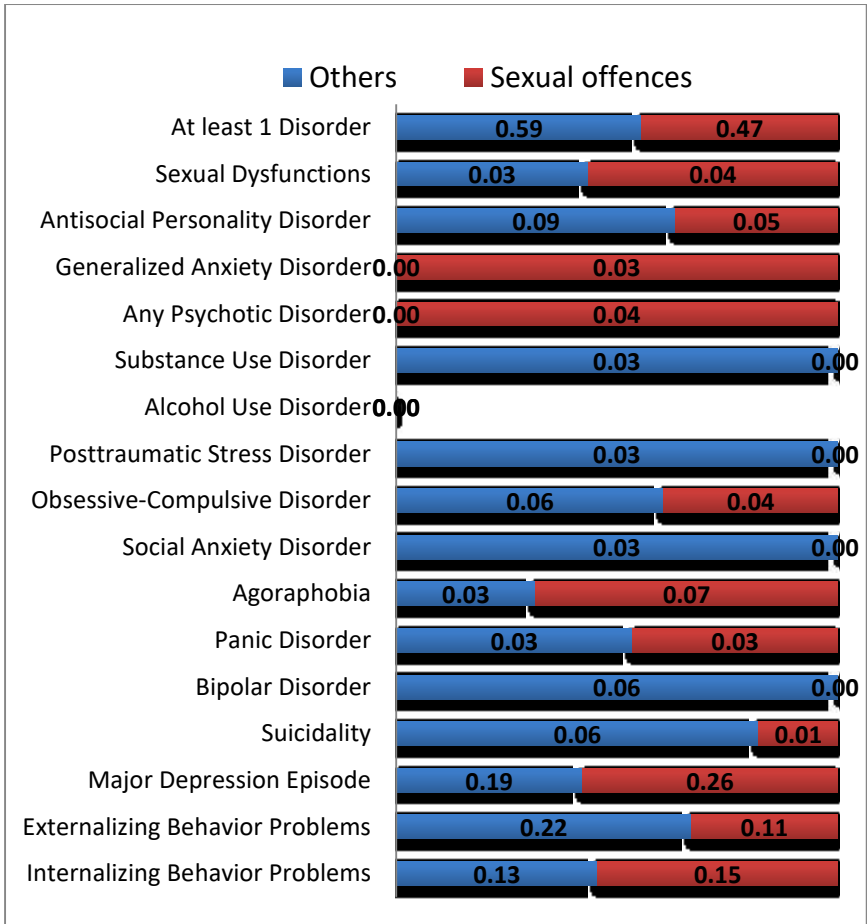


Figure 24: Prevalence of mental disorders by Offence

### 3.3.3 Prevalence of mental disorders and behavioral problems by Guilty Plea situation

Guilty plea status (yes: plead guilty versus no: did not plead guilty) was not significantly associated with any of the assessed disorder. For most of mental disorders, their presence was equally distributed among those who plead guilty and those who did not with a slightly higher prevalence among those who plead guilty. For example, the proportion of children prisoners with at least 1 psychiatric disorder was 52% among those who plead guilty while it was 42% among those who did not (OR = 1.32,  $p = .637$ ). As can be seen on figure 25, a number of disorders were only present among those who plead guilty. This is the case of Sexual dysfunction (4%), generalized anxiety (2%), substance use disorder (1%), Posttraumatic stress disorder (1%), social anxiety disorder (1%), panic disorder (3%), bipolar disorder (2%) and suicidality (3%).

Conversely, without being statistically significantly different, the proportion of disorder presence was substantially higher among those who did not plead guilty compared to those who did for Major Depression Episode (25% versus 23%), Internalizing behaviour (17% versus 14%), Externalizing behaviour (12% versus 11%), Agoraphobia (5% versus 4%), Posttraumatic Stress Disorder (17% versus 14%), Agoraphobia (8% versus 5%), Obsessive compulsive disorder (8% versus 4%) and Any psychotic disorder (8% versus 2%), Anti-social personality disorder (8% versus 6%).

Though not statistically significantly different, slightly higher prevalence was observed among those who did not plead guilty compared to those who plead guilty only for Manic Disorder (4% versus 3%), Obsessive Compulsive Disorder (16% versus 11%), and Psychotic disorder (7% versus 5%).

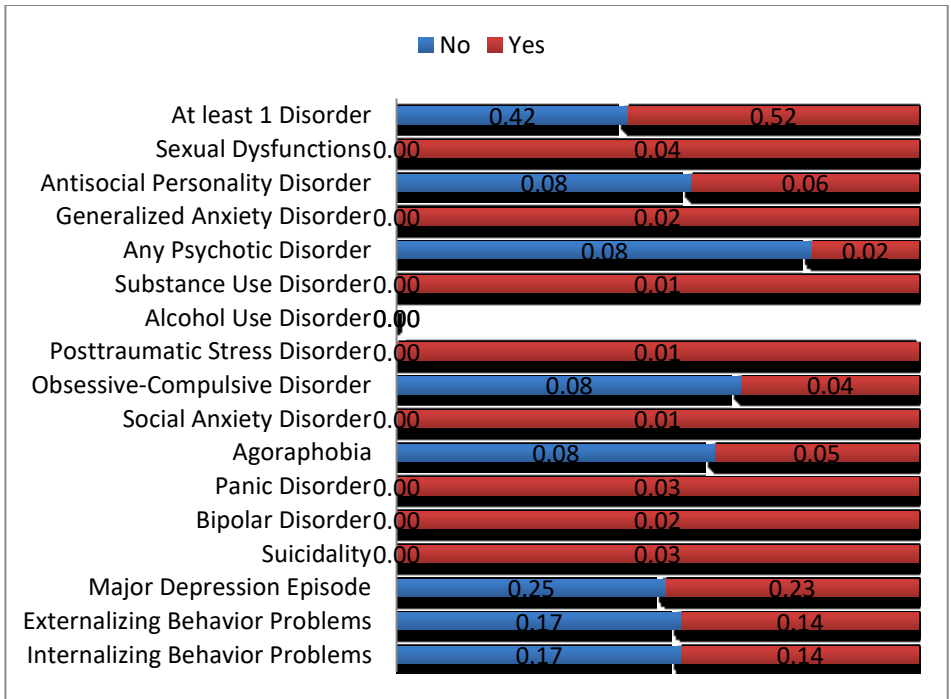


Figure 25: Prevalence of mental disorders and behavioral problems by Guilty Plea situation

### 3.3.4 Prevalence of mental disorders and behavioral problems by perceived coping with prison life situation

The Prevalence of mental disorders by perceived coping situation is presented in figure 26. As can be seen on the figure, children prisoners who were embarrassed or did not cope with prison life were five times more prone to develop at least one mental disorders (77%) than those who managed to cope (41%) (OR = .199,  $p = .001$ ).

Major Depression Episode were the only specific mental disorder significantly associated with the subjective perception of whether

the child prisoner has managed to cope with prison life or were embarrassed with it. The association was in the sense that those who were embarrassed about their prison life were three times (OR = .288,  $p = .008$ ) more exposed to develop Major Depressive Episode compared to those who managed to cope with prison life.

Similarly, six mental disorders were found to be present only among children prisoners who were feeling embarrassed by prison life: sexual dysfunction (13%); Substance use disorder (3%); Posttraumatic stress disorder (3%); social anxiety disorder (3%); Bipolar disorder (7%) and suicidality (10%).

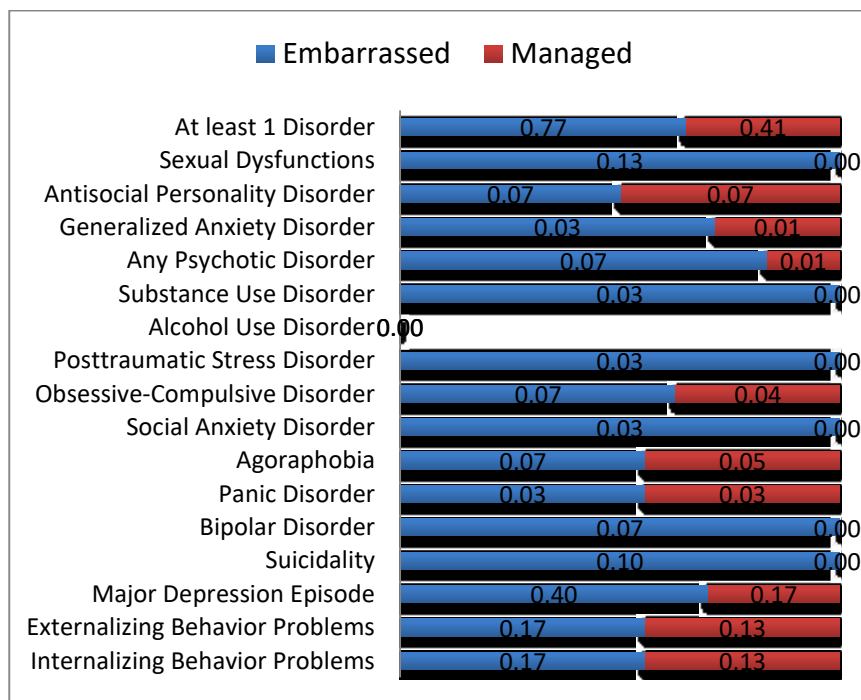


Figure 26: Prevalence of mental disorders and behavioral problems by perceived coping with prison life situation

### 3.3.5 Prevalence of mental disorders and behavioral problems by frequency of received visits

The prevalence of mental disorders by the frequency of received visits from any external person is presented in the figure 27. No mental disorder was found to be significantly associated with the frequency of received visits. As can be seen, the study findings on the probability of having a disorder conditional on visit frequency revealed that both children who were frequently visited and those who were not or rarely visited had at least one disorder at 54% and 48% respectively. Both situations were equally predisposed to having at least one mental disorders ( $p = .784$ ).

Substance Abuse disorder, Posttraumatic stress disorder, social anxiety disorder, panic disorder and bipolar disorder were solely present among children prisoners who were not or were rarely visited.

Without being statistically significantly different, the proportion of disorder presence was substantially higher among those who were not or were rarely visited compared to those who were visited for Obsessive compulsive disorder (6% versus 4%); Agoraphobia (8% versus 4%) and Suicidality (4% versus 2%).

On the contrary, the prevalence of antisocial personality disorder, Any psychotic disorder, Major depression episode and externalizing behavior problems were slightly higher (not significant) among

children prisoners who were frequently visited compared to those who were frequently visited.

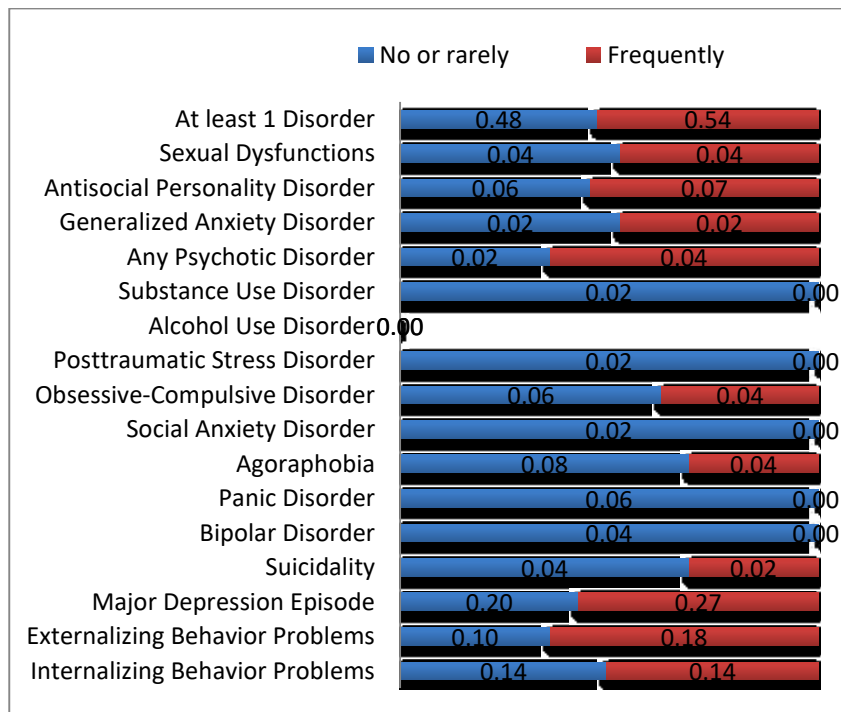


Figure 27: Prevalence of mental disorders and behavioral problems by frequency of received visits



### 3.3.6 Prevalence of mental disorders and behavioral problems by previous occupation

Two categories of occupation namely students and others were explored. “Students” category represented children prisoners who were attending school while “others” represented those who were not attending school before imprisonment due to school dropout. Figure 28 presents the probability of having a disorder conditional on children prisoner’s previous occupation.

As can be seen, the study findings revealed that both those who were at school and those who were not had at least one disorder at 40% and 58% respectively. This implies that both categories were equally predisposed to develop at least one mental disorders ( $p = .081$ ).

Generalized Anxiety Disorder, Any Psychotic Disorder, Substance Use Disorder, Posttraumatic Stress Disorder, Social Anxiety Disorder, panic Disorder, Bipolar Disorder and Suicidality were only present among children prisoners who were not attending school before their imprisonment.

Without being statistically significant, children prisoners who were not attending school (“others”) had slightly higher prevalence of antisocial personality disorder (9% versus 2%), agoraphobia (8% versus 2%), major depressive episode (26% versus 20%) and externalizing behaviour problems (18% versus 8%).

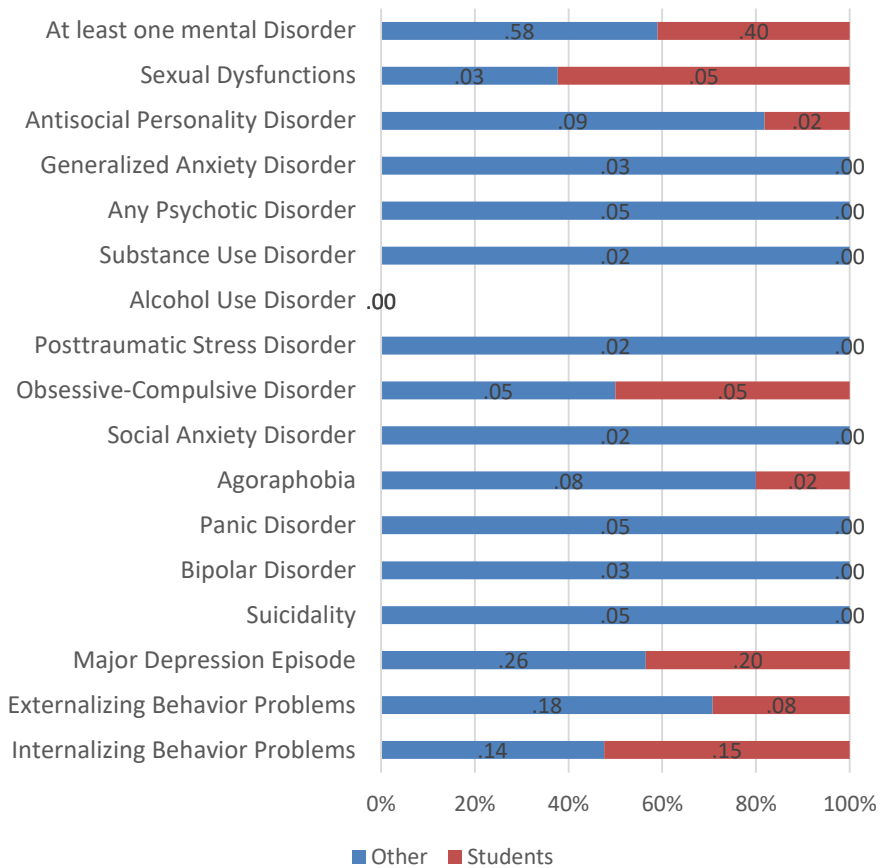


Figure 28: Prevalence of mental disorders and behavioral problems by previous occupation

## **CHAPTER 4: Conclusion and Recommendations**

Prisons as part of the large criminal justice system play a crucial role to maintain security and safety for each society. We know also that worldwide; several million prisoners have serious mental disorders, but don't have enough services to address their psychological problems. In Rwanda, the same situation of detainees is observed. The detainees (minors, women and men) are a special vulnerable group.

This study has shown that the prevalence of mental disorders revealed that, up to 50.7% (316) the likelihood of having at least one mental disorder. Findings on the prevalence of individual mental disorder showed that the most prevalent mental disorder among the prisoners was major depression episode (30.2%, 189) followed by posttraumatic stress disorder (14.4%, 91), obsessive-compulsive stress disorder (13.3%, 83) and panic disorder (11.9%, 74) in that order. On the contrary, the least prevalent disorders among the adult prisoners were substance use disorder (3.4%, 22), alcohol use disorder (2.0%, 13), social anxiety disorder (3.3%, 21), and manic disorder (2.9%, 18).

The similar study ( 2015) conducted in US has shown that nearly two thirds of males and nearly three quarters of females met

diagnostic criteria for one or more psychiatric disorders. Excluding conduct disorder (common among detained youth), nearly 60% of males and more than two thirds of females met diagnostic criteria and had diagnosis-specific impairment for one or more psychiatric disorders. Half of males and almost half of females had a substance use disorder, and more than 40% of males and females met criteria for disruptive behaviour disorders.

In this study it is estimated that 80% of convicted prisoners are in prison for atrocities committed during the genocide perpetrated against the Tutsi in 1994. The consequence is the new challenges related to the psychological problems and their complexity emerged not only during the period of incarceration but also when the former perpetrators came back in the community for rehabilitation and reintegration.

The dimension of mental health in Rwandan prisons remains a priority of the country. The first experience of the foundation DIDE since 2000 with incarcerated minors has shown the crucial role of professionals in mental health (Psychiatrist, psychologist, psychiatric nurses). Worldwide most of prisons are keeping the punitive and repressive philosophy. Fortunately, Rwandan government, through Rwanda Correctional Service found that the perspective of correctional pedagogy is more important than repressive.

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## Appendices

### 3. Le consentement éclairé

#### **Le consentement éclairé pour la participation à cette recherche**

##### **Introduction**

Mon nom est ... Je travaille pour la fondation DIDE (Dignité en Détention), une ONG international Suisse qui travaille dans les prisons. Depuis 2006, nous accompagnons des mineurs détenus dans les prisons rwandaises. C'est une ONG qui travaille avec RCS.

Avant d'accepter de participer dans ce projet de recherche, nous voudrions que vous lisiez attentivement tous ces renseignements concernant la recherche. Ensuite, nous vous invitons à poser toutes les questions que vous jugez importantes en rapport avec le sujet de recherche.

#### **1. La nature de l'étude**

*Evaluation des troubles psychologiques et psychiatriques en milieu pénitentiaire au Rwanda : prévalence et proposition d'un dispositif de suivi ».*

Elle a donc pour objectifs de montrer l'ampleur et la complexité des problèmes de santé mentale dans le milieu pénitentier au Rwanda ; renforcer la capacité technique des psychologues de Rwanda Correctional Service pour prévenir et traiter les patients psychiatriques dans les prisons rwandaises; dégager des recommandations quant aux stratégies adéquates pour une meilleure prise en charges des problèmes psychologiques et psychiatriques des prisonniers.

## **2. Qu'attendons-nous de toi ?**

L'objet de cette étude est d'évaluer et catégoriser les troubles mentaux qui pourraient exister chez les détenus des prisons rwandaises. Il sera question aussi de proposer au gouvernement les stratégies de prise en charge et de prévention de ces prisonniers rwandais.

Notre entretien va prendre entre 50 minutes à une heure. Tout dépendra de la façon dont notre entretien se déroule.

Tu fais partis de ceux qui vont fournir l'information nécessaire et il est de ton droit de savoir à la fin les résultats de cette recherche puisque tu as contribué à sa réalisation.

## **3. Qui vont participer dans cette recherche ?**

Ce sont 904 détenus incarcérés dans des prisons rwandaises qui vont être choisis d'une façon aléatoire.

La participation à cette recherche sera volontaire ; il n'y aura aucune condition ou contrainte à imposer aux participants. C'est votre décision à participer ou à se retirer de cette recherche. Nous sommes ici pour discuter sur ce consentement et si vous ne savez pas lire, vous allez chercher quelqu'un de votre choix et en qui vous avez totalement confiance pour vous le lire et l'expliquer. Puis, il signera le formulaire comme témoin et vous mettrez votre empreinte digitale pour marquer votre accord.

Alors, si vous accepter à participer activement dans cette recherche, vous allez signer ce formulaire ou y mettre votre empreinte digitale.

Toutes ces copies vont être gardées dans un endroit sécurisé. Nous vous garantissons la confidentialité de toutes ces informations recueillies.

Si jamais vous ne vous sentez bien et que vous êtes déstabilisé à cause de ce que nous allons parler, nous avons une équipe de thérapeutes qui vous prendra en charge. Il suffira de le signaler et nous arrêtons l'interview pour s'occuper de vous. C'est par après, quand vous vous sentirez mieux que nous reprendrons l'entretien.

#### **4. Est-il possible de se retirer de la recherche après avoir pris l'engagement d'y participer ?**

Il est de votre droit de se retirer de cette recherche à n'importe quel moment si vous jugez infranchissable la difficulté rencontrée. Sinon, pour des questions en rapport avec la recherche, vous pouvez contactez au principal chercheur au nom du Prof. Eugene Rutembesa au numéro de téléphone 0788426866. Pour des questions en rapport avec l'éthique et vos droits dans cette recherche, vous pouvez contactez le président du Comité National d'Ethique Dr Jean Baptiste Mazarati au numéro 0788309807 et au Dr David Tumusiime, le secrétaire exécutif de ce comité au numéro 0788749398.

#### **5. L'intérêt de cette recherche**

Cette étude donnera des pistes sur les troubles mentaux existants dans les prisons rwandaises. Elle va aussi proposer des stratégies d'intervention et de prévention des troubles psychologiques et psychiatriques chez les détenus incarcérés dans les prisons rwandaises. Nous pourrons donc prévenir et anticiper l'éclosion des troubles mentaux dans les prisons rwandaises.

Après avoir lu le formulaire de consentement et après les explications des chercheurs, j'accepte volontairement à participer dans cette recherche.



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