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Forensic mental observations - a comparative analysis of outcome and psychiatric morbidity

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FORENSIC MENTAL OBSERVATIONS -- A COMPARATIVE ANALYSIS OF OUTCOME AND PSYCHIATRIC MORBIDITY

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree

of

Master of Medicine in the branch of Psychiatry

Johannesburg, 2013.

DECLARATION

I, Tiaan Schütte declare that this research report is my own work. It is being submitted for the degree of Master of Medicine in the branch of Psychiatry in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

…….. ……day of…….....2013, Johannesburg.

Signature

ABSTRACT

Objective

This study aims to compare the outcome and psychiatric morbidity of the forensic mental observation referrals, in the two legally created groups of awaiting trial detainees – the 'singles' representing the minor violent and non-violent offenders versus the 'panels', representing the seriously violent offenders.

Method

A cross-sectional, retrospective record review of 200 cases, spanning from January 2010 to August 2010, of all individuals admitted to the Forensic unit of Sterkfontein Hospital, for 30 days psychiatric observation.

The Pearson's Chi squared test for categorical data was used to determine statistical significance.

Results

Of 110 'singles' 49 (44.55%) were found fit for trial and 40 (40.4%) criminally responsible, whereas of the 90 'panel' cases 60 (66.67%) were fit for trial and 57 (64.77%) were criminally responsible. ($p = 0.002$ and 0.001 respectively)

Conclusion

Those charged with seriously violent offences appear to be more likely to be found both fit and responsible, compared to those charged with less serious offences.

ACKNOWLEDGEMENTS

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1.0) INTRODUCTION

1.1) Background

In 1967, the then prime minister of South Africa, Dr. Hendrik Verwoerd, was assassinated by one Demetrios Tsafendas. During the trial it quickly became apparent that the accused before court may indeed have been suffering from a serious mental illness and with this, the whole issue of the insanity defence was pushed into the spotlight – both in the public, as well as in the psychiatric and legal fraternities. Prior to this landmark trial, there was no consistent standard or guidelines and each case was considered separately.(1) After overwhelming psychiatric expert opinion, Tsafendas was finally found 'not guilty by reason of insanity' and, after an initial stay in a maximum security prison, was eventually transferred to Weskoppies and later Sterkfontein psychiatric hospitals.

It was in response to this case that the State President then ordered the Rumpff Commission of Inquiry to investigate the efficacy of the law regarding the prevention of dangerous acts by mentally disordered persons. This process ultimately culminated in Section 77, 78 and 79 of the Criminal Procedure Act, Act 51 of 1977 which, despite several amendments over the years, still governs how South African criminal Courts deal with the mentally disordered offender today.(1)

Section 79 of the Act deals, *inter alia* with the decision of the court whether to appoint a single psychiatrist to perform the mental observation or whether to appoint a panel of psychiatrists. According to the act, all cases where the accused is charged with "*murder, culpable homicide, rape* or *another charge involving serious violence"*, the court shall appoint a panel of psychiatrists of at least two – one acting on behalf of the state (state employed) and one appointed by the court for the accused. A third psychiatrist, not in full time employment of the state, as well as a clinical psychologist may from time to time also be appointed to the panel, should the court so decide. In *all other cases,* the court shall appoint only one 'single' psychiatrist on behalf of the state to do the

observation: these cases will thus include all *non-violent* or *less violent/minor violent* cases, including common assault, as well as property offences such as theft, common robbery, housebreaking, trespassing and malicious damage to property.

The above described legal procedure therefore conveniently divides the forensic patient population into two distinct groups, purely based on the legal/court perceived seriousness of the alleged offence. Furthermore, should the outcome of the observation indicate that the accused is either not fit to stand trial, and/or, was not criminally responsible for his/her actions at the time of commission of the wrongful act, the court will also deal with these two groups of patients/defendants in different ways: Those who committed offences involving serious violence ('Panels') will be declared "State Patients" and will be referred back to the forensic hospital, in terms of Section 42 of the Mental Healthcare Act, Act 17 of 2002, there to be indefinitely detained and treated pending a decision by a Judge in Chambers. Those who perpetrated minor offences ('Singles') will be made involuntary psychiatric patients and referred to the general section of a psychiatric hospital where they will be treated and dealt with as any other mental patient and discharged based on clinical status in terms of Chapter V of the Mental Healthcare Act, Act 17 of 2002.

This study aims to compare these two groups of pre-trial defendants in terms of their psychiatric morbidity and outcome of the mental observation.

1.2) Aim of the Study

The aim of this study is to highlight and compare the differences between the 'Single' versus the 'Panel' appointed forensic mental observations – both in terms of the final outcome of the observation process, as well as their psychiatric morbidity.

1.3) Study Objectives

1.3.1) To compare the psycho-socio-demographic variables in the two legally created groups of awaiting trial detainees – the 'singles' representing the minor violent and non-violent offenders versus the 'panels', representing the seriously violent offenders.

1.3.2) To compare the outcome of the forensic mental observations in terms of fitness to stand trial and criminal capacity, within these two groups.

1.4.) Hypotheses

1.4.1) Individuals referred as ‘single’ observations – i.e. representing minor violence, are more likely to be found either not fit to stand trial and/or not criminally responsible for their actions, by virtue of a serious and enduring diagnosable mental illness or intellectual disability.

1.4.2) Individuals referred as ‘panel’ observations – representing serious violence, are comparatively more likely to be found to have ‘No mental illness or intellectual disability’ and therefore regarded as fit to stand trial and criminally responsible for their actions.

2.0) LITERATURE REVIEW

The exact link between violent criminal behaviour – whether considered serious or trivial – and the presence of a diagnosable mental illness, has been disputed and studied since antiquity. Received wisdom from both Roman and Greek civilisations dating back to as early as the 5th Century, holds that the presence of a mental illness is indeed strongly associated with a propensity towards violent behaviour.[2] Rosen,[3] noted that "two forms of behaviour were considered particularly characteristic of the mentally disordered, their habit of wandering about and their proneness to violence."(p.98)

In modern times, despite numerous studies on the topic, the exact nature of the relationship between crime – violent or non-violent – and mental illness still remains elusive.

According to Taylor & Gunn,[4] there are essentially 3 possible hypotheses:

- That the mentally ill are ***more*** prone to violence.
- That mental illness has ***no*** tangible effect on violence/crime.
- That mental illness ***reduces*** the risk of violence.

Indeed, one can find support for all three in the scientific literature. [4]

Despite this very complex and confusing arena, there are some observations that stand out and appear to be generally agreed upon:

1.) A diagnosis of schizophrenia is strongly correlated with an increased risk of violence. [4,5,6,7,8] Of the most studied associations is the particular risk that the schizophrenic patient has to commit murder/homicide – it is estimated by several studies that the overall risk of committing a murder is 10 – 20 fold that expected for the general population. [9, 10,11,12]

2.) Furthermore, the risk is considered greater when the illness is associated with other important factors, such as duration of psychosis and the presence of active psychotic symptomatology (positive symptoms in particular). [13,14]

3.) The presence of an intellectual disability has also been strongly identified as a major risk factor for violence when compared with intellectually average individuals. [15,16,17,18]

In a recent large scale meta-analysis [12] of 20 studies examining the relationship between schizophrenia (and other psychoses) and violence, the authors found that although schizophrenics have a 20 times higher risk to commit murder than the general population, only 1 in 300 people with schizophrenia had actually killed someone, which is a similar risk as is seen for people with a substance abuse disorder.

Also, the overall risk for individuals with psychosis and co-morbid substance abuse appears similar to individuals with substance abuse alone, but a lower risk was seen in individuals with psychosis *without* substance abuse.

Russo *et al*, in an Italian study, comparing criminal versus non-criminal mentally disordered patients, found schizophrenia to be the most common diagnosis in both groups.[19] In terms of murders and other offences involving serious violence, those with *personality disorders* outweighed those with a diagnosis of schizophrenia, and conversely schizophrenics committed a higher percentage of non-violent offences.

In a US National study, [20] the authors, although acknowledging the importance of psychotic symptoms and violent behaviours, also emphasise the very important role of "pre-morbid developmental events such as childhood conduct problems; and current social situation, such as increased opportunity for violence presented by living with family members." In this study an

increase in both minor and more serious violence was seen in the schizophrenic population, however the study relied heavily on self-report as its key measure of violence, which may have underestimated the true incidence of such violent acts. The authors still feel that self-report may be the best method of distinguishing between minor violence and more serious violent behaviours, especially since many violent acts may not attract criminal charges and therefore criminal records may under-estimate the true incidence of these behaviours even more.

Of importance to note regarding the above studies seem to be that they mostly focus on serious violence and homicide in particular, and there seem to be only a small number of studies involving minor violent and even non-violent offences committed by the mentally disordered. This can be due, in part to the study design and selection criteria. Taylor & Gunn [(4)] comment on this in their study and emphasise that most studies of this nature, tend to look at either imprisoned or hospitalised offenders who may represent the extremes of both violence and mental illness, respectively. They thus decided to use remand prisoners – awaiting trial detainees – as it was felt that they would be most representative and least restricted in terms of violence and mental illness.

The aforementioned British study, [(4)] would thus be considered most comparable to the current study, in that all forensic observation patients in SA –whether 'single' or 'panel'—are all awaiting trial detainees.

In this study of 2,743 remand prisoners the overall presence of psychiatric symptoms was 9%. "Serious personal and life threatening violence was much more commonly committed by psychiatrically normal than by disturbed people." It is also interesting to note that of all the men in this study charged with murder, only one third were considered psychiatrically abnormal –despite the acknowledged increased risk of murder amongst schizophrenics when compared to the general population. "Arson and other violence directed primarily against property were, by contrast, more commonly committed by psychiatrically disturbed men." The authors then continue to try to explain

this finding by implying "…that the population of this remand prison was unnecessarily inflated by the bringing of criminal charges against men who showed minor disturbances in behaviour, but were ill and perhaps should have been in hospital."

The above strongly supports the theme and hypotheses of this study, and is considered particularly relevant when taking into account the very high provincial and national priority placed upon both the criminal justice and mental healthcare systems, to address the ever present and growing waiting lists of awaiting trial detainees, awaiting psychiatric observation across South Africa.

From a South African perspective, there are relatively few published studies on this topic.[21] The studies reviewed mostly focus on the outcome of the forensic observation process in terms of triability and accountability of subjects and the appropriateness of the referrals made by the courts. [22-25]

It is interesting to note that the outcome of the above studies range between 42 – 57% in terms of cases where no mental illness or defect were detected, which is strikingly similar to the 52% seen at Sterkfontein Hospital during 2007 in an unpublished report.

As far as could be determined, no previous South African study compared forensic observation patients in terms of their referral type ('single' vs 'panel').

3.0) METHODOLOGY

3.1) STUDY DESIGN

The study design was a cross-sectional, retrospective, forensic record and hospital file review. The first 200 admissions of the year 2010, to the forensic unit of Sterkfontein Hospital, in terms of Section 79 of the Criminal Procedure Act (51/'77), were included in the study. This included all admissions from the 1st of January to the end of August 2010. The records of all 200 cases were available and none were excluded due to missing or grossly incomplete records.

3.2) SITE OF STUDY

The study was conducted at the forensic unit of Sterkfontein Hospital in Krugersdorp, Gauteng, South Africa. Sterkfontein is classified as a specialist psychiatric hospital serving the Southern Gauteng region. The hospital is divided into two main units: The forensic unit and the general adult psychiatric unit. In total, the hospital has a capacity of 623 usable beds and is currently occupied on average at about 80 % capacity. On the general side, mental healthcare users are admitted in terms of the Mental Healthcare Act, Act 17 of 2002, predominantly as involuntary users, admitted after a 72 Hour period for further involuntary care, treatment and rehabilitation.

The forensic unit admits adults (male and female) and juvenile male adolescents in terms of Section 77, 78 and 79 of the Criminal Procedures Act, Act 51 of 1977 for a period of up to 30 days. (Forensic mental observations on adolescent females are currently not done at Sterkfontein Hospital). The objective is to determine their fitness to stand trial and criminal responsibility after being charged with a criminal offence. The unit also admits State patients in terms of Section 42 the Mental Healthcare Act – both adults and juvenile male adolescents – who were found either not fit and/or not responsible for their crimes by reason of mental illness or intellectual disability. On occasion the unit may also admit mentally ill sentenced prisoners if so requested by the courts and the Department of Correctional Services.

3.3) STUDY POPULATION AND INCLUSION CRITERIA

The first 200 admissions to the forensic observation unit of Sterkfontein Hospital in terms of Sections 77, 78 and 79 of the Criminal Procedures Act (51/'77), during the period January 2010 to August 2010, were included in the study. There were no exclusion criteria for this study, and the population included adult males and females, as well as adolescent males. A sample size of 200 was decided upon based on a calculation of 10 – 15 study subjects per variable studied.

3.4) DATA COLLECTION

Data was collected from the hospital clinical files, official prosecutor's reports, charge sheets, social and collateral reports and the official psychiatric report to court. A data collection sheet was used for data capturing. *(Appendix A).*

1.) Socio-demographic Data: age, sex, race, marital status, employment status and level of education.

2.) Forensic Data: Relationship between victim and accused: (Is the complainant/victim a family member or well known to the accused or co-habitating with the accused?), criminal charge(s), panel or single referral, accused released on bail, the reason for the referral and history of prior offending.

3.) Medical and Psychiatric Data: Past psychiatric history, relevant family and medical history, substance abuse, any current psychiatric medication, medication used at the time of the alleged offence and history of early maladjustment (conduct disorder features, learning disorders and/or academic failures.)

4.) Observation Outcome: Diagnosis given, fitness to stand trial and criminal responsibility.

3.5) DATA ANALYSIS

Data was transferred to an Excel spread sheet and analysed using Statistica version 10 for Windows. Continuous data is presented as means ±SD and categorical data, as frequencies and percentages.

To compare associations between socio-demographic variables and outcomes in terms of fitness to stand trial and criminal responsibility in both groups, bivariate and multivariate analyses, using the Pearson's Chi squared test and Fisher's exact test for categorical data, were used to determine statistical significance. The statistical significance level was set at $p < 0.05$.

3.6) ETHICS AND CONFIDENTIALITY

The study is a retrospective record review of awaiting trial detainees who were observed over a 30 day observation period during 2010. The participants were not actively involved and no questionnaires or procedures were performed on them. All identifying details such as names, ID numbers and hospital numbers were excluded from the study.

Ethics approval was granted from the Human Research Ethics Committee (HREC) of the University of the Witwatersrand, Johannesburg. *(Appendix B).*

4.0) RESULTS

4.1) Demographics

Table 1.1 summarises the demographic profile of the 200 subjects. The mean age was 32.6 years (±SD 10.92). The youngest participant was 14 years and the oldest 67 years. Of the 200 participants only 20 (10%) were female.

Only 12 (6%) were admitted to the adolescent unit and thus by definition under the age of 18 years. All 12 (100%) of the adolescents were referred as panel cases, compared to only 78 (41.49%) of the adult referrals. (χ^2 = 15.6, df = 1, p = 0.00008). When looking at fitness to stand trial, adolescents also seemed much more likely to be found fit to stand trial: 11 (91.67%) were found fit, whereas only 98 (52.13%) of the adults were fit for trial. (χ^2 = 7.11, df = 1, p = 0.0077).

Table 1.2 summarises further bivariate and multivariate analyses for the rest of the demographic variables, specifically looking at the outcome of the observation (fitness to stand trial), as well as the type of referral (single or panel appointed case.) Employment status of the accused was the only other demographic variable where a significant difference could be shown in terms of fitness to stand trial: Individuals who were found fit for trial were significantly more likely to be either in full time or part time employment and those found not fit for trial were more likely to have been receiving a disability grant. (p = 0.045).

Table 1.1 Demographics.

N		200
AGE (mean ±SD)(years)		32.6 ± 10.92
GENDER [n (%)]		
	MALE	180 (90)
	FEMALE	20 (10)
RACE [n (%)]		
	BLACK	161 (80.5)
	WHITE	18 (9.0)
	INDIAN	1 (0.5)
	COLOURED	19 (9.5)
	OTHER	1 (0.5)
MARITAL STATUS [n (%)]		
	SINGLE	162 (81.0)
	MARRIED	21 (10.5)
	DIVORCED	13 (6.5)
	WIDOWED	3 (1.5)
	UNKNOWN	1 (0.5)
EMPLOYMENT [n (%)]		
	FULL TIME	23 (11.5)
	CASUAL	31 (15.5)
	UNEMPLOYED	119 (59.5)
	DISABILITY GRANT	26 (13.0)
	UNKNOWN	1 (0.5)
LEVEL OF EDUCATION [n (%)]		
	GD 1 – 7	44 (22.0)
	GD 8 – 11	93 (46.5)
	MATRIC	29 (14.5)
	TERTIARY QUALIFICATION	11 (5.5)
	NO SCHOOLING	6 (3.0)
	SPECIAL NEEDS EDUCATION	8 (4.0)
	UNKNOWN	9 (4.5)

N = Number of subjects, % = percentage, SD = standard deviation.

TABLE 1.2. Summary of bivariate and multivariate analyses of demographic variables in terms of referral type and fitness to stand trial. (HLOE = Highest Level of Education.)

	TYPE OF REFERRAL			***FITNESS FOR TRIAL***		
	SINGLE	**PANEL**	**p-value**	**FIT**	**NOT FIT**	**p- value**
GENDER [n]			0.64			0.96
MALE	98	82		98	82	
FEMALE	12	8		11	9	
MARITAL STATUS [n]			0.63			0.69
SINGLE	91	71		86	76	
MARRIED	9	12		11	10	
DIVORCED	8	5		9	4	
WIDOWED	2	1		2	1	
EMPLOYMENT [n]			0.59			0.045*
FULL TIME	13	10		17	6	
PART TIME	14	17		21	10	
UNEMPLOYED	69	50		60	59	
DISABILITY GRANT	13	13		11	15	
HLOE [n]			0.07			0.66
GD 1 – 7	20	24		25	19	
GD 8 – 11	49	44		54	39	
GD 12	22	7		13	16	
TERTIARY	6	5		8	3	
NO EDUCATION	4	2		4	2	
SPECIAL NEEDS	2	6		4	4	
RACE [n]			0.07			0.06
BLACK	81	80		81	80	
WHITE	13	5		14	4	
INDIAN	1	0		1	0	
COLOURED	14	5		13	6	

(Indicates statistical significance.)*

4.2) Forensic Data

Forensic data is summarised in Table 2. Regarding the outcome of the forensic observations, a total of 109 (54.5%) and 97 (48.5%) subjects were found fit for trial and criminally responsible, respectively. (Figures 1 & 2.)

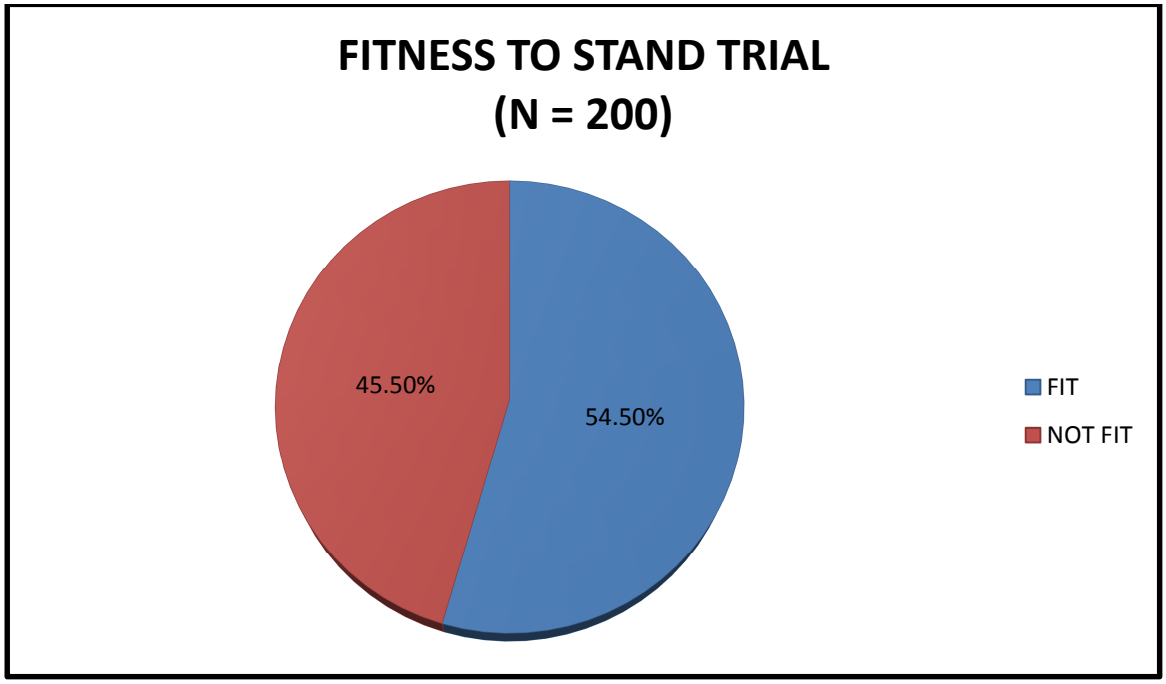

Fig. 1. Fitness to stand trial.

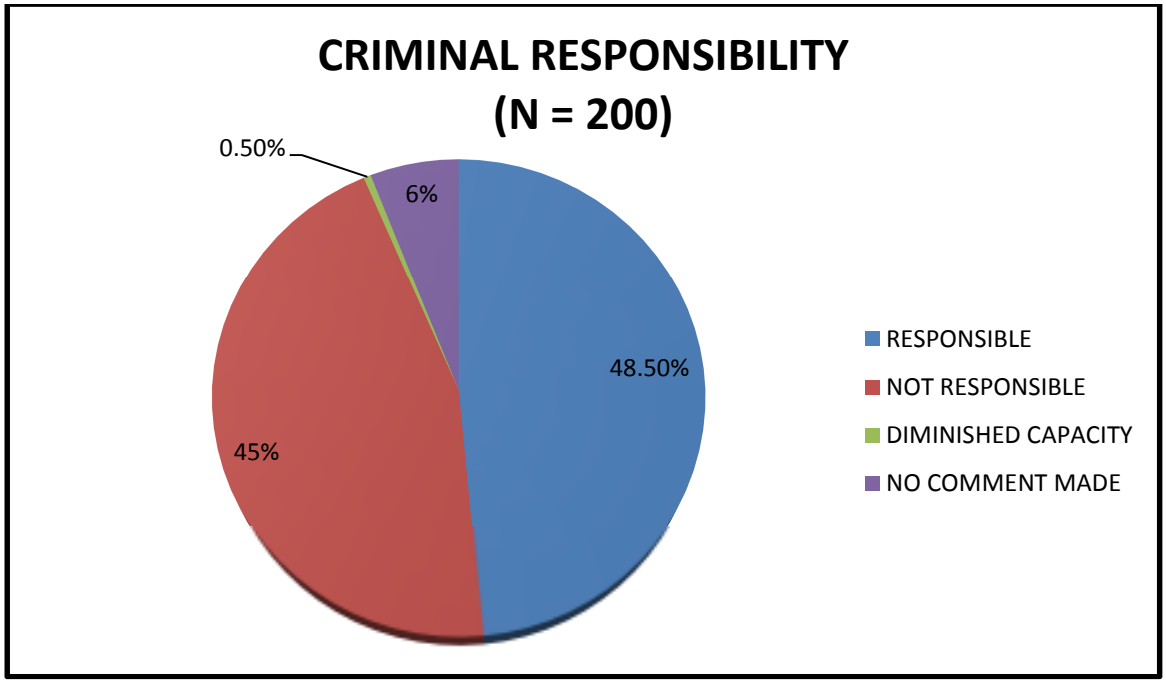

Fig.2. Criminal Responsibility.

TABLE 2 Forensic Data.

N		200
RELATIONSHIP TO COMPLAINANT [n (%)]		
	FAMILY MEMBER	62 (31%)
	OTHER ACQUAINTANCE	42 (21%)
	NOT KNOWN	89 (44.5%)
	UNCERTAIN	7 (3.5%)
TYPE OF REFERRAL [n (%)]		
	SINGLE	110 (55%)
	PANEL	90 (45 %)
CUSTODY [n (%)]		
	OUT ON BAIL	50 (25%)
	FROM PRISON	136 (68%)
	UKNOWN	14 (7%)
REASON FOR REFERRAL [n (%)]		
	FAMILY'S ORAL EVIDENCE	56 (28%)
	DOCUMENTED PROOF OF PSYCHIATRIC CONDITION	43 (21.5%)
	BEHAVIOUR IN COURT/IN CUSTODY	60 (30%)
	ATTORNEY UNABLE TO CONSULT	23 (11.5%)
	ACCUSED'S STATEMENT	15 (7.5%)
	UNKNOWN	3 (1.5%)
PREVIOUS ARRESTS OR OFFENDING BEHAVIOUR		
[n (%)]	PRESENT	127 (63.5%)
	ABSENT	55 (27.5%)
	UNKNOWN	18 (9%)
CRIMINAL CHARGES [n (%)]		
(FIG 5 & 6)	MURDER/ATTEMTED MURDER	32 (16%)
	SEXUAL OFFENCES	29 (14.5%)
	AGGRAVATED ROBBERY	12 (6%)
	ASSAULT – GBH	16 (8%)
	KIDNAPPING	2 (1%)
	ASSAULT – COMMON	11 (5.5%)
	MITP	16 (8%)
	HOUSEBREAKING + THEFT	17 (8.5%)
	ARSON	2 (1%)
	FRAUD	10 (5%)
	DOMESTIC VIOLENCE	14 (7%)
	THEFT	28 (14%)
	*OTHER	11 (5.5%)

N = Number of subjects, % = percentage, GBH = Grievous Bodily Harm, MITP = Malicious Injury to Property.

4.2.1) Type of Referral

Regarding classification or type of referral, a total of 110 (55%) of the participants were referred as 'Single-psychiatrist' cases or 'Singles'. The rest, 90 (45%) were referred as 'Panel appointed' cases. In all of the panel cases, the panel of psychiatrists appointed came to a unanimous conclusion regarding both the diagnosis and outcome in terms of fitness for trial and criminal responsibility.

Analysis for fitness to stand trial revealed that 49 (44.55%) (n=110) of the Singles were found to be fit for trial and 61 (55.45%) were regarded as not fit for trial. The Panel cases however, revealed very much the opposite picture: Of the 90 cases, only 30 (33.33%) were found *not* fit for trial, whereas the majority, 60 (66.67%) were found fit to stand trial. (χ^2 = 9.77, df = 1 p = 0.002). (Figure 3.)

When criminal responsibility was compared, the difference between the two groups of subjects became even more significant: 59 (59.6%) (n=99) of the Singles were found *not* to have been criminally responsible for their actions, and 40 (40.40%) only, were found criminally responsible, whereas only 31 (35.23%) (n=88) of the Panel cases were regarded as not responsible and 57 (64.77%) were regarded as criminally responsible. (χ^2 = 11.08, df = 1, p= 0.001). (Figure 4.)

In 12 cases of the total study population (6%) (n= 200), no comment could be made regarding criminal responsibility, due to a lack of sufficient information and in 1 case (0.5%) a finding of 'diminished capacity' was made.(Fig.2). These 13 cases were excluded in the above and all other analyses of criminal responsibility. (n=99 + 88 = 187).

Furthermore, when comparing fitness and responsibility, individual cases were very likely to be found either 'fit and responsible' or 'not fit and not responsible': In 173 (86.5%) of the total study population, this was indeed the case: 94 (47%) were both fit and responsible, and 79 (39.5%) were neither fit nor responsible. 11 (5.5%) cases were found fit for trial, but not criminally responsible, whereas only 3 (1.5%) were found not fit for trial, but were criminally responsible for their actions. (χ^2 = 140.27, df = 3, p < 0.0000).

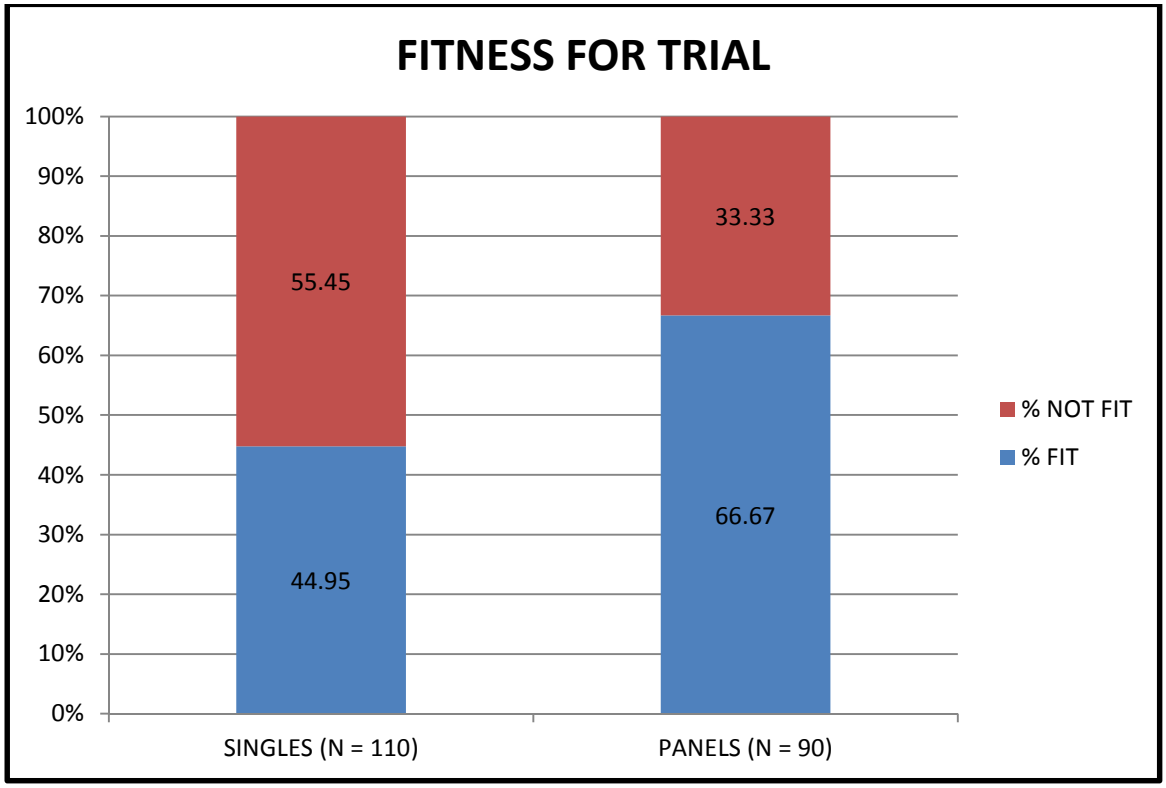

Figure 3. Comparison of 'Singles' and 'Panels' for fitness to stand trial.

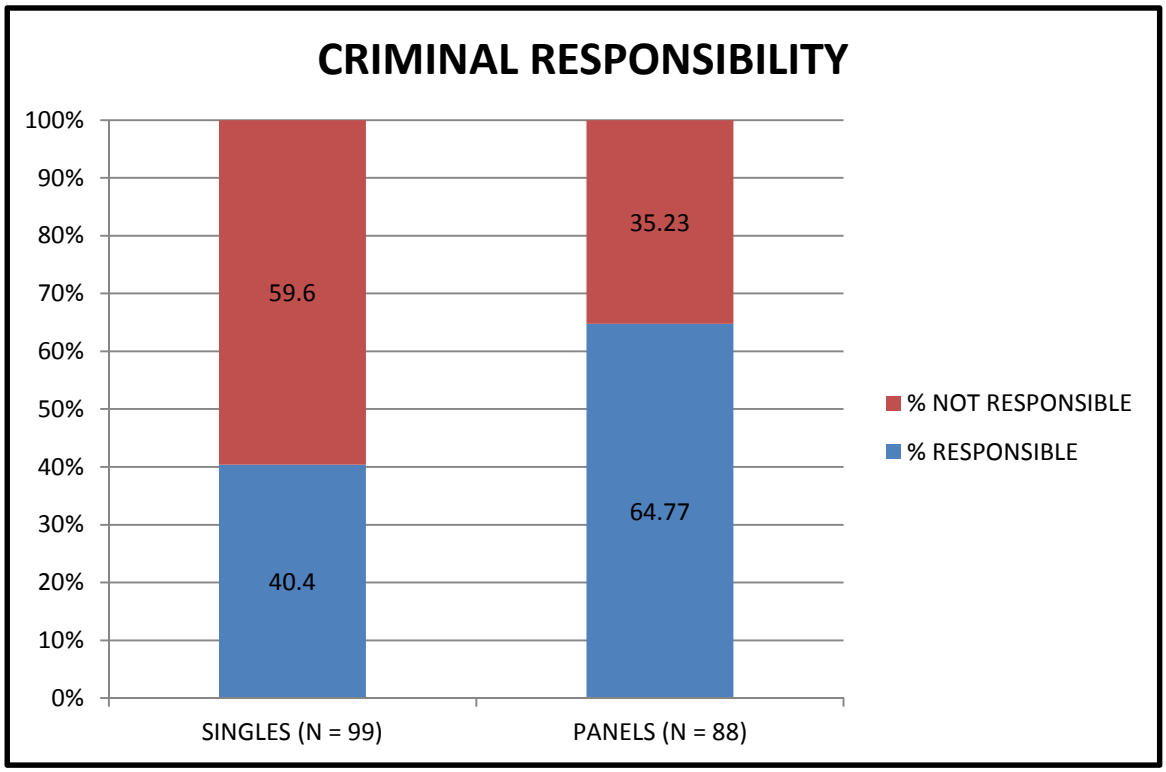

Figure 4. Comparison of 'Singles' and 'Panels' for criminal responsibility.

4.2.2) Relationship between the accused and complainant/victim.

From a total n = 193 cases, 104 (53.89%) were well known to their victims or complainants and 89 (46.11%) were not known. Of the panel cases, (n = 86), 53 (61.63%) were well known to their victims – either a family member or close friend or acquaintance – however amongst the single cases, (n = 107), only 51 (47.66%) were well known to their victims. The apparent difference observed fell just outside statistical significance: (χ^2 = 3.74, df = 1, p = 0.053). The relationship between victim and accused did not seem to be associated with either the accused's fitness to stand trial or criminal responsibility. (χ^2 = 0.0099, df = 1, p = 0.92 and χ^2 = 0.0034, df = 1, p = 0.95, respectively).

4.2.3) Custodial Status

In 186 (93%) cases, information on the accused's custodial status was available from the sources examined. Of the 86 (46.24%) who were found not fit for trial, 72 (83.72%) were from prison and only 14 (28%) were granted bail. When compared to the 100 (53.76%) cases found fit to stand trial, 36 (36%) were granted bail and 64 (64%) were from prison. (χ^2 = 9.15, df = 1, p = 0.002). When comparing criminal responsibility and type of referral (single vs panel) with the accused's custodial status respectively, no statistical significance was found. (p = 0.08 and p = 0.54).

4.2.4) Reason for Referral for Observation

Table 2 summarises the reasons for referral.

The behaviour of the accused in court or during arrest or in custody, seemed to be associated more strongly with referral of the 'single' cases, whereas the defence attorney having difficulty in consulting with his/her client, seemed to be more associated with the referral of the 'panel' cases: Of the total of 60 (30%) cases referred due to their odd/abnormal behaviour in court, 44 (73.33%) were singles and out of the 23 (11.5%) referred due to the attorney being unable to consult, 15 (65.22%) were 'panel' cases. (χ^2 = 10.56, df = 1, p = 0.0012).

Also of note was that 'Attorney being unable to consult' and cases referred as a result of 'Accused's own statement/oral evidence in court', were significantly more associated with being found fit to stand trial: 18 out of the 23 cases (78.26%) referred due to attorney being unable to consult were found fit for trial. All of the 15 cases (100%) who were referred due to their own statements in court were in fact also ultimately found fit to stand trial. This was however in contrast to cases referred due to their 'Odd or abnormal behaviour in court': Of those 60 cases, 48 (80%) were found not fit to stand trial. ($\chi^2 = 43.59$, df = 2, $p < 0.0000$).

Furthermore, the 'attorney being unable to consult' and 'accused's own evidence' referrals, were more likely not to have had any actual past psychiatric history revealed during observation (60.87% and 66.67%, respectively). As could be expected, the majority of cases, 35 out of the 43 (81.4%), referred as a result of 'Documented proof of a psychiatric condition' did indeed reveal a genuine past psychiatric history during observation. ($\chi^2 = 27.01$, df = 4, $p < 0.0000$).

4.2.5) Previous arrests or offending behaviour

When examining the relationship between previous offending behaviour and type of referral, as well as fitness to stand trial, no statistical significant relationship could be shown ($p = 0.128$ and $p = 0.631$ respectively).

4.2.6) Criminal Charge

Table 2 summarises the criminal charges laid against the accused. In cases where more than one charge was laid against a particular individual, the most serious, or main charge, was taken as the charge against that individual. Figures 5 and 6 give a graphical representation of the criminal charges and the outcome of the observation in terms of fitness and criminal responsibility, respectively. The more serious charges (murder, sex crimes etc.) were more likely to be found both fit and responsible when compared to the less serious charges, such as MITP and common assault.

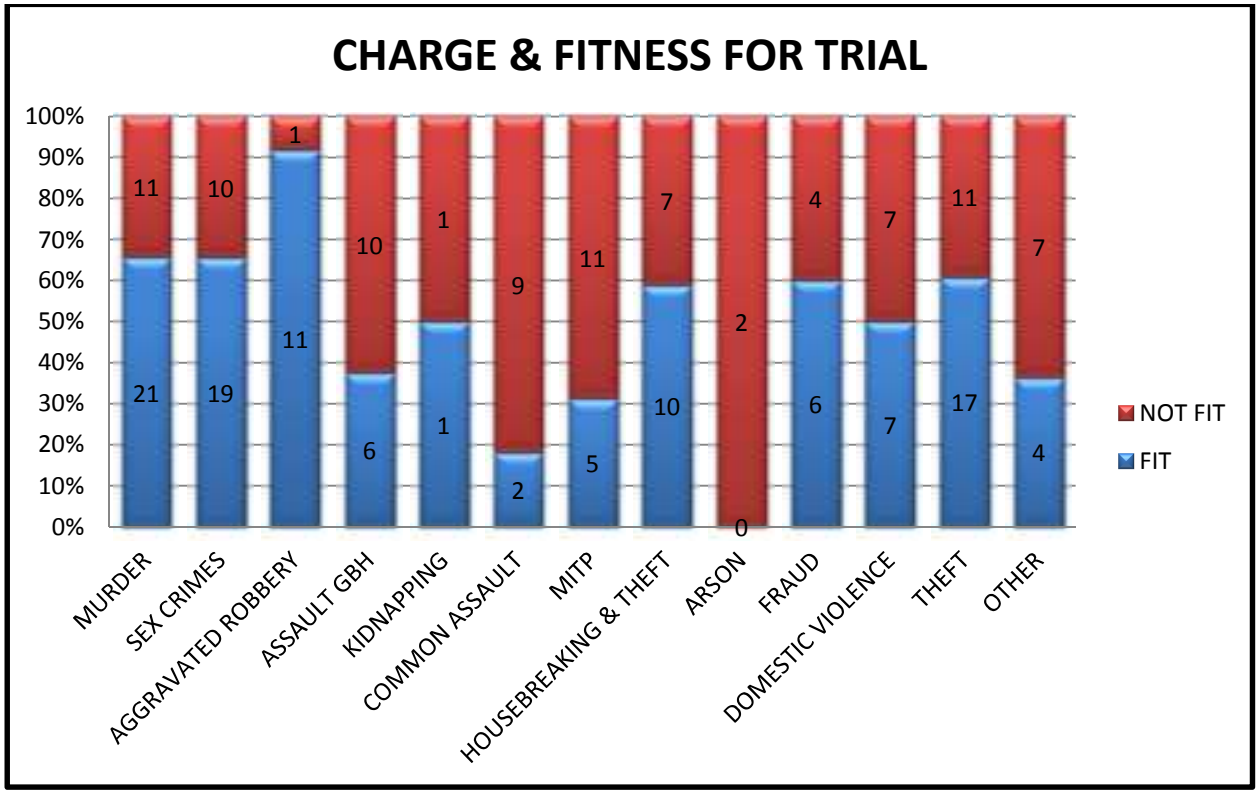

Fig.5. Fitness to stand trial in terms of Criminal Charge. (n =200)

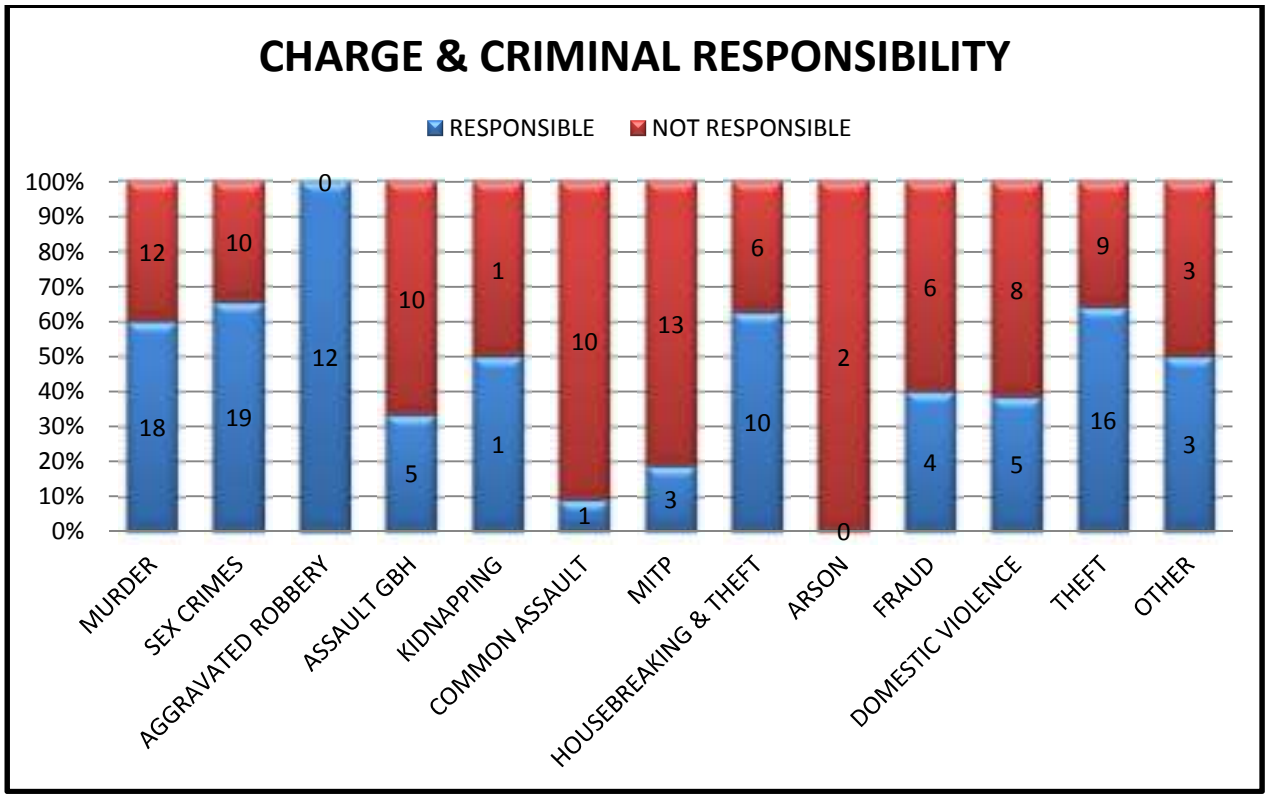

Fig.6. Criminal responsibility in terms of Criminal Charge. (n = 187)

'*Assault GBH' = Assault with intent to do grievous bodily harm. 'MITP' = Malicious injury to property. *'Other' = Crimes including trespassing, possession of stolen property, possession of cannabis, dealing in drugs, possession of unlicensed fire-arm and/or ammunition and impersonating a SAPS officer.*

When combining the charges of 'Housebreaking and theft' and 'Theft', and comparing them with the rest of the *single* observation cases, there seemed to be a significant difference: Cases of 'housebreaking and theft' and 'theft' were more likely to be found fit to stand trial and criminally responsible for their actions. From a total of 110 singles, 45 (41%) were charged with either of these two crimes and a total of 27 of these (60%), were found fit for trial, whereas the rest of the 'singles', totalling 65 (59%), only 22 (33.85%) were found fit for trial. ($\chi^2 = 7.36$, df = 1, p = 0.0067). In terms of criminal responsibility, similar figures were found: out of a total of 41 cases of housebreaking and theft and theft, 26 (63.41%) were found criminally responsible and only 14 out of 58 (24.14%) of the other single observation cases were found responsible for their crimes. (N = 58 + 41 = 99 as the other 11 cases were excluded as no comment were made on their criminal responsibility). ($\chi^2 = 15.39$, df = 1, p = 0.00009).

When performing the same analysis for cases of 'MITP' and 'Common Assault' as a group, compared to the rest of the single referred cases, the opposite picture emerged: 27 of the 110 single cases (24.55%) were charged with either of these two offences. Of these, 20 (74.07%) were found not fit to stand trial, whereas of the rest of the 83 singles (75.45%), 41 (49.4%) were found not fit for trial. ($\chi^2 = 5.02$, df = 1, p = 0.025). As expected, a similar trend was seen when looking at criminal responsibility: 23 out of the 27 cases (85.19%) of 'MITP' or 'Common assault' were also found not to have been responsible for their crimes, whereas for the rest of the single cases the finding was exactly fifty-fifty, with 36 being found responsible and 36 not responsible. (N = 72 + 27 = 99 as again the 11 cases of 'no comment' on responsibility were excluded.) ($\chi^2 = 10.1$, df = 1, p = 0.0015).

4.3) Psychiatric Data

Table 3. Summary of the psychiatric data collected:

N		200
PAST PSYCHIATRIC HISTORY		
[n (%)]	PRESENT	105 (52%)
	ABSENT	83 (41.5%)
	UNCLEAR	12 (6%)
ON PSYCHIATRIC TREATMENT DURING TIME OF OFFENCE		
[n (%)]	YES	18 (9%)
	NO	161 (80.5%)
	UNKNOWN	21 (10.5%)
ON PSYCHIATRIC TREATMENT DURING OBSERVATION		
[n (%)]	YES	41 (20.5%)
	NO	159 (79.5%)
SUBSTANCE ABUSE/DEPENDENCE		
[n (%)]	NONE	34 (17%)
	CANNABIS ONLY	55 (27.5%)
	ALCOHOL ONLY	23 (11.5%)
	CANNABIS + ALCOHOL	38 (19%)
	OTHER DRUGS	8 (4%)
	POLY-SUBSTANCE (>2 INCL.CANNABIS)	29 (14.5%)
	UNKNOWN	13 (6.5%)

PAST MEDICAL HISTORY		
[n (%)]	**NONE**	**136 (68%)**
	EPILEPSY	**24 (12%)**
	HEAD INJURY	**21 (10.5%)**
	HIV +	**8 (4%)**
	OTHER	**7 (3.5%)**
	UNKNOWN	**4 (2%)**
HISTORY OF EARLY MAL-ADJUSTMENT		
[n (%)]	**NONE**	**55 (27.5%)**
	CONDUCT FEATURES	**35 (17.5%)**
	LEARNING/ACADEMIC MAL-ADJUSTMENT	**19 (9.5%)**
	MULTIPLE ISSUES	**31 (15.5%)**
	UNKOWN	**60 (30%)**
FAMILY PSYCHIATRIC HISTORY		
[n (%)]	**PRESENT**	**53 (26.5%)**
	NONE	**90 (45%)**
	UNKNOWN	**57 (28.5%)**

Figures 7 – 9 illustrate the psychiatric diagnoses made during the observation process, in terms of the type of referral, fitness to stand trial and criminal responsibility respectively. The diagnosis taken was the main diagnosis given to each case, excluding diagnoses of co-morbid substance use disorders. 'No mental illness' refers to all cases of 'no mental illness or intellectual disability'. 'Other psychoses' includes all cases of substance induced psychosis, psychosis due to a general medical

condition, schizo-affective disorder and psychotic disorder not otherwise specified. 'Cognitive impairment' includes all diagnoses such as borderline intellectual functioning, below average intellect and specific learning disorders. 'Other' includes all the other diagnoses such as depressive disorders, anxiety disorders, personality traits and disorders, conduct disorder and substance use disorders diagnosed without mention of another co-morbid diagnosis of a severe and enduring form of mental illness or intellectual disability.

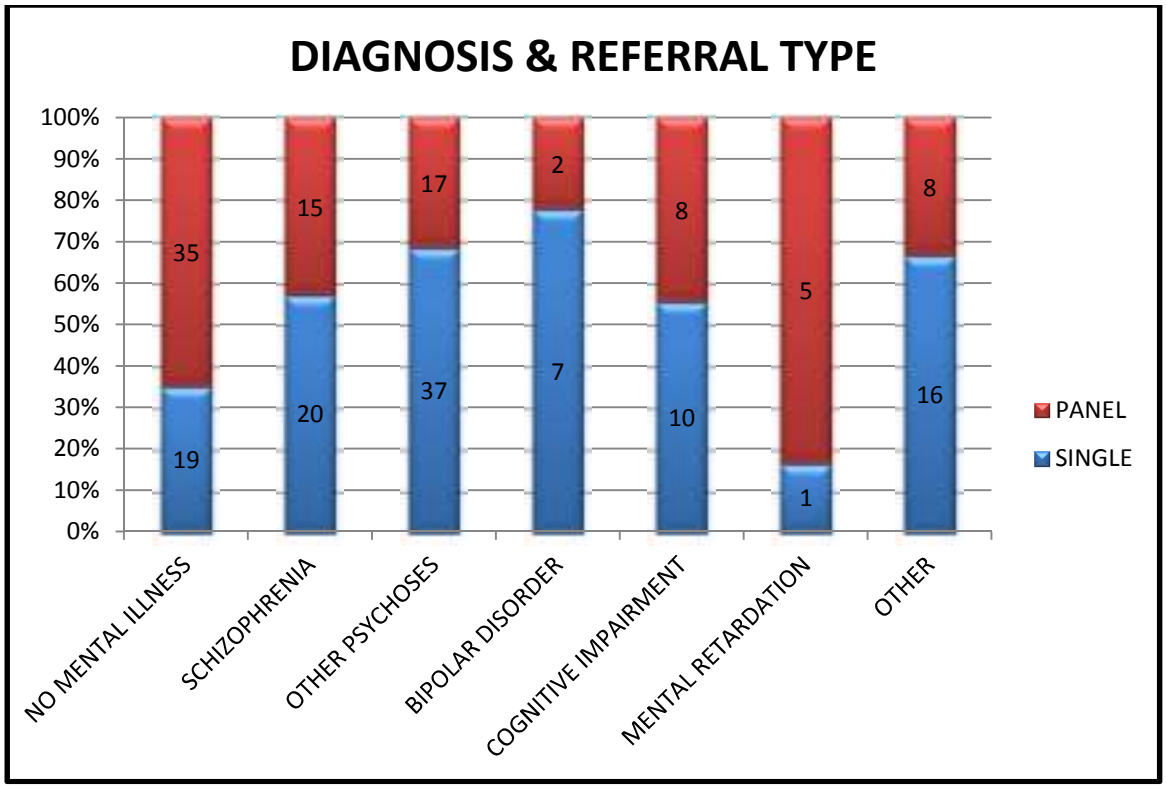

Fig.7. Diagnoses made in terms of the referral type (n = 200).

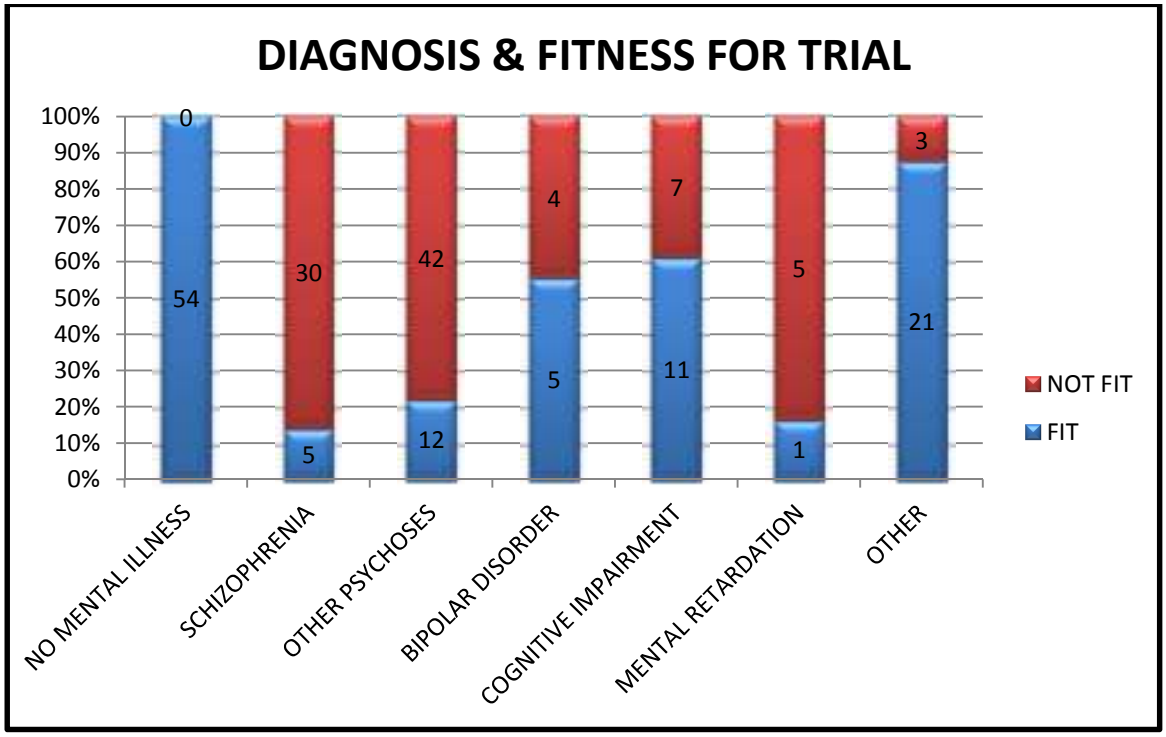

Fig.8. Diagnoses made in terms of fitness to stand trial (n = 200).

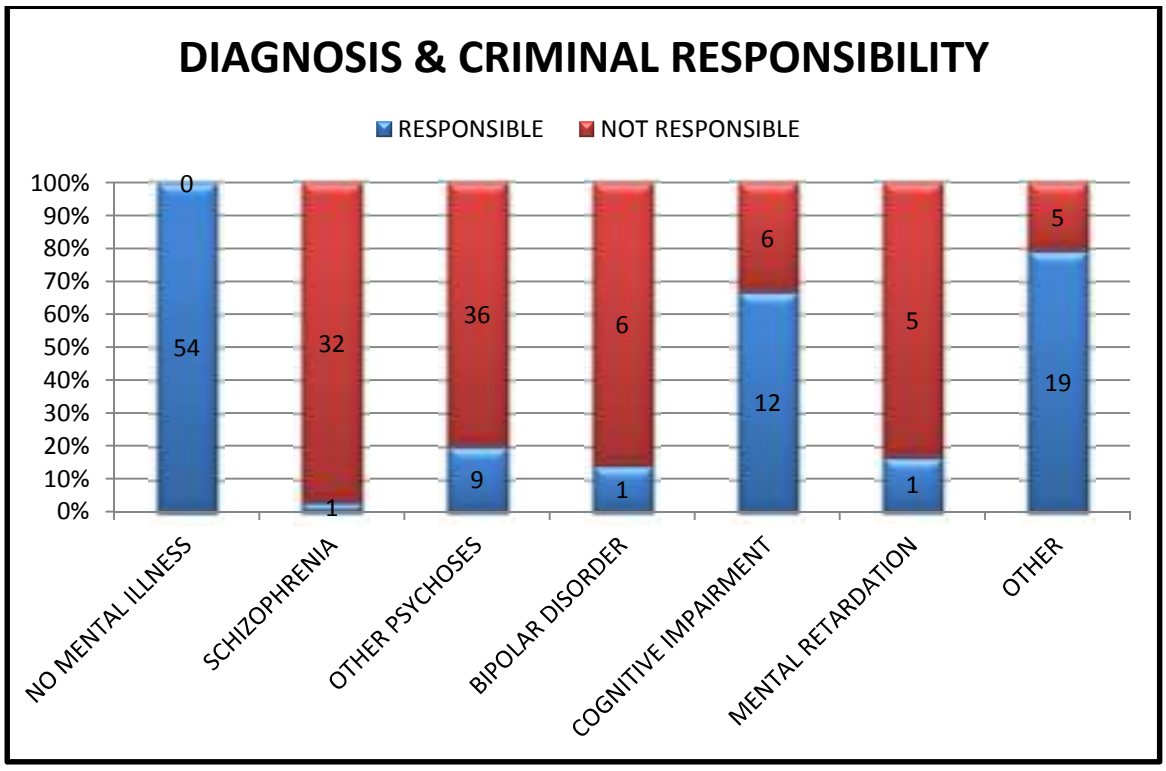

Fig.9. Diagnoses made in terms of criminal responsibility (n = 187).

4.3.1) Past psychiatric history.

Of the 83 cases (41.5%) where no past psychiatric history was present, 55 (66.27%) were found fit to stand trial and of the 105 cases (52%) with a past psychiatric history, 50 (47.62%), were found fit to stand trial. ($\chi^{2=}$ 6.54, df = 1, p = 0.01). The same trend can be seen regarding criminal responsibility, with a positive psychiatric history being more associated with not being found criminally responsible. (χ^2 = 12.65, df = 1, p = 0.0004). No significant association between past psychiatric history and the type of referral could be found. (χ^2 = 0.32, df = 1, p = 0.57).

4.3.2) Psychiatric treatment at the time of the offence and during the observation process.

As can be seen from Table 3, the majority of cases studied were neither on any psychiatric treatment during the time of the offence, 161 (80.5%), nor were they on any psychiatric treatment during observation, 159 (79.5%).

12 out of the 17 cases (70.59%), were taking treatment during the time of the offence and found criminally responsible for their actions. When these were compared to the 78 out of 153 (50.98%) who were not on any treatment and also found responsible, no significant difference could be shown. (χ^2 = 2.36, df = 1, p =0.12).

However, when specifically looking at the 105 (52%) cases with a known past psychiatric history, those who were compliant on their treatment around the time of the offence were significantly more likely to be found criminally responsible, than those who were non-compliant: 12 out of 17 (70.59%) on their treatment were found responsible, whereas only 21 out of 65 (32.31%) of those on no treatment were found responsible.(χ^2 = 8.21, df = 1, p = 0.004)

Finally, when comparing those on treatment during the observation with regards to their fitness to stand trial and the type of referral (single vs panel) respectively, no differences were seen: p = 0.90 and p = 0.87, respectively.

4.3.3) Substance abuse

153 (76.5%) out of the total study population, had a history of one or more substances of abuse or dependency. Cannabis was by far the most common substance of abuse with 55 cases (27.5%) having a positive history for cannabis as their only drug of abuse. In total, 122 (61%) had a positive history for cannabis abuse, either with or without other substances.

Comparative analysis of those with any substance of abuse versus those with no documented substance abuse, did not yield any statistically significant results in terms of the type of referral, fitness to stand trial or criminal responsibility.($p = 0.16$, $p = 0.73$, $p = 0.92$, respectively). Also, when comparing the 29 (14.5%) poly-substance abusers with the rest of the study population, no significant differences could be demonstrated.

4.3.4) Relevant medical history.

As can be seen from Table 3, 60 (30%) of the total study population, presented with some relevant past medical history. No significant differences could be shown regarding the type of referral, fitness for trial or criminal responsibility, when comparing these cases with those who presented with no relevant medical history, 136 (68%). ($p = 0.55$, $p = 0.36$, $p = 0.11$ respectively).

When comparing the 24 (12%) cases with a diagnosis of epilepsy, with the rest of the study population 176 (88%), it appeared that those with epilepsy were more likely to be found fit to stand trial: 20 of the 24 (83.33%) were fit for trial whereas only 89 (50.57%) of the rest of the non-epileptic study population were found fit for trial. ($\chi^2 = 9.14$, $df = 1$, $p = 0.0025$). A similar picture emerged when looking at criminal responsibility, but the significance levels were lower: ($\chi^2 = 5.10$, $df = 1$, $p = 0.02$).

A similar analysis for the 21 (10.5%) cases with a history of a previous head injury, could not reveal any significant differences when compared to the rest of the study population.

4.3.5) History of early maladjustment.

The majority of referrals presented with a history of some form of early maladjustment: In total, 85 (42.5%) of the total population, whereas 55 (27.5%) had no such history. (In the other 60 (30%), no information was available. These cases were excluded in all analyses.)

When comparing those with early maladjustment to those without, no significant difference could be shown regarding the type of referral. ($\chi^2 = 0.65$, df = 1, p = 0.42). When comparing the groups in terms of fitness and criminal responsibility, it appeared that those with a history of some form of early maladjustment were more likely to be found fit to stand trial: 60 of the 85 (70.59%) were found fit to stand trial and 57 out of 83 (68.67%) were also found criminally responsible. ($\chi^2 = 6.56$, df = 1, p = 0.01 and $\chi^2 = 11.22$, df = 1, p = 0.0008, respectively).

5.0) DISCUSSION

5.1) Demographics

As can be deduced from Table 1.1, the typical referral for mental observation to Sterkfontein Hospital during the study period, represented a rather homogenous group of individuals from a demographic point of view: The typical candidate would be on average 32.6 years of age, male (90%), black (80.5%), single (81%), unemployed (59.5%) with a highest level of education between Grade 8 – 11 (46.5%). It is thus not surprising that analyses of these variables yielded very little differences regarding the type of referral and observation outcome in terms of fitness to stand trial (Table1.2).

Employment status was the only variable where a significant difference ($p = 0.045$) was seen regarding the accused's fitness to stand trial: It appears that those in either full time or part time employment are more likely to be found fit to stand trial, compared to those who were unemployed or receiving a disability grant. The fact that an individual is able to maintain employment, may possibly indicate a higher overall level of functioning and thus making it less likely that such a person would be mentally impaired significantly enough to be found unfit for trial. Conversely, those who are already receiving a disability grant as a result of their mental condition would be far less likely to be found fit for trial. Numerous studies have repeatedly shown gainful employment to be, not only an indicator of successful treatment outcome, but also a highly effective treatment modality in those with severe mental illness.[26 – 30] Furthermore, studies also indicate that employment in the mentally ill is significantly associated with improved cognitive functioning, especially in modalities such as attention, working memory and executive functioning.[31 – 34] As the concept of 'fitness to stand trial' is essentially a reflection of cognitive functioning – the ability to follow and comprehend the court proceedings – the finding in this study of its association with employment, can therefore be seen as supportive of the above studies.

Although the adolescents made up only a small proportion of the study population (6%), they clearly stood out in so much as all (100%) were referred as panel cases and all but one, were also found fit for trial. It is possible that the children's courts in our jurisdiction may be less inclined to refer adolescents for 30 days observation, if the child is accused of only a minor offence. Such cases may very well be seen as outpatients by a child and adolescent psychiatrist whilst the child remains in the custody of his parents or a place of safety. Such cases would thus not have been included in the current study.

5.2) Forensic Data

A total of 48.5% of the current study subjects were found both fit for trail and criminally responsible for their actions. This figure is in keeping with figures of around 42 – 57% found in other South African studies of forensic mental observations. [21 – 25]

From the results of this cross-sectional retrospective record review, it appears that the original hypotheses of this study may be correct: Those cases referred as 'singles' are significantly more likely to be found both unfit for trial and not criminally responsible for their actions, compared to those referred as 'panel' cases. This would thus indicate that people with active and severe forms of mental illness are more likely to commit relatively minor or non-violent offences and those with no significant active mental illness are more likely to commit offences of serious violence. This may appear to be against the tide of numerous studies which have found mental illness, specifically a diagnosis of schizophrenia, to be a significant risk factor for serious violence, especially murder.[9 – 18] These studies tend to focus on those with known diagnoses of severe mental illness who are either in a forensic hospital or prison. The risk that these patients then pose to commit a seriously violent offence such as murder is then compared to the risk posed by the general population, and clearly the mentally ill pose a greater risk. One possible explanation for this strong association could be related to the selection of subjects in these studies: Those selected from forensic hospitals and

sentenced prisoners may represent only the extreme cases of severe psychopathology and violence, respectively.[4]

The current study is thus more in keeping with the work of Taylor & Gunn[4] where the study population consisted of pre-trial detainees/remand prisoners charged with the full spectrum of minor and major crimes. They considered these pre-trial detainees as perhaps the "least restrictive" in terms of both their psychopathology and range of offending behaviour.

The authors go on to speculate that their study population may indeed have been "inflated" by laying unnecessary minor charges against those who are clearly mentally ill.

This most certainly rings true from a South African perspective, where a resource-scarce mental healthcare system often lacks the capacity and strains to deal with the enormous public demand for services.

One may speculate that relatives of a difficult and aggressive mentally ill person may indeed feel they are left with no other option than to lay a relatively minor charge, such as common assault or MITP, against their relative—indeed, not with the intent to seek some form of justice or retribution necessarily, but rather in a desperate attempt to seek help for their relative, whom they may perceive the mental healthcare system is unable or unwilling to assist.

Furthermore, since the implementation of the current Mental Healthcare Act, Act 17 of 2002, late in 2004, the option of accessing the mental healthcare system directly via the courts has also been taken away from relatives battling to get help with an aggressive mentally ill person. Anecdotal reports and unpublished statistics from the forensic unit at Sterkfontein have shown an increase in the number of referrals for minor offences ('singles') since the advent of the current Mental Healthcare Act.

5.2.1) The relationship between the accused and complainant.

The tendency for victims/complainants to be well known to, or, at least acquainted with their assailants, seems to be more common amongst the panel cases than the singles.

Indeed, there is good support from the literature to show that in most cases of murders committed by mentally disordered persons, the majority were well known and/or family members of their victims.[35 -37] Also, in a French study[38], comparing the characteristics of murderers with and without mental illness, the mentally ill were significantly more likely to have been well known to their victims when compared to those without any psychiatric disorders: (94,6% versus 76,7%, p=0,008). A similar trend can be found when looking at cases of rape and sexual assault.[39]

The singles represent a more challenging group to draw conclusions from in this regard: Very few studies look at the less serious or non-violent offences. Two studies[36,37] examining 'non-lethal offences' found that again, the majority of these offences committed by mentally disordered offenders, are committed against family members or acquaintances, with only 14% and 16% respectively, targeting strangers.

This appears to be in contrast to the findings of this study, where 52% of the singles were not known to their victims at all. This could possibly be explained by the fact that the singles include many examples of 'non-personal' crimes such as fraud, shoplifting, damage to property and housebreaking, where the 'victim' might be an institution or business. Furthermore, one could argue that family/acquaintances of a mentally ill person committing a minor transgression, may be less likely to lay a criminal charge, compared to strangers or businesses who may be more likely to do so.

5.2.2) Custodial Status

The fact that those found not fit for trial were significantly more likely to be refused bail i.e. sent for observation directly from prison, may indicate the reluctance of the courts to release potentially mentally unstable individuals out on bail. Surprisingly, the type of referral – which is essentially a function of the seriousness of the alleged offence—did not seem to play an important role in the decision whether to grant bail or not, as no significant difference could be shown. It thus appears that the presence of possible mental illness is regarded by the courts as being of greater risk to the community, rather than the seriousness of the crime that the individual is being accused of.

Based on the findings of this study and the acceptance of the hypothesis that those without mental illness are more likely to commit the more serious crimes when compared to the mentally ill, one may venture that those with mental illness are being unfairly discriminated against during bail hearings and possibly inappropriately detained in prison.

5.2.3) Reasons for Referral for Observation

'Odd or strange or unusual behaviour in court' seems to be associated most strongly with the accused ultimately being found not fit for trial: 80% of such cases were found not fit. Also, the majority of these cases (73%) were single observation cases. In contrast 'Attorney being unable to consult' was significantly more associated with being found fit for trial as well as with the panel referrals.

One possible explanation could be that those charged with minor offences, who behave in a way making it quite obvious to the court that they are mentally ill, would be directly referred for mental observation (and kept in prison while on a waiting-list, as discussed above). In these cases an attorney may not even be appointed or consult much, prior to referral of such cases.

It is difficult to explain why the panel cases would be more strongly associated with the attorney being 'unable to consult': Clearly, proper defence counsel is prudent when one is charged with a more serious offence. However the fact that the majority of the panel cases were found both fit and responsible, and 78% of 'attorney unable to consult' cases were also found fit for trial, makes it hard to understand what the exact reasons for not being able to consult actually were. One could cautiously speculate that it may in fact be part of a tactical move on behalf of the defence counsel, trying to defend a very difficult case. This is further supported by the fact that the majority of these cases also did not reveal any significant past psychiatric history.

The fact that 100% of cases referred solely due to their own oral evidence in court, were all found fit for trial, speaks for itself. One could speculate that an accused's own account of their mental illness in court, should not be regarded as sufficient enough evidence to warrant any court to make a referral for forensic observation.

5.2.4) Criminal Charge.

Perusal of Fig. 5 & 6 further reiterates the fact that perpetrators of the more serious offences are more likely to be found fit and responsible compared to the less serious offenders, however two charges, amongst the singles, seemed to show the opposite trend : 'Housebreaking and theft' and 'Theft'. Combined analysis of these two charges showed that these offenders were more likely to be found fit and responsible, when compared with the rest of the single cases.

When a similar analysis of the two charges, 'MITP' and 'Common assault' was performed, the opposite finding was made: They were more likely to be found not fit and not responsible, which was in keeping with the overall finding regarding the singles.

Based on the above, one could therefore begin to postulate what type of offending behaviour would be more in keeping with a mentally ill person: Simple, often poorly motivated, poorly or unplanned or rather primitive acts of impulsive aggression towards the environment or the closest unfortunate

person, will ultimately result in charges of MITP and assault respectively. Offences such as housebreaking and theft may conversely require a greater degree of executive functioning such as planning and self-monitoring which would explain the greater proportion being found fit and responsible and thus not currently mentally ill.

This may further explain the very high percentage, (100%) of all cases of robbery with aggravated circumstances being found criminally responsible for their actions: It is very unlikely that a person with active and severe mental illness would be capable of committing such a relatively complex crime. Aggravated robbery is also often committed by two or more co-perpetrators and it is unlikely that a mentally ill person would be able to successfully plan and execute their part in such a scenario.

Regarding the panel cases, one may argue that crimes such as murder, rape and assault GBH often involve impulsive acts with little forethought or planning and therefore may fit in better with the profile of a mentally disordered perpetrator. However many others in this category may represent more predatory and carefully premeditated attacks, which would conversely favour the mentally well rather than the mentally ill.

5.3) Psychiatric Data

5.3.1) Diagnosis

Of note is that 54 out of the total study population of 200 (27%) were not diagnosed with any form of psychiatric disorder or intellectual disability. 65% of these cases were also referred as panel cases, and as would be expected, they were all found fit and responsible. This further serves to support the hypotheses that the perpetrators of the more serious offences are more likely to be mentally normal.

Further, as could be expected, a diagnosis of a major psychotic disorder such as schizophrenia and other psychoses is significantly associated with not being found fit or responsible.

Although the diagnosis of bipolar disorder was only given in 9 cases, 5 of these were found fit for trial (56%) and yet only 1 was found to have been responsible. This can be explained by the fact that patients with bipolar disorder would typically offend during a period of mania with psychosis, making them not responsible, but by the time they present for observation they may already be in remission and thus assessed as fit to stand trial.

The 24 cases classified as 'other' represented mostly cases of non-psychotic disorders, such as unipolar depressive disorders, anxiety disorders and personality disorders etc. where reality testing would generally not be affected. It is thus clear from the outcome that these diagnoses seldom impact on an accused's fitness for trial or criminal responsibility.

5.3.2) Psychiatric treatment at the time of the offence and during observation

Overall, the use of psychiatric medication, both during observation and around the time of the alleged offences, was very low.

Of the 105 (52%) of the study population where a past psychiatric history was present, only 20% were actually compliant on their treatment around the time of their offences. The impact of treatment compliance was clearly relevant as these 20% were significantly more likely to be found responsible than those who defaulted on their treatment. This emphasises the importance of treatment compliance among psychiatric patients, not only in reducing overall morbidity, but also in possibly reducing criminal behaviour borne out of uncontrolled mental illness and ultimately resulting in long term forensic admissions.

Traditionally, the use of psychiatric treatment during the observation is kept to a minimum, as the idea is to observe the mental status of the accused for a 30 day period, with as little as possible

interference from external confounding factors. Medication would typically be continued if a patient has a well-documented psychiatric history and is clearly stable on his/her current treatment. It may also be started in cases where a patient is clearly severely psychotic and medication may thus be needed for acute containment and stabilisation. Therefore, one can deduce that those given medication during the observation period, represent a mixture of patients in terms of their mental status. This could then possibly explain why no significant difference in terms of fitness for trial could be shown.

5.3.3) Substance Abuse.

The overwhelming majority of the study population (77%) presented with either substance abuse or dependence. Also, in most cases the substance abuse/dependence was diagnosed together with another major co-morbid Axis I diagnosis such as 'substance induced psychotic disorder'. This would explain why this study failed to demonstrate the impact of pure substance abuse alone on either the outcome of the observation or the type of referral.

Another factor, of course may be that substance abuse is so common among criminal offenders, that the courts would be unlikely to refer cases which are purely substance related, for forensic observation.

5.3.4) Relevant Medical history.

Epilepsy may present with a variety of neuro-psychiatric symptoms resulting in possible aberrations in consciousness and mental status, which could render an individual not responsible for their actions. This would include cases of epileptic automatism which occur typically during the intra-ictal period or in the immediate post-ictal period, resulting in a total lack of voluntary conduct. Epilepsy is

also associated with major inter-ictal mood and psychotic disorders which may present clinically indistinguishable from primary psychiatric disorders.

Comparison of the epileptic patients as a group with non-epileptic patients however revealed that they were more likely to be found fit for trial and criminally responsible.

This may be explained by the paroxysmal nature of the condition itself, where the patient is observed when the epilepsy is well controlled – explaining the higher significance level for being found fit for trial ($p = 0.0025$)—but may have had seizures or seizure related psychiatric symptoms around the time of the offence, explaining the relatively lower significance level for responsibility ($p = 0.02$)

There may also be an incorrect assumption by the courts, that merely because an accused has a diagnosis of epilepsy, that this on its own should be a reason enough for Section 79 referral, possibly resulting in a higher number of inappropriate or unnecessary referrals in these cases.

5.3.5) History of early maladjustment.

As would be expected in any offending or criminal population, this study found a high rate of evidence of early maladjustment: Significant histories of conduct disorder features, learning difficulties, academic failures as well as a history of physical, emotional or sexual abuse or neglect were all included in the 85 (42.5%) of cases categorised as having some form of early maladjustment.

The fact that these individuals were more likely to be found fit and responsible, compared to those with no such histories, may emphasise the importance of these factors in the development of maladaptive patterns of behaviour, possibly in keeping with personality disorders, rather than that of severe mental illness. There are numerous examples of longitudinal studies on children and

adolescents which lend support to the fact that early disruptive behaviours, conduct disorder features, poor socialisation and school achievement are significantly associated with delinquent and anti-social personality traits in later adolescence and early adulthood.[40-45] Child maltreatment and neglect have also been cited as major risk factors for internalising and externalising problems which may ultimately lead to maladaptive personality traits and aggressive behaviours.[46] Although recent studies[47,48] have identified premorbid behavioural and childhood neurobiological disturbances to be more common amongst patients who will eventually be diagnosed with schizophrenia, such early disturbances tend to be subtle and subjects tend to have an increase in "the prevalence of trait related measures of schizophrenia spectrum psychopathology such as schizotypy...."[47] It is therefore possible that such rather subtle deviations in early childhood behaviours may not have been considered clinically relevant or 'picked up' in adult patients who now present with severe mental illness. Thís, in contrast to the more severe conduct features and disruptive behaviours so typically associated with those with personality disorders who would then be more likely to be found fit to stand trial.

6.0) RECOMMENDATIONS

6.1.) Recommendations for further studies

6.1.1 Adolescent Forensics

Further studies, looking at larger numbers of adolescents, representing the full spectrum of offending behaviours are required to draw further conclusions regarding this particular highly specialised sub-group of forensic referrals.

6.1.2 The Impact of the Mental Healthcare Act, Act 17 of 2002

Further future studies could be contemplated, comparing the referral rates of specifically the single cases, prior to and after implementation of the Mental Healthcare Act, Act 17 of 2002, in order to measure the impact of this legislation on both general and forensic psychiatric referrals. This could further highlight the notion of users accessing mental healthcare services via the forensic system.

6.1.3 The utility and constitution of the panel of psychiatrists

Late in the year 2010, the Criminal Procedure Act was amended reducing the number of psychiatrists constituting a panel, from three to only two. This has sparked widespread debate as to the utility of the panel itself and would be an important area of future research.

6.2.) Recommendations to Criminal Courts and Probation Officers

6.2.1 Bail

The results of this study may serve as part of a guideline to courts regarding their decision whether to grant bail to a mentally ill defendant. The mere fact that a defendant is mentally ill or has a

history of mental illness should not automatically lead to refusal of bail, especially in cases where there is a relatively minor charge and where the family has indicated a willingness to supervise the defendant.

6.2.2 Reasons for Referral for Observation

An accused giving oral evidence of their alleged mental illness should not be regarded as sufficient enough to warrant a formal Section 79 referral. Further corroborating evidence should be sought from hospitals or mental healthcare clinics or at least from family members or SAPS members who have observed the accused at some point.

It is often merely the fact that an accused before court presents with *any* previous psychiatric or psychological problem that prompts the probation officer to recommend Section 79 observation, regardless of the nature or severity of such condition. Simple non-psychotic disorders such as unipolar depression and personality disorders seldom have an impact on fitness and responsibility.

Neurological diagnoses such as epilepsy or head injury should not lead to automatic referral, as many such patients never experience significant psychiatric symptoms. Further investigation into each case and whether the condition has had any relevance at all, should be encouraged.

It is also possible that the referring courts and probation officers may inappropriately refer individual cases for mental observation purely based on longitudinal histories of early childhood maladaptive and disruptive behavioural problems and social problems. Family members would typically testify that the accused has been 'mentally unstable since childhood' and these features may then dominate or totally distract the court's mental inquiry, rather than focussing on the accused's mental state around the time of the alleged offence and whether there actually is a genuine diagnosis that could impact on fitness or responsibility.

7.0) LIMITATIONS

The sample size may be somewhat small in order to draw generalisable conclusions in all instances and correlates.

1.) Although all of the clinical files and reports were available, some of the variables had large numbers of missing or unknown data, for example 57 (28.5%) had no data as to the presence of a family psychiatric history and 60 (30%) had no data regarding early maladjustment.

2.) The study subjects were assessed by several different psychiatrists who may have had different approaches to diagnosis and interpretations of the core concepts of fitness and responsibility – this, in part why a period of *consecutive months* was chosen in an attempt to minimise the amount of psychiatrists involved in the different cases.

3.) Specifically, in the 'Panel' cases, no access to the private and defence psychiatrists' records was possible – in all of the panel cases however, unanimous 'joint' reports were submitted.

4.) Throughout the study, fitness for trial was used as the major indicator of outcome of the observation cases: Categorical data on fitness in all 200 cases was available, whereas data on criminal responsibility was incomplete in 6 % of cases. Criminal responsibility is also a retrospective analysis, often based extensively on collateral information rather than objective assessment – this, in contrast to fitness for trial, which is a more accurate 'here and now' assessment based more closely upon the actual 30 day observation findings.

5.) The actual past criminal records of convictions ('SAP 69's) were seldom available during the observation period. This variable was therefore assessed in a much broader sense in that any behaviour that could potentially have attracted criminal charges – whether such charges

were laid or not – was included. This could explain the high percentage (63.5%) and why no statistical significance could be shown in terms of the main variables compared.

6.) The charge of 'assault with intent to cause grievous bodily harm' unfortunately seems to be regarded as a 'single' case by some courts and a 'panel' by others, which will obviously affect any conclusions drawn in these cases.

7.) All charges involving violence, such as murder, rape and assault are non-specific regarding the issue of intent or degree, according to South African law. A distinction between premeditated murders versus impulsive murders for example, may have yielded rather interesting results in terms of criminal responsibility.

8.0) CONCLUSION

The results of this study support the hypothesis that the 'single' observation cases, representing the relatively minor and/or non-violent offences, were more likely to be found both not fit for trial and not criminally responsible for their actions, relatively to the 'panel' cases, representing more serious acts of violence and aggression. This may therefore imply that the mentally ill offender is more likely to commit a greater proportion of relatively minor offences, when compared to those with no current mental illness, who seem to be associated more frequently with more serious acts of violence.

Furthermore, those referrals found not fit for trial, were more likely to be referred based on their behaviour during court proceedings; more likely to be unemployed; more likely to be refused bail whilst awaiting observation; more likely to have had a documented past psychiatric history and ultimately more likely to have been given a diagnosis of a major psychotic or mood disorder and less likely to have been labelled as having 'no mental illness or intellectual disability'.

The specific charges of 'housebreaking and theft' and 'theft' seemed to more closely resemble the profile of the panel cases, whereas the charges of 'MITP' and 'common assault' more closely resembled the profile of the singles, in terms of fitness and responsibility. This may further add to understanding the type of offending behaviour that mentally disordered individuals would be more likely to commit, when compared to the mentally normal.

Psychiatric treatment appeared to play a significant role regarding criminal responsibility in those with a documented past psychiatric history, but overall compliance with treatment was very low.

Substance abuse or dependency was common across the study population and seemed to play a role in both mental illness and criminal behaviour, but could not be associated with either the type of offence or the outcome of the forensic assessment.

The results of this study may be of use to the referring courts and probation officers alike, specifically looking at their reasons for making the referral and possibly help in terms of developing a more rigorous screening procedure as part of their own mental inquiry, to ultimately try to reduce the ever growing waiting lists for forensic observation cases across the country.

This study may also aid in the de-stigmatisation of mental illness, where the mentally ill are all too often portrayed as the stereotypical 'crazed killers' and almost by definition regarded as highly dangerous within their communities.

9.0) DEFINITIONS

Observation patient: A trial awaiting defendant / detainee referred to a forensic psychiatric hospital for up to 30 days observation in terms of the Criminal Procedure Act, Act 51 of 1977, so as to determine their diagnosis, fitness to stand trial and criminal responsibility.

Single and Panel: Terms used to indicate whether the court appointed only one psychiatrist or a panel of psychiatrists respectively, to do the assessment in a particular case.

Fitness to Stand Trial: The capacity of a defendant to follow the court proceedings so as to make a proper defence.

Criminal Responsibility: The capacity to appreciate the wrongfulness of one's actions and to be free to act in accordance with such appreciation, at the time of commission of the alleged offence.

Early Maladjustment: Cases with identifiable conduct disorder features during childhood or learning disorders and/or academic failures. A combination of both these were taken as 'multiple issues.'

10.) REFERENCES

1.) Kaliski S, editor. Psycholegal Assessment in South Africa. Southern Africa: Oxford University Press, 2006.

2.) Monohan J. A terror to their neighbours: Beliefs about mental disorder and violence in historical and cultural perspective. Bulletin of the American Academy of Psychiatry and the Law 1992; 20: 191-195.

3.) Rosen G. Madness in Society: Chapters in the historical sociology of mental illness 1968; Chicago: University of Chicago Press.

4.) Taylor PJ, Gunn J. Violence and Psychosis: I – Risk of Violence among Psychotic Men. Br Med J 1984; 288:1945-1949.

5.) Grossman LS, Haywood TW, Cavanaugh JL, Davis JM, Lewis DA. State psychiatric hospital patients with past arrests for violent crimes. Psychiatric Services 1995; 46(8):790-795.

6.) Wootton L, Buchanan A, Leese M, Tyrer P, Burns T, Creed F, et al. Violence in psychosis: estimating the predictive validity of readily accessible clinical information in a community sample. Schizophrenia Research 2008; 101(1-3):176-184.

7.) Munkner R, Haastrup S, Joergensen T, Kramp P. Insipient offending amongst schizophrenia patients after first contact to the psychiatric hospital system. European Psychiatry 2005; 20(4):321-6.

8.) Soyka M, Graz C, Bottlender R, Dirschedl P, Schoech H. Clinical correlates of later violence and criminal offences in schizophrenia. Schizophrenia Research 2007; 94(1-3):89-98.

9.) Eronen M, Hakola P, Tiihonen J. Mental disorders and homicidal behaviour in Finland. Arch Gen Psychiatry 1996; 53:497-501.

10.) Fazel S, Grann M. Psychiatric morbidity among homicide offenders: a Swedish population study. Am J Psychiatry 2004; 161:2129-2139.

11.) Schanda H, Knecht G, Schreinzer D, Stompe T, Ortwein-Swoboda G, Waldhoer T. Homicide and major mental disorders: a 25 year study. Acta Psychiatr Scand 2004; 110:98-107.

12.) Fazel S, Gulati G, Linsell L, Geddes JR, Grann M. (2009) Schizophrenia and violence: Systematic review and meta-analysis. PLoS Med 6(8): e1000120. doi:10.1371/journal.pmed.1000120.

13.) Humphreys MS, Johnstone EC, MacMillan JF, Taylor PJ. Dangerous behaviour preceding first admissions for schizophrenia. British Journal of Psychiatry 1992; 161:501-505.

14.) Link BG, Andrews H, Cullen FT. The violent and illegal behaviour of mental patients reconsidered. American Sociological Review 1992; 57:275-292.

15.) Joyal CC, Gendron C, Cote G. Nature and frequency of aggressive behaviours among long-term inpatients with schizophrenia: a 6 month report using the modified overt aggression scale. Canadian Journal of Psychiatry 2008; 53(7):478-481.

16.) Sondenaa E, Rasmussen K, Nottestad JA. Forensic issues in intellectual disability. Current Opinion in Psychiatry 2008; 21(5):449-453.

17.) Rojahn J, Matson JL, Naglieri JA, Mayville E. Relationships between psychiatric conditions and behaviour problems among adults with mental retardation. American Journal of Mental Retardation 2004; 109(1):21-33.

18.) Crocker AG, Mercier C, Lachapelle Y, Brunet A, Morin D, Roy ME. Prevalence and types of aggressive behaviour among adults with intellectual disabilities. Journal of Intellectual Disability Research 2006; 50(Pt 9):652-661.

19.) Russo G, Salomone L, Della Villa L. The characteristics of criminal and non-criminal mentally disordered patients. International Journal of Law and Psychiatry 2003; 26:417-435.

20.) Swanson JW, Swartz MS et al. A national study of violent behaviour in persons with schizophrenia. Arch Gen Psychiatry 2006; 63:490-499.

21.) Calitz FJW, Van Rensburg PHJJ et al. Psychiatric evaluation of offenders referred to the Free State psychiatric complex according to sections 77 and/or 78 of the Criminal Procedure Act. South African Journal of Psychiatry 2006; 12(3)

22.) Gagiano CA, Van Rensburg PHJJ, Verschoor T. Unnecessary committals for forensic observation: Sections 77 and 78 of the Criminal Procedure Act 51 of 1977. South African Law Journal 1991; 108(1):714-718.

23.) Verster I, Van Rensburg PHJJ. Mental disorders in patients referred for psychiatric observation after committing homicide. Journal of Juridical Science 1999; 24(1):58-66.

24.) Pretorius PJ, Van Rensburg PHJJ, Gagiano CA, Oosthuizen H. Daggagebruik deur wetsoortreders wat deur die hof vir 30 dae psigiatriese observasie verwys word. Geneeskunde 1996; March/April: 43-50.

25.) Slabber M, Van Rensburg PHJJ, Gagiano CA, Joubert G, Van Dyk A. The relationship between MRI brain abnormalities and psychiatric disorders. Geneeskunde 1996; 38:6-12.

26.) Bell MD, Lysaker PH, Milstein RM. Clinical benefits of paid work activity in schizophrenia. Social Psychiatry and Psychiatric Epidemiology 1996; 39(5):337-49.

27.) Bond GR. Supported employment: Evidence for evidenced based practice. Psychiatric Rehabilitation Journal 2004; 27:345-359.

28.) Bond GRDR, Meuser KT, Becker DR. An update on supported employment for people with severe mental illness. Psychiatric Services 1997; 48(3):335-346.

29.) Marwaha SJS. Schizophrenia and employment – a review. Social Psychiatry and Psychiatric Epidemiology 2004; 39(5):337-349.

30.) Dunn ECWN, Rogers ES. The Meaning and Importance of Employment to People in Recovery from Serious Mental Illness: Results of a Qualitative Study. Psychiatric Rehabilitation Journal 2008; 32(1):59-62.

31.) Kaneda Y, Jayathilak K, Meltzer HY. Determinants of work outcome in schizophrenia and schizoaffective disorder: Role of cognitive function. Psychiatry Research 2009; 169:178-179.

32.) Cook JA, Razzano L. Vocational Rehabilitation for Persons with Schizophrenia: Recent Research Implications for Practice. Schizophrenia Bulletin 2000; 26(1):87-103.

33.) Green M. What are the functional consequences of neurocognitive deficits in schizophrenia? American Journal of Psychiatry 1996; 153:321-329.

34.) Green MF, Kern R, Braff DL, Mintz J. Neurocognitive Deficits and Functional outcome in Schizophrenia: Are We Measuring the “Right Stuff”? Schizophrenia Bulletin 2000; 26(1):119-136.

35.) Matejkowski JC, Cullen SW, Solomon PL. Characteristics of Persons With Severe Mental Illness Who Have Been Incarcerated for Murder. Journal of the American Academy of Psychiatry and the Law Online 2008 March; 36(1):34-86.

36.) Steadman HJ, Mulvey EP, Monahan J. Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. Arch Gen Psychiatry 1998; 55:393–401.

37.) Estroff SE, Swanson JW, Lachicotte WS. Risk reconsidered: targets of violence in the social networks of people with serious psychiatric disorders. Soc Psychiatry Psychiatr Epidemiol 1998; 33(1 Suppl):95S–101S.

38.) Richard-Devantoy S, Chocard AS, Bourdel MC, Gohier B, Duflot JP, Lhuillier JP, Garré JB. [Homicide and major mental disorder: what are the social, clinical, and forensic differences between murderers with a major mental disorder and murderers without any mental disorder?]. Encephale 2009 Sep; 39(4):304-314.

39.) Jones JS, Wynn BN, Kroeze B, Dunnuck C, Rossman L. Comparison of sexual assaults by strangers versus known assailants in a community-based population. American Journal of Emergency Medicine 2004 Oct; 22(6):454-459.

40.) Olsson M. DSM diagnosis of conduct disorder (CD)—A review. Nord J Psychiatry 2009; 63:102-112.

41.) Barker ED, Séguin JR, White HR, Bates ME, Lacourse E, Carbonneau R, Tremblay RE. Developmental trajectories of male physical violence and theft: relations to neurocognitive performance. Arch Gen Psychiatry 2007 May; 64(5):592-9.

42.) Ge X, Conger RD. Adjustment problems and emerging personality characteristics from early to late adolescence. Am J Community Psychol 1999 Jun; 27(3):429-59.

43.) Wångby M, Bergman LR, Magnusson D. Development of adjustment problems in girls: what syndromes emerge? Child Dev 1999 May-Jun; 70(3):678-99.

44.) Tremblay RE, Pihl RO, Vitaro F, Dobkin PL. Predicting early onset of male antisocial behaviour from preschool behaviour. Arch Gen Psychiatry 1994 Sep; 51(9):732-9.

45.) Tremblay RE, Masse B, Perron D, Leblanc M, Schwartzman AE, Ledingham JE. Early disruptive behaviour, poor school achievement, delinquent behavior, and delinquent personality: longitudinal analyses. J Consult Clin Psychol 1992 Feb; 60(1):64-72.

46.) Kim J, Cicchetti D, Rogosch FA, Manly JT. Child maltreatment and trajectories of personality and behavioural functioning: implications for the development of personality disorder. Dev Psychopathol 2009 Summer; 21(3):889-912.

47.) Keshavan MS, Eack SM, Montrose DM, Abela MM, Bangalore SS, Diwadkar VA, Prasad KMR, Rajarethinam R. Do premorbid impairments predict emergent 'prodromal' symptoms in young relatives at risk for schizophrenia? Early Intervention in Psychiatry 2009; 3:213–220.

48.) Tarbox SI, Brown LH, Haas GL. Diagnostic specificity of poor premorbid adjustment: Comparison of schizophrenia, schizoaffective disorder, and mood disorder with psychotic features. Schizophrenia Research 2012; 141:91–97.

Appendix A - DATA COLLECTION SHEET

A.) SOCIODEMOGRAPHIC DETAILS

1.) Participant number: _____

2.) Age on admission: _____

3.) Gender

   a.) Male

   b.) Female

4.) Race

   a.) Black

   b.) White

   c.) Indian

   d.) Coloured

   e.) Other

5.) Marital Status

   a.) Single

   b.) Married

   c.) Divorced

   d.) Widowed

   e.) Traditional Marriage

   f.) Unknown

6.) Employment Status

a.) Full time employment

b.) Casual/Piecemeal employment

c.) Unemployed

d.) On disability grant

e.) Other grant/pension

f.) Unknown

7.) Highest Level of Education

a.) Grade 1 – 7

b.) Grade 8 – 11

c.) Grade 12

d.) Tertiary Education

e.) No Schooling

f.) Special Needs/Remedial School

g.) Unknown

B.) <u>FORENSIC DATA</u>

1.) Complainant/Victim a family member, close acquaintance, well known to or co-habitating with the accused ?

a.) Yes : Details:_____

b.) No

c.) Unknown

2.) Criminal Charge/s: _____

3.) Type of Referral

   a.) Single

   b.) Panel

4.) Current Status of Accused

   a.) Out on bail

   b.) From prison/in custody

   c.) Unknown

5.) Reason for Referral

   a.) Family's/other's oral evidence in court

   b.) Documented proof of a psychiatric condition

   c.) Behaviour in court/during arrest/in custody

   d.) Attorney unable to consult/communicate with client

   e.) Accused's oral evidence

   f.) Unknown

6.) History of previous arrests and offending behaviour

   a.) Yes

   b.) No

   c.) Unknown

C.) <u>MEDICAL AND PSYCHIATRIC DATA</u>

1.) Past psychiatric history

a.) Yes : Dx:_____

b.) None

c.) Unknown/Not clear

2.) On treatment around the time of the offence ?

a.) Yes

b.) No

c.) Unknown

3.) Currently on psychiatric treatment (during observation)

a.) Yes

b.) No

4.) Relevant past medical history

a.) Yes :

_____

b.) None

c.) Unknown

5.) History of Substance abuse or dependency

a.) Yes : List Substances:_____

b.) No

c.) Uncertain

6.) Relevant family psychiatric/substance history

a.) Yes :

_____

b.) No

c.) Unknown

7.) History of early maladjustment or conduct disorder

a.) Yes: Details:_____

b.) No

c.) Unknown

8.) Other relevant history or focus of attention:_____

_____

_____

D.) <u>OUTCOME OF OBSERVATION</u>

1.) Diagnosis given:_____

2.) Fitness to Stand trial

a.) Yes

b.) No

c.) No comment made

3.) Criminal responsibility

a.) Responsible

b.) Not responsible

c.) Responsible but with diminished capacity

d.) Insufficient evidence/unable to comment.

Appendix B – Ethics Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Dr Tiaan Schutte

CLEARANCE CERTIFICATE	**M110622**
PROJECT	'Single' versus 'Panel' Appointed Forensic Mental Observations-A Comparative Analysis of Outcome
and	Psychiatric Morbidity
INVESTIGATORS	Dr Tiaan Schutte.
DEPARTMENT	Division of Psychiatry/Forensic Unit
DATE CONSIDERED	24/06/2011
DECISION OF THE COMMITTEE*	Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 24/06/2011 **CHAIRPERSON** .....
(Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable
cc: Supervisor : Dr U Subramanney

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee before or in the course of the year.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQ