An investigation of the relationship between drug consumption and crime in South Africa: Implications for social work

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An investigation of the relationship between drug consumption and crime in South Africa: Implications for social work

by

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DECLARATION

I declare that the study, "An investigation of the relationship between drug consumption and crime in South Africa: Implications for social work", is my own work, and that all the sources that I have used or quoted, have been indicated and acknowledged by means of complete references.

Candidate's signature: 

Date: 31 May 2004

DEDICATION

To my son, Joseph

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SUMMARY

The primary aim of this investigation was to facilitate the prevention of the drug-crime problem through researching its nature and extent, and focusing on detainees in holding cells at police stations in South Africa. The objectives were:

- To investigate the nature and extent of the drug-crime problem among the detainees as well as vulnerability to this problem on the individual and broad socioeconomic level;
- To suggest a national system for monitoring the relevance of prevailing knowledge on and the impact of preventive action against the drug-crime phenomenon, with special emphasis on the detainees;
- To develop guidelines for social workers to help prevent the drug-crime problem, based on the research findings.

A public health perspective underpinned the investigation, i.e. the problem was investigated with a focus on individuals and their environments and the relationship between these two factors. At the core of the investigation was a sample survey (including an interview-administered questionnaire) that was conducted among persons 18 years and older in holding cells in police stations in South Africa in February 2000, using a stratified probability sampling design. Analysis confirmed the integrity of the realised survey sample and questionnaire responses. Data analysis focused on (a) the frequency distribution of the questionnaire responses in the survey, (b) interactions between the questionnaire responses, and (c) the relationship between individual-oriented factors (questionnaire responses) and population-oriented factors (census figures on socioeconomic conditions in the districts included in the survey sample).

The survey data confirmed the expectation that the drug-crime phenomenon manifests in intense drug intake and intense criminal activity, and in an interactive relationship between the two manifestations; and that it develops within a context of social exposure to, support for and limited discrimination against drug use; as well as positive personal orientations towards such use. The survey data in combination with the census data deepened insight into (a) the influence of broad socioeconomic conditions on individual behaviour (e.g. drug consumption); (b) the importance of factoring violence (and, by implication, injury and death) into estimations of the costs of drug-crime manifestations; and (c) the variability and complexity of the manifestation

and development of drug-crime links. For example, analysis showed that greater population density in a neighbourhood increased the probability of individuals experiencing violent encounters (e.g. threats/stabbing with a knife). These encounters, in turn, increased the probability of the individuals concerned taking drugs such as cannabis.

The demonstrated integrity of the realised survey sample and questionnaire responses underlined the appropriateness of the fieldwork procedures in the survey for developing a permanent system for nationally monitoring the drug-crime phenomenon among detainees in holding cells at police stations. Data analysis also highlighted the usefulness of Geographical Information Systems (GIS) technology as well as the HLM and CHAID computer programs for exploring the contribution of broad socioeconomic conditions to the drug-crime phenomenon and interactions between the latter conditions and individual-oriented factors.

Finally, the investigation provided pointers for preventive action, apart from showing that drug-using detainees in holding cells at police stations tended to be favourably disposed towards drug-related remedial treatment. The latter finding, in conjunction with existing evidence that effective drug-related treatment reduces criminal activity, underlines the importance of regularly screening entrants into the criminal justice system and diverting those who test positive into drug-related treatment. The investigation also points to the importance of social workers participating in action to prevent the drug-crime problem, considering that (a) the study demonstrated that vulnerability to the drug-crime phenomenon manifests at the individual and broad socioeconomic level; and (b) social work has traditionally been concerned with problem solving with regard to individuals, groups and communities.

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CHAPTER 1
GENERAL ORIENTATION

1.1 INTRODUCTION

Enormous and rapid socioeconomic change has become a characteristic feature in many parts of the world (Room, Jernigan, Carlini-Marlatt, Gureje, Mäkelä, Marshall, Medina-Mora, Monteiro, Parry, Partanen, Riley & Saxena, 2002:13-36). In the wake of this change, several recurring and interconnected social, economic and environmental problems have surfaced, deepening insecurity about the future. Matters are complicated by the increasing interdependency between sectors (e.g. welfare, and safety and security agencies), individuals, families, communities and countries.

Over the past two decades South Africa has also experienced drastic socioeconomic change due to the transition from a racially divided society towards a non-racial society. In the course of this change a number of problems have emerged, one of which is a disproportionate rise in crime in which drugs (including the consumption of and trading in drugs) play an integral part (Crime Information Analysis Centre, 2000:19-23, 1999:15, 28-30). The adverse consequences of crime and the consumption of drugs severely strain the already scarce resources in South Africa. This is aptly depicted in the following extract (United Nations Office on Drugs and Crime, 2000:Foreword):

At the dawn of the new millennium ... South Africa finds itself with a significant drug and crime challenge ... this ... makes it more difficult for South Africa to pursue its goals of empowering its citizens ... It also inhibits the attainment of broader goals, such as those of the New Economic Partnership for Africa's Development (NEPAD), as the effort of countering drugs and crime must compete for limited resources and energy ... for such challenges as creating employment opportunities and stopping the devastating spread of HIV/AIDS.

The adverse effects of the drug-crime problem on socioeconomic development in South Africa (and by implication on development in the wider African continent) require that the problem be countered systematically and resolutely (Crime Information Analysis Centre, 2000:19; Department of Welfare and Population Development, 1999:3-6; Department for Safety and Security, 1998:iii-iv, 6-7). Moreover, effective countering of this problem presupposes a base of sound knowledge and sound research.

It is against the above background that the present investigation of the relationship between drug consumption and crime in South Africa (hereafter alternatively called "the 2000 holding cell survey" to distinguish it from related studies referred to in the thesis) was conceived. This chapter provides a general orientation to the study. It discusses the motivation for the study as well as the dimensions of the problem, the aims and objectives of the study, underlying assumptions and the questions investigated. This is followed by an exposition of the manner in which the investigation was designed or structured in order to achieve its objectives as unambiguously and cost-effectively as possible. The limitations and significance or expected benefits are also alluded to. The chapter concludes with a resume of the contents of the remaining chapters.

1.2 MOTIVATION

This study was initiated in response to mounting calls for preventing the drug-crime phenomenon in South Africa, for illuminating this phenomenon—and especially vulnerability to it—as well as for monitoring the relevance of prevailing knowledge and the impact of preventive actions. These calls were directly and indirectly voiced in various policy documents of the South African government. For example, the *Reconstruction and Development Programme. A Policy Framework* (1994) underlined the need for stronger measures against drug-related harm. Various other government policy documents followed suit, such as *The National Crime Prevention Strategy* (Department for Safety and Security, 1996), *Towards a National Health System* (Department of Health, 1995) and *White Paper for Social Welfare* (Department of Welfare and Population Development, 1997). Calls in government circles for strengthening efforts at preventing drug-related harm culminated in the 1999 *National Drug Master Plan* (NDMP) with its plea for priority attention to the prevention of drug-related crime (Department of Welfare and Population Development, 1999).

The following five issues strengthened and focused the decision to respond to calls for the effective prevention of the drug-crime phenomenon:

- The expectation that the drug-crime problem in South Africa will continue to grow if not countered. This expectation is underpinned by evidence of an ongoing rise in the level of drug consumption on the African continent and in South Africa in particular, by indications that the level of crime in a community tends to concur with the level of drug consumption in that community, and by indications of an interactive relationship

between drug consumption and crime (International Narcotics Control Board, 2004:1-6,39; Marlowe, 2003:4-5; United Nations Office on Drugs and Crime, 2003:8, 14-15; Allen, 1999:5-11; United Nations Office for Drug Control and Crime Prevention, 1999b:171-177; Minnaar, Pretorius & Wentzel, 1998:45-51; Rocha-Silva, 1998:10-58; United Nations International Drug Control Programme, 1997:96-100;World Health Organization, 1993:2-3).

- Evidence that drug-crime links can impede socioeconomic development in South Africa and consequently related initiatives elsewhere in Africa, as expressed by NEPAD (International Narcotics Control Board, 2003:4-8, 31).
- The dearth of comprehensive and integrated research into the drug-crime phenomenon in South Africa (Leggett, 2002: 1; Rocha-Silva, 1998:106-108).
- The consequent absence of sound guidelines for preventing the drug-crime problem in South Africa.
- More generally, the opportunity for refining past South African research on the consumption of drugs and contributing towards social work's traditional efforts at countering social problems comprehensively—on the individual as well as the broad socioeconomic level (Sewpaul, 2001:314-320; Bracht, 1995:1882-1884; Barker, 1991:221-222).

Finally, the author's career at the Human Sciences Research Council in South Africa from 1979 to 1999 contributed towards the interest in and provided opportunities for initiating the present investigation.

1.3 PROBLEM STATEMENT

Little is known about the nature and extent of the relationship between drug consumption and crime in South Africa and about contributors (and thus vulnerability) to the drug-crime problem. Local insight is dated and restricted. Apart from a 1996 sample survey into drug-crime links among persons in South African prisons, national studies on the phenomenon have not emerged, thus hampering comprehensive and integrated understanding of the subject. In addition, the findings of the 1996 survey have not been corroborated with studies among at least related population groups such as entrants into the criminal justice system (detainees in holding cells at police stations). The suggestion in the 1996 study that broad socioeconomic

conditions are intertwined with the development and maintenance of drug-crime links in a community and the recommendation that this relationship be examined in depth have also not been followed up. It follows that an effective response to the South African government's calls for proactive planning and action against the drug-crime phenomenon cannot be expected, especially because a viable national system for monitoring the relevance of prevailing thinking on the drug-crime phenomenon and the impact of counter measures has as yet not been developed. The development of such a monitoring system is particularly important when considering that drug consumption—one of the main factors in the drug-crime relationship—varies over time and location as well as in complex ways. To facilitate proactive counter action, the monitoring system has to give special attention to entrants into the criminal justice system (detainees in holding cells at police stations). Furthermore, considering that (a) the drug-crime phenomenon is associated with factors on the individual and broad socioeconomic level, and (b) social workers have traditionally operated on both these levels, social workers need to facilitate the implementation of appropriate preventive action among entrants into the criminal justice system.

In short, this investigation of the relationship between drug consumption and crime in South Africa and its implications for social work was developed because of an absence of sound and comprehensive guidelines for preventing the drug-crime problem in South Africa. More particularly, an inadequate knowledge base on the subject and a neglect to monitor the dynamics of the subject systematically—especially in relation to entrants into the criminal justice system—contributed to the initiation of this study.

1.4 AIMS AND OBJECTIVES

The primary aim of this study was to facilitate the prevention of the drug-crime problem in South Africa through improving knowledge on the subject by researching the nature and extent of the problem as well as vulnerability to it, and focusing on entrants into the criminal justice system (detainees in holding cells at police stations). In fact, in accordance with the view of De Vos, Strydom, Fouché and Delport (2002:108-109) that applied research aims at solving specific problems and/or at helping practitioners such as social workers in the fulfilment of their tasks (e.g. countering social problems), the study was undertaken to (a) increase insight into the drug-crime relationship in South Africa, and in this way (b) assist policy makers and service providers (in particular social workers) in countering this relationship efficiently.

Three secondary aims underpinned the above aim: The first was to advance insight into vulnerability to this problem on the individual as well as broad socioeconomic level. The second was to facilitate the development of a system for empirically monitoring drug-crime links among detainees in holding cells at police stations in South Africa. The third was to extract preventive guidelines from the research.

To achieve the above aims, this study set the following objectives:

- To investigate the nature and extent of the drug-crime problem among detainees in holding cells at police stations in South Africa as well as contributors (and thus vulnerability) to this phenomenon on the individual as well as broad socioeconomic level
- To provide pointers for the development of a national system for monitoring the relevance of prevailing knowledge on and the impact of preventive action against the drug-crime phenomenon, with special emphasis on detainees in holding cells at police stations in South Africa
- To develop guidelines for preventing the drug-crime problem, based on the research findings

1.5 BASIC ASSUMPTIONS

In accordance with social scientists such as Joubert (in Mouton, 1994:236-240) and Thorogood (1992:43), this study viewed social phenomena as an outflow of a combination of individual-oriented issues such as the behaviour and beliefs of individuals, and the socioeconomic environment in which people live, that is, their social, economic and political circumstances. Beliefs refer to people's perceptions, thoughts and assumptions about life and other people. The study also assumed that a dynamic and interactive relationship prevails between the individual and the socioeconomic environment in which he/she lives, with individuals influencing the socioeconomic environment positively or negatively and the socioeconomic environment providing opportunities and constraints for individuals. Furthermore, the study extracted the following assumptions from available evidence on the relationship between drug consumption and crime:

- The relationship between drug consumption and crime is too complex to infer linear causality between drug consumption and crime or ascribe causal priority to either of

these issues (United Nations Office for Drug Control and Crime Prevention, 2000:100-101; McBride & McCoy, 1993:257-278).

- There is interaction between the consumption of drugs and crime (International Narcotics Control Board, 2004:1-5; United Nations Office for Drug Control and Crime Prevention, 2000:100-101; Inciardi, Lockwood & Quilan, 1993:119-129).
- A number of similar factors (such as poverty and poor self-esteem) tend to contribute to the consumption of drugs and crime (Crime Information Analysis Centre, 2000:19-24; United Nations Office for Drug Control and Crime Prevention, 2000:100-101; Harwood, Fountain & Livermore, 1998: section 6.2.3).
- A combination of individual-oriented factors and broad socioeconomic conditions in a community contribute to the drug-crime problem (International Narcotics Control Board, 2004:2-4; Emmett, 2003:4-18; Affinnih, 2000:21-38; Global Analysis Project Team, 2000:913-916; Bernstein, 1999:13-32; Friedman, 1998:15-32; Kaasik, Andersson & Hörte, 1998:1589-1599; Rhodes, 1997:208-227; Aguirre-Molina & Gorman, 1995:363-378; Kuna & Bande, 1993:23-30).
- The main variables in the drug-crime phenomenon are socially as well as psychologically regulated and, thus, patterned rather than random, dynamic rather than static, and complex rather than simple (Dubourg & Pearce, 1998:169-188; Rocha-Silva, 1998:10-57; Rocha-Silva & Ryan, 1998:323-34; United Nations International Drug Control Programme, 1997:10-11; Anderson, 1994:1523-1527).

In accordance with the views of (a) a large group of social scientists on the nature of social science research (Neuman, 1997: 6-16, 46, 144, 150; Mouton & Marais, 1990:14-15, 31; Denzin, 1989:25), and the views of (b) international agencies on drug-related research (World Health Organization, 2002b:7-8, 2000b:72; United Nations Office for Drug Control and Crime Prevention, 2000:87-91; United Nations International Drug Control Programme, 1997:33), this study also made the following assumptions concerning validity in social science research and survey research in particular:

- Research, as a human and thus cognitive activity, has inherent validity problems.
- Research cannot eliminate uncertainty; it can at best reduce it.
- Multiple converging lines of independent evidence decrease uncertainty in research.

- Survey research cannot be expected to determine the distribution of a particular phenomenon—especially in the case of clandestine practices such as illicit drug consumption and crime—in a community in any absolute sense; it can at best identify cross-sectional patterns and longitudinal trends.

1.6 RESEARCH QUESTIONS

The inadequacy of past research into and efforts at preventing the drug-crime problem suggested this study's focus on the following questions in relation to detainees in holding cells at police stations in South Africa:

- What are the nature and extent of drug consumption, crime and especially connections between drug consumption and crime among the research population?
- What individual-oriented and broad socioeconomic conditions contribute to vulnerability to drug consumption and crime, and to connections between these two issues?
- How should the relevance of prevailing thinking on the subject and the impact of counter measures be monitored in South Africa?
- What measures—on the individual and broad socioeconomic level—should be instituted to counter the drug-crime phenomenon in South Africa proactively?

1.7 RESEARCH METHODOLOGY

This section first discusses the main components in terms of which the present investigation was designed. Attention is given to the type of empirical study conducted (a national sample survey) as well as the conceptual framework that underpinned the study. It also describes the survey population, sample size and sampling procedure. Subsequently, the more detailed components of the survey are discussed. Attention is given to the data-gathering instruments in the survey, the variables on which data were gathered as well as the manner in which they were measured, the techniques employed in the analysis of the data collected in the survey, and the pilot study in which the data collection instruments were tested.

1.7.1 Type of study

Because of the present study's national scope and emphasis on examining contributors to the drug-crime phenomenon, it adopted what social scientists such as Mouton and Marais (1990:44, 48-53) as well as De Vos, Strydom, Fouché and Delport (2002:109-110) refer to as a quantitative-correlational research approach. Procedurally, this approach entails the implementation of a cross-sectional survey. In fact, the present study was based on a national sample survey, the 2000 holding cell survey.

In accordance with the views of Babbie (2001:101-102, 238-268), Neuman (1997:227-265) and Denzin (1989:24-25, 138-146) on the logical structure of survey research, the survey at the core of the study discussed here, the 2000 holding cell survey, had the following general characteristics:

- Information (data) gathering was restricted to pre-defined sets of attributes (variables), indirect information sources (questionnaires), a representative subset (sample) of the researched cases (units of observation/analysis), and observation during a single point in time (one-shot observation).
- The data were recorded numerically and stored electronically.
- Selection and observation of a subset (representative sample) of the research cases (population) in terms of probability principles (randomised sampling) contained costs and facilitated reliable inferences (generalisation) about the research population.
- Standardisation of data gathering (through pre-structured interview-administered questionnaires, training and supervision of fieldworkers in terms of a pre-structured fieldwork manual) and data analysis (through the computer-facilitated application of statistical analysis techniques) minimised the extraction of ambiguous similarities and differences from the data.
- Analysis focused on the distribution of similarities and differences in the observations (univariate or descriptive analysis) as well as on interrelations between the observations (multivariate analysis).
- Experimental logic—and specifically the use of the following four mechanisms—facilitated analysis of interrelations between observations: Comparison groups were distinguished; covariance and, thus, relationships between observations were examined through cross-tabulating the observations in the randomised sample and applying

multivariate statistical techniques and consequently statistically controlling alternative influences on the relations examined; temporal order was inferred between questionnaire responses that related to past and present events; and repetitive observation was simulated through comparing the responses in this study with the findings of related studies.

In view of limited local research on persons detained at police stations, this survey took note of a related USA research programme, the Arrestee Drug Abuse Monitoring (ADAM) Programme (Taylor & Bennett, 1999:5-16).

1.7.2 Description of the survey population, sample and sampling procedure

The *population* among whom the survey was conducted comprised adults (persons 18 years and older) who were detained for not longer than 48 hours in holding cells in police stations in the nine provinces in South Africa. Younger persons were excluded because the South African Police Service (SAPS) is prohibited from detaining persons younger than 18 years in holding cells at police stations.

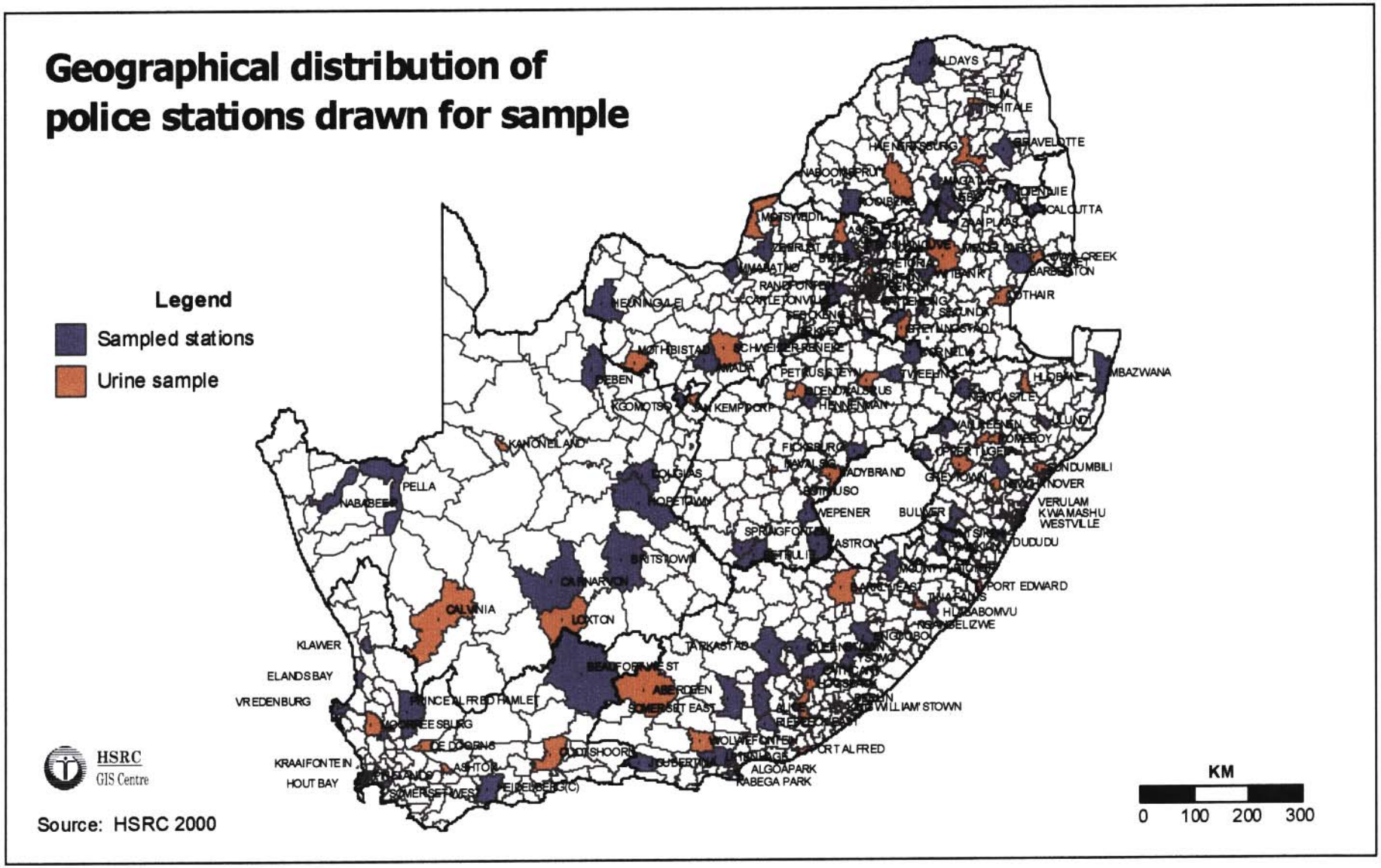
A *sample* of 2 000 respondents (detainees in holding cells at police stations in South Africa) was used in the survey. Respondents were selected through a process of randomised sampling. (Randomised sampling is the process of selecting a representative number of persons from a wider population in terms of probability principles and some form of random procedure (based on chance) such as simple random sampling, systematic sampling, stratified random sampling, cluster sampling and panel sampling (De Vos et al., 2002:201-206).)

As the primary sampling unit (cases to be sampled) in the survey consisted of detainees in holding cells at police stations in South Africa, *sampling* was done in two stages. Police stations were first selected in terms of stratified random sampling principles, and then detainees were selected at sampled police stations in terms of a sequential systematic procedure. Time and cost constraints, the large number of survey variables, and the need for precision and representivity influenced the decision to select 150 police stations (14.0% of the total number of police stations in South Africa) and 2 000 detainees. The number of police stations rather than the number of detainees determined the precision of the sample. Fewer police stations would not have covered the various provinces and districts representatively.

To facilitate reliable analysis across province and SAPS district, police stations were stratified in the first sampling stage in terms of the nine provinces, the SAPS districts, and the sociodemographic and reported crime characteristics of these districts as indicated in the most recent available data sources (South African 1996 census data and SAPS reported crime figures for 1998). To avoid selection bias over the survey period, the second sampling stage systematically selected recorded detainees at sampled police stations over a seven-day period, excluding the hours 22:00 to 06:00, when contact with detainees was generally prohibited. The selection interval in the systematic sampling of the detainees per sampled police station was calculated in terms of the number of detainees recorded in the four weeks before data collection at the police station concerned, and the number of detainees to be selected at the relevant station. The 2 000 detainees were disproportionally allocated to the sampled police stations, but with a minimum of four detainees per station and taking account of the reported crime cases per police station during the fieldwork month (February) and the year 1998. Furthermore, every third police station sampled was selected for the procurement of urine specimens from the questionnaire respondents.

Figure 1 depicts the distribution of the two sets of sampled police stations. A list of the sampled police stations is provided in Appendix 1. Differences between the realised and the originally designed sample were compensated for by weighting the response/data set.

Figure 1: Distribution of the police stations that were sampled for, first, questionnaire administration only and, second, for questionnaire administration as well as the procurement of urine specimens



1.7.3 Conceptual framework

In accordance with the views of Mouton and Marais (1990:25-26, 57-58) and Bless and Higson-Smith (2000:8-11), an explicitly outlined conceptual framework directed the observations and inferences made in this investigation—a role that Mouton and Marais (1990:138-142) ascribe to conceptual models. Moreover, considering the cognitive nature of observation and inference, the use of an explicitly outlined conceptual framework was a means to avoid haphazard data collection and analysis and minimise implicit conceptual bias. The conceptual framework of this study rested on the following premises:

1.7.3.1 Drug consumption

In accordance with the definition of the World Health Organization, the term "drug" in this study refers to any psychoactive substance (United Nations International Drug Control Programme, 1997:10). A psychoactive substance is any substance that has the potential to affect perception, mood, cognition. behaviour or motor function when taken into a living organism. Drugs can be divided into (a) licit substances such as alcohol, nicotine and over-the-counter medicine (cough mixtures, appetite suppressants, sedatives, tranquillisers), and (b) illicit substances such as cannabis, cocaine, heroin and LSD.

1.7.3.2 Drug consumption, crime, violence and HIV/AIDS

Although the main concern in the present study was with drug consumption and crime, as well as with the relationship between drugs and crime, attention was also given to violent behaviour and level of awareness regarding HIV/AIDS-related issues. The decision to extend the concern with the consumption of drugs and involvement in crime to violent behaviour is related to the high level of violence in South Africa as well as to local and international evidence that violent behaviour tends to be intertwined with the drug-crime phenomenon (International Narcotics Control Board, 2004:1-6; Emmett & Butchart, 2000:3-21). The concern with HIV/AIDS relates to the escalating HIV/AIDS epidemic in South Africa, and to indications of a relationship between drug consumption and the spread of HIV/AIDS (United Nations Office on Drugs and Crime, 2002:41-42).

1.7.3.3 Public Health Perspective

A public health perspective (PHP) of the phenomenon was accepted, as articulated by Bukoski (1991:12-13) and Bertram, Blachman, Sharpe and Andreas (1996:187-203) in relation to the consumption of drugs, as outlined with regard to crime and violence by Emmett and Butchart (2000:3-21) and by the World Health Organization (2002b:15-19, 2002c:3-5) with regard to connections between drugs, violence and HIV/AIDS. The PHP facilitated placement of the present investigation within the context of local and international reviews of drug consumption such as those by Parry and Bennetts (1998:23-100), Rocha-Silva (1998:10-79), the United Nations Office for Drug Control and Crime Prevention (2000:55-79, 1999c:19-42), the World Health Organization (2000b:3-18), the United Nations Office on Drugs and Crime for Southern Africa (2002:7-44), and Jernigan (2001:1-43).

In contrast to the largely unidimensional focuses of past South African research on drug use and related problems such as crime, which research tended to "blame" or "pathologise" individuals *or* broader socioeconomic conditions (e.g. poverty) *or* drugs, the PHP explicitly recognises the complexity and variability of drug use and its intertwinedness with broad socioeconomic conditions. The PHP, furthermore, lends itself to a comprehensive and integrated understanding of the complex field of drug-crime links, towards an explicit focus on prevention and, thus, an emphasis on monitoring the empirical relevance of prevailing thinking on the subject. Remarking on the advantages of adopting a PHP on drug-crime links, Emmett and Butchart (2000:4) state: "Public Health ... provides a preventive counterpoint to the more reactive, deterrence-oriented approach to criminal justice." The emphasis of the PHP on integration is also suited to the increasing prominence accorded to integrated solutions in South African public policy making during the past decade. (Recent policy documents that emphasise integrated solutions include the *Reconstruction and Development programme* of 1994 *Integrated and Sustainable Rural Development Strategy* (ISRDS) of 2002, *The National Crime Prevention Strategy* (NCPS) of 1996, the 1998 *White Paper on Safety and Security*, and the 1997 *White Paper for Social Welfare*.) The PHP also allows agencies concerned with countering drug-related harm (e.g. crime) to link the issue to efforts towards facilitating social development, as called for in the *White Paper for Social Welfare* (1997:10, 66, 81-88) and by International agencies such as the International Narcotics Control Board (2003:31) and the United Nations Office for Drug Control and Crime Prevention (1999c:111).

The PHP views the drug-crime phenomenon as an outflow of three interactively related issues: agents (drugs, crime/violence), hosts (individuals who consume drugs and commit crime/violence) and environments, as shown in Figure 2. Individual choice regarding the consumption of drugs (and participation in crime/violence) is seen to be exercised within and influenced by the wider societal and physical environment.

Figure 2: Public health perspective on the drug-crime phenomenon

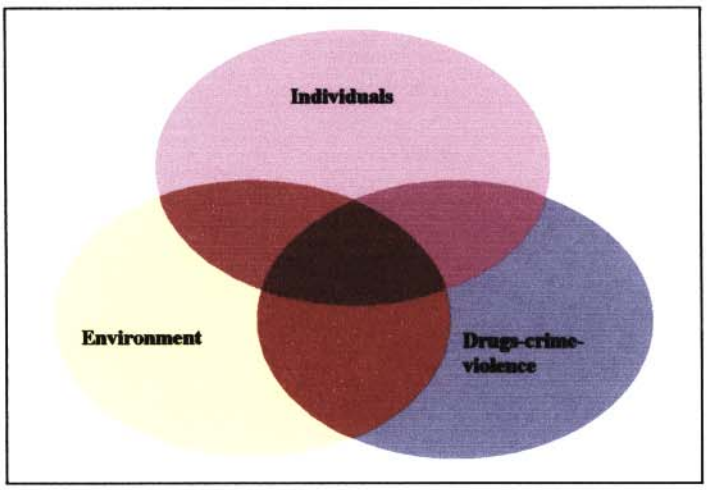


Figure 2 was adapted from the initial report on this study (Rocha-Silva, 2001:16). It depicts the complexity and interrelatedness of the main variables in the study.

In line with the above public health premises and evidence on the determinants of drug consumption and crime (including violence), this study also made the following assertions:

- Drugs are consumed in a community to the extent to which there is a demand for and access to them (United Nations Office for Drug Control and Crime Prevention, 2000:14-16; United Nations International Drug Control Programme, 1997:11-13, 87, 180; Holder & Edwards, 1995:1-5; Edwards et al., 1994:129-145).
- The general level of drug consumption in a community is positively related to the general level of crime/violence in that community (Holder & Edwards, 1995:65-79; Edwards et al., 1994:57-60, 99-100, 203-205; World Health Organization, 1993:2-3, 10; Frankel & Whitehead, 1981:51-60).

Furthermore, in accordance with (a) the findings of various overseas and local studies on psychosocial contributors to the consumption of drugs (Farmer, 1996:20-27; Harrison,

1996:6-10, 125-127; Kuna & Bande, 1993:23-30; Bukoski, 1991:12-13; Flay & Petraitis, 1991:82-89;), (b) the basic premises of general theoretical perspectives in sociology (Rocha-Silva, 1981:12-40, 157-162), and (c) the basic premises of ecological conceptual models of violence (World Health Organization, 2002c:13-15) and health promotion (McLeroy, Bibeau, Steckler & Glanz, 1988:351-377), the following sociocultural and psychological variables were viewed as contributing to a demand for and access to drugs:

- Drugs are in demand in a community to the extent to which, first, the following sociocultural conditions prevail: sociocultural support for (a particular form of) drug consumption, lack of (or limited) sociocultural discrimination against (a particular form of) drug consumption, and sociocultural exposure to (a particular form of) drug consumption; and, second, the extent to which the following psychological variables exist: tolerance towards (a particular form of) drug consumption, a belief that discrimination against (a particular form of) drug consumption is mild or non-existent, as well as a belief in the rewarding nature of and a personal attraction to (a particular form of) drug consumption.
- Drugs are accessible to the extent to which sociocultural opportunities for engaging in drug consumption as well as knowledge/awareness of (a particular form of) drug consumption and ways of acquiring drugs exist in the community concerned.
- The sociodemographic characteristics of individuals and the broad socioeconomic conditions in which individuals live mediate access to and demand for drugs.

1.7.3.4 Prevention and Social Work

For comprehensiveness, this study adopted a conception of drug-related prevention that took cognisance of the views of international agencies such as the World Health Organization (2002b:15-19, 2002c:15-17) and the United Nations Office for Drug Control and Crime Prevention (2000:104-110). Consideration was also given to the World Health Organization's recent comprehensive and critical review of drug-related preventive efforts (World Health Organization, 2002a) as well as the present study's public health perspective of drug consumption and crime. To place this study's conception of prevention within the context of social work, consideration was given to the approach and strategies called for in the South African government's 1997 *White Paper for Social Welfare*. In fact, the present study viewed prevention as comprising interventions that

- focus in an integrated and balanced way on the individual and the environment (community/group);
- focus on individuals as subjects who can contribute positively to intervention;
- have a firm support base in the (wider) community within which preventive action occurs;
- involve target groups in prevention planning and implementation;
- combine demand reduction (e.g. through programmes that enhance life skills and reduce socioeconomic inequities) and supply reduction (e.g. through control/law enforcement and poverty alleviation) in a balanced and multileveled manner;
- are evidence/research-based and thus based on the dynamics of the application context at a particular point in time; and
- are implemented at one or more of the following three levels: at the primary level, where prevention is directed at reducing initial individual and environmental risks of developing drug-related harm (e.g. crime); at the secondary level, which involves early detection of risk proneness with regard to the development of drug-related harm; and at the tertiary level (usually called "treatment"), where the focus is on arresting intensification and perpetuation of drug-related harm.

In short, the above conception of prevention is in line with social work's traditional interest in all people and groups who experience problems of any kind, including drug consumption and crime (Hepworth, Rooney & Larsen, 2002:5). It subsumes the idea of adopting a social development approach to countering social problems, as called for by, for example, Osei-Hwedie (1993:23, 1990:87-99). It points towards the need for effecting multilevel and multisystem intervention that adopts a social perspective in service delivery without ignoring individual therapy approaches and without assigning "blame", as called for by Elliot (1993:87-99).

1.7.4 Data collection

Data were gathered through an interview-administered and largely closed-ended questionnaire (Appendix 2), supplemented with randomly administered biological tests (urine analysis) for drug consumption to test the reliability of self-reported drug consumption.

In accordance with the objectives and basic assumptions of the study, the questionnaire provided for comparability with related but more restrictive local studies (Parry, Louw, Vardas & Plüddemann, 2001, 2000a, 2000b; Rocha-Silva, 1998:127; Rocha-Silva & Stahmer, 1996). Note was also taken of local and international indicators/measures (questionnaire items) on drug

consumption (World Health Organization, 2000a:37-59, 2000b:63-65, 127-203, 220-221; Rocha-Silva, 1992:10-11, 1987:133-138). To minimize loss of concentration among the respondents and interference with police routine, the questionnaire was generally administered within 30 minutes. The section on licit drugs was also dealt with less comprehensively than intended or recommended in related research (World Health Organization, 2000a:37-59, 2000b:127-203; Rocha-Silva, 1992:10-11, 1987:133-138). To facilitate standardisation, the fieldworkers were provided with a detailed fieldwork manual (Appendix 3). As with related research in England, data collection took four weeks (28 days). In the USA, data collection in a similar programme generally takes 14 days (Taylor & Bennett, 1999:9). Care was taken to ensure confidentiality and voluntary participation in the interviews and provision of urine specimens.

Table 1 depicts the variables specified in the study's conceptual framework and the specific items (measures/indicators) on which data were collected.

Table 1: Variables and measures used in data gathering

Variables	Measures/indicators
Individual level:	*Interview-administered questionnaire data*:
Level of drug use	• Type, age at onset and frequency of drug use, "dependence" on drugs, enrolment in drug-related treatment programmes (The data on drug intake arising from the survey questionnaire were supplemented with data on voluntarily provided urine specimens.) • Perceptions of residential area (e.g. level of crime, gangsterism, fights, drug dealing)
Crime and violence	• Nature and extent of involvement with the criminal justice system (e.g. arrest, conviction and victimisation history) • Practices/attitudes with regard to firearms and other weapons • Drug-crime links (e.g. crime to support drug use, use of drugs during/after committing crime)
HIV/AIDS issues	• Knowledge, attitudes and practices relating to HIV/AIDS
Population level: Broad socioeconomic conditions	Routinely gathered *secondary data* in, for example, government departments on community conditions, e.g. census data on: • Population density, level of poverty, access to basic services
Individual level: Socioeconomic background of research population	*Interview-administered questionnaire data*: • Socioeconomic and demographic characteristics of survey respondents
Sociocultural circumstances of research population:	
Demand for drugs	
Social support/pressure to use drugs	• Offers of drugs and/or pressure to use drugs
Exposure to drug use	• Using drugs at places conducive to usage (taverns, haunts of drug dealers)
Limited social discrimination against drug use	• Using drugs in the company of people who are not opposed to them
Access to drugs	
Opportunity for taking drugs	• Witnessing drug trading at home
Psychological make-up of the research population:	
Demand for drugs	
Being tolerant towards drug use	
Believing that discrimination against drug use is limited or lacking	• Reasons for drug use: To change mood, to cope with life/stress, for enjoyment, for health improvement
Believing in the rewarding nature of drug use	
Being attracted to drug use	
Access to drugs	
Knowing about drug use	• Acquaintance with drugs

The variables indicated in Table 1 are discussed in more detail in the presentation of the findings of the 2000 holding cell survey in Chapter 4 of the present study.

1.7.5 Data analysis

Analysis of the data gathered in the survey (2000 holding cell survey) conducted in the present study leaned towards multivariate analysis, which is directed at examining relationships between variables. It refers to the simultaneous examination of relationships between two or more variables (Babbie, 1989:248-249).

Because of the large scope and quantitative nature of the study, data analysis was computer facilitated. The emphasis was on the manner in which the data patterned rather than on absolute figures. Descriptive analysis—focusing on the frequency distribution of the questionnaire responses in the survey—was facilitated by cross-tabulation and graphic display. Relationships were examined with the aid of Geographic Information Systems (GIS) technology and multivariate statistical analysis, including the use of the HLM (Hierarchical Linear Models) and CHAID computer programs. Budget constraints resulted in selective use of these programs, except with regard to CHAID.

1.7.6 Pilot study

In line with the definition of Bless and Higson-Smith (2000:52,155), the feasibility of the data collection procedures and the need for adjustments were assessed in a pilot before commencing with the actual data collection. A limited research budget influenced the decision to conduct the pilot in three police stations close to the researcher's base and known to operate under difficult circumstances such as staff shortages and a high level of reported violent crimes. The pilot pointed out the following needs:

- Fieldwork supervisors were to give special attention to eliciting the cooperation of the staff at the sampled police stations, informing them well in advance of the fieldwork, committing the fieldwork team to accepting police station regulations, and reminding police station staff of the agreed fieldwork arrangements before commencing with the fieldwork at any particular station.
- Interviewers had to convince interviewees of the confidentiality of the interviews.
- Interviewers had to be trained to know the questionnaire by heart before commencing with interviews in order to ensure ease of administration.

1.8 LITERATURE REVIEW

This investigation of the relationship between drug consumption and crime in South Africa was developed against the background of a critical review of literature on past South African research on drug consumption generally and on the drug-crime relationship in particular. To deepen perspective, the review also attended to available research on the subject in other countries on the African continent and abroad.

To facilitate completeness, the review focused on the organisation and methodological structure as well as the findings of drug-related research in South Africa between the beginning of the 1960s (i.e. the time when the first national studies on drug consumption were initiated) and the year 2000. To ensure comprehensiveness and corroboration, the overview leant heavily on a collection of past reviews of the status of drug-related research in South Africa and specifically those that were the most detailed.

1.9 LIMITATIONS OF THE INVESTIGATION

Because the 2000 holding cell survey was the first of its kind, its usefulness for identifying cross-sectional patterns in drug-crime connections and trends in this respect across time, and, consequently, its usefulness in directing preventive efforts will have to be evaluated in follow-up surveys. Follow-up surveys will also have to try to overcome the following limitations:

- The large scope of the survey and especially a restricted budget necessitated sole reliance on quantitative data. Insight into the main findings could have been increased if supplemented with qualitative data. Selected focus group interviews could, for example, have increased insight into differentiations in the data across province and police district.
- Because of a limited budget the survey questionnaire, furthermore, had to give selective attention to alcohol consumption. Analysis of the extent to which broad socioeconomic conditions interacted with data on drug consumption and crime also had to be limited to selected variables.

1.10 SIGNIFICANCE OF THE INVESTIGATION

The primary significance of this investigation of the relationship between drug consumption and crime in South Africa lies in its applied research focus. As a response to government calls for stronger action against the drug-crime problem the study was directed at facilitating appropriate measures against the problem through advancing insight into drug-crime links, and providing pointers for preventive policy/service delivery as well as monitoring the impact of preventive efforts in South Africa. The study's national scope and special concern with the relationship between the drug-crime phenomenon and broad socioeconomic conditions were also directed at facilitating reconstruction and development in South Africa. Finally, as the first of its kind, the study makes a methodological and substantive contribution to related future research.

1.11 CONTENTS OF THE DISSERTATION

The general orientation provided in this (the first) chapter is followed by a critical review of the organisation and methodological character of South African studies on drug consumption and the drug-crime phenomenon in Chapter 2. The focus is on the period 1960 to 2000. Chapter 3 provides an overview of available knowledge on drug consumption (patterns and trends) as well as its connection with crime in South Africa. The latter chapter also places the South African body of knowledge within general patterns and trends on the African continent and abroad. Chapter 4 presents, analyses and interprets the findings of the survey conducted in the course of the study. A general summary, conclusions and recommendations are presented in Chapter 5.

CHAPTER 2

A CRITICAL REVIEW OF THE ORGANISATIONAL AND METHODOLOGICAL CHARACTER OF DRUG-RELATED RESEARCH IN SOUTH AFRICA: 1960-2000

2.1 INTRODUCTION

To place the inception and design of this investigation of the connection between drug consumption and crime in South Africa within the wider context of drug-related research in the country, this chapter critically reviews the organisational and methodological character of past drug-related research in South Africa. It reveals the low profile of social work in the initiation and design of drug-related research, especially during earlier years, and alludes to the extent to which the drug-related studies that were conducted at various institutions influenced policy and/or action in South Africa. The chapter concludes with a general evaluation of the character of past drug-related research in South Africa.

Concern is with research projects conducted between 1960 (when the first national studies on drug use were initiated in South Africa) and 2000. To facilitate comprehensiveness and corroboration, the chapter is based on the most detailed reviews and comments on the status of drug-related research in South Africa, notably those of Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher and Kozel (2002:969-976); the United Nations Office on Drugs and Crime in South Africa (2002:7-43); Parry (2000: Chapter 23); the Department of Welfare and Population Development (1999:30-34); Parry and Bennetts (1998:23-100); Rocha-Silva (1998, 1997a, 1997b, 1992); and Rocha-Silva, Mokoko and Malaka (1998).

2.2 AN OVERVIEW OF RESEARCH DEVELOPMENTS IN SOUTH AFRICA

Historically, various broad developments can be distinguished in the organisation and design of drug-related research in South Africa. The type and number of studies conducted varied over time and in terms of the particular research agencies that initiated the investigations. Studies also differentiated in terms of the extent to which the research had an applied focus, the extent to which the researchers systematically built on related studies, and in terms of the

degree of rigour employed in the design of the research. These general developments are discussed in more detail in subsequent sections.

2.2.1 Applied research focus

Research has generally not been a point of departure for drug-related policy making and service delivery, even though policy/service delivery documents acknowledged the importance of research for directing policy/service delivery. Rocha Silva (1992:2), for example, cited the following extract from an information brochure that a national agency concerned with countering drug-related harm distributed in the early 1990s:

A profession or field of practice must be built on a body of knowledge ... knowledge must not only be verifiable but also relevant to the tasks that the profession is called upon to perform and to the area of expertise that it asserts a claim over ... for without research ... no profession is likely to be able to maintain its credibility in society.

Instead of building research into their activities, policy makers and service providers customarily rationalised their decisions with regard to the countering of drug-related harm in terms of the findings of independently conducted studies, and even on occasion manipulated the findings to suit their particular policy/service delivery choices (Van der Burgh, 1984:1-3, 21-24, 1975:1). In an overview of pre-1984 drug-related research in South Africa, Van der Burgh (1984:1) remarked as follows:

Despite the widespread interest in drug use and abuse ... students of the subject agree that insufficient systematic information has been accumulated ... Even when statistical data on drug use are available, there is a tendency to misuse, misunderstand and misinterpret these data and play ... the drug abuse numbers game.

The long-term research programme on drinking-and-driving of the Department of Transport was an exception (Siegfried & Parry, 2003:49; Department of Transport, 1995; Mynhardt, 1995; Rocha-Silva, 1983, 1982). This programme was explicitly initiated in the mid-1970s to inform and evaluate efforts at preventing traffic accidents related to drinking-and-driving.

2.2.2 Sporadic and fragmentary research

Drug-related research in South Africa has generally been initiated in a sporadic and fragmentary manner (Department of Welfare and Population Development, 1999:31-34). The systems and documents in the public and private sector, indeed the research projects and routinely collected data that are needed to provide the media, politicians, policy makers and

others with reliable national and local figures on drug consumption and related harm either have not been developed or have been partially developed.

One of the reasons for this neglect has been the tendency, noted in the South African government's *National Crime Prevention Strategy* (NCPS) (Department for Safety and Security, 1996:11-12), that data gathering has traditionally been viewed as "an administrative rather than an analytical enterprise". The racially divisive dispensation of the pre-1994 government in South Africa also contributed towards researchers/agencies neglecting certain groups and regions such as rural communities (The Presidency, 2003:73).

Another reason for the tendency to research drug-related issues in a sporadic and fragmentary manner in South Africa has been the limited funding available for such research, especially since the beginning of the 1980s, but to a lesser extent in the case of the statutory national research houses (Department of Welfare and Population Development, 1999:34; Parry & Bennetts, 1998:185, 232; Rocha-Silva, 1992:7-8). In the allocation of funding for policies and services for countering drug-related harm in, for example, the public sector, generally no provision was made for the funding of drug-related research, even where the need for research to direct policies/services was acknowledged. Rocha-Silva (1997b:1) noted in this respect as follows: "[I]nvestments in preventive initiatives were generally not simultaneously accompanied by investments in research."

2.2.3 Under-researched issues

Certain drug-related issues have especially been under-researched in South Africa, notwithstanding calls for such research. One such issue is the acceptability and the impact of actions against drug-related harm. The research programme at the Human Sciences Research Council was to some extent an exception in that it periodically gauged the acceptability of particular drug-related prevention/treatment measures within the general public (Rocha-Silva, 1989a; Van der Burgh, 1979, 1978, 1977).

Another issue that has been under-researched is the effect of mass media messages on drug consumption and the development of drug-related harm. The dearth of research on the effects of, for example, television on drug consumption exists notwithstanding the dominance of television as a mode of public communication and, thus, its expected influence on values and lifestyles in South Africa (Visser & Botha, 1991:96).

As yet no rigorous analysis of the economic costs and benefits of drug consumption has been done in South Africa (Department of Welfare and Population Development, 1999:31). This neglect has occurred despite evidence from abroad of the usefulness of such analyses in enhancing policy and service delivery for countering drug-related harm (Single, Collins, Easton, Harwood, Lapsley, Kopp & Wilson, 2001:2; Wiessing & Hartnoll, 2001:11-14; Harwood, Fountain & Livermore, 1998:1-2; Walsh, 1998:31). The following extract from Harwood, Fountain and Livermore (1998:Section 2.1) describes the value of economic analysis of drug-related harm:

Economic analyses of alcohol and drug abuse disorders provide a convenient means of quantifying the effects of alcohol and drug abuse ... [thus serving] as a tool for policy analysts and researchers with questions about the consequences and costs associated with alcohol and drug abuse.

As far as could be ascertained two studies investigated the economic effects of drug consumption in South Africa. Both were restrictive in terms of the issues addressed and both lacked rigour. In 1985 Langley (1986:1-2) extrapolated 1975 estimates for the United States of America of the cost of various types of harm associated with alcohol in South Africa (e.g. lost production, alcohol-related health and medical expenses, car accidents, violence and crime, fire damage and the costs of prevention/treatment programmes). In 1996 Parry, Tibbs, Van der Spuy and Cummins (1996:2-5) did ground work for estimating the cost of alcohol-related harm in terms of fatal and non-fatal trauma by assessing what alcohol attributable fractions (AAFs) had to be assigned to 11 types of injuries that had been linked to alcohol in overseas studies. The assessed AAFs were based on the opinions of 11 selected key informants (pathologists and trauma surgeons) at selected hospitals and university departments around the country. The informants were required to base their opinions on their clinical experience and existing research on the subject. (As research on AAFs has as yet not been conducted in South Africa, the responses in the Parry, Tibbs, Van der Spuy and Cummins (1996:2-5) study must have been based on the clinical experience of the key informants.)

The drug-crime phenomenon has also not been on the formal research agenda in the private and public sector in South Africa, despite periodic government calls for strengthening research-based efforts at countering rising levels of crime and more particularly drug-related crime (Leggett, 2002:1-6; Department of Welfare and Population Development, 1999:16, 31; Rocha-Silva, 1998:106-108). Exceptions included a 1996 national survey of the pre-

incarceration history of persons in South African prisons (Rocha-Silva & Stahmer, 1996), and a 1999-2000 survey of drug consumption and crime among detainees in holding cells at selected police stations in three metropolitan centres in South Africa (Parry, Plüddemann, Louw & Leggett, 2004:167-185; Parry, Louw, Vardas & Plüddemann, 2001, 2000a, 2000b). The latter survey was initiated parallel with the 2000 holding cell survey that was conducted in the present investigation of the connection between drug consumption and crime in South Africa.

2.2.4 Restrictive research design

Past South African studies on drug consumption generally adopted a "single-method/single data source" approach to data collection, even though the validity of a multimethod/multi data source approach has been widely recognised in the international literature on the subject (De Vos, Strydom, Fouché & Delport, 2000:341-342; World Health Organization, 2000b:14; Jessor, Graves, Hanson & Jessor, 1968:139, 142-148). In fact, in their design of drug-related studies, South African researchers generally overlooked the sensibility of what has been said about the research endeavours of the Finnish researcher, Kettil Bruun (as cited in Rocha-Silva, 1992:55):

Not only did he conduct experiments but he exploited interview material, official statistics, participant observation, fiction, expert interviews and archive records. He entirely ignored the academic controversy over soft and hard methodology. His objective was simply to attain information on the actual workings of the Nordic societies.

Past drug-related research—as illustrated in the studies conducted between 1965 and 1995 among young people (10-24 years) in South Africa and listed in Table 2—also focused on easily accessible captive populations such as students in selected educational institutions and on metropolitan centres. Selected dimensions of drug consumption tended to be examined, e.g. alcohol *or* tobacco *or* (selected) illicit drugs; lifetime (ever used) *or* current consumption (consumption at the time of a study or during a specified time before the study, such as three days, two weeks, 30 days, or 12 months); and the quantity *or* frequency *or* type of drug consumption. Indeed, researchers did not explore interactions between various dimensions of drug consumption. Little, if any, attention was also given to the context of and the reasons for drug consumption, despite indications in studies abroad of the relevance of these issues.

Table 2: South African studies on drug consumption among young people (10-24 years): 1965-1995

Author	Year	Type of drug and questions	Research strategy	Sampling frame				Sample size	Sampling strategy	Response rate (%)
				Scope	Age group	Gender	Population group			
Rocha-Silva et al. (1996)	1994	*Alcohol, cigarettes, snuff, pipe, over-the-counter, prescription, illicit, inhalants, injecting *Status, frequency, quantity, reasons, context, onset	(a) Household survey b) Focus groups c) Case studies	a) RSA b) & c) Urban: Gauteng (Soweto)	10-21 years	Male Female	Historically disadvantaged ("black" people)	a) 1 376 b) 60 c) 3	a) Multistage stratified sampling b) & c) Purposive sampling	a) 100.0
Parry et al. (1994)	1993	*Alcohol *Status, quantity ("heavy")	School survey, university survey	a) Cape Town students in public places on campus: urban b) Pupils in selected Cape Town schools: urban	a) 18-25 years b) 10-17 years	Male Female	Historically advantaged and disadvantaged	a) 372 b) 340	a) Accidental sampling b) Not available	a) & b) 100.0
Nkhoma & Maforah (1994)	Not available	*Alcohol *Status, frequency, context	University survey	Cape Town: urban	21-24 years	Male Female	Historically disadvantaged (91% "black" people)	71	Systematic sampling	Not available
Flisher & Charlton (1995)	1991	*Alcohol, cigarettes, illicit, injecting, inhalants *Status, quantity ("heavy"), frequency	School & school drop-out survey	Cape Peninsula: urban	13-19; older than 15 years	Male Female	Historically disadvantaged ("coloured" people)	68	Two-stage stratified sampling	100.0
Flisher et al. (1993)	1990	*Alcohol, cigarettes, illicit, injecting, inhalants *Status, quantity ("heavy"), frequency	School survey	High school in Cape Peninsula (Grades 8-12): urban	Not available (Grades 8-12)	Male Female	Historically advantaged and disadvantaged	7 340	Cluster sampling of schools & systematic sampling of pupils (40% in 1 school; all in others)	371 in 3 schools refused; Grade 8s in 1 school not permitted participation
Disler (1990)	Not available	*Alcohol, cigarettes, illicit, prescription *Status, frequency, quantity (tobacco)	School survey	High school in Cape Town (Grades 10-12)	14-19 years	Male Female	Historically advantaged	429	All pupils	Two pupils refused
Dept. of Education & Culture (1990)	1989	*Alcohol, cigarettes, over-the-counter, prescription, illicit, inhalants *Status, frequency	School survey	RSA: historically advantaged high schools, Grades 10, 12	Not available (Grades 10, 12)	Male Female	Historically advantaged	Not available	All historically advantaged government schools (no details on pupil selection)	Not available
Dept of Education & Culture (1989)	1988	*Alcohol, cigarettes, illicit, inhalants *Status, frequency, onset	School survey	Gauteng: urban, rural	Not available (Grades 10, 12)	Male Female	Historically advantaged	7 609	All historically advantaged government schools	100.0
Hunter et al. (1991)	1989	*Cigarettes, snuff, pipe, chewable tobacco *Status, quantity	School survey	Cape Town: urban	10 years	Male Female	Historically disadvantaged ("black" people)	111	Purposive sampling	Not available
Nkonzo-Mtembu (1994)	1989	*Alcohol *Perceptions of status, reasons, contributors to drinking	School survey	Esikhawini Township (2 high schools): rural	12-19 years	Male Female	Historically disadvantaged ("black" people)	180	Systematic sampling of respectively all male and female pupils	100.0
Strebel et al. (1989)	1988	*Cigarettes, pipe & other types of tobacco	School survey	Cape Town (3 high schools): urban	9-21 years	Male Female	Historically disadvantaged	673	All pupils in Grades 6-7	Not available

Author	Year	Type of drug and questions	Research strategy	Sampling frame				Sample size	Sampling strategy	Response rate (%)
				Scope	Age group	Gender	Population group			
		*Status, quantity, onset					("black" people)			
Morgenrood (1988)	1988	*Alcohol, prescription, illicit, inhalants *Status, frequency, onset	School survey	Gauteng (1 high school): urban	14-16 years (average)	Male Female	Historically disadvantaged ("Asian" people)	548	All pupils in Grades 8-11	Not available
Epstein (1986)	1985/86	*Alcohol, illicit, inhalants *Status, quantity, frequency, context	School survey	East London: urban	Not available	Male Female	Historically advantaged	309	All pupils in Grade 10	Not available
Van Wyk (1985)	Not available	*Cigarettes, pipe, rolled tobacco *Status, quantity, frequency	School survey	Cape Town: urban	14-19	Male Female	Historically disadvantaged ("coloured" people)	1 028	Multistage stratified sampling	100.0
Dept of Education & Culture (1989)	1982	*Alcohol, cigarettes, illicit *Status, frequency, onset	School survey	Gauteng: urban, rural	Not available (Grades 10-12)	Male Female	Historically advantaged	6 900	Grades 10-12, advantaged government schools	Not available
Du Toit (1991)	1985	*Alcohol, cannabis, inhalants *Status, onset	School survey University survey	Durban: urban	Not available	Male Female	Historically advantaged & disadvantaged	1 247	Grade 12s and first-year students	Not available
Du Toit (1991)	1974	*Alcohol, cannabis *Status, onset	School survey	Durban: urban	Not available (Grade 12)	Male Female	Historically advantaged and disadvantaged	1 152	All pupils in Grade 12	Not available
Prout & Benatar (1982)	Not available	*Cigarettes *Status, quantity, onset, reasons	School survey	Cape Town: urban	11-19 years	Male Female	Historically advantaged	1 716	Advantaged schools; randomly selected classes	100.0
Benatar (1979)	Not available	*Cigarettes *Status, quantity, onset, reasons	School survey	Cape Town: urban	11-15 years	Male Female	Historically advantaged, disadvantaged ("coloured" people)	605	All	100.0 (disadvantaged schools); 55.5 (advantaged schools)
Van der Burgh (1984)	1981	*Alcohol, cigarettes, over-the-counter, prescription *Status, quantity, frequency	Survey (defence force conscripts)	RSA	16-30 years	Male	Historically advantaged	2 653	Stratified sampling	100.0
Olivier et al. (1977)	Not available	*Cigarettes *Status, quantity, onset	School survey	Bloemfontein: urban	Not available	Male Female	Historically advantaged	1 505	Grades 11-12 of 12 high schools	100.0
Van der Burgh (1975)	1973/74	*Alcohol, cigarettes, illicit *Status, quantity, frequency	Household survey	RSA	16-21 years	Males (post-school)	Historically advantaged	4 588	Stratified sampling	100.0
Van der Merwe (1974)	1974	*Cigarettes, pipe *Status	Household survey (school leavers)	RSA	16-21 years	Male (school leavers)	Historically advantaged	2 421	Stratified sampling	100.0

National surveys on drug consumption and in particular methodologically and conceptually comparable surveys as well as general population surveys have been a rarity in South Africa, especially since the latter part of the 1980s and with regard to young people in South Africa. The drug-related surveys that have been conducted have generally focused on selected areas, ethnic groups, contexts and dimensions of drug consumption. An exception is the methodologically comparable surveys on the extent of drinking-and-driving in the various provinces in South Africa that have been conducted annually by the Council for Scientific and Industrial Research between about the mid-1970s and the mid-1990s (Mynhardt, 1995; Hugo, 1992).

The neglect to conduct national surveys inhibited opportunities for exploring the extent to which drug consumption interacted with broad socioeconomic conditions (e.g. level of service provision). The focus on individual-level data implied a conception of drug consumption and related harm that "blamed" individuals and overlooked the interactive relationship between individuals and their environment (e.g. broad socioeconomic conditions).

The general absence of regularly conducted methodologically comparable national surveys also inhibited comparisons and, indeed, the monitoring of drug consumption and related issues across time and location. Furthermore, the neglect to conduct surveys in the general population in South Africa—and especially methodologically comparable surveys—at regular intervals complicated the development of a comprehensive and integrated database on drug consumption. The findings of such surveys would provide a broad point of reference for interpreting the findings from research in more restricted settings. Indeed, as pointed out by Roizen (1989:359), the findings of surveys in the general population provide a basis for

creating a mosaic in which statistics gathered in emergency rooms, morgues and prisons begin to have some meaning. Simple facts of emergency life such as 80 per cent of those coming to an emergency room had been drinking [become more meaningful when interpreted] against the background of knowledge from general population studies.

The Human Sciences Research Council (HSRC) was the only research house that periodically conducted national surveys in the general population. This agency maintained a national, methodologically comparable survey databank on drinking practices among the adult population from about the mid-1960s until the mid-1980s, after which funding difficulties resulted in more restrictive research focuses (Rocha-Silva, 1992:3-9).

Furthermore, with the exception to some extent of the HSRC surveys on drug consumption that will be discussed in subsequent paragraphs in this chapter, surveys on drug consumption in South Africa mostly used unstandardised and simplistic and, thus, ambiguous indicators of drug consumption. This complicated the interpretation of the research findings as well as synthesis across studies and time. Surveys, for example, measured the prevalence of the consumption of alcohol without providing for the possibility of variation across time and types of alcoholic beverages. Indicators such as "number of drinks" and/or "frequency of intoxication" were used to measure quantity of alcohol consumption without necessarily defining "drinks" or "intoxication". The possibility that some respondents might have been "former" consumers of drugs—i.e. persons who had consumed a drug at some time but not at the time of the study or during a specified time preceding the study—tended to be overlooked. This oversight complicated analysis of trends in alcohol consumption.

2.2.5 Substantial research infrastructure

Notwithstanding the abovementioned deficiencies in the design and initiation of studies, reviews underlined that South Africa had substantial and sophisticated research capacity, as shown in Table 3.

Table 3: Data-gathering infrastructure in South Africa

1. **Primary data gathering**

- Annual Human Sciences Research Council (HSRC) national household surveys on various socioeconomic issues, including drug use
- HSRC periodic regional and community surveys among specific populations (e.g. youth, informal settlements, prisoners, patients treated at primary health care clinics), attending inter alia to drug use
- Annual national surveillance of the blood alcohol level of drivers and pedestrians, based at Transportek, Council for Industrial and Scientific Research (CSIR)
- Periodic national, regional and community surveys by the SA Community Epidemiology Network of Drug Use (SACENDU), the National Trauma Research Programme and the National Health Promotion Research and Development Group, based at the Medical Research Council (MRC), focusing on metropolitan centres (e.g. Cape Town, Port Elizabeth, Durban, Pretoria, Johannesburg) and on admissions to treatment centres and medical trauma units
- Periodic national, regional, community/group surveys at universities (staff/students), (market) research houses, and agencies concerned with the treatment/prevention of drug-related harm, e.g. the offices/branches of the South African National Council on Alcoholism and Drug Dependence (SANCA)
- Crime Information Analysis Centre, SA Police Service (SAPS) surveys, e.g. 1996 survey among arrestees in Hillbrow, Gauteng
- Dept of Health five-yearly national household and antenatal clinic surveys with restricted attention to drug practices
- Statistics South Africa annual national household surveys - restricted attention to drug practices
- Community Agency for Social Enquiry (CASE) periodic national household (health) surveys

2. **Secondary/routine data gathering**:

- Annual routinely collected figures on the production, import, export and sale of alcoholic beverages provided by Dept of Customs and Excise & Dept of Trade and Industry and published in the South African Licensee's Guardian
- Annual routinely collected figures on drug seizures and other drug-related arrests by the Crime Information Analysis Centre, SA Police Service
- Annual routinely collected figures on admissions to state-funded drug-related (specialized) treatment centres through the National Information Strategies of the Department of Social Development and the Department of Health
- Periodic and selected collection and analysis of drug-related data in the routinely compiled records of welfare/social work agencies

Drug-related research was conducted by a number of institutions and individuals in especially the medical and social sciences and by postgraduate students in particular, although generally not on an on-going and systematic basis. Research agencies generally did not specialise in drug-related matters. Exceptions included the drug-related research programmes at national research houses, namely the Pretoria-based Human Sciences Research Council (HSRC) during the period mid-1960 to mid-1990, the Cape Town-based Medical Research Council (MRC) since the beginning of the 1990s, and the transport section at the Pretoria-based Council for Industrial and Scientific Research (CSIR). Utilisation of the internet increased to some extent access to drug-related information, especially among advantaged groups in the urban centres in South Africa. The Johannesburg-based research house, the Community Agency for Social Enquiry (CASE), contributed to drug-related research as part of more

comprehensive investigations into the socioeconomic and health status of communities or groups, in particular those who have been historically disadvantaged in South Africa.

2.2.6 Research partnerships and collaborative research

Since more or less the beginning of the 1990s various external pressures contributed towards the formation of researcher and researcher-practitioner partnerships such as the South African Community Epidemiology Network of Drug Use (SACENDU) and the South African Researcher-Practitioner Association (SARPA) (Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher & Kozel, 2002:969-976; Department of Welfare and Population Development, 1999:33-34). These pressures included the following issues:

- An emphasis on comprehensive, multisectoral and integrated research in government policy or strategic documents such as the 1997 *White Paper for Social Welfare* (Department of Welfare and Population Development, 1997), the 1996 *National Crime Prevention Strategy* (Department for Safety and Security, 1996), and the 1996 *White Paper on Science and Technology* (Department of Arts, Culture, Science and Technology, 1996);
- A "tighten-the-belt" economic climate in South Africa;
- An expected increase in the general level of drug consumption and related harm;
- Increased interest within the international community in the development of appropriate drug-related research methodology and data within developing countries and, consequently, increased possibilities—as evidenced in overseas research communities (Wiener, 1981:20-22, 51-52, 251-263)—for local researchers to initiate research on a contractual (profit-making) basis.

The partnerships that developed within the local research community facilitated the initiation of selected integrated drug-related research programmes such as

- the 1995 SARPA National Drug Surveillance Project that was based at the Human Sciences Research Council (Rocha-Silva, 1998:1); and
- the 1996 SACENDU Sentinel Surveillance Project (Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher & Kozel, 2002:969-976; Department of Welfare and Population Development, 1999:33). The SACENDU project was managed by the Medical Research Council in collaboration with the University of Durban-Westville

with technical assistance from the United States National Institute on Drug Abuse (NIDA) and funding by the United Nations Development Programme (UNDP) via the World Health Organization's Programme on Substance Abuse (WHO/PSA).

The methodological characteristics of these two initiatives will be discussed in more detail in the next section.

2.3 IMPACT OF SPECIFIC RESEARCH DEVELOPMENTS ON POLICY AND/OR SERVICES IN SOUTH AFRICA

Considering that the HSRC was the only organisation in South Africa specialising in drug-related research before the 1990s and contributed substantively to drug-related research in the 1990s, this section reviews drug-related research studies at the HSRC in detail (Rocha-Silva, 1998:1-108, 1992:1-9). It also provides an overview of two drug-related surveillance programmes that developed in the mid-1990s to facilitate comprehensive and integrated research on the subject. Apart from being directed at increasing insight into the methodological and organisational context within which the present study was conceived, the discussion is essential to reveal the extent to which past drug-related research programmes were geared at influencing drug-related policy/services.

2.3.1 Developments at the HSRC

Since its inception in the mid-1960s the HSRC, formerly known as the Bureau for Educational and Social Research, has intermittently conducted drug-related research as part of its broader social research programme. The research mainly comprised a number of (national) household sample surveys as listed in Table 4.

Table 4: HSRC household surveys on drug intake practices*

Ethnic group	Year of study	Area of study	Type of drug studied	Age group	Sample size	Response rate (%)
Blacks	1962	RSA (urban and rural)	Alcohol	15 years and older	1 500	100.0
	1976	RSA (urban and rural)	Alcohol	20-59 years	4 000	100.0
	1982	Pretoria-Witwatersrand (urban)	Alcohol	18-64 years	673	87.8
	1985	Pretoria-Witwatersrand (urban)	Alcohol	18-64 years	1 450	96.5
	1990	RSA (urban, rural and deep-rural)	Alcohol and other drugs	14 years and older	1 824 (deep-rural) 1 501 (urban/rural)	99.1 99.5
	1994	RSA (urban, rural and deep-rural)	Alcohol and other drugs	10-21 years	1 376	100.0
	1996	RSA (urban, rural and deep-rural)	Alcohol and other drugs	14 years and older	1 440	100.0
Coloureds	1962	Cape and Natal (urban and rural)	Alcohol	18 years and older	1 000	100.0
	1977	Cape and Transvaal (urban and rural)	Alcohol	20-59 years	2 500	100.0
	1982	Cape (urban)	Alcohol	18-64 years	1 397	67.6
	1985	RSA (urban)	Alcohol	18-64 years	1 400	85.5
Asians	1963	Natal (urban and rural)	Alcohol	15 years and older	1 500	100.0
	1977	Natal (urban and rural)	Alcohol	20-59 years	2 500	100.0
	1982	Natal (urban)	Alcohol	18-64 years	1 400	81.4
	1985	Natal (urban)	Alcohol	18-64 years	1 400	97.0
Whites	1962	RSA (urban and rural)	Alcohol	18 years and older	1 500	100.0
	1975	RSA (urban and rural)	Alcohol	20-59 years	5 000	100.0
	1982	RSA (urban)	Alcohol	18-64 years	1 252	60.4
	1985	RSA (urban)	Alcohol	18-64 years	1 400	76.9

* This table is based on a related table compiled by Rocha-Silva (1998:127). The studies listed were all cross-sectional sample surveys and used the same sampling procedure, namely multistage random sampling. Provision was made for proportional representation per province and economic and magisterial district as defined for population censuses. The questionnaires used in the various studies were completed with the aid of trained fieldworkers in private face-to-face interviews in which respondents were assured of the confidentiality of the responses.

In the mid-1980s the drug-related research at the HSRC came to be formally acknowledged as a specialisation area in the HSRC with the establishment of the HSRC Centre for Alcohol and Drug-Related Research. Its drug-related research programme evolved in a cumulative manner and became progressively more refined. The initial largely exclusive concern with fact-finding gradually evolved into studies with explicitly outlined and detailed conceptual frameworks. In the course of time researchers also increasingly designed their projects in a

manner that would (a) facilitate comparisons with the findings of related studies within the wider research context in South Africa and abroad, and (b) inform service delivery and policy making with regard to preventing drug-related harm. These developments are discussed in more detail in the following paragraphs.

2.3.1.1 HSRC studies: 1960-1970

In the 1960s the HSRC drug-related research programme largely consisted of national cross-sectional and in detail pre-structured surveys (as listed in Table 4) of the drinking practices of the various ethnic groups in the general population. The theoretical and practical implications (e.g. for countering alcohol-related harm) of the survey findings were not considered, neither did the researchers place their findings within the wider international context. Analysis amounted to little more than enumerating the accumulated data and noting the extent to which individual drinking practices differentiated in terms of sociodemographic variables and, thus, "group" practices. The possibility that the same social meaning may not be attached to a particular way of drinking over time and place was not explored. In fact, the surveys were not developed in terms of an explicit and detailed conceptual framework. They were based on the following hypothesis noted by Venter (1965:2):

[T]here will be differences between the drinking practices of different socioeconomic groups as well as different cultural groups, and ... these differences are determined by the varying degree of social acceptance of drinking in the various groups.

Broad and, thus, ambiguous measures of drinking practices characterised the surveys. Concern was with the frequency with which respondents usually consumed alcohol instead of the frequency with which particular alcoholic beverages were consumed. Quantity of consumption was measured in terms of the number of "drinks" that the respondents consumed per alcoholic beverage in the week preceding the research interviews. The measures did not provide for variation in the amount/frequency of alcohol consumption over time.

Although the researchers went beyond the traditional tendency in the literature at the time to focus on "pathological" drinking or, for that matter, on the "abuse of liquor" (Venter, 1965:2) and investigated drinking practices in general, fieldworkers were also required to gauge the prevalence of various broad categories of drinkers such as "moderate drinkers", "immoderate drinkers" and "alcoholics". This fieldworker classification of the respondents' drinking practices, however, opened the results to bias. The research provided an arbitrary summary of

the respondents' drinking practices and could be expected to be masking differences among the respondents.

It should also be borne in mind that the World Health Organization (WHO) discarded the term "alcoholism" for the term "alcohol dependence syndrome" in the ninth revision of the International Classification of Diseases in 1976 and defined (Shaw, Cartwright, Spratley & Harwin, 1978:68) the latter as

a state, psychic and usually also physical, resulting from taking alcohol, characterised by behavioural and other responses that always include a compulsion to take alcohol on a continuous or periodic basis in order to experience its psychic effects, sometimes to avoid the discomfort of its absence; tolerance may or may not be present.

This terminological change occurred against the background of increasing empirical evidence of the multifaceted and, indeed, culturally specific nature of the concept of "alcoholism" as well as indications that "alcoholic" drinking differed quantitatively (e.g. in terms of quantity consumed) rather than qualitatively from non-alcoholic or "normal" drinking (Rocha-Silva, 1998:58-60; Holder & Edwards, 1995:43; Skog, 1985:93).

The pre-1970 national surveys were, however, quite comprehensive, although without being explicitly geared towards informing policy/services with regard to the prevention of drug-related harm among vulnerable groups (e.g. historically disadvantaged communities). Apart from gathering information on drinking practices, attention was given to reasons for drinking and the context within which alcohol was used, with emphasis on the place and time of drinking and the amount spent on alcoholic beverages.

2.3.1.2 HSRC studies: 1970-1980

In the 1970s the HSRC updated its national surveys on drinking practices in a methodologically comparable but less comprehensive manner (see list of surveys in Table 4). The surveys did not investigate reasons for drinking or the context of drinking. Some of the studies were to a certain extent explicitly service oriented, as they investigated the acceptability of particular drug-related prevention programmes and legislative measures within the general population (e.g. Van der Burgh, 1979, 1978, 1977). The drug-related research programme of the HSRC also broadened to a consideration of the nature, extent and development of illicit drug consumption (e.g. Strydom, 1976; Van der Burgh, 1975) and of places of drinking such as shebeens/taverns (e.g. De Kock, 1977). In some instances projects

were designed in terms of explicitly outlined conceptual premises (e.g. Van der Burgh, 1975). These premises were mostly borrowed from structural-functional and anomie-cum-differential-association theoretical perspectives on deviance in sociology. In fact, the relation between behaviour and associated social meanings (or norms/values) was assumed to be unproblematic. Particular forms of drug consumption were viewed as necessarily violating certain norms/values, with the consumers knowingly participating in the violation on the basis of being acquainted with such behaviour, the behaviour offering certain pay-offs, and the consumers being faced with limited social support/means to behave in another way and with limited possibilities of the behaviour in question being socially discriminated against.

2.3.1.3 HSRC studies: 1980-1990

In the 1980s the HSRC updated and refined (conceptually and methodologically) the earlier surveys on alcohol consumption (see list of surveys in Table 4). In terms of the issues addressed and measures employed, the surveys were more multifaceted than their earlier counterparts. The studies were also developed in terms of clearly outlined conceptual premises. The move towards economic independence at the HSRC—and, thus, towards contract research—contributed in large measure to an explicit concern with service delivery and in particular with formulating the preventive implications of the research results.

The surveys, in fact, identified risk practices and attitudes with regard to the development of alcohol-related harm in the general population (see, for example, discussion in Rocha-Silva, 1989a:1-2), based on the assumption (Frankel & Whitehead, 1981:58-60) that

- the effective countering of alcohol-related harm required information about not only patterns of drinking in the community concerned but also about the attitudes of community members towards such practices and their impressions of the existing services for countering such harm; and
- the assumption that the lower the general level of alcohol consumption and the less drinking and drunkenness were accepted in a community, the lower the prevalence of alcohol-related problems.

The trend towards multifacetedness was, furthermore, underpinned by a multidimensional conception of drug-related research (Rocha-Silva, 1992:7) that acknowledged the basically assumptive and thus perspectival nature of thought, as is metaphorically expressed in the

Indian legend in which six blind men separately place their hands on a different part of an elephant and as a result describe a different beast. This conception reminded researchers to acknowledge and articulate their particular claims or grounds of authority while accepting the possibility of others having different perspectives and thus considering ways of building bridges between traditionally "opposing" theoretical assumptions, research procedures/ techniques, measuring devices, preventive guidelines, and ultimately between research and service delivery.

A critical review of South African research on drinking-and-driving demonstrated the usefulness of a multidimensional methodological and conceptual approach to drug-related research (Rocha-Silva & Pieterse, 1984:98-102). The review showed the fruitfulness of investigating a combination of potential contributors to drinking-and-driving instead of adopting the traditional approach of a priori apportioning "blame" to a particular factor (e.g. a drinking driver).

The surveys of alcohol consumption of the 1980s measured drinking practices in more detail than the earlier surveys, without forfeiting comparability with the measures used in the earlier surveys. These measures also facilitated comparisons with related studies abroad (especially in the United States of America). Furthermore, whereas the studies on alcohol intake in the 1980s initially focused on drinking frequency, volume of consumption and type of alcoholic beverages consumed, a survey (Rocha-Silva, 1989b) among elderly citizens in Pretoria in the late 1980s extended this focus to also investigating the context within which drinking occurred (place and time of drinking and drinking-related experiences) as well as reasons for drinking.

To facilitate standardisation and thus comparability across surveys, the HSRC researchers developed the following instruments for measuring alcohol consumption and related harm (Oberholster, 1993:90-91; Rocha-Silva, 1987:133-138):

- **Khavari-Alcohol-Test (KAT)**

The KAT, an easily administered quantity-cum-frequency index of alcohol intake, was developed in the United States of America and re-modeled at the HSRC to suit South African circumstances. A particular advantage of the KAT was its sensitivity to differences in alcohol intake and its ability to facilitate accurate recall. Instead of arbitrarily classifying drinkers into predefined nominal classes such as light, moderate and heavy drinkers as was traditionally

the case in South Africa, the KAT's interval quantification facilitated a detailed, statistical and empirical identification of various types of drinkers in terms of the quantity and frequency of consumption of various alcoholic beverages. It enabled a beverage-by-beverage analysis of frequency, quantity and quantity-cum-frequency of alcohol intake, as well as an analysis of the extent to which a respondent's pattern of intake varied over time. The KAT also included questions on alcohol intake that paralleled those used in most other quantity/frequency indices of level of alcohol intake. Thus it facilitated a comparative analysis and integration of data.

- **Jellinek-Walsh-Ledermann-Khavari formula**

To assist policy makers in estimating as accurately as possible the magnitude of alcohol-related harm, the Jellinek-Walsh-Ledermann-Khavari formula was devised at the HSRC. It is a multifaceted estimation device that was established to overcome to some extent the inherently biased nature of all data collection methods. This estimation procedure relied heavily on validity through convergence, i.e. convergence between independently collected data (sets). A particular advantage of the formula was that it included indicators on which data were generally available or could be made available in South Africa, e.g. alcohol-related mortalities, admissions to alcohol-related rehabilitation/treatment centres, and taxed sales of alcoholic beverages. Table 5 illustrates this.

Table 5: Jellinek-Walsh-Ledermann-Khavari formula

Data collection	Data/indicators	Potential biases
Jellinek-oriented: Routine records	1. Drug-related mortality: Deaths certified as caused by, for example: *Alcohol liver cirrhosis *Alcohol dependence syndrome *Fatal drug-related traffic accidents 2. Drug-related morbidity (e.g. drug-related injury, illness)	Diagnostic difficulties: Inaccurate reporting and recording
Walsh-oriented: Routine records	Admissions to drug-related treatment centres, hospitals, the criminal justice system, etc.	Diagnostic difficulties: *Inaccurate reporting and recording *Admission difficulties (e.g. due to policy and the socioeconomic conditions of applicants)
Ledermann-oriented: Routine records; national sample surveys	"Heavy" drinkers (consuming on average at least 10-15 cl absolute alcohol per day) in the adult population of a community (calculated in terms of inter alia taxed sales of alcoholic beverages, population figures, and statistical assumptions regarding the distribution of alcohol intake in a community)	Diagnostic difficulties (an intake of 10-15 cl absolute alcohol per day not necessarily problematic): *Inaccurate reporting and recording *Inaccurate statistical assumptions and analyses
Khavari and Faber-oriented: National sample surveys	Self-reported drug users (e.g. self-reported consumption of an average of at least 10-15 cl absolute alcohol per day) in the general population	Diagnostic difficulties (an intake of 10-15 cl absolute alcohol per day not necessarily problematic): *Inaccurate reporting and recording *Inaccurate sampling

The Jellinek-Walsh-Ledermann-Khavari Formula was generally similar to the typologies of alcohol-related harm proposed by international bodies such as the World Health Organization (Cercone, 1994:4), and by Rehm and Fischer (1997:252). Table 6 illustrates this.

Table 6: Typology of alcohol-related harm

Type of harm	WHO: "Sustained consumption at moderate/high level" R & F: "Long-term consumption"	WHO: "Episodic intoxication" R & F: "Single-occasion use"
	Indicators	**Indicators**
WHO: Medical problems R & F: Physiological harm; psychophysical harm and mental harm	Mortality and morbidity: Oesophagus cancer, liver cancer, gastritis, pancreatitis, liver cirrhosis, dependence, depression	Mortality and morbidity: Overdose, accidents, trauma, hangover, alcohol poisoning
WHO: Social problems R & F: Immediate personal & social environmental harm (behavioural aspect)	Disruption of social and economic relations: Family problems, absenteeism, low productivity	Severe family and workplace disruption, injury to others, violence: Domestic violence, industrial accidents, aggressive behaviour
WHO: Legal problems R & F: Wider social and cultural harm/problems (determined by societal reactions)	Stigmatisation, coercion to change, treatment, criminalisation of drug-related behaviour (crime, coercive treatment)	Criminal and informal sanctions: Criminal justice arresting and sentencing

2.3.1.4 HSRC studies: 1990-2000

Increasing economic pressure in the 1990s inhibited an update of the HSRC databank on drinking practices and on the acceptability of drinking and drunkenness in the general population. The focus was on historically neglected sectors and issues during this period.

The traditional focus on alcohol and on a particular (type of) drug at a time was extended to a concern with a range of drugs at a time, thus facilitating the examination of relationships between various drug-taking practices. Projects, furthermore, focused on sectors such as historically disadvantaged persons, rural residents and young people, and redressed the dearth of research into drug-crime links. Researchers consolidated the conceptual and methodological refinements of the 1980s, by implementing multisource/multidata designs and developing a model for researching vulnerability to drug-related harm. The explicit concern with policy making and service delivery of the 1980s also continued and evolved into collaborating closely with key policy makers and service providers. In fact, to ensure relevance and implementation of the research findings, key policy makers/service providers participated in the conception and execution of projects.

The three major HSRC surveys conducted in the 1990s are discussed in more detail in the following sections because of the direct bearing these developments had on the conception of this study into drug-crime connections. However, the first of these is discussed in more detail than the others because of its large influence on the manner in which the later projects were designed.

- **Comprehensive survey among historically disadvantaged persons: 1990-1991**

At the end of 1990 and the beginning of 1991 the HSRC conducted the first comprehensive survey among a historically disadvantaged group (persons of "black African" background) (Rocha-Silva, 1991a, 1991b). The survey focused on adults (persons older than 21 years) and a major sector in the younger age group (14-21 year olds). The sample was drawn from metropolitan centres in South Africa, towns neighbouring these centres and deep-rural areas (i.e. the most densely populated districts in the former self-governing states, namely KwaZulu, KwaNdebele, Gazankulu, Lebowa, Qwaqwa and KaNgwane).

A key outcome of this survey was the formation of a drug-related preventive research model (Oberholster, 1993:91-92). In accordance with the conceptual premises of the HSRC studies conducted in the 1980s, this model had the following features:

- It was rooted in general sociology, in sociological studies of deviance, and in the research findings of South African sociological research on "deviant" and, more particularly, "alcoholic" drinking;
- it expected concurrence between the general level of alcohol intake, acceptance of drinking and drunkenness, and the prevalence of alcohol-related harm in a community; and
- it took cognisance of the public health assumption that drug-related harm occurred within a community to the extent to which there was a demand for and access to drugs.

The public health perspective required researchers to focus on agents (e.g. drugs), hosts (e.g. consumers of drugs) and the environment (e.g. setting/context in which drugs are consumed). Davies and Walsh (1983:19), for example, observed with regard to research into alcohol-related problems that "a public health perspective sees alcohol problems as emerging from the interaction between alcohol, drinkers and the physical and social environments". Indeed, a public health approach required a comprehensive approach in the selection of research issues. Consideration had to be given to drug-taking practices, reasons for drug taking and the

context within which usage takes place (including perceptions about existing preventive policy/service delivery) when researching vulnerability to drug-related harm. This approach reflected social work's concern with identifying WHAT problems existed WHERE, WHO experienced the problems and HOW the problems were experienced when attempting to help solve the problems concerned. Moreover, the development of the public health preventive research model reflected to some extent the intervention research mode, described by De Vos et al. (2002:418) as research that focused on "... the development of technology that supports a human service profession."

Of particular importance and in line with the public health conceptual underpinning was the fact that the 1990/1991 HSRC study went beyond the traditional HSRC focus on individuals to explore—at least indirectly—the impact of broad social conditions (e.g. differences in level of "urbanisation" or "industrialisation") on the drug-taking practices of individuals. Indeed, the data on alcohol intake in the heavily industrialised metropolitan areas in the RSA that were gathered in the 1980s and the beginning of the 1990s were compared with the data that were collected in the non-industrialised deep-rural areas at the beginning of the 1990s.

Table 7 illustrates the preventive research model that guided the drug-related studies of the HSRC after 1990.

Table 7: Preventive research model

SOCIAL VARIABLES		PSYCHOLOGICAL VARIABLES		DRUG USE AND RELATED PROBLEMS
Variables	Research questions/indicators	Variables	Research questions/indicators	Research questions/indicators
Access to drugs: Opportunities for taking drugs Demand for drugs: • Social support/ pressure • Exposure to people taking drugs • Lack of, or little, discrimination against drug taking	• Knowing about places and social networks through which drugs can be obtained in the researched communities • Experiences of persistent offers to take drugs; drinks bought in rounds; criticism or jokes when turning down drug use • Drug use in places where the focus is on drug use (e.g. bars, bottle stores, hotel lounges, shebeens, taverns, "drug houses") • Drug taking in company and specifically company that would not necessarily discriminate against one's behaviour; and/or drug taking on one's own	• Knowing about/ acquainted with drug use • Being tolerant towards drug taking • Believing that drug taking will not be discriminated against • Personal need for/ attraction to drug taking • Believing in the rewarding nature of drug taking	• Accustomed to drug taking among acquaintances • Believing that it is easy to obtain drugs • Drug taking to change mood, to cope with life, for enjoyment, for health improvement, etc.	• Drug use • Self-recognition of experiences of drug-related problems, e.g. after/during drug taking sessions

- **HSRC national survey among young people: 1994**

Against the background of a progressive increase in the level of drug consumption in South Africa and repeated calls for national baseline information for directing and monitoring preventive services, the HSRC conducted in 1994 the first comprehensive drug-related household survey among historically neglected young people in South Africa (Rocha-Silva, De Miranda & Erasmus, 1996). A representative sample of 1 376 young people of "black" cultural background in the age group 10-21 years were surveyed. As in the 1990/1991 HSRC survey (Rocha-Silva, 1991a, 1991b) and in order to inform preventive policy and action, the study investigated the nature and extent of vulnerability to drug consumption and related harm in the research group.

To facilitate cumulative research and, more particularly, comparative analysis, the youth household survey was developed in terms of the preventive research model developed in the 1990/1991 HSRC survey (Rocha-Silva, 1991a, 1991b) among historically disadvantaged persons, 14 years and older. It was underpinned by the same public health conceptual premises, focused on the same geographic areas, followed largely the same sampling procedure, and used largely similar data-gathering instruments (e.g. questionnaire) as the 1990/1991 HSRC survey (Rocha-Silva, 1991a, 1991b). The research design, however, also had the following unique features as indicated by Rocha-Silva, De Miranda & Erasmus (1996:6-14, 17):

- A consultative body, representing local policy makers and service providers as well as researchers specialising in drug-related research in neighbouring African countries and abroad, participated in and supervised every phase of the survey.
- The largely quantitative research design was supplemented with qualitative data-gathering techniques (e.g. focus group interviews and case studies) to contextualise the questionnaire responses in more detail.
- Fieldworkers were mostly women, had experience in establishing rapport with young children, and received additional training in face-to-face interviewing of young children from the local service providers on the consultative body.
- The local policy makers/service providers on the research consultative body facilitated fieldworker access to the sampled districts/households through (in)direct negotiations with community leaders in the sampled districts.

- To ensure the confidentiality of the responses the interviews were conducted in privacy.
- For ethical reasons, fieldworkers obtained verbal/written permission from the head of a sampled household to approach the randomly selected young person in the household for an interview.
- The questionnaire included a few general items (contributed by the consultative body) that tested the overall integrity with which a young person responded. To retain the concentration of respondents, the questionnaire administration took a maximum of 30 minutes.

The general reliability of the survey results was reflected in the high response rate (100.0%), the logical consistency between the responses to the various sections in the questionnaire, and the low non-response rate in the questionnaire (Rocha-Silva, De Miranda & Erasmus, 1996:10, 99-148). The responses to the questionnaire items that tested overall integrity also suggested that, generally, the survey questions were answered honestly (Rocha-Silva, De Miranda & Erasmus, 1996:10, 99-148).

It is also important to note that the design of the 2000 holding cell survey that was conducted as part of the present investigation of the connection between drug consumption and crime leaned heavily on the manner in which the 1990/1991 and 1994 HSRC surveys were designed.

- **HSRC national survey on the drug-crime phenomenon: 1996**

In 1996 the HSRC conducted the first comprehensive survey on the drug-crime phenomenon in South Africa (Rocha-Silva & Stahmer, 1996). The survey focused on incarcerated males in South Africa. (Females were omitted from the survey because few were in prison/under correctional supervision at the time.) The focus on incarcerated persons related to

- the objective of the study to inform preventive policy/action;
- the accessibility of persons in prison when planning preventive programming;
- indications (e.g. from studies conducted abroad) that offenders with a history of drug consumption were inclined to miss formal drug-related treatment opportunities;
- indications (e.g. from studies conducted abroad) that persons with a criminal history and a history of drug consumption generally continued taking drugs when entering prison,

and such drug consumption contributed towards recidivism and thus to an increased economic and administrative burden on criminal justice authorities.

To facilitate comparisons, the survey was constructed in terms of largely the same conceptual premises and data collection and analysis instruments/techniques as the 1990/1991 HSRC survey (Rocha-Silva, 1991a, 1991b). It was also managed in a similar way as the latter survey. The consultative body on the research management team included local representatives of key policy makers/service providers and participated in every phase of the project. Data collection focused on the respondents' drug intake and criminal activities before their arrest for the offense for which they were serving a sentence, as well as on their willingness to enter drug-related treatment services if needed. The questionnaire was largely similar to the questionnaire in the 1990/1991 HSRC survey (Rocha-Silva & Stahmer, 1996).

More particularly, in a two-stage sampling procedure, stratified in terms of the nine provinces in South Africa, 1 603 male prisoners were selected. In the first stage, prisons (38) were drawn with a probability proportional to their size. During the second stage, prison staff at each sampled prison selected the number of prisoners to be interviewed, applying serial sampling. A closed-ended questionnaire was administered in face-to-face interviews by a team of HSRC fieldworkers experienced in interviewing people on sensitive issues and in difficult circumstances (e.g. residential areas known for high levels of violence). Representatives of local drug-related prevention/treatment services and the prison authorities on the consultative body on the research management team assisted in training the fieldworkers. Interviews were conducted in the language chosen by individual respondents, beyond the hearing of other people (including prison wardens) and scheduled by fieldwork supervisors in cooperation with the relevant prison authorities. Fieldwork supervisors monitored the data collection. In order to avoid concentration difficulties on the part of the respondents, the administration of the questionnaire did not exceed 45 minutes. The respondents were assured of the confidentiality of their responses. The questionnaire was pretested in prison in Pretoria, with the consultative body on the research management team observing the process and making recommendations.

As in the case of the 1994 HSRC youth survey (Rocha-Silva, De Miranda & Erasmus, 1996:10, 99-148), the findings of the 1996 drug-crime survey reflected integrity (Rocha-Silva & Stahmer, 1996:5-9). In fact, the survey achieved a response rate of 100.0% and the

responses to the various sections in the questionnaire were logically consistent with one another.

- **HSRC survey on drug-crime links among detainees at a selected police station: 1996**

In response to the findings of the 1996 survey of drug-crime links among prisoners in South Africa, the HSRC, in collaboration with the Crime Information Analysis Centre (CIAC) of the South African Police Service (SAPS), tentatively explored the feasibility of investigating drug-crime links among detainees at police stations during the latter part of 1996 (Rocha-Silva, 1996:1-22). In view of (a) the advantage of placing local data within an international context, and (b) limited experience in data collection among persons detained at police stations, the research implemented a customised format of the USA Arrestee Drug Abuse Monitoring (ADAM) programme in South Africa, using the very busy Hillbrow police station in Gauteng as the experimentation site. As in the USA ADAM, data collection entailed a fieldworker-administered questionnaire on the drug consumption of the respondents, their involvement in the use of guns and a request for a urine specimen. The questionnaire took a maximum of 15 minutes to complete. Because of funding restrictions the fieldworkers did not take the urine specimens that the USA ADAM required in order to test the reliability of respondents' reports of drug consumption in the survey interview.

In the USA the ADAM programme provided local estimates of drug consumption among an otherwise hard-to-reach population of drug consumers (i.e. persons engaged in long-term and "intense" drug consumption), who tended to increase the burden of agencies involved in health care, criminal justice, welfare, etc. ADAM unravelled drug-crime links and also served as a platform for researching other issues, e.g. the prevalence of HIV/AIDS and links between HIV/AIDS and drug use, domestic violence, gun ownership and living on the street. Several countries have implemented versions of the USA ADAM programme, e.g. Australia, Chile, England, Wales, Scotland, The Netherlands, Panama and Uruguay (Taylor, Brownstein, Parry, Plüddemann, Makkai, Bennett & Holloway, 2003:269-286; National Institute of Justice, 2000:5-6; Taylor & Bennett, 1999:5-10).

The Hillbrow survey demonstrated the viability of measuring drug consumption among detainees at police stations in South Africa, apart frmm providing guidelines for conducting a national survey. Among the 90 detainees who were interviewed at the police station, a 92.0%

response rate was achieved and an 83.0% compliance rate for the urine specimen request. Because of funding restrictions the urine was not tested.

2.3.2 SARPA national drug surveillance project

In order to go beyond the historically largely fragmentary organisation and design of research in South Africa and in this way contribute towards more meaningful research findings, a model for comprehensive and integrated national surveillance of drug-related issues in South Africa was drafted in 1995 and tested and refined in 1996 (Rocha-Silva, 1998:i). The South African Researcher-Practitioner Association (SARPA), a network of researchers and practitioners who represented various public and private bodies in South Africa concerned with countering drug-related harm, initiated and managed the project voluntarily. However, the project was administratively housed at the HSRC, using in-house funds. In 1999 the surveillance programme was discontinued because of the restructuring of the focus areas and staffing within the agencies represented in SARPA and a consequent lack of research funding.

The surveillance model that SARPA developed and implemented had the following features (Rocha-Silva, 1998:1-9):

- A multisectoral task force *voluntarily* collated and analysed the research findings and facilitated their implementation in policy and service provision. The task force included representatives of the national research houses in South Africa with drug-related research programmes, as well as policy makers and service providers concerned with drug consumption and related harm.
- Bi-monthly interactive meetings strengthened the commitment of the task force members and facilitated quality data collection, interpretation, dissemination and implementation, e.g. through peer review and, where required, a modification of the operational process and outputs.
- Data collection focused on available data and the standard contexts tapped in local and international studies on drug consumption and related harm. These contexts included general and special populations such as young people, homeless persons, entrants to the criminal justice system (detainees in police cells and incarcerated persons); admissions to drug-related treatment units; admissions to medical trauma/emergency units; and the production, distribution and sale of drugs.

- A combination of methods (quantitative and qualitative) and data sources (primary and secondary) was used to minimise inferential ambiguity and facilitate validation by convergence (Neuman, 1997:151; Jessor, Graves, Hanson & Jessor, 1968:137-149, 165).
- A multifaceted conceptual framework and, indeed, the preventive research model in terms of which HSRC surveys were developed in the 1990s guided the research (Rocha-Silva, 1998:4-5, 1991a, 1991b).
- The findings of national sample surveys were used as "baseline" reference points for interpreting and integrating the data collected from other more restricted sources.

In fact, as recommended by international agencies (Sloboda, 2003:5), the SARPA surveillance project included "surveillance" as well as "monitoring" mechanisms. Sloboda (2003:5) notes in this respect:

The stigmatised nature of drug abuse suggests certain limitations in the usual epidemiologic approaches to data collection. It is generally recommended that several systems be established ... The most widely used approaches ... include the use of existing data to determine general drug use patterns within the drug-using populations (surveillance) and surveys to estimate incidence and prevalence rates within a general population (monitoring).

Apart from drawing attention to sources of bias in existing data, the project identified patterns/trends in the nature and extent of drug consumption, vulnerability to drug-related harm and drug-related harm at the national level and, where available, at a provincial and district level (Rocha-Silva, 1998:10-108). The project also extracted the preventive implications of the synthesised data. The discontinuation of the project after the restructuring of the focus areas of the agencies represented in the management team, however, highlighted the importance of procuring long-term funding independently of the budgets of the agencies represented in the management team.

More particularly, the project—as noted in the reports compiled by SARPA members (e.g. Rocha-Silva, 1997b)—illustrated the complexity and dynamics of drug consumption. The synthesised data showed that drug consumption varied across time, place and individuals, with such variations differentiating in terms of type of drug and dimension of drug consumption (e.g. frequency and quantity of consumption). This all pointed to the need for comprehensive and integrated cross-sectional and long-term monitoring of drug use on a local/district, regional/provincial and national level. The project not only highlighted the need

for the long-term, comprehensive and integrated monitoring of drug consumption and associated harm, it also identified a number of areas in need of research as pointed out in earlier sections in this chapter. Furthermore, in its use of the findings of (HSRC) national sample surveys on drug consumption to synthesise the findings of more restricted studies on the nature and development of drug consumption in a country, the project illustrated the value of regularly conducting such surveys.

2.3.3 SACENDU Sentinel Surveillance Project

In 1996 the Medical Research Council of South Africa (MRC) and the University of Durban-Westville established a sentinel surveillance project, the South African Community Epidemiology Network on Drug Use (SACENDU) (Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher & Kozel, 2002:969-976). SACENDU largely reflected the 1995 HSRC surveillance project. It also comprised the following more unique features:

- Local agencies (e.g. ministries such as the Departments of Health, Welfare and Population Development) as well as external agencies (e.g. international agencies) funded the project.
- The project was developed along lines of a surveillance model described by the World Health Organization as an "aggregate system" (Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher & Kozel, 2002:970). The system focused on available data sources on the subject in the targeted geographical areas, such as "event registers, case reporting and case registers".
- The project focused on selected major cities (i.e. Cape Town, Port Elizabeth, Durban and Johannesburg/Pretoria) as research sites, with the intention to gradually expand towards other communities/sites.
- Data collection occurred on an ongoing and six-monthly basis and focused on specific settings and particular captive populations within the research sites, i.e. populations in specialised drug-related treatment centres, trauma and psychiatric units in hospitals, and criminal justice system units. The intention was to progressively target as many settings/populations within the research sites as possible.
- Data (a) profiled persons admitted to specialised drug-related treatment centres, providing information on referral sources, biographical characteristics, type of drug consumption treated, type of treatment received (in/out-patient treatment) and treatment

history; (b) the drug use history of persons admitted to trauma units at hospitals; (c) admissions/discharges directly related to drug consumption at psychiatrics institutions; and (d) seizures of illicit drugs and arrests for possession of illicit drugs by the South African Police Service.

- Cognisance was also taken of (a) the views of SACENDU participants on the nature, extent and consequences of drug consumption within the research sites; and (b) available data on drug consumption and related issues that were collected through other initiatives/agencies, such as the findings of surveys and ethnographic data (e.g. the findings of focus group and in-depth interviews).
- To facilitate comparative analysis, standardised instruments (e.g. validated questionnaires and/or biological tests for drugs) were used in the collection of data in the focus areas, e.g. specialised treatment centres, hospital trauma units and psychiatric hospitals.
- Analysis comprised an enumeration of the standard data collected in the focus areas, and the identification of statistical patterns/trends. Attention was also given to the extent to which other available data converged/diverged from and/or detailed the patterns/trends identified in the standard SACENDU data.

Apart from contributing knowledge on patterns/trends in drug consumption and related harm (consequences of drug consumption), SACENDU initiated ongoing and standardised monitoring of these issues. The project demonstrated that sustainment of the system was dependent on ensuring formal and long-term funding at the initiation of data collection. As yet the usefulness of SACENDU in generating comprehensive and integrated knowledge on drug consumption and related harm in South Africa is, however, limited. This limitation relates to the fact that data collection is biased towards indicators (data) of drug-related harm and, more particularly, towards selected indicators of such harm in selected cities. The incompleteness of the data collected within the targeted settings also compromises the integrity of the findings. Not all the treatment centres within the project sites, for example, (consistently) provide data (Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher & Kozel, 2002:974-975). The neglect to develop the project in terms of a clearly outlined conceptual framework, furthermore, complicates the interpretation of the data, apart from increasing potential bias.

2.4 GENERAL EVALUATION OF DRUG-RELATED RESEARCH IN SOUTH AFRICA

In summary, the discussion in the previous sections points to various inadequacies in the organisation and design of drug-related research in South Africa, notwithstanding substantial and sophisticated research infrastructure (e.g. various national research houses). Despite international indications of the complexity and interactive nature of various dimensions of drug consumption, past South African studies tended towards a "narrow" rather than a comprehensive and integrated focus (e.g. focusing on selected drugs and selected dimensions of drug consumption). The studies also tended to be largely "factophrenic", neglecting to look at drug consumption in terms of a clearly outlined conceptual framework. Cross-sectional and longitudinal analyses were inhibited because of a tendency to conduct studies on an ad hoc basis; to restrict studies to selected sectors and regions (e.g. "mainstream" sectors such as people in households and institutions rather than "hidden" sectors such as offenders, and rural centres); and to use simplistic and non-standardised measures/indices of drug consumption. Researchers also generally did not take advantage of the validity value of a multisource/multimethod approach to data gathering and analysis. The studies were seldom directly related to countering the drug-related problems that assailed South Africans.

Past research also tended to overlook the relationship between drug consumption and its wider (socioeconomic) context. Research designs did not include variables on the level of the individual as well as on the level of the "population" or broad social conditions. The preference for individuals as the units of analysis insinuated that drug use was (mainly) situated within the individual, and that the drug user was the "root cause" of the related harm. This overlooked the social dimensions of drug consumption, i.e. that it is organised and constructed within the course of social interaction. The preference for individuals as units of analysis also overlooked the contributions of social scientists such as Serageldin and Steer (1994:1-9) and Baum and Sanders (1995:149-160) to the concepts "sustainable development" and "health promotion", in other words, their reminder to social science researchers to explicitly consider the interdependency between individuals and between them and their wider socioeconomic and physical environment. These scholarly contributions directed the attention of social science researchers to the influence of power relations on individual behaviour, and in particular to the sociostructural constraints on individual decision making and action, e.g. limited access to basic amenities and production/economic means.

Researchers were also reminded that global processes (e.g. commodity production, declining profit margins, global trade, communication and travel, population growth) contributed to the level and spread of drug consumption and related harm, with the *particular* histories and conditions of individuals, households, communities and nations mediating the impact of these processes (Friedman, 1998:15-32; Vally, 1998:6-7; Desjarlais, Eisenberg, Good & Kleinman, 1995:87-101; Kuna & Bande, 1993:23-28; Wilson & Ramphele, 1989:170-185; Glass, 1988:149-158).

Whereas two multistakeholder surveillance systems—a nationally and city-based system—that were initiated in the mid-1990s advanced knowledge on drug use as well as the design of drug-related research in South Africa, these systems did not quite overcome the inadequacies of past research. In fact, the multifactorial approach to data gathering and analysis of both surveillance systems represented an improvement on the traditional unidimensional approach. This approach provided a sound basis for overcoming the inherent bias in all data gathering, apart from facilitating comprehensive and integrated research. The national surveillance system, however, had more scope than the city-level system for integrating and meaningfully monitoring drug-related issues at a national, provincial and district level, which was essential considering the variability of drug consumption and related harm across time and location. This advantage related to the national system's explicit recognition of the value of general population surveys and its multifactorial public health conceptual framework. In contrast, by ensuring long-term funding the city-level surveillance system had more potential for being maintained.

This review also identified a number of neglected research areas such as drug-crime links, even though a 1996 national HSRC survey (Rocha-Silva & Stahmer, 1996) of the pre-incarceration history of persons in South African prisons provided some insight into the issue. The 1996 drug-crime survey showed that persons who had moved into the criminal justice system (e.g. as prisoners) were at high risk of drug-related harm (e.g. crime) and called for further research into the subject with special attention to persons entering the criminal justice system (e.g. detainees at police stations). The 1996 project also underlined the importance of developing a refined system for monitoring the nature of drug-crime links among offenders, specifically to assess the impact of efforts to counter such links and to inform policy/action directed at "disentangling" them. A 1996 follow-up (Rocha-Silva, 1996) to the project among incarcerated persons suggested the viability of researching drug-crime links among detainees

at police stations in South Africa by testing a related USA initiative at a busy police station in Gauteng.

2.5 CONCLUSION

In order to place the present study within context, the overview of past research on drug consumption and related crime in this chapter concentrated on the organisational and methodological character of the reviewed research, including the extent to which the research was explicitly directed at informing policy/services. The next chapter will focus on the body of knowledge accumulated in the reviewed research.

CHAPTER 3

A REVIEW OF RESEARCH FINDINGS ON DRUG USE AND RELATED CRIME IN SOUTH AFRICA: 1960-2000

3.1 INTRODUCTION

This chapter provides an exposition of the findings of drug-related research (including research on drug-crime links) in South Africa, conducted between 1960 and 2000, and reviewed in the previous chapter. Where useful in terms of better insight, reference is made to the findings of more recent studies. In accordance with the logic underlying construct validation, the chapter draws attention to commonalities in the reviewed data. Consideration is given to the claim that convergence or logical consistency between various sets of independently gathered data minimises bias (Neuman, 1997:150-151). Furthermore, concern is with regularities across place, person and time, i.e. patterns and trends in, for example, drug use, rather than absolute figures. Available national drug surveys are used as points of reference in the identification of these patterns and trends, and in particular the following studies:

- The HSRC national surveys of (a) incarcerated persons in 1996 (Rocha-Silva & Stahmer, 1996), (b) historically disadvantaged young people (black African youth) in the age group 10-21 years in 1994 (Rocha-Silva, De Miranda & Erasmus, 1996), and (c) disadvantaged persons (black African people in the age group 14 years and older (Rocha-Silva, 1991a, 1991b)).
- The Department of Health's (a) 2002 national youth risk behaviour survey among Grade 8-11 learners in public schools (Reddy, Panday, Swart, Jinabhai, Amosun, James, Monyeki, Stevens, Morejele, Kambaran, Omardien & Van den Borne, 2003, Chapter 5), and (b) sections on alcohol and tobacco use in the 1998 national demographic and health household survey as discussed by Parry (2000, Chapter 23) and Saloojee (2000, Chapter 22).

The focus is on the following three sets of variables that have been shown to be relevant to a comprehensive and, in particular, a public health understanding of drug use (World Health Organization, 2000a:37-73; Bukoski, 1991:12-13): level of drug intake (type, frequency and

quantity of use); reasons for drug use; and the settings within which drugs are used (company, place of use, time of use). As drug use differentiates in terms of the type of drug used as well as sociodemographically (e.g. gender, age and region), the chapter distinguishes patterns and trends in drug use among adults and young people in South Africa with regard to the mentioned three sets of variables, as well as with regard to the use of licit drugs (alcohol and tobacco) and illicit drugs (including the non-medical use of various medicines and inhalants). Regarding licit drug use, the emphasis is on alcohol because of a lack of detailed cross-sectional and trend (longitudinal) data on the use and frequency of use of various types of tobacco. A distinction is made between historically advantaged and disadvantaged youngsters to avoid obscuring the socioeconomic discriminatory effects of the pre-1994 legislative grouping of South Africans according to phenotype (Ellison, De Wet, Ijsselmuiden & Richter, 1996:1257-1262). Where essential in terms of avoiding misunderstanding about the sampling frame of a study, the pre-1994 description of a sampled group is noted (e.g. Asian, black African, coloured and white).

To increase insight into local findings, the chapter first gives a brief exposition of (a) the general characteristics of drug use, related harm and the drug-crime nexus, and (b) patterns and trends in drug use and related crime in Africa and abroad between approximately 1990 and 2000.

3.2 THE COMPLEXITY OF DRUG USE

The use of drugs has been shown to be quite complex (United Nations Office for Drug Control and Crime Prevention, 1999c:15; Grant & Litvak, 1998:1-3; Single & Leino, 1998:7-21; Edwards et al., 1994:75-102; World Health Organization, 1993:14-16). Its complexity is illustrated in the multiple and interactive dimensions (e.g. types/classes of drugs) in terms of which it manifests and to which it contributes. In fact, a particular drug is not necessarily consumed in isolation from other drugs. Instead, a number of studies in various countries (including South Africa) have shown that two or more drugs tend to be taken together (Heath, 1998b:103-123; Rocha-Silva, 1998:10-57; Single & Leino, 1998:7-21; Anderson, 1994:1523; Flisher, Ziervogel, Chalton & Robertson, 1993:473, 484). In addition, drug consumption tends to vary across location and time in terms of the type of drugs consumed, the type of drugs regarded as licit and illicit, the manner in which particular drugs are ingested, the reasons given for intake, and the effects of consumption (Room, Jernigan, Carlini-Marlatt, Gureje, Mäkelä, Marshall, Medina-Mora, Monteiro, Parry, Partanen, Riley & Saxena,

2002:115-118; Heath, 1998a:296; United Nations International Drug Control Programme, 1997:71-105).

Drug use can also contribute to many types of harm (e.g. crime) in various sectors of society and in complex ways (Room et al., 2002:115-118; United Nations International Drug Control Programme, 1997:71-105). This harm can amplify. If left unchecked, the harm a user experiences in a particular sphere of life can spill over to other spheres and other persons, and even extend to subsequent generations and across regions (United Nations International Drug Control Programme, 1997:71-105). The following issues illustrate the variety of types of harm to which drug use contributes:

- *Physical/psychological debility* such as premature death, injury, mental and physical illness (e.g. tuberculosis and HIV/AIDS). Murray and Lopez (1996:740-743) estimated exposure to tobacco and alcohol use as respectively accounting for about 3% of the global burden of disease and injury in 1990, apart from constituting two of the ten major risk factors for disease and injury in the world. For 1990, tobacco was estimated to contribute 2.6%, alcohol 3.5% and illicit psychoactive substances 0.6% to the total disability-adjusted life years (DALYs) (sum of years of life lost because of premature mortality and years of life lived with disability). These figures are disturbing when considering that (a) injuries are common in developing countries, especially in sub-Saharan Africa, and (b) the global prevalence of injuries is expected to rise (Murray & Lopez, 1996:740-743). The Global Burden of Disease (GBD) project of the World Health Organization (2001:31-32) estimates the

  [p]oint prevalence of alcohol use disorders (harmful use and dependence) in adults ... to be around 1.7% globally ... The rates are 2.8% for men and 0.5% for women ... The period prevalence of drug abuse and dependence ranges from 0.4% to 4.0%, but the type of drug use varies greatly from region to region ... the point prevalence of heroin and cocaine use disorders is 0.25%.

  In addition, the occurrence of drug use among women and young people can exacerbate the particularly heavy burden of the HIV/AIDS epidemic in sub-Saharan Africa for the following reasons (Joint United Nations Programme on HIV/AIDS, 2000:8-36): Women and young people/children are particularly vulnerable to HIV/AIDS (Department of Health, 2000:7; Joint United Nations Programme on HIV/AIDS, 2000:45-54; LoveLife, 2000:3); evidence suggests that drug use increases vulnerability to contracting and transmitting HIV, horizontally as well as vertically (mother-to-child)

(Parry & Bennetts, 1998:67-68; Rocha-Silva, 1998:93); and drug use tends to be entwined with domestic violence, rape and inequality between men and women in sexual relationships (Parry & Bennetts, 1998:67-68; Plant, 1997:229-231). The *Report on the Global HIV/AIDS Epidemic 2000* (Joint United Nations Programme on HIV/AIDS, 2000:47) notes that "women often have a lower status in society at large and in sexual relationships in particular. This gender vulnerability, again, is particularly acute for young girls."

- *Erosion of social values, norms and relationships*, e.g. child and spouse neglect/abuse, crime and drop out from school, work and church.
- *Environmental degradation*, e.g. cigarette detritus (cigarette butts), liquor cans/bottles, broken glass and syringes, forest depletion by felling trees to clear space for illicit drug cultivation, dumping of illicit drug-processing waste into sewers/rivers or underground.
- *Economic debility*, e.g. lower productivity in the workplace, increasing unemployment, reduced tax revenues through, for example, the diversion of human resources from licit to illicit economic activities, increased strain on the economic, physical and social infrastructure of institutions responsible for environmental and health care, as well as on the security system, social welfare, criminal justice and business. Drug-related harm can, in effect, intensify the already precarious position of the poor (Walsh, 1998:318-319; United Nations International Drug Control Programme, 1997:77-87; Harrison, 1996:125-129; Cercone, 1994:25; United Nations Development Programme, 1993:87; Wilson & Ramphele, 1989:170-172). In turn this can increase socioeconomic inequality within communities, exacerbate socioeconomic inequality in developing countries, and aggravate the disadvantaged position of these countries within the world economy.

The complexity of drug use and related harm is also illustrated by its interrelatedness with a variety of other factors. The public health (PH) movement in medicine—with its recognition of the influence of broad socioeconomic conditions on the definition, development and maintenance of (ill) health—in particular directed the attention of researchers and intervenors to the interplay between three sets of variables in the development and maintenance of drug use and related harm: (a) the type, frequency and quantity of drug use, (b) the socioeconomic/physical environment in which use occurs (including the setting/context in which usage takes place), and (c) the characteristics (e.g. age, gender, physical condition, psychological make-up, reasons for drug use) of the individual users (Emmett & Butchart,

2000:3-21; Bukoski, 1991:12-13; Davies & Walsh, 1983:2). Indeed, the PH movement brought into sharp focus the flawedness of perspectives on drug use and related harm that blamed or pathologised (particular) individuals or (particular) broad socioeconomic conditions (e.g. poverty) or (particular) drugs.

3.3 THE DRUG-CRIME NEXUS

Various studies abroad, supported by criminal justice officials, have evidenced an interactive relationship between drug use and crime (e.g. Organization of African Unity, 1999; United Nations Office for Drug Control and Crime Prevention, 1999b:171-177; United Nations International Drug Control Programme, 1997:96-100). There is a disproportionately high prevalence and intensity of (a) drug use among persons with established criminal careers, and (b) criminal activity among persons with established or "heavy" drug use careers (United Nations Office for Drug Control and Crime Prevention, 1999b:177). Trafficking in and the use of illicit drugs tend to increase the level of other crimes, e.g. criminal action to get money for drugs, corruption of officials by drug traffickers, and violent crime in support of the drug trade (United Nations Office for Drug Control and Crime Prevention, 1999b:172).

Researchers often differ in their explication of the nature of the drug-crime relationship (McBride & McCoy, 1993:257-278). However, some consensus exists on three issues. First, there is general agreement that the relationship between drug use and criminal activity is too complex to infer linear causality and ascribe causal priority to either drug use or criminal activity. This complexity and the difficulty to identify finite causal relations relate, amongst others, to the fact that the key variables in the relationship—drug use and crime—are multifaceted and change over time and place in their manifestation and development (United Nations Office for Drug Control and Crime Prevention, 1999b:171, 176; Grant & Litvak, 1998:1-6; Holder & Edwards, 1995:115; Edwards et al., 1994:57-58; Plant & Plant, 1992:139-142). Second, there is some consensus that "although the use of drugs does not necessarily initiate criminal careers, it tends to intensify and perpetuate them" (Inciardi, Lockwood & Quilan, 1993:120). Third, various researchers agree that drug use and criminal activity have similar underlying causes (Crime Information Analysis Centre, 2000:19-24; Department for Safety and Security, 1998:6-9; Harwood, Fountain & Livermore, 1998:Section 6.2.3; Kennedy, Kawachi, Prothrow-Stith, Lochner & Gupta, 1998:7-17).

Little is known about the drug-crime phenomenon in South Africa. The following developments in the country have, however, contributed towards calls for in-depth research into the phenomenon (Crime Information Analysis Centre, 2000:3, 9, 19, 22-24; United Nations Office for Drug Control and Crime Prevention, 1999b:xviii, 21; Department for Safety and Security, 1998:6-7):

- The marked increase in the level of crime in the 1980s and 1990s in South Africa—a trend characteristic of countries undergoing wide-ranging socioeconomic change;
- The rapid growth in organised crime syndicates, locally as well as internationally, with trafficking in illicit drugs often part and parcel of the activities of these syndicates;
- Expectations that trafficking in illicit drugs will intensify in the future, particularly in developing countries such as South Africa where the illicit drug market is growing, the level of unemployment is high and the capacity to cultivate/manufacture illicit drugs exists;
- The association between organised crime and violence and corruption.

3.4 GLOBAL RISE IN DRUG USE AND RELATED HARM/CRIME

Since at least the beginning of the 1990s evidence of a global increase in drug use and associated harm has been rising, albeit unevenly across regions (World Health Organization, 2001:30-33; United Nations Office for Drug Control and Crime Prevention, 1999a:1; Desjarlais, Eisenberg, Good & Kleinman, 1995:87; Cercone, 1994:1; United Nations Development Programme, 1993:86-89). Of particular concern are indications that countries experiencing rapid socioeconomic change—as in the case of many African countries—are particularly vulnerable to increased drug use (Riley & Marshall, 1999:1; United Nations Office for Drug Control and Crime Prevention, 1999c:15, 19, 108). Indeed, drug use is progressively spreading from the affluent, urban and developed sectors to poor, rural and developing communities among whom women and young people/children are "overrepresented" (Riley & Marshall, 1999:ii, 1, 5-12).

Many researchers predict that the rise in drug use in developing countries in the 1990s will continue into the future (Adelekan, 2000:3-6, 7; United Nations Office for Drug Control and Crime Prevention, 1999b:xvii, 171-172; United Nations Office for Drug Control and Crime Prevention, 1999c:19). A progressive increase is foreseen in the demand for and availability

of drugs, in the array of drugs used, in the patterns of use encountered in highly industrialised countries, and in drug-related harm on the African continent (Adelekan, 2000:6; United Nations Office for Drug Control and Crime Prevention, 1999c:19-42; Rocha-Silva, 1998:10-58; United Nations International Drug Control Programme, 1997:85).

Various broad socioeconomic issues are seen as contributing to this increase in drug use in developing countries. On the African continent, the increase in drug use is associated with a high level of socioeconomic deprivation in many regions, financial benefits derived from the drug trade, the global expansion of trade markets, improved technological and communication networks, long-standing trade and sociopolitical links between many countries, and political instability (including wars) (Adelekan, 2000:3-8; United Nations Office for Drug Control and Crime Prevention, 1999b:xvii-xviii, 2, 21, 23, 30-32, 174, 182; United Nations Office for Drug Control and Crime Prevention, 1999c:5). Furthermore, the HIV/AIDS epidemic has exacerbated levels of socioeconomic deprivation, including an increase in young people without financial, social and emotional support and thus vulnerable to recruitment into drug trafficking and drug use. Adelekan (2000:8) notes that

political instability, including wars, lead to a weakening of the capacity of the country to control drug trafficking. The breakdown in law and order in war times creates a conducive environment for all kinds of criminal activities, including drug trafficking. Rebels and even countries in war have been known to engage in the drug trade to fund the war. Demobilized combatants may have to turn to the drug trade for want of other viable employment.

Some social scientists (e.g. Adelekan, 2000:3-8; Friedman, 1998:15-32; Glass, 1988:149-158; Singer, 1986:113-129) argue that a global increase in commodity production and a decrease in economic opportunities contribute to a rising demand for drugs and an increase in potentially harmful patterns of use in Africa. The authors assert that, within post-colonial Africa, drug use has been "liberated" from traditional social normative constraints and "co-opted" for escaping, coping and self-assertion.

The contributions of social scientists to the concepts of sustainable development and health promotion (e.g. Holdgate, 1996; Baum & Sanders, 1995; Elliott, 1994; Serageldin & Steer, 1994) have directed attention to questions on the influence of history and power relations on initiation into and continuation of drug use. These contributions point to the importance of taking cognisance of (a) the differential capacity among individuals to influence the terms of day-to-day life, and (b) the constraints of broad socioeconomic conditions on individual decision making.

Concomitantly with the global increase in drug use, there has been a rise in related harm and in particular in related crime (e.g. drug law offences) in the 1990s (United Nations Office for Drug Control and Crime Prevention, 1999b:xv, xvii, 48, 172, 174, 189). This rise is consistent with substantial evidence that the overall level of drug use (e.g. prevalence, frequency/quantity of use, number of drugs used) in a community tends to concur with the overall level of various types of harm (including crime) in that community (Holder & Edwards, 1995:1-5, 65-79; Edwards et al., 1994:129-145; World Health Organization, 1993:2-3). On the basis of an extensive review of overseas research on the relationship between drug use and crime, McBride and McCoy (1993:271) conclude: "[F]rom every conceivable methodological perspective, data consistently show that there is a strong correlation between drug use and criminal behavior and that increases in drug use are related to increases in crime."

The global rise in crime is to be expected for yet another reason. Various studies, supported by criminal justice officials, point out that not only do the levels of drug use and crime in a community concur, but drug use and criminal activity also tend to interact closely (Organization of African Unity, 1999; United Nations Office for Drug Control and Crime Prevention, 1999b:171-177; United Nations Drug Control Programme, 1997:96-100).

3.5 PATTERNS AND TRENDS IN DRUG USE IN SOUTH AFRICA: ADULTS

This section offers an overview of drug use patterns and trends among South African adults by focusing on the prevalence of alcohol and tobacco use, alcoholic beverage preferences, frequency of alcohol and tobacco use, quantity of alcohol use, level of illicit drug use, the non-medical use of medicine and the use of inhalants, as well as the context of and reasons for drug use.

3.5.1 Prevalence of alcohol and tobacco use

Historically, substantial proportions of adult South Africans admitted alcohol and tobacco use. National surveys reported alcohol consumption rates in the general population of between 45% and 91% for males and between 22% and 77% for females in the 1980s (Rocha-Silva, 1989a:24). In the early 1990s, a national survey among a major sector of the South African general population (persons of black African background) recorded alcohol

consumption rates of between 63% and 80% for males, and between 28% and 66% for females (Rocha-Silva, 1991a:44). More recently, in the Department of Health's 1998 demographic and health household survey in the general population, alcohol use rates varied between 37% and 71% among males and between 9% and 51% among females (Parry, 2000:2).

With regard to trends over time, the reviewed data also show that between the mid-1960s and the beginning of the 1980s alcohol use rates among adults increased simultaneously in the historically largest (white) and smallest (Asian) consumer segments and decreased in the other sectors (black Africans and coloureds) in the general population (Rocha-Silva, 1998:13-14). Since the mid-1980s, the decrease among adults of black African and coloured background reversed, and the increase among persons of white background stabilised. Furthermore, the 1998 national demographic and health survey (persons 15 years and older) of the Department of Health showed that the historically advantaged sector (whites) in the general population remained the largest alcohol consumer segment, followed by persons of coloured background (Parry, 2000:2).

The 1998 demographic and health survey of the Department of Health (Parry, 2000:2) also suggested that the historically marked "overrepresentation" of urban residents (Rocha-Silva, 1991a:44) among alcohol users in the early 1990s had largely disappeared among a major sector of the historically disadvantaged group (black Africans), especially in the case of females (43.6% of the male respondents in urban areas and 38.8% in non-urban areas admitted drinking at the time of the survey; among female respondents the comparative percentages were 12.8% and 11.8%).

Drinking rates generally increased with age up to the middle years (40-50 years), after which they decreased. In the case of historically advantaged persons (whites)—where drinking was historically particularly common—these rates generally peaked earlier than middle age; and in the case of the smallest consumer market (persons of Asian background) rates peaked later than middle age (Rocha-Silva, 1998:10). Whereas historically, drinking rates among historically disadvantaged adults (black Africans and coloureds) tended to decrease with an increase in level of education, the 1998 national demographic and health survey of the Department of Health suggested that this decrease had reversed. The survey found that drinking rates increased in the higher education groups (Grade 12 and higher) among South Africans generally (Parry, 2000:2).

Tobacco use among adults in the South African population generally declined in the 1990s (Saloojee, 2000:3). However, various studies suggested that rates were increasing among females, i.e. the historically smaller consumer segment. A 1995 national household survey, for example, found a higher proportion of female (59%) than male (58%) users of tobacco (cigarettes) among persons (18 years and older) of coloured background (Rocha-Silva, 1998:128). Over time, tobacco use has been particularly common among males, especially in the lower educational and income categories, among unskilled or manual workers and in urban areas (Rocha-Silva, 1998:21-23). Differences in the proportions of male and female users of tobacco were generally the smallest among historically disadvantaged adults of coloured background and to a lesser extent among historically advantaged adults of white background. Females tended to be "overrepresented" among users of snuff. Tobacco use generally increased with age, peaking in the middle years (30-40 years category), and then declining again. Somewhat in contrast, a 1990 HSRC study (Rocha-Silva, 1991b:69) among historically disadvantaged people (black Africans) found that tobacco use was more common among older (50 years and older) than younger age groups in rural areas (including the former KwaZulu, KwaNdbele, Gazankulu, Lebowa, Qwaqwa and KaNgwane, i.e. pre-1994 states in South Africa that had self-governing powers in terms of the Self-Governing Territories Constitution Act 21 of 1971). The 1998 national demographic and health survey of the Department of Health found tobacco use distinctly more common in urban than rural areas, especially in the case of females (13.2% females in urban areas and 6.6% in rural areas admitted cigarette use at the time of the survey) (Saloojee, 2000:3).

3.5.2 Alcoholic beverage preferences

Alcoholic beverage preferences have widened since the 1960s (Kew, 1992:7; Rocha-Silva, 1991a:45, 1989a:25). Historically disadvantaged (black African) drinkers progressively moved away from drinking mainly ordinary beer towards also drinking wine (especially female drinkers) and distilled spirits (especially male drinkers in informal settlements bordering metropolitan centres). In some instances a narrowing of beverage choices occurred. For example, whereas before 1970 the use of ordinary beer, wine and distilled spirits was more or less equally common among historically advantaged (white) female drinkers, a clear preference for wine emerged after 1970. The use of ordinary beer and to a lesser extent distilled spirits increased among historically disadvantaged persons who preferred wine historically (coloureds). Wine drinking rates tended to rise with an increase in level of

education among urban residents of historically advantaged (white) and disadvantaged (black African) background.

Historically disadvantaged drinkers (black Africans and coloureds) tended to be mostly weekend drinkers (Parry, 2000:2; Van der Burgh, 1981:214). Van der Burgh (1981:214) relates the tendency towards weekend drinking among the mentioned groups to the custom of end-of-the-week payment of workers within the latter groups.

3.5.3 Frequency of alcohol and tobacco use

A number of studies have shown that the occurrence of regular drinking (at least once a week) has increased over time in the general population, although unevenly across beverages and genders (Rocha-Silva, 1991a:46-47, 1989a:27-28; Van der Burgh, 1981:217). Higher drinking frequencies for male drinkers than for female drinkers have generally been reported, although differences have diminished over time. While regular drinking generally increased among historically advantaged drinkers (whites) between 1962 and 1975, this trend stabilised in the 1980s in respect of males within this group. Among female drinkers of historically advantaged background (whites) regular drinking increased with regard to their beverages of preference, namely wine and ordinary beer. Whereas a subsector among historically disadvantaged drinkers (coloureds) also tended towards less regular drinking in the period 1962-1975, this trend stabilised in the 1980s, except in the case of the use of distilled spirits among male drinkers and the use of ordinary beer and distilled spirits among female drinkers. The 1990 HSRC national household survey (Rocha-Silva, 1991a:46-47) among historically disadvantaged persons of black African background also suggested that the earlier observed gradual decrease in regular drinking within this population group had changed into an increase in respect of the most commonly used beverages, that is, ordinary beer and wine.

Pre-1980 national household surveys showed that higher drinking frequency rates were an urban rather than a rural phenomenon among historically advantaged drinkers (whites), whilst the opposite was true for a subsector of historically disadvantaged persons (coloureds) in the Western Cape (Van der Burgh, 1981:219). Whereas in the early 1990s regular drinking among persons of black African background was mostly an urban phenomenon (Rocha-Silva, 1991a:46-47), the 1998 national demographic and health survey of the Department of Health (Parry, 2000:2) suggested that this urban bias had diminished during the 1990s, if not disappeared in some instances. In the 1998 survey non-urban rather than urban residents

admitted "risky" drinking, i.e. in the case of males an intake of at least three "drinks" a day, and in the case of females at least two drinks a day at the time of the survey (Parry, 2000:2). In fact, 8.3% of the males and 12.9% of the females in non-urban areas (6.4% versus 7.1% in urban areas) admitted "risky" drinking during weekdays; and 38.0% of the males and 39.3% of the females in non-urban areas (30.0% versus 29.5% in urban areas) admitted such drinking during weekends.

Not much is known about the frequency with which tobacco was used in the general adult population. However, a number of studies have shown that tobacco was generally used regularly (at least once a week), at least in the case of a major sector of the South African population, namely persons of black African background (Mnisi & Mathe, 1997:39; Rocha-Silva, 1991b:52).

3.5.4 Quantity of alcohol use

Substantial proportions of drinkers in South Africa manifested a high volume of alcohol use in the period early 1980 to early 1990. An average of 7.5% of the male and 3.6% of the female drinkers in a 1985 national household survey (persons of black African background were only surveyed in Gauteng), and an average of 30.9% of the male and 16.4% of the female drinkers of black African background in a 1990 national household survey reported risky annual volumes of absolute alcohol (AA) intake (Rocha-Silva, 1998:37-39, 1991a:49). "Risky" intake was defined as the level of intake that has been shown to place a drinker at risk of various health complications, namely an intake of at least 36.5 litres AA per year or 10 centilitres AA on average per day (Davies & Walsh, 1983:7; Frankel & Whitehead, 1981:24-25). (In South African terms 10 centilitres is the equivalent of 9.3 tots of distilled spirits, or 6.6 standard glasses of wine, or 4.9 small (340 ml) bottles/cans of ordinary beer.) The 1990 survey (Rocha-Silva, 1991b:48-49) showed that drinkers (especially males) generally reported high annual quantities of consumption (26 litres and more per year), especially in respect of ordinary beer and to some extent wine (not with regard to the use of distilled spirits, nor with regard to the use of wine and sorghum-based homebrew by female drinkers in metropolitan centres). The opposite applied to drinkers in deep-rural areas (lower rather than higher annual quantities of consumption were reported), except with regard to the intake of ordinary beer and to a lesser extent the intake of sorghum beer by males.

Furthermore, surveys conducted in the 1990s found that, among certain sectors, offenders and persons with acknowledged alcohol-related problems, the level of alcohol intake was generally particularly high (Rocha-Silva & Stahmer, 1996:72-83; Rocha-Silva, 1993:115-127). The total annual AA intake of a substantially higher proportion (61.3%) in a 1996 survey on the pre-incarceration drug use history of persons in prison compared to a 1990 national household survey (between 16.2% and 37.2%) among persons of black African background may be described as risky (an annual intake of at least 36.5 litre AA). In addition, the proportion (54.7%) among past-year consumers of distilled spirits with a high annual intake of this beverage (at least 26 litres per year) in the 1996 survey was substantially larger than the comparative proportions (between 14.2% and 35.4%) in the 1990 survey.

3.5.5 Level of illicit drug use, the non-medical use of medicine and the use of inhalants

In conjunction with one another, survey data and records of patients admitted to treatment centres as well as survey data and records of the SAPS Crime Information Management Centre (CIMC) indicated the following trends in the use of drugs other than alcohol and tobacco in the 1990s (Parry, Bhana, Plüddemann, Myers, Siegfried, Morojele, Flisher & Kozel, 2002:971-974; United Nations Office on Drugs and Crime, 2002:7-9; Parry, 2000:4; Rocha-Silva, 1998:25-28): The range of drugs (other than alcohol and tobacco) reported by adults widened. A pattern of taking a combination of various illicit or illicit and licit drugs emerged. Illicit drugs tended to be used regularly (at least once a week).

The use of drugs other than alcohol and tobacco particularly included the non-medical use of medicines (e.g. pain relievers), as well as illicit drugs such as cannabis and to a lesser extent mixtures of cannabis and mandrax (blend of methaqualone and antihistamine), cocaine, "club" drugs (e.g. ecstasy), heroin, LSD, methamphetamine (speed) and injectable drugs. For example, the 1990 national survey among persons of African background found that among urban residents past-year usage rates varied between 4.7% and 26.3% for snuff; between 8.9% and 22.3% for cannabis; between 5.6% and 17.8% for LSD; between 5.9% and 17.2% for cocaine (crack); and between 3.5% and 12.4% for the non-medical use of severe pain relievers such as pethidine and Wellconal (Rocha-Silva, 1991a:50-51). A survey (Mnisi & Mathe, 1996:39) among patients of largely black African background at primary health clinics in a district within the Pretoria metropole in Gauteng found that reports of past-year non-medical use of severe pain relievers (e.g. pethidine), sedatives and stimulants (e.g.

amphetamines) were more common than reports of past-year cannabis use. An increase in cocaine and to a lesser extent heroin use among persons admitted to drug-related treatment centres in selected metropolitan centres has also been observed since 1997 (Parry et al., 2002:971).

Use of drugs other than alcohol and tobacco generally manifested as a male and urban phenomenon. Females tended to be "overrepresented" among non-medical users of (prescription) medicine, e.g. tranquillisers, amphetamines and to some extent sedatives (Parry et al., 2002:973; Rocha-Silva, 1998:27). The 1990 national survey among persons of black African background found that cannabis use was particularly common among persons living in poor socioeconomic conditions, e.g. residents in informal settlements and deep-rural areas (Rocha-Silva, 1991a:50). In such circumstances, as observed by Obot (US Department of Health and Human Services, 1996:426) in a survey in eastern Nigeria among 640 women in farming, fishing and other unskilled occupations, cannabis use functioned as a means to relieve pain and muster courage to take on dangerous tasks, e.g. fishing at night in turbulent waters. The findings of the 1996 survey among prisoners further suggested that the use of cannabis was particularly common in the Western Cape, Eastern Cape, KwaZulu-Natal and Mpumalanga provinces (Rocha-Silva & Stahmer, 1996:12). A 1996 study among women attending selected antenatal clinics in the Western Cape supported to some extent the 1996 finding that cannabis use was particularly common in the Western Cape (Croxford, 1996:25). Injecting drug use (especially Wellconal, cocaine and heroin) was observed among particularly commercial sex workers, offenders and persons in treatment for drug-related problems (United Nations Office on Drugs and Crime, 2002:7; Rocha-Silva, 1998:31).

Within certain subgroups such as offenders, a particularly intense use of drugs other than alcohol and tobacco manifested. Past-year rates for cannabis, mandrax, mixtures of mandrax and cannabis, heroin and amphetamines in the 1996 national survey among prisoners were, for example, higher than in related rates in the 1990 survey among historically disadvantaged persons (black Africans) in the general population (Rocha-Silva & Stahmer, 1996:79-80).

3.5.6 Context of and reasons for drug use

Notwithstanding a dearth of research data on the context of and reasons for drug use among adults in South Africa, available data (Rocha-Silva, 1998:43-51)—mainly relating to persons of black African background—pointed to the following patterns:

- Drinking tended to be a group activity, with friends and relatives being mostly the company of choice. In the case of drinkers from low socioeconomic areas (e.g. informal settlements), tavern or "kitchen party" patrons/guests tended to be the preferred company, and in the case of offenders, members of a gang. Although drinking at one's own home or that of a friend/relative was generally the preferred place of drinking, public drinking in, for example, taverns/shebeens was especially common among male drinkers, female drinkers in deep-rural areas and offenders. Illicit drugs were generally used in privacy (i.e. not in the company of other people and at home), and if used in company, friends and/or relatives were mostly the company of choice. Public use of illicit drugs mostly occurred in metropolitan centres and towns bordering these centres, with clubs/discotheques the preferred place of usage. Among offenders, typical places where illicit drugs were used included the street (in the case of cannabis) and the "homes" of drug dealers.

- Lone use and (early) morning use (practices that are generally regarded as indicative of drug "dependence/addiction") were observed among particularly males and offenders. Among persons of historically disadvantaged background (black Africans), morning cannabis use occurred among female drinkers in deep-rural areas and male drinkers in informal settlements in metropolitan areas rather than among other drinkers.

- Commonly reported reasons for drinking included pleasure seeking (particularly among male drinkers), coping with hardship and force of habit, especially in the case of drinkers living in poor socioeconomic conditions. Drinking for social benefit and/or for mood change also tended to be common among alcohol users. Among offenders, drinking seemed to be driven by social pressure and/or a need to get drunk. Particularly common reasons for using illicit drugs and the non-medical use of medicine included mood change, coping with hardship, lack of energy and sleeping problems. Inhalant users particularly associated their inhalant use with getting "high" and breaking the monotony of their daily life. Among offenders pleasure seeking was a primary motivation for using illicit drugs. The use of cannabis was to some extent an exception: It was especially associated with energy/stamina. Among the less educated offenders in particular, cannabis use tended to be associated with the ability to work, to have courage when mixing with people and because it had become a habit.

- Experiences of direct pressure to use alcohol and easy access to alcoholic beverages were widespread, at least among historically disadvantaged persons of black African background. Certain sectors in the population such as offenders were particularly exposed to direct pressure to use some or other drug and had easy access to a variety of drugs, especially alcohol, tobacco and cannabis.

3.6 PATTERNS AND TRENDS IN DRUG USE IN SOUTH AFRICA: YOUTH

This section offers an overview of drug use patterns and trends among South African youth (more or less the age group 10-24 years) by focusing on the prevalence of alcohol and tobacco use, alcoholic beverage preferences, frequency of alcohol and tobacco use, quantity of alcohol use, level of illicit drug use, the non-medical use of medicine and the use of inhalants, and the context of and reasons for drug use.

3.6.1 Prevalence of alcohol and tobacco use

Historically, alcohol and to a lesser extent tobacco have been the drugs most commonly reported in South African studies on drug use among young people. Substantial proportions—generally to a lesser extent than in the case of adults—of young people admitted alcohol and tobacco use. A number of national surveys among young people reported drinking rates of between 20% and 50%, and tobacco use rates of between 20% and 30% (Reddy, Panday, Swart, Jinabhai, Amosun, Manyeki, Stevens, Morejele, Kambaran, Omardien & Van den Borne, 2003:98, 102; Braehmer, Kimmie, Greenstein, Morake & Seutloadi, 2000:92-93; Rocha-Silva, 1998:24-25; Rocha-Silva, De Miranda & Erasmus, 1996:41, 115). Various studies have also suggested that alcohol use rates among historically disadvantaged young people (black Africans) have remained generally stable in the 1990s (Reddy et al., 2003:102-103; United Nations Office on Drugs and Crime, 2003:43; Rocha-Silva et al., 1996:105).

Past studies consistently pointed out that drinking and tobacco use rates differentiated in terms of gender, with males rather than females generally admitting use (Reddy et al., 2003:41, 44; Rocha-Silva, 1998:10; Rocha-Silva et al., 1996:105; Flisher & Charlton, 1995:112; Flisher et al., 1993:447-481; Department of Education and Culture, 1990:42). A 1996 national survey (Van der Reiss, 1997:8-9) on consumer behaviour and attitudes among

young people, for example, suggested that drinking remained a largely male phenomenon, at least among historically disadvantaged young people in metropolitan South Africa. Most of the respondents in the latter survey were of the view that women should not drink, at least not in public (Van der Reiss, 1997:8). In contrast, a 1989 study among historically disadvantaged pupils in a rural secondary school in KwaZulu-Natal (Nkonzo-Mtembu, 1994:50-52) suggested that in certain rural areas adolescent females might be moving away from the traditional norm of abstention. The latter study found that females (34%) rather than males (25%) felt "strongly that drinking [was] ... fashionable" (Nkonzo-Mtembu, 1994:52).

Youth drinking and tobacco use have also been found to be generally more common among historically advantaged than disadvantaged young people, and to increase with age (Reddy et al., 2003:41, 44; Braehmer, Kimmie, Greenstein, Morake & Seutloadi, 2000:92; Rocha-Silva, 1998:18; Rocha-Silva et al., 1996:42-43; Flisher et al., 1993:477-481). The prevalence of youth drinking has also been shown to vary in terms of socioeconomic variables such as recreational activities, residential area and participation in religious activities. The 1994 survey (Rocha-Silva et al., 1996:42-43), for example, found that past 12 months' drinking was particularly common among male 18-21 year olds who had taken part in festive gatherings (e.g. birthday parties, weddings and the unveiling of tombstones) and who lived in metropolitan centres and towns bordering these centres. Apart from including especially persons who had never attended church, synagogue, mosque or temple services, younger drinkers (14-17 year olds) were particularly persons who had attended festivities or gatherings in the 12 months before the study. Youth tobacco use was generally more common in urban than rural areas (Saloojee, 2000:3). Rocha-Silva et al. (1996:115) also found that among historically disadvantaged young people (black Africans) rural rather than urban males reported past 12 months' use of cigarettes in 1994.

3.6.2 Alcoholic beverage and tobacco preferences

As detailed national data on alcoholic beverage and tobacco preferences among young people are mainly restricted to the 1994 national survey among historically disadvantaged 10-21 year olds (black Africans), the discussion in this section is largely focuses on the findings of this study (Rocha-Silva et al., 1996:107, 120). The 1994 survey pointed to the following patterns among young people with regard to alcoholic beverage and tobacco preferences:

- Among male drinkers, ordinary beer (commercially brewed and sold) was generally the most preferred beverage, followed by distilled spirits and then wine. The use of ordinary beer and distilled spirits was particularly common among older males. Cider drinking was more common among urban than rural males.
- Among urban female drinkers, ordinary beer was the most commonly used beverage, followed by wine and then cider. (The 2000 national household study (Braehmer, Kimmie, Greenstein, Morake & Seutloadi, 2000:93) found that among young people of both genders and of historically disadvantaged background ordinary beer was generally the beverage of preference. Young people of historically advantaged background preferred distilled spirits to ordinary beer and wine.)
- Rural female drinkers showed a preference for wine and cider.
- Female drinkers of ordinary beer and distilled spirits tended to be persons in stable sexual relationships who were married or had boyfriends and—in the case of ordinary beer—persons who lived in informal settlements bordering metropolitan centres.
- Wine-drinking females were particularly of the older age groups, especially those attracted to attending festivities.
- Generally, cider drinking was most common among older drinkers, especially if involved in stable sexual relationships and attracted to attending traditional ceremonies and/or festivities.
- Homebrew use was particularly common in poor areas (informal settlements and deep-rural areas).
- Negligible proportions admitted using tobacco other than cigarettes.

3.6.3 Frequency of alcohol and tobacco use

As in the case of alcoholic beverage and tobacco preferences, available data on the frequency with which young people used alcohol and tobacco are largely restricted to the findings of the 1994 survey among 10-21 year olds of historically disadvantaged background (black Africans) (Rocha-Silva et al., 1996:45-47, 109). The emphasis in this section is therefore on the findings of this survey, which found that past 12 months' drinkers mostly imbibed less frequently than once a week, with some exceptions. A regular (at least once a week) intake was reported by (a) most past 12 months' rural male users of ordinary beer (69.3%) and cider

(55.9%), and by (b) substantial proportions of past 12 months' male users of distilled spirits (45.5% in urban areas and 48.8% in rural areas) as well as urban female users of distilled spirits (50%). The 1994 survey also showed that regular use of ordinary beer was particularly common among older youth, especially those who did not attend church; regular users of homebrews and to a lesser extent wine were also generally in the older group.

The 1994 national survey (Rocha Silva et al., 1996:52), supported by a 1990 study among high school learners in Cape Town (Flisher et al., 1993:477), found that regular tobacco/cigarette use was more common among males than females and increased with age.

3.6.4 Quantity of alcohol and tobacco use

Although little information has been gathered through the years on the quantity of alcohol and tobacco use among young people, the 1994 household survey (Rocha-Silva et al., 1996:47-49, 111, 113) among historically disadvantaged 10-21 year olds (black Africans) provided some pointers. High AA intake rates, i.e. an average weekly intake of at least 49 centilitre AA, increased with age and placed the drinker at risk of medical complications (Fossey, 1994:33). A high AA intake was also a male rather than female phenomenon, apart from particularly occurring among drinkers in stable sexual relationships, who had children and who did not participate in church activities.

Apart from supporting the 1994 study's finding that a high alcohol intake predominated among males and increased with age, surveys in Cape Town among secondary school learners in 1990 and 1997 suggested an increase in high levels of alcohol intake (an intake of five or more drinks on at least one occasion in the fortnight before the survey) during the 1990s, at least with regard to older age groups (Parry, 2000:4; Flisher et al., 1993:481). In the 1997 survey among secondary school learners in state-funded schools in Cape Town, 36% males and 19% females in Grade 11 admitted drinking five or more drinks at a time in the fortnight before the survey, which percentages were 4% to 7% higher than in a related earlier study in 1990. Reddy et al. (2003:45, 102) reported a high level of alcohol intake among somewhat similar proportions of learners in Grades 8-11 in public schools in South Africa, i.e. 29.3% males and 17.9% females admitted "binge" drinking and specifically taking five or more drinks within a few hours on one or more days in the month before the survey. Reddy et al.'s (2003:45) survey supported to some extent the finding of earlier studies (Parry, 2000:4; Rocha-Silva et al., 1996:47-49; Flisher et al., 1993:481) that a high alcohol intake

predominates among male and older drinkers. Apart from showing that "binge" drinking was particularly common among young people of white and coloured background, the Reddy et al. (2003:45) survey found that males predominated among alcohol users who admitted "binge" drinking, especially in the case of young people of black African background.

The 1994 survey also found that drinkers with a high total annual volume of wine intake (at least 26 litres) were characteristically female, in the older age group, had children and did not attend church; the same applied to beer drinkers, except that males rather than females typically consumed large amounts and that high volumes of beer drinking was particularly common among those attracted to attending festivities (Rocha-Silva et al., 1996:47-49). A high annual intake of cider in the 1994 survey was particularly prevalent among males, especially those who had children and did not attend church. The annual intake of large amounts of distilled spirits typically occurred in urban sectors (excluding informal settlements), especially among those not attending church (Rocha-Silva et al., 1996:47-49).

In the 1994 national survey among 10-21 year olds substantial proportions (between 20% and 57.4%) of the past-year users of cigarettes reported smoking between five and ten cigarettes a day (Rocha-Silva et al., 1996:120). A number of studies also suggested that the number of cigarettes smoked per day generally increased with age (e.g. Disler, 1990:31; Department of Education and Culture, 1989:5; Prout & Benatar, 1982:485; Benatar, 1979:302). A 2003 assessment (World Health Organization, 2003:13) of drug use among 10-21 year olds within respectively a rural and an urban community 100 kilometres apart (Bela-Bela and Greater Pretoria) found that daily use of cigarettes was more common in the rural (79%) than in the urban site (13%).

3.6.5 Level of illicit drug use, the non-medical use of medicine and the use of inhalants

Available data pointed to the following patterns and trends in the use of illicit drugs, in the non-medical use of medicine and the use of inhalants among young people in South Africa:

The 1994 national survey among 10-21 year olds of historically disadvantaged background suggested that non-medical use of over-the-counter medicine occurred among major proportions of young people in South Africa. In this survey between 76.8% and 88.9% admitted lifetime use (ever used), and between 56.3% and 72.9% past-year use of over-the-counter medicine (e.g. pain relievers, cough mixtures with a high codeine/alcohol content,

allergy medicine, Lennon's products with a high alcohol content) for non-medical purposes (Rocha-Silva et al., 1996:49, 115).

In the 1980s and 1990s a number of studies, in conjunction with one another, showed that a variety of illicit drugs were used by the younger age groups in South Africa, whether living in urban or rural districts (e.g. World Health Organization, 2003:13-14; Mathe & Rocha-Silva, 2001:91; Rocha-Silva et al., 1996:115). Cannabis was, however, the most commonly used illicit drug, especially among males and older persons (United Nations Office on Drugs and Crime, 2002:39-40; Rocha-Silva, 1998:29). In the 1994 national survey among 10-21 year olds, 5.5% males admitted past-year cannabis use (Rocha-Silva et al., 1996:115). Studies by Flisher et al. (1993:483-484) and Du Toit (1991:64-65) suggested that the use of cannabis was more common among historically disadvantaged (black African) young people than among advantaged young people, although differences were diminishing. The 1994 national survey showed that past-year cannabis use mostly manifested as regular use (at least once a week).

Between the mid-1980s and mid-1990s Rocha-Silva et al. (1996:71), Flisher et al. (1993:484), the Department of Education and Culture (1990:44), and Van der Burgh (1984:13-14) found that the proportions of young people who admitted lifetime use of solvents/inhalants in the general population varied between 5% and 10%. Du Toit (1991:139), supported by the local United Nations Office on Drugs and Crime (2002:7-8), asserted that the use of solvents/inhalants was most common among young people living on the street. In the 1980s and 1990s a number of studies showed that the use of drugs in the tranquillo-sedative group, stimulants such as amphetamines and to a lesser extent LSD occurred among especially historically advantaged young people, with the proportions admitting use varying between 1% and 8% (United Nations Office on Drugs and Crime, 2002:39-40; Du Toit, 1991:139-140; Van der Burgh, 1984:14). In the 1994 survey among 10-21 year olds of historically disadvantaged background (black Africans) only a few (between 20 and 40) respondents admitted past-year use of non-prescriptive narcotics other than heroin, steroids, mandrax, solvents/inhalants and LSD (Rocha-Silva et al., 1996:49). Only two respondents admitted lifetime injection of drugs in the 1994 survey (Rocha-Silva, De Miranda &Erasmus, 1995:185).

The findings of a 1991/1992 national survey (Rocha-Silva, 1993:72-76) among persons in drug-related treatment suggested with regard to historically advantaged South African youth

that the injection of drugs mostly manifested in the period late adolescence to early adulthood and generally as part of a poly-drug use pattern. About one-quarter of the patients in drug-related treatment centres in South Africa at the time of the survey injected drugs in the year before their admission to the centres. The injection of drugs generally went hand in hand with the use of alcohol, cannabis, white pipe (cannabis-mandrax/methaqualone mixture) and to a lesser extent sedatives and tranquillisers. Severe pain relievers (e.g. opium, pethidine and particularly Wellconal (especially among females)) and to a lesser extent cocaine and heroin were the most commonly used injection drugs.

3.6.6 Context of and reasons for drug use

Information on the context of and reasons for drug taking among South African youth is largely restricted to the 1994 study among historically disadvantaged youth (Rocha-Silva et al., 1996:71-77, 121-137). In terms of this study, drinking and tobacco use mostly occurred in company; the opposite applied to other drugs. Drinking and tobacco use tended to take place in the company of friends (same age or younger); in the case of other drugs, relatives were mostly the partners of those who took the drugs in company. As a place of drinking, shebeens/taverns were particularly popular among males, especially older ones. Females generally preferred to drink at their own homes or, to a lesser extent, at the homes of friends. Clubs/discotheques were also popular places of drinking, specifically in the case of urban male drinkers; and bottle stores in the case of rural male drinkers. Tobacco users in urban areas generally smoked at their own homes (particularly at times when their parents/ guardians were not present), and to a lesser extent at their friends' homes; rural male tobacco users tended to prefer school premises, and rural female tobacco users tended to prefer the homes of their friends. Users of drugs other than alcohol/tobacco typically took these drugs at their own homes, especially younger males and females generally. Whereas urban drinkers tended to be evening drinkers (took their first drink of the day in the late afternoon or evening), rural drinkers were generally afternoon drinkers. Tobacco users typically took their first tobacco when they woke in the morning, and so did noteworthy proportions of drinkers. Between 5% and 9.7% of drinkers reported that they took their first drink of the day when they woke. Morning drinking was especially common among drinkers who attended traditional ceremonies.

Drinkers in the 1994 survey (Rocha Silva et al., 1996:74-75, 127) typically reported using alcohol in order to change mood (particularly in rural areas), to have fun/enjoyment

(particularly among older drinkers and younger urban drinkers) or to experiment. Other reasons given for drinking included: "I like the taste", "To give myself courage/confidence", "So as not to be the odd one out", "Because my friends drink", "So that my friends won't think I am scared". That drinking was associated with food was especially evident among drinkers in rural areas. Although tobacco, in common with drinking, tended to be used for enjoyment/fun and mood change (enjoyment/fun was more important to tobacco users than to drinkers), habit ("Used to do so", "Taught to do so"), social pressure ("Because my friends do so", "So as not to be the odd one out", "So that my friends won't think I am scared") and coping ("To give myself courage/confidence", "To help me mix more easily with people") were also important (Rocha Silva et al., 1996:74-75, 128). Regarding solvent/inhalant use, enjoyment ("It is fun"), habit ("My friends do it", "Used to it") and mood change ("Makes me feel alright", "Makes me feel drunk") were particularly common reasons for use. To rural solvent/inhalant users, taking away the cold in winter was especially important. Drugs other than alcohol, tobacco and solvents/inhalants were generally associated with a need for energy and/or stamina. Cannabis was also taken to "protect" or "strengthen" the user against "harm", facilitate weight loss/control, make a user sleepy and stimulate extrasensory experiences.

With regard to the context in terms of which first use of some drug or other occurred, the 1994 survey among historically disadvantaged 10-21 year olds (black Africans) (Rocha-Silva et al., 1996:52-58) and the 1996 survey on the drug-related pre-incarceration history of prisoners in South Africa (Rocha-Silva & Stahmer, 1996:13-19) showed the following patterns:

- For alcohol, tobacco and cannabis, the age of onset in the 1994 survey was generally around mid-adolescence—with the onset of alcohol/tobacco use generally preceding that of cannabis use—and for solvent use earlier. In the 1996 survey the median age of onset for solvent use was 12 years and the mean age was 13 years; the median age of onset for tobacco use was 17 years and so also the mean age of onset; for cannabis use the median age of onset was 17 years and the mean age was 18 years; the median age of onset for alcohol use was somewhat later, namely 18 years, and the mean was 19 years; for white pipe (mixture of cannabis and methaqualone) the median age of onset was even older, namely 19 years, and the mean age was 20 years; for drugs such as sedatives, tranquillisers, stimulants, mandrax (methaqualone), cocaine, LSD, heroin, ecstasy, narcotics other than heroin (e.g. Wellconal) and steroids the median age of onset was 19 years and the mean age was 20 years.

- In the 1994 survey tobacco users—who also took alcohol—generally started with tobacco (urban female tobacco users who also took alcohol were an exception).
- In the 1994 survey friends, and to a lesser extent the individual him/herself, generally supplied the first drink, tobacco and especially solvent, although among the younger ones relatives were generally the suppliers of the relevant drugs. The 1996 survey among prisoners also found that friends and to a lesser extent the respondents themselves mostly provided the first drink. Those respondents in the 1996 survey who obtained their first drink from friends were mostly from Western Cape prisons. Those in the latter survey who reported that they obtained their first drink themselves and who were in Western Cape prisons particularly included offenders who said that their parents had an alcohol or other drug problem. In the 1996 survey the first cannabis smoke was also mostly indicated as having been provided by friends (especially in the case of respondents in Western Cape prisons), and to a lesser extent as having been obtained by the relevant respondents themselves or having been provided by drug traders. Solvent users in the 1996 survey also mostly reported friends and to a lesser extent themselves as the suppliers of their first solvents. Friends and drug dealers were mostly reported in the 1996 survey as the first suppliers of drugs such as sedatives, tranquillisers, stimulants, mandrax, cocaine, LSD, heroin, ecstasy, narcotics other than heroin (e.g. Wellconal) and steroids.
- Whereas first use of alcohol was generally experienced as pleasant ("nice") in the 1994 survey, the opposite applied to tobacco (especially among younger users in urban or semi-urban areas) and to solvents (except among urban females); older male drinkers/tobacco users in particular were accepting of continued drinking/tobacco use. The 1996 survey among prisoners also found that the first intake of alcohol was mostly experienced as pleasant ("nice"), particularly in the case of respondents from Western Cape, Eastern Cape, Free State and KwaZulu-Natal prisons. The first experience of cannabis and solvents was also generally experienced as pleasant ("nice", "alright").
- Typical reasons for the first drink, tobacco and solvent in the 1994 survey included the following: "To see what it is like" (especially among younger groups attending church); "Because a friend insists" (especially among urban youth) and "I thought it would be fun" (especially among older youth). The related findings with regard to alcohol, tobacco, cannabis and solvents in the 1996 survey among prisoners largely concurred with the results of the 1994 survey. Furthermore, in the latter survey experimentation as

the reason for first use of alcohol was most common among respondents in Western Cape and Eastern Cape prisons; pressure from friends among respondents in KwaZulu-Natal prisons; fun among respondents in Gauteng prisons as well as in North West, Northern Province and Northern Cape prisons. Offenders who reported that they had obtained their first cigarette/tobacco from friends were particularly from Western Cape, Free State, KwaZulu-Natal and Mpumalanga prisons; and those who indicated that they had obtained their first cigarette/tobacco themselves were particularly from Eastern Cape prisons and especially those who reported that their parents had a drug problem. Offenders who reported experimentation as their reason for starting to use cannabis were particularly from Western Cape and Gauteng prisons; and those who said that pressure from friends was their reason for taking cannabis for the first time were especially from KwaZulu-Natal, North West, Northern Cape and Northern Province prisons.

3.7 THE DRUG-CRIME NEXUS IN SOUTH AFRICA

Although little data have been accumulated on the drug-crime phenomenon in South Africa, the 1996 survey (Rocha-Silva & Stahmer, 1996) on the pre-incarceration drug and crime history of prisoners in South Africa deepened insight into the subject. The survey showed that persons who had moved into the criminal justice system (e.g. as prisoners) were in various ways at risk of drug-related harm (including crime) (Rocha-Silva & Stahmer, 1996, executive summary). In fact, as pointed out in earlier sections, the surveyed offenders typically reported pre-incarceration levels of drug use (in terms of the range of drugs used and volume of intake) that were higher than those found among a comparative group in the general population in the early 1990s. The following findings underlined that pre-incarceration drug use patterns developed and were maintained within a context of tolerance towards and social interactional support for drug use:

- Initiation into drug use commonly occurred within socially supportive circles. Friends were generally the providers of the first substances, and to a lesser extent respondents themselves, in particular those who also reported that their parents had drug problems. In the case of illicit drugs, drug traders featured as suppliers of the first drugs.

- Drug use was commonly a group activity, mostly with friends (who were sometimes members of a gang). It typically occurred at venues frequented by drug traders such as taverns and "drug houses".
- Access to the drugs mostly used (tobacco, cannabis and alcohol) was generally reported as easy.
- Direct social pressure to use drugs, whether licit or illicit, was a common experience.
- Personal attraction to and a belief in the rewarding nature of drug use were common.

Reports of high levels of pre-incarceration drug intake among the surveyed offenders in the 1996 study were generally accompanied by reports of high levels of pre-incarceration criminal activity. The following findings (noted in earlier sections) furthermore implied that an interactive relationship underpinned the concurrence in the levels of drug taking and criminal activity:

- The onset of alcohol, tobacco and other drug intake generally preceded first involvement with the criminal justice system (e.g. as arrestees).
- The onset of involvement with the criminal justice system tended to occur concurrently with the onset of "hard" illicit drug use (e.g. the use of cocaine and heroin) in late adolescence/early adulthood, and appeared to be related to illicit drug trading and/or a need to acquire the means to buy drugs.
- The onset of the use of cannabis (an illicit drug) generally preceded the onset of the use of alcohol (a licit drug).
- Involvement in a criminal subculture (specifically gangs) appeared to be partly responsible for the onset of especially illicit drug use and trading in such drugs.

The following survey findings implied that the observed concurrence in the levels of drug use and criminal activity crystallised into participation in a drug-and-crime "lifestyle" that ever so often included acts of violence:

- Taking drugs immediately before or at the time of committing an offence was common among the offenders throughout their criminal careers. Almost half (46.4%) of the surveyed offenders reported that they had taken alcohol and/or other drugs immediately before or while committing the offence for which they were imprisoned at the time of the survey.

- Drinking and/or taking illicit drugs—excluding cannabis and mixtures of cannabis and mandrax (methaqualone)—were occasionally accompanied by aggression such as quarrels/fights and outbursts of rage. Of the surveyed offenders who reported lifetime alcohol use, 37.9% reported involvement in quarrels/fights during or after a drinking session; in the case of illicit drugs—excluding cannabis and mixtures of cannabis and mandrax (methaqualone)—the comparative proportion was 35.1%. The reports that drug taking was accompanied by quarrels/fights and that some offenders mostly took drugs in the company of gang members implied that some of these quarrels/fights were related to the dynamics of the interaction among gang members and the activities they participated in.

- Certain crimes, drug-taking settings and motivations for drug taking correlated statistically significantly (at the 5% level): (a) Rape and housebreaking/burglary were associated with drinking (offenders who were serving a sentence for rape particularly reported that they had taken alcohol and/or other drugs immediately before or at the time of the offence, usually drank in a group—the group consisting of friends, gang members or co-arrestees—and at public drinking places); (b) property crimes were associated with smoking cannabis in company; and (c) violent crimes and housebreaking/burglary were associated with imbibing alcohol to build courage.

The findings furthermore implied that participation in a drug-crime lifestyle developed and was maintained against the background of experiences of socioeconomic deprivation, i.e. growing up in a single-parent family, in a community with limited educational and employment opportunities and without joining community organisations such as religious groups. The drug-crime lifestyle also manifested to the extent to which particular drugs were available in regions. Licit drug use (e.g. alcohol) and/or illicit drug use (e.g. cannabis) occurred in regions where the particular drugs were cultivated/produced, e.g. in vine and cannabis-growing regions. Perceptions that access to illicit drugs was "(very) easy" were especially common in regions known to have established illicit drug distribution networks. In certain regions the onset of licit as well as illicit drug use was facilitated by the presence of suppliers of drugs in the respondents' close social circle. The commencement of licit and/or illicit drug use for "fun" occurred mainly in regions with a low level of basic service provision and poor economic, educational and recreational opportunities (e.g. informal settlements with their high level of unemployment and illiteracy).

In short, the 1996 drug-crime survey showed that persons who had moved into the criminal justice system (e.g. as prisoners) were at high risk of drug-related harm (e.g. crime) as an individual and as a member of a social group. It underlined the need for preventive action and for facilitating such action through further research on the subject, especially among entrants into the criminal justice system (arrestees at police stations). However, the findings of the 1996 survey have to be corroborated and the suggested link between individual and societal contributors to the drug-crime phenomenon has to be investigated in more depth. The survey also underscored the importance of developing a refined system for monitoring the nature of drug-crime links among offenders in order to inform, assess and, indeed, ensure effective preventive action.

3.8 GENERAL OVERVIEW OF DRUG USE AND RELATED ISSUES IN SOUTH AFRICA

In line with drug use trends abroad, the reviewed data suggest a rise in the overall level of drug use in South Africa. The consumer market has broadened and new patterns of use have come to the fore. Drug use, which used to be largely an urban male phenomenon, has spread to rural areas, to the disadvantaged sector and to females. The range of drugs used has widened. A pattern of "poly-drug use" (use of combinations of drugs) has also been observed. Levels of alcohol intake have increased among at least young people of historically disadvantaged groups living in rural areas. The reasons given for drug use are also diverse: Drugs are used by way of habit/custom, as part of ceremonies and festivities, to counter "discomfort", to enhance pleasure, as food, etc.

Furthermore and as shown in subsequent sections, the reviewed data (a) point to a link between drug use and broad socioeconomic conditions and thus to the importance of studying drug use within the wider context within which it occurs, and (b) contribute insight on the drug-crime relationship.

3.8.1 Drug use and poverty

Regarding the relationship between drug use and broad socioeconomic conditions, the reviewed data suggest that drug use linked with "poverty", i.e. a condition which Hancock (1986:93-100) defines as manifesting in a combination of debilitating socioeconomic factors such as unemployment and lack of basic necessities (e.g. water, sanitation, health care, safety,

education). In fact, the reviewed data suggest that people in poverty-stricken neighbourhoods are vulnerable to drug use and particularly to comparatively "heavy" use. For example, a regular (at least once a week) and high volume (at least 7 centilitres AA on average per day) of intake have emerged among historically disadvantaged young drinkers, especially those living in informal settlements in urban areas and in rural communities with generally low household incomes and limited access to necessities.

Within the context of the drug use and poverty link various other issues come to the fore. The data with regard to, for example, young people indicate that although traditional normative structures may still reserve drug use (specifically regular use and a high volume of intake) for (mainly) male adulthood, there is reason to believe that female African youth within poor households in South Africa (especially in the older age groups) may be at increasing risk of drug use. This is also highlighted by overseas research. Farmer (1996:99, 106), for example, states that poverty

destabilizes lives, crushes self-esteem and creates an apartheid between those who have economic power and those who do not ... [and in these circumstances] drug use and drug trafficking may become the most viable way of surviving ... [especially in the case of women because women generally] fare far worse than men, not because of their gender, but because of sexism: unequal power relations between the sexes. More often that not, assertion of power (no matter what the context) is not an even option for poor women.

Drug use may also be part of the erosion of social institutions in South Africa, the poor generally being particularly vulnerable in this regard. The reviewed data highlight with regard to young people that a lack of social integration within institutions such as the church commonly occurs among regular (at least once a week) and high volume (at least 7 centilitres AA on average per day) consumers of alcohol, especially those living in informal settlements in urban areas. Within this context, a weakening of social regulatory mechanisms with regard to drug use can be expected. The reviewed data support this expectation and show that young people generally start and maintain drug use within socially "unregulated" circumstances, with friends or young people themselves and to a lesser extent drug traders generally providing the first drugs; and with drinking commonly taking place within company and settings where the focus is on alcohol use (e.g. taverns, bottle stores, clubs/discotheques). Indeed, there is reason to believe that the worldwide trend towards the "normalisation" of drug use as part of day-to-day life has emerged among the new consumer generation in South Africa, namely young people. This highlights the importance of adopting a transnational perspective when attempting to understand drug use patterns and trends in a country.

As early as the mid-1980s Gumede (1986:1018) observed the surfacing of socially "unregulated" drinking among historically disadvantaged groups as part of a process of increased contact with the habits of foreigners, stating:

Groups that had been protected by usage, custom and taboo were suddenly exposed to alcohol abuse ... Women, young adults and children who were traditionally protected by their cultural norms were influenced by habits of people from other cultures ... The arrival of Europeans ushered in an era of the Whiteman's firewater in an area where traditionally beer with a low alcohol content was drunk. The easy availability of a strong, potent portable liquor increased the number of new drinkers.

A pattern of transgenerational "heavy" use is also apparent in poor regions with regard to at least licit drugs and to a lesser extent cannabis. The reviewed data, for example, indicate that young users of alcohol, tobacco and cannabis who get their first drugs themselves particularly report that they have parents/guardians with drug-related problems, especially those who live in areas (e.g. the Free State and Eastern Cape) with a high proportion of households in the bottom income category. Furthermore, "heavy" drinking youth—i.e. those who tend to drink regularly (at least once a week) and/or imbibe at least 7 centilitres AA on average per day)—in poverty-stricken areas tend to "introduce" the next generation to heavy drinking in that they commonly have children.

3.8.2 Drug-crime link

The reviewed data also show that certain sectors—persons who have come into conflict with the law—manifest particularly high levels of drug use that are entwined with participation in criminal activity. It is evident that drug use, criminal activity and broad socioeconomic conditions—especially poor living conditions—are interrelated. Moreover, the occurrence of drug-crime links can be expected to grow if not countered, considering (a) the ongoing rise in the overall level of drug consumption on the African continent and in South Africa in particular; (b) evidence that the level of crime in a community tends to concur with the level of drug consumption in that community; and (c) evidence of an interactive relationship between drug consumption and crime.

3.9 CONCLUSION

The expected increase in drug-crime links in South Africa and the debilitating effect this increase can have on socioeconomic development in South Africa highlight the importance of instituting effective preventive action. However, the lack of comprehensive and integrated

insight into drug-crime links in South Africa—as shown in the current and earlier chapters of this dissertation—inhibits an appropriate response to calls for preventing the drug-crime phenomenon in South Africa (Department of Welfare and Population Development, 1999; Department of Welfare and Population Development, 1997; Department for Safety and Security, 1996; *Reconstruction and Development Programme: A Policy Framework*, 1994:15). Proactive counteraction requires more rigorous research on the subject, especially among entrants into the criminal justice system (detainees in holding cells at police stations) and regarding the influence of broad socioeconomic conditions on the development and maintenance of drug-crime links. Effective preventive action also implies the institution of ongoing assessment of the dynamics of drug-crime links and the impact of preventive efforts. Against this background and as pointed out in the first chapter of this dissertation, a national survey on the drug-crime phenomenon was conducted among detainees in holding cells at police stations in South Africa in 2000, the findings of which are reported in the next chapter.

CHAPTER 4
DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

To illuminate the drug-crime phenomenon in South Africa on the individual and population level and in particular vulnerability to drug consumption and related crime, this chapter presents and analyses the responses to the questionnaire administered in this study's sample survey (the 2000 holding cell survey) among individual detainees in holding cells at police stations in South Africa that was conducted in February 2000. The chapter also presents and analyses interactions between selected population data (i.e. the broad socioeconomic conditions in the police districts where the sample survey was conducted) and individual data (data collected in the sample survey).

Before presenting and analysing the survey findings, this chapter discusses (a) the variables on which data were gathered, (b) the reasons why analysis of the nature and extent of drug consumption among the survey respondents focused on the questionnaire responses (self-reports) rather than on the results of the urine tests of drug consumption, (c) presentation and analysis techniques, and (d) the integrity of the realised sample. In the analysis of the findings, the focus is on whether and in what way the research confirmed vulnerability to drug consumption and related crime/violence as well as to HIV/AIDS. In line with the present study's conceptual framework, and as specified in Chapter 1, it is assumed that vulnerability to drug consumption and related crime would exist to the extent that the survey sample consumed drugs and participated in criminal/violent activity, and to the extent that the following sociocultural and psychological conditions prevailed:

- Sociocultural support for (a particular form of) drug consumption, lack of (or limited) discrimination against (a particular form of) drug consumption, exposure to (a particular form of) drug consumption, and opportunities for engaging in drug consumption; and
- Tolerance towards (a particular form of) drug consumption, knowledge/awareness of (a particular form of) drug consumption and ways of acquiring drugs, a belief that

discrimination against (a particular form of) drug consumption is mild or non-existent, a belief in the rewarding nature of, and a personal attraction to (a particular form of) drug consumption.

Consideration is also given to the assumption that vulnerability to drug consumption and related crime differentiated in terms of the demographic characteristics of the respondents and the broad socioeconomic conditions in which they found themselves before their arrest at the time of the 2000 holding cell survey.

4.2 VARIABLES/DATA

In accordance with the conceptual framework outlined in Chapter 1, the findings of the sample survey related to the following issues:

- The level (nature and extent) of drug consumption and in particular the following dimensions of drug consumption: type of drugs consumed, age of onset of drug consumption, frequency of drug consumption, experiences of drug-related harm (including "dependence"), and perceived drug-related treatment needs
- Experiences of social and personal "pressure" to take drugs as well as ease of access to drugs (e.g. offers of drugs, direct pressure to take drugs, using drugs at places conducive to usage and in the company of people who would usually not be opposed to usage, witnessing/participating in drug trading, being acquainted with drug use, giving positive reasons for drug use)
- Level of involvement in crime, violence and gangs
- Knowledge, attitudes and practices related to HIV/AIDS
- Demographic characteristics (gender, age, home language, educational qualifications, marital status, religious affiliation, employment and income status, housing/residential conditions, and family composition).

To heighten the reliability of inferences or generalisations about the population from which the survey sample was drawn and, in fact, to compensate for differences between the realised and originally designed sample, the emphasis in this chapter is on the weighted questionnaire responses/data. The (a) unweighted data on the demographic characteristics of the survey sample are, however, used when describing the respondents in the realised sample

biographically, and (b) the weighted data when analysing the extent to which demographic variables differentiated between the other questionnaire responses.

Budget constraints resulted in restricting the analysis of the extent to which the survey responses differentiated in terms of the broad socioeconomic conditions (population data) within the police districts included in the survey to selected broad socioeconomic conditions and survey data, i.e. the responses on the main variables on drug consumption, crime and violence in this survey, and available 1996 census data on those survey variables that clearly differentiate between the responses.

4.3 SELF-REPORTED DRUG CONSUMPTION VERSUS URINE TESTS OF DRUG CONSUMPTION

In the USA and England biological tests such as urinalysis have largely confirmed the reliability of questionnaire reports (self-reports) of drug consumption among detainees at police stations. In 1999 surveys (Taylor & Bennett, 1999:27) at police stations the self-reported drug consumption of 90.3% of the sampled detainees in the United States and 91.3% in England was in agreement with the results of the urinalysis. The other detainees either underreported or overreported drug use (as measured by urinalysis). In the national holding cell survey that was conducted for the present study on drug-crime connections in South Africa the self-reports of the respondents who participated in the urine testing and the results of the latter tests also concurred generally. Analysis focused on the following drugs: cannabinoids, mandrax, cocaine, opiates (e.g. heroin, morphine), amphetamines, methadone, phencyclidine (PCP), propoxyphene (e.g. analgesics), LSD and benzodiazepines (e.g. tranquillisers). With regard to cannabis, for example, 77.1% of the results of the urine tests accorded with the matching self-reports on the use of this drug in the three days before the survey (10.4% of the respondents overreported and 12.5% underreported cannabis use during the period concerned). With regard to self-reports on the use of cannabis in the 30 days before the survey, 74.1% of the results of the urinalysis corresponded with the matching self-reports (16.7% of the respondents overreported and 9.3% underreported cannabis use, as measured by urinalysis, during the period concerned).

In view of the general concurrence between the self-reported drug consumption and the results of the urinalysis, particularly in relation to drug consumption in the period immediately preceding urinalysis, greater reliability can be ascribed to self-reporting than might otherwise have been expected. For this and the following reasons, the focus in this

chapter is on the self-reported data on drug consumption, rather than on the results of the urinalysis:

- First, comprehensive or multifaceted measures of drug consumption—e.g. a person's style or overall pattern of drug consumption—provide a better understanding of vulnerability to related harm such as crime than a single measure such as a person's level of drug intake at a particular point in time (Single & Leino, 1998:7-8). Roizen (1989:53) comments in this respect and with regard to alcohol use as follows:

  Without knowing the drinking history [of the person concerned], heavy drinking preceding trauma may simply be an indirect indicator of a life in which drink is an accompaniment to all the day's activities, in which case the question is not What is the role of alcohol? but Why, given that this activity is routinely accompanied by drink, did an injury occur this time?

- Second, urinalysis results are not necessarily useful and accurate because, as noted by Makkai (2000:x) and by Burns, Page and Leiken (1998:658-661), urine drug tests detect a class rather than specific drugs/metabolites; and false positives and negatives can occur.

- Third, the comparatively small number (325) of useable urine specimens and small number of positive tests in this study inhibited detailed analysis. Indeed, this necessitated a focus on the self-reports of drug consumption. (The urinalysis results included 132 (40.6%) positive tests for cannabinoids, 19 (5.9%) for mandrax, 2 (0.6%) for opiates, 1 (0.3%) for amphetamines, 1 (0.3%) for propoxyphene and 1 (0.3%) for benzodiazepines.)

4.4 PRESENTATION AND ANALYSIS TECHNIQUES

Cross-tabulation and, to a lesser extent, graphic display of the distribution of the survey responses facilitated the presentation and descriptive analysis of the survey findings. The emphasis was on distribution patterns rather than distribution figures, based on the argument that

- all data-gathering instruments tend to be biased (Neuman, 1997:141-152; Denzin, 1989:25); and

- survey research cannot be expected to determine the distribution of a particular phenomenon in a community in any absolute sense (May, 1992:110). It can at best identify cross-sectional patterns and longitudinal trends.

To increase insight, and as indicated in the introductory chapter of this study, subsequent paragraphs in this chapter will also draw attention to the findings of related studies and in particular to the findings of

- a 1996 national survey (Rocha-Silva & Stahmer, 1996) of the pre-incarceration history of persons in prisons in South Africa at the time of the survey, and
- a 1999-2000 three-phased survey of drug-crime connections among detainees in holding cells at selected police stations in three metropolitan centres in South Africa (Parry, Louw, Vardas & Plüddemann, 2001, 2000a, 2000b), hereafter alternatively referred to as the "three-metro study".

In the analysis of the results of the 2000 holding cell survey, the CHAID computer program was used to identify "background" or independent variables (predictors) that discriminated most significantly between the categories of a particular dependent variable (variable to be explained or predicted), as well as identify interactions between discriminators (predictors). Although the focus in the CHAID analysis was on the influence of the reported demographic (biographic) characteristics of the respondents on the responses to each of the other variables included in the questionnaire, the analysis also examined whether the demographic influences on a particular variable were mediated by—or, for that matter, interacted with—the remaining variables in the questionnaire. The CHAID results (organised as a tree structure or dendrogram) displayed subgroups that differed most significantly on the respective dependent variables. The more detailed technical characteristics of the CHAID analysis, the particular variables included in the analysis and the detailed results are provided in Appendix 4. The CHAID results were supplemented with chi-square tests of the degree of association between pairs of variables (questionnaire responses) that were not among those that the CHAID analysis identified as variables that most significantly discriminated between the categories of a particular variable.

The extent to which the 2000 holding cell survey's individual data differentiated in terms of the broad socioeconomic conditions (population data) within the sampled police station districts in the various provinces was examined with the aid of Geographic Information Systems (GIS) computer technology in combination with the Hierarchical Linear Models (HLM) computer programme (Kreft, 1996). GIS computer technology can capture, store and display in spatially referenced format (maps) at various levels (e.g. provincial, district and

neighbourhood) and in an integrated manner various descriptive and numerical data sets (e.g. data on the drug consumption of survey respondents) (Frischer & Heatlie, 2001:55-66; Drake, 1991:29-32). Appendix 5 provides further details on the HLM computer program.

4.5 INTEGRITY OF THE REALISED SURVEY SAMPLE

Although an unanticipated low number of detainees at several of the police stations in the realised sample of the national holding cells survey reduced the original sample size from 2 000 to 1 143 detainees for questionnaire administration, the integrity of the realised sample was reflected in a number of ways:

- The realised number (146) of police stations sampled for questionnaire administration closely resembled the recommended number. In four provinces (Eastern Cape, Gauteng, Northern Cape and Western Cape) the realised sample was one less than the recommended number due to the exclusion of a sampled police station that did not have holding cells.

- The sampled questionnaire respondents were generally closely similar to the recorded population of detainees from which the respondents were selected with regard to gender and, to a lesser extent, main offence category in terms of which a person was detained. Whereas the realised sample comprised 87.5% males and 12.5% females, the percentages in the population from which they were selected were 86.4% and 13.6%. The main offence categories of members of the realised sample related to violent crimes (36.6% of the sampled respondents), property crimes (34.6%), drug law crimes (13.1%) and immigration law/miscellaneous crimes (15.0%). The comparative percentages among the detainees from whom the respondents were selected were 29.6%, 31.1%, 21.5% and 16.4%.

- Weighting of the questionnaire responses—in order to compensate for disproportionate sampling and for differences between the realised and originally designed sample—did not skew the response percentages generally. The differences between the weighted and unweighted questionnaire response percentages were generally less than five percentage points.

- In line with related studies in the USA, England and Australia (Makkai, 2000:ix; National Institute of Justice, 2000:10; Bennett, 1998:10), as well as in the three-metro in South Africa (Parry et al., 2001:5, 2000a:5, 2000b:5), high compliance rates were

achieved in the administration of the questionnaire and the procurement of urine specimens in the 2000 holding cell survey. Of the sampled persons who were approached for an interview in the latter survey, 99.4% consented; all of those approached for a urine specimen consented. (Because of a low intake of detainees at selected police stations, the realised sample (372) of detainees selected for urine specimens was also lower than the original sample (717).)

4.6 DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The main demographic characteristics of the questionnaire respondents in the national holding cell survey are depicted in Figure 3.

Figure 3: Main demographic characteristics of respondents (in percent)

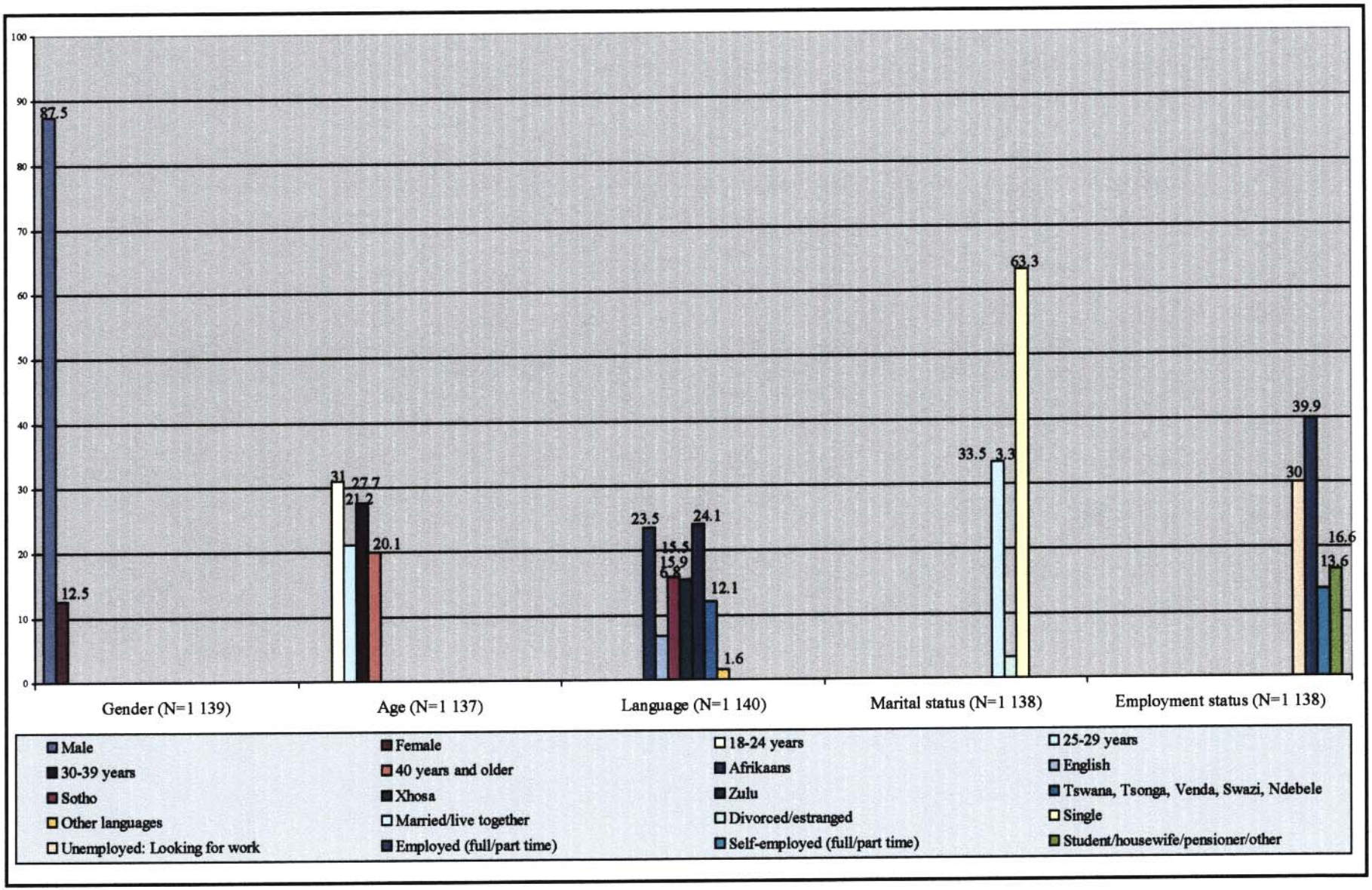


Figure 3 shows that by far the majority (87.5%) of the survey respondents were males. The more detailed demographic characteristics (e.g. age, language, marital status, employment status) suggest that a substantial number of the respondents had limited access to material and social support. The respondents were in the younger rather than older age groups, with the single largest proportion (31.0%) falling in the youngest age group (18-24 years). The majority (67.6%) of the respondents indicated as their home language a language of one of the historically disadvantaged groups, namely Zulu (24.1%), Sotho (15.9%), Xhosa (15.5%) and related languages (12.1%) such as Tswana, Tsonga, Venda, Swazi and Ndebele. Most (63.3%) of the respondents stated that they were single and a substantial proportion (30.0%) stated that they were looking for work at the time of the survey. Many (76.8%) of the detainees who responded (1 140) to the relevant question indicated an affiliation to a religious denomination. The majority (66%) of those who responded (872) to the question concerned admitted active participation (at least once a month) in religious services.

Table 8 presents the perceptions of the respondents in the 2000 holding cell survey regarding their place of residence in the month before their arrest.

Table 8: Respondents' perceptions of their place of residence in the month before their arrest

Perceptions	Very often	Often	Seldom	Very seldom	Not at all	Total
	Weighted percentages					
Fights (e.g. fist fights)	17.2	10.9	16.3	16.1	39.5	100.0
Gangsterism	11.0	8.0	7.8	9.4	63.7	100.0
Crime (e.g. theft, homicide, rape)	18.3	15.1	14.9	13.8	37.9	100.0
Empty/abandoned buildings	7.0	6.6	9.9	12.2	64.3	100.0
Graffiti writing on walls in public places	9.2	9.3	9.5	13.1	58.9	100.0
People walking around at night without a weapon	19.7	15.6	12.8	13.0	38.9	100.0
Drug trading/selling	15.0	12.7	9.0	10.3	53.0	100.0

Table 8 shows that substantial proportions of the respondents very often/often witnessed some form of crime (33.4%), fights (28.1%), drug trading/selling (27.7%), gangsterism (19.0%) and/or graffiti writing on walls in public places (18.5%) in their place of residence in the month before their arrest at the time of the survey.

4.7 THE NATURE AND EXTENT OF DRUG CONSUMPTION

This section presents and analyses the responses to the questionnaire in the 2000 holding cell survey before analysing the extent to which the reported data differentiated provincially and demographically. It should be noted that, although the questionnaire generally included the

same series of questions for each drug, the series was shortened in the case of selected drugs because of restricted interview time. The questions on licit drug consumption were restricted to lifetime consumption (consumption of a drug at some time in life), past 12 months' consumption (consumption in the 12 months before the survey) and past month's consumption (consumption in the 30 days before the survey). Besides including similar questions, the questions on illicit drug consumption also included a question on consumption in the three days before the survey. The question on past three days' consumption was inserted in order to facilitate comparison of the responses with the results of the earlier mentioned urine tests for drug consumption. In the case of both licit and illicit drugs, questions on the frequency with which drugs were consumed were restricted to those respondents who admitted drug consumption in the past 12 months.

4.7.1 Types of drugs consumed

Table 9 presents the manner in which self-reported drug use distributed among the respondents across various types of drugs and with regard to various periods of use, namely usage at some time in a person's life (lifetime use) and during respectively the 12 months, the month and three days before the survey.

Table 9: Types of drugs consumed (national figures)

Drugs	Lifetime use	Past year's use	Past month's use	Past 3 days' use
	Weighted percentages			
Tobacco	75.0	66.4	64.2	*
Alcohol	78.0	68.9	61.9	*
Over-the-counter pain relievers	33.5	24.1	16.1	*
Other over-the-counter medicine	28.2	19.0	11.6	*
Inhalants	10.1	1.7	0.8	0.7
Cannabis	34.7	21.0	17.2	13.9
Cannabis-mandrax mix	11.2	6.2	4.5	3.5
Mandrax	7.0	3.9	3.2	1.8
Cocaine (crack)	6.4	4.9	4.6	3.9
Cocaine (powder)	2.6	1.2	0.9	0.5
Amphetamines	8.8	4.4	4.0	1.2
LSD	12.2	8.1	7.7	3.4
Designer drugs	4.7	4.7	1.0	-
Severe prescription pain relievers	18.3	7.5	4.4	2.2
Prescription relaxants	14.0	6.0	4.1	3.3
Prescription sleep-inducing substances	15.3	3.3	1.4	1.1
Steroids	7.4	3.2	3.2	2.8

* No data accumulated

- **Reported licit drug (alcohol, tobacco and over-the-counter medicine) consumption**

Table 9 shows that the respondents in the 2000 holding cell survey most commonly admitted the consumption of the licit drugs, alcohol and tobacco, whether on a lifetime basis, past 12 months' basis or past month basis. By far the majority of the respondents admitted that at some time in their life they had used alcohol (78.0%) and/or tobacco (75.0%). Fewer respondents admitted the use of alcohol (68.9%) and/or tobacco (66.4%) in the past 12 months. The proportions that admitted past 12 months' use of alcohol and tobacco in the 2000 holding cell survey differed in some respects from the comparable proportions in related studies. In fact, the respective proportions of respondents in the 2000 holding cell survey who admitted past 12 months' use of alcohol and tobacco were largely similar to the proportion (69.2%) for alcohol and substantially lower than that for tobacco (75.1%) in the 1996 survey on pre-incarceration drug use among male prisoners in South Africa (Rocha-Silva & Stahmer, 1996:9-12). The percentages in the most recent national household survey (a 1990 study among historically disadvantaged persons in the age group 14 years and older) were substantially higher in the case of alcohol—specifically in urbanised areas and among males (the percentages varied between 77.0% and 80.0%) (Rocha-Silva, 1991a:44).

Prevalence rates for lifetime and past 12 months' use of alcohol and tobacco in the national 2000 holding cell survey differed from those in the related three-metro study. Lifetime and past 12 months' prevalence rates in the three-metro study also differed across metropolitan areas and the various time periods in which the study was conducted. These differences underlined the importance of ongoing and region/district-specific surveillance. For example, the highest figures recorded (weighted data) in the first phase of the three-metro study (Parry, Louw, Vardas & Plüddemann, 2000a:15) were as follows for Cape Town: Lifetime use for alcohol was 79.1% and for past 12 months' use 67.1%; for tobacco the rate for lifetime use was 82.6% and for past 12 months' use 77.4%. Furthermore, alcohol rather than tobacco was consistently the most commonly reported drug for lifetime and past 12 months' use in the 2000 holding cell study. In the three-metro study, tobacco rather than alcohol use was most commonly reported in the Durban and Cape Town areas in the first phase; in the second and third phase of the study, tobacco use was consistently more common than alcohol use (Parry et al., 2001:16, 2000a:15, 2000b:16).

Table 9 also shows that substantial proportions of the respondents in the 2000 holding cell survey admitted non-medical use of over-the-counter medicine, between 28.2% and 33.5% on a lifetime basis and between 19.0% and 24.1% on a past 12 months' basis. The related proportions in the three-metro study were lower, varying between zero percent and 29.2% on a lifetime basis and between zero percent and 19.5% on a past 12 months' basis across the different sites and data-gathering periods (Parry et al., 2001:16, 2000a:15, 2000b:16).

- **Reported illicit and prescription drug consumption**

Table 9, furthermore, indicates that cannabis was consistently the illicit drug most commonly used in the 2000 holding cell survey. In the survey 34.7% of the respondents admitted lifetime use and 21.0% past 12 months' use of cannabis. Although cannabis was also the illicit drug most commonly used in the three-metro study, the proportions who admitted lifetime and past 12 months' cannabis use were higher in the Cape Town and Durban sites and lower in the Gauteng sites than in the 2000 holding cell survey—(Parry et al., 2001:16, 2000a:15, 2000b:16). In the three-metro study 44.2% and 40.5% admitted lifetime use and 38.4% and 36.5% past 12 months' use of cannabis in respectively the Cape Town and Durban research sites in the first phase (weighted data); the percentages in the second phase were 38.2% and 25.6% for lifetime use and 32.8% and 23.0% for past 12 months' use; in the third phase the percentages were 39.1% and 32.6% for lifetime use and 37.1% and 29.1% for past 12 months' use. The percentages in respect of cannabis use in the Gauteng research sites in the three-metro study were 13.6% and 18.8% in the first phase, 16.6% and 14.2% in the second phase, and 16.0% and 14.9% in the third phase.

In comparison with the 1996 survey among male prisoners in South Africa (Rocha-Silva & Stahmer, 1996:16), the 2000 holding cell survey's prevalence rates for lifetime and past 12 months' use of cannabis were low, suggesting that since the mid-1990s the *overall* prevalence of cannabis use may have decreased somewhat among arrestees and prisoners. The percentages in the 1996 survey among incarcerated males (Rocha-Silva & Stahmer, 1996:16) who admitted lifetime and past 12 months' use of cannabis were respectively 41.5% and 32.8%. In the 1990 national household survey (Rocha-Silva, 1991:50) among historically disadvantaged persons (14 years and older), however, substantially lower percentages (between 8.9% and 22.3%) than in the 1996 survey among incarcerated males admitted past 12 months' use of cannabis, suggesting that cannabis use was disproportionately common among persons who had moved into the criminal justice system as, for example, prisoners.

Regarding the use of illicit drugs other than cannabis, including the non-medical use of prescription drugs, Table 9 also indicates that the order of popularity of various drugs varied across different reporting periods in the 2000 holding cell survey, suggesting that "new" patterns in drug use preferences (e.g. an increase in the use of LSD and crack cocaine) have been evolving among detainees in holding cells at police stations. With regard to lifetime drug use, the survey respondents most commonly admitted non-medical use of prescription drugs—especially pain relievers (e.g. Wellconal, Pethidine) (18.3%) and, to a lesser extent, sleeping tablets (e.g. Amytal, Nembutal) (15.3%) and relaxants (e.g. Valium, Librium) (14.0%)—and LSD (12.2%). Regarding past 12 months' drug use, reporting of the use of LSD (8.1%) and prescription pain relievers (7.5%) was more common than reporting of the other drugs of concern, except that LSD was more frequently reported than prescription pain relievers. The use of mixtures of cannabis and mandrax ("white pipe") (6.2%) and of prescription relaxants (6.0%) was also reasonably common. Past month's drug use reflected a more or less similar pattern as that for past 12 months' use, except that the use of cocaine (crack) (4.6%) was more common than the use of mixtures of cannabis and mandrax (4.5%) and the non-medical use of prescription pain relievers (4.4%). Regarding drug use in the three days before the survey, cocaine (crack) (3.9%) was the most commonly reported drug and, to a lesser extent, mixtures of cannabis and mandrax (3.5%), LSD (3.4%), prescription relaxants (3.3%) and steroids (2.8%).

The complex national patterns in the 2000 holding cell survey with regard to illicit (including prescription) drug use—as depicted in Table 9—contrasted with the more unified picture (weighted data) reflected in the related three-metro study with regard to illicit drug use (Parry et al., 2001, 2000a, 2000b). In the latter study mixtures of cannabis and mandrax and, to a lesser extent, cocaine were the illicit drugs other than cannabis most commonly reported on a lifetime and past 12 months' basis in the Cape Town and Durban research sites. In the Gauteng sites, the use of cocaine was generally more common than the cannabis-mandrax mixture on both a lifetime and past 12 months' basis.

- **Provincial differences in reported drug consumption**

Table 10 presents the manner in which the figures on self-reported drug consumption in the 2000 holding cell survey differentiated provincially.

Table 10: Types of drugs consumed by province

Drugs	Lifetime use	Past year's use	Past month's use	Past 3 days' use
	Weighted percentages			
Western Cape				
Tobacco	85.9	79.8	78.5	*
Alcohol	86.0	80.2	75.7	*
Over-the-counter pain relievers	64.7	46.6	31.7	*
Other over-the-counter medicine	51.1	31.5	18.3	*
Inhalants	9.2	3.6	0.6	0.6
Cannabis	46.1	31.2	26.6	20.8
Cannabis-mandrax mix	17.7	10.1	9.5	7.3
Mandrax	15.1	6.6	6.6	3.8
Cocaine (crack)	1.8	1.8	1.4	1.0
Cocaine (powder)	3.5	1.4	0.8	0.8
Amphetamines	8.4	-	-	-
LSD	7.4	6.3	6.3	6.3
Designer drugs	3.6	3.6	3.6	-
Severe prescription pain relievers	37.7	10.9	-	-
Prescription relaxants	33.9	16.9	14.5	14.5
Prescription sleep-inducing substances	18.8	11.3	6.2	5.1
Steroids	4.6	-	-	-
Eastern Cape				
Tobacco	71.7	63.1	62.5	*
Alcohol	72.8	65.4	63.9	*
Over-the-counter pain relievers	36.3	26.8	22.4	*
Other over-the-counter medicine	36.4	26.6	23.1	*
Inhalants	8.0	3.9	3.5	3.5
Cannabis	34.8	21.4	18.5	16.1
Cannabis-mandrax mix	8.8	7.3	7.3	5.6
Mandrax	5.5	5.5	5.5	3.3
Cocaine (crack)	4.4	4.4	4.4	4.4
Cocaine (powder)	-	-	-	-
Amphetamines	2.7	-	-	-
LSD	-	-	-	-
Designer drugs	-	-	-	-
Severe prescription pain relievers	23.7	14.6	14.6	14.6
Prescription relaxants	3.3	3.3	3.3	-
Prescription sleep-inducing substances	5.5	1.1	1.1	-
Steroids	10.2	-	-	-
Northern Cape				
Tobacco	86.7	83.4	83.4	*
Alcohol	93.9	93.9	90.0	*
Over-the-counter pain relievers	68.1	48.2	31.2	*
Other over-the-counter medicine	36.8	25.1	14.0	*
Inhalants	5.2	-	-	-
Cannabis	55.2	28.1	21.1	19.2
Cannabis-mandrax mix	20.4	17.1	-	-
Mandrax	18.6	18.6	9.3	9.3
Cocaine (crack)	-	-	-	-
Cocaine (powder)	-	-	-	-
Amphetamines	19.6	-	-	-
LSD	15.3	-	-	-
Designer drugs	-	-	-	-
Severe prescription pain relievers	10.1	-	-	-
Prescription relaxants	23.6	-	-	-
Prescription sleep-inducing substances	35.3	-	-	-
Steroids	3.5	-	-	-
Free State				
Tobacco	75.6	65.7	63.6	*
Alcohol	75.9	64.1	58.6	*
Over-the-counter pain relievers	48.6	36.3	29.3	*
Other over-the-counter medicine	37.1	27.1	18.1	*
Inhalants	14.8	2.5	-	-
Cannabis	25.4	12.4	8.1	5.2
Cannabis-mandrax mix	15.5	15.5	4.4	4.4
Mandrax	9.0	2.1	2.1	-

Drugs	Lifetime use	Past year's use	Past month's use	Past 3 days' use
	Weighted percentages			
Cocaine (crack)	-	-	-	-
Cocaine (powder)	-	-	-	-
Amphetamines	29.8	11.9	11.9	-
LSD	19.3	-	-	-
Designer drugs	50.0	50.0	-	-
Severe prescription pain relievers	43.5	25.7	25.7	-
Prescription relaxants	29.2	11.7	11.7	-
Prescription sleep-inducing substances	35.7	5.2	-	-
Steroids	-	-	-	-
KwaZulu-Natal				
Tobacco	68.6	60.2	54.0	*
Alcohol	69.0	54.7	49.2	*
Over-the-counter pain relievers	7.2	4.2	-	*
Other over-the-counter medicine	3.6	2.1	-	*
Inhalants	8.7	0.6	-	-
Cannabis	31.5	22.3	19.1	16.4
Cannabis-mandrax mix	9.6	8.0	6.4	4.8
Mandrax	8.1	6.5	4.9	1.6
Cocaine (crack)	13.3	13.3	13.3	6.6
Cocaine (powder)	5.7	2.8	2.8	2.8
Amphetamines	6.1	6.1	6.1	6.1
LSD	19.1	9.5	9.5	9.5
Designer drugs	13.1	13.1	-	-
Severe prescription pain relievers	7.1	7.1	7.1	7.1
Prescription relaxants	-	-	-	-
Prescription sleep-inducing substances	12.2	1.4	-	-
Steroids	6.2	-	-	-
North West				
Tobacco	68.9	65.0	65.0	*
Alcohol	79.3	72.5	56.2	*
Over-the-counter pain relievers	53.4	43.6	19.9	*
Other over-the-counter medicine	54.0	43.4	18.4	*
Inhalants	8.7	1.8	0.9	0.9
Cannabis	30.5	24.4	16.1	14.5
Cannabis-mandrax mix	-	-	-	-
Mandrax	4.1	-	-	-
Cocaine (crack)	9.0	-	-	-
Cocaine (powder)	13.3	6.6	6.6	-
Amphetamines	-	-	-	-
LSD	-	-	-	-
Designer drugs	-	-	-	-
Severe prescription pain relievers	13.8	2.9	13.8	2.9
Prescription relaxants	-	-	-	-
Prescription sleep-inducing substances	9.1	-	-	-
Steroids	10.9	-	-	-
Gauteng				
Tobacco	73.8	63.5	61.8	*
Alcohol	79.7	70.4	60.0	*
Over-the-counter pain relievers	15.7	10.8	7.4	*
Other over-the-counter medicine	16.4	10.5	5.6	*
Inhalants	11.6	-	-	-
Cannabis	31.7	16.0	13.4	9.4
Cannabis-mandrax mix	7.8	0.5	-	-
Mandrax	1.2	-	-	-
Cocaine (crack)	10.5	9.0	9.0	9.0
Cocaine (powder)	0.6	-	-	-
Amphetamines	10.8	8.7	7.7	1.2
LSD	19.9	19.9	19.9	-
Designer drugs	-	-	-	-
Severe prescription pain relievers	5.1	2.5	-	-
Prescription relaxants	6.8	3.9	-	-
Prescription sleep-inducing substances	14.6	1.0	-	-
Steroids	9.3	7.3	7.3	6.4
Mpumalanga				
Tobacco	74.3	58.6	54.6	*

Drugs	Lifetime use	Past year's use	Past month's use	Past 3 days' use
	Weighted percentages			
Alcohol	77.2	61.9	53.9	*
Over-the-counter pain relievers	9.2	1.5	0.6	*
Other over-the-counter medicine	5.3	0.6	0.6	*
Inhalants	12.0	2.2	2.2	1.3
Cannabis	24.1	11.3	8.4	8.4
Cannabis-mandrax mix	9.5	2.2	2.2	2.2
Mandrax	8.0	2.7	1.4	1.4
Cocaine (crack)	17.9	-	-	-
Cocaine (powder)	2.6	2.6	-	-
Amphetamines	6.4	-	-	-
LSD	29.1	12.7	-	-
Designer drugs	-	-	-	-
Severe prescription pain relievers	9.0	-	-	-
Prescription relaxants	-	-	-	-
Prescription sleep-inducing substances	11.3	11.3	-	-
Steroids	4.2	-	-	-
Northern Province				
Tobacco	61.6	49.4	45.8	*
Alcohol	61.3	51.7	39.3	*
Over-the-counter pain relievers	37.3	31.0	21.0	*
Other over-the-counter medicine	31.9	21.6	17.6	*
Inhalants	20.9	3.3	3.3	-
Cannabis	17.8	5.5	3.4	-
Cannabis-mandrax mix	13.2	-	-	-
Mandrax	-	-	-	-
Cocaine (crack)	18.2	-	-	-
Cocaine (powder)	-	-	-	-
Amphetamines	-	-	-	-
LSD	-	-	-	-
Designer drugs	-	-	-	-
Severe prescription pain relievers	63.6	33.4	11.6	-
Prescription relaxants	11.7	-	-	-
Prescription sleep-inducing substances	6.8	-	-	-
Steroids	-	-	-	-

* No data accumulated

Table 10 indicates that provincial figures for self-reported drug consumption generally reflected the national patterns in the 2000 holding cell survey, at least with regard to alcohol, tobacco and cannabis use, and especially in the case of KwaZulu-Natal, Gauteng and Mpumalanga. There were, however, exceptions, pointing to the importance of surveying drug consumption not only nationally but also within subregions in a country: The non-medical consumption of over-the-counter medicine tended to be more common than the consumption of cannabis in the Free State in particular, but also in the Western Cape, the Eastern Cape, North West and, to a lesser extent, the Northern Cape.

Table 10 also shows that certain provinces manifested fairly unique patterns. For example, in contrast to national patterns, designer drugs (50.0% reported lifetime/past 12 months' use) tended to be more popular in the Free State than licit drugs such as over-the-counter non-pain relieving medicine (37.1% lifetime use and 27.1% past 12 months' use) and the generally popular illicit drug, cannabis (25.4% lifetime use and 12.4% past 12 months' use), at least

with regard to lifetime and past 12 months' consumption. In KwaZulu-Natal—in contrast to national patterns and the findings of earlier related national studies (Rocha-Silva, 1998:25)—the use of illicit drugs such as LSD (19.1% reported lifetime use and 9.5% past 12 months' use) and cocaine (crack) (13.3% reported lifetime and past 12 months' use) were more common than licit over-the-counter pain relieving medicine (7.2% reported lifetime use and 4.2% past 12 months' use) with regard to lifetime and past month's consumption. Similarly, in Gauteng the use of LSD (19.9% reported lifetime/past 12 months' use) was more commonly reported than over-the-counter non-pain relieving medicine (16.4% reported lifetime use and 10.5% past 12 months' use), and more commonly reported than cannabis (16.0% reported past 12 months' use) on a past 12 months' basis. In Mpumalanga LSD (29.1% reported lifetime use and 12.7% past 12 months' use) was more commonly reported than over-the-counter pain relieving medicine (9.2% reported lifetime use and 1.5% past 12 months' use) and cannabis (24.1% reported lifetime use and 11.3% past 12 months' use) on a lifetime as well as past 12 months' consumption basis. In the Northern Province the use of prescription pain relievers was particularly common on a lifetime basis (63.6%)—more so than the generally most popular licit drug, alcohol (61.3%), and more popular than the illicit drug, cannabis (17.8%). The Western Cape also reflected a wider range of types of drugs used than the other provinces, and the Northern Cape and North West the smallest range, especially with regard to illicit drugs.

- **Demographic differences (including interactions between demographic and other variables) in reported drug consumption,**

A detailed analysis—using the CHAID computer program (see Appendix 4 for the detailed CHAID results)—of demographic differentiations in *self-reported drug consumption* (dependent variable) and especially interactions between self-reported drug consumption and responses to the other questions in the 2000 holding cell survey indicated the following patterns:

- *Lifetime consumption of alcohol* was statistically significantly associated with *trying to get hold of alcohol* when arrested. The respondents who were trying to get hold of alcohol when they were arrested—rather than those who were not trying to do so—admitted lifetime consumption of alcohol. This finding suggests that at least some of the respondents who tried to get hold of alcohol did so to support a "habit" of alcohol consumption or "dependence" on such consumption. A chi-square test also showed a

statistically significant association (here and later in the report "statistically significant association" means at the 5% level) between lifetime consumption of alcohol and *trying to get hold of tobacco* when arrested for an alleged offence. Analysis of this association showed that lifetime consumers of alcohol were particularly common among persons who were trying to get hold of tobacco, suggesting that at least some of the persons who were probably consuming alcohol "habitually" at the time of the survey were also doing so with regard to tobacco. A statistically significant association was also found between lifetime consumption of alcohol and type of offence for which a person had been arrested at the time of the survey (namely February 2000). (Lifetime consumers of alcohol were more common among respondents who had been arrested at the time of the survey for *assault* and, to a lesser extent, for *rape* and *drug law offences* than for other offences.)

- *Males* rather than females, and especially males with *no formal educational qualifications* admitted *lifetime use of tobacco*. This demographic profile accords with the general profile of tobacco-consuming adults in the South African population as reflected in a 1998 review of relevant studies conducted between the beginning of the 1970s and the mid-1990s (Rocha-Silva, 1998:22). Female lifetime consumers of tobacco were particularly prominent in the Western Cape, Northern Cape, Free State and Mpumalanga. Lifetime consumers of tobacco in the higher educational qualification category (Grade 11 and higher) were mostly respondents who indicated that they had been *exposed to some form of drug trading* in their place of residence in the month before the national holding cell survey was conducted. A chi-square test also showed a statistically significant association between lifetime use of tobacco and *trying to get hold of tobacco* and, thus, by implication, "habitual" consumption of tobacco at the time of the survey.

- Respondents who admitted *lifetime non-medical consumption of over-the-counter pain relievers* were more prominent in the Western and the Northern Cape than in the other provinces, and were especially persons who had been detained for a *property or drug law offence* at the time of the survey. Lifetime non-medical consumers of over-the-counter pain relievers from the Free State and North West particularly indicated that in the neighbourhood where they lived in the month before their detention it was impossible to walk in the streets at night without some *weapon to defend* themselves. Lifetime non-medical consumers of over-the-counter pain relievers from the Eastern

Cape and the Northern Province especially admitted that they had at some time or another been *threatened with a weapon* other than a gun; those who had not been thus threatened, especially indicated that they had *easy access to a knife*.

- The respondents from the Western Cape and from North West rather than those from the other provinces reported *lifetime non-medical use of over-the-counter medicine (other than pain relievers)*. Lifetime consumers of over-the-counter medicine (other than pain relievers) in the Western Cape and the Northern Cape also most commonly indicated that in the month before their detention they had lived in a neighbourhood where *drug trading* occurred frequently. Lifetime non-medical consumers of over-the-counter medicine (other than pain relievers) from the Eastern Cape, Northern Cape, Free State and Mpumalanga especially said that (a) it was *easy for them to get hold of a knife* if they wanted one and that (b) they were *trying to get hold of tobacco* when they were committing the offence for which they were detained. In short, the findings suggest that the non-medical consumption of over-the-counter medicine (whether pain relievers or non-pain relievers) was linked to involvement in (a) drug trading, (b) crime to support the "habit" of tobacco consumption, and (c) violent behaviour.

- The respondents who reported that it would be *easy for them to get hold of a knife* if they wanted a knife—rather than those who indicated the opposite—admitted *lifetime consumption of inhalants*. These respondents in the age group 18-24 years also indicated that—in the month before the survey—they had often/very often been exposed to graffiti on walls (and thus, by implication, to gang activities). Lifetime consumers of inhalants in the older age group (25-39 years)—who said that it would be easy for them to get hold of a knife—were more likely to report that they were *trying to get hold of tobacco* when they were arrested. A chi-square test also showed a statistically significant association between reports of lifetime consumption of inhalants and reports of (a) *trying to get hold of cannabis*, and (b) *possessing a firearm* when arrested.

- The place (province) where the respondents lived before their arrest at the time of the survey differentiated significantly per response category in respect of the question on whether they had consumed cannabis at some time in their life. The respondents from the Western Cape and the Northern Cape were more likely to admit *lifetime consumption of cannabis*. This group also especially included persons who said that (a) they could *easily get hold of a knife* if they wanted one and who said that (b) in the

neighbourhood where they lived in the month before the survey, they had *witnessed drug trading* often/very often. Those respondents from KwaZulu-Natal, North West and Gauteng who admitted lifetime consumption of cannabis comprised especially males who reported that they had often/very often witnessed trading in drugs where they lived in the month before the survey. A chi-square test also showed a statistically significant association between reports of lifetime consumption of cannabis and reports of *trying to get hold of cannabis/tobacco* when arrested.

- The provincial status of the respondents also differentiated significantly per response category in respect of the question on whether they had consumed (non-medically) severe pain relievers. Respondents from the Western Cape and Eastern Cape mostly admitted *lifetime non-medical consumption of severe pain relievers*. This group included especially persons who were *not in formal employment* at the time of the survey. A chi-square test also showed a statistically significant association between lifetime non-medical consumption of severe pain relievers and *trying to get hold of alcohol/tobacco* when arrested.

- The respondents from Gauteng and to a lesser extent those from the Western Cape, Northern Cape and North West rather than those from the other provinces admitted *lifetime consumption of sleeping tablets*. Inhabitants of Gauteng who reported that they had lived in a safe neighbourhood in the month before the survey (i.e. those who said that in their neighbourhood people often/very often walked around at night without a weapon) were more likely to report lifetime consumption of sleeping tablets. The respondents from the Western Cape, Northern Cape and North West who reported that in the month before the survey they had lived in a neighbourhood where there were no empty or abandoned buildings, were more likely to admit lifetime consumption of sleeping tablets.

- The respondents from the Western Cape and Northern Cape rather than those from the other provinces admitted *lifetime consumption of some drug or other*, whether licit or illicit. These respondents were also more likely to report that at some time in their life they had been *threatened with a weapon* other than a gun, and in particular a knife.

- Reports of *past 12 months' consumption of alcohol* were more common among those respondents who said they were *trying to get hold of alcohol* when they were arrested than among those who said they did not try to get hold of alcohol. The past 12 months'

consumers of alcohol who reported that they were not trying to get hold of alcohol when they were arrested were especially persons who said that at some time in their life they had been *threatened with a weapon* other than a gun or had *used a knife while they were committing a crime*. A chi-square test also showed a statistically significant association between reports of past 12 months' consumption of alcohol and type of offence arrested for. Past 12 months' consumers of alcohol were particularly well represented among persons who had been arrested for *assault* and, to a lesser extent, *rape*.

- The respondents who reported that they were *trying to get tobacco* when they were arrested—rather than those who denied it—admitted *past 12 months' consumption of tobacco*. This group also included mostly persons who believed that *people respected them more if they had a knife*. A chi-square test also showed a statistically significant association between reports of past 12 months' consumption of tobacco and reports of *trying to get hold of cannabis* when arrested.

- The respondents from the Western and Northern Cape rather than those from the other provinces reported *past 12 months' non-medical consumption of over-the-counter pain relievers*. These respondents were also more likely to say that they *knew people who were living with HIV/AIDS*. Past 12 months' non-medical users of over-the-counter pain relievers who were from the Free State and North West, furthermore, were more likely to say that where they lived in the month before their arrest, they *could not at all walk about at night without a weapon* to defend themselves. A chi-square test also showed a statistically significant association between past 12 months' consumption of over-the-counter pain relievers and *trying to get hold of alcohol/tobacco* when arrested.

- The respondents from the Western Cape and North West—rather than those from the other provinces—admitted *past 12 months' non-medical consumption of over-the-counter medicine (non-pain relievers)*. These respondents were also more likely to indicate that they had witnessed *drug trading* often/very often where they lived in the month before their arrest. Past 12 months' non-medical consumers of over-the-counter medicine (non-pain relievers) from the Eastern Cape, Northern Cape, Free State and Northern Province were more likely to say that they could *easily get hold of a knife* if they wanted one, and to be persons who said that at some time in their life they had been *threatened with a weapon* other than a gun. A chi-square test showed a

statistically significant association between past 12 months' consumption of over-the-counter non-pain relievers and *trying to get hold of tobacco*.

- The respondents who indicated that where they had lived in the month before the survey people *very seldom walked around at night without a weapon* to defend themselves—rather than the respondents who said the opposite—admitted *past 12 months' consumption of inhalants*. A chi-square test showed a statistically significant association between past 12 months' consumption of inhalants and *trying to get hold of cannabis/tobacco* at the time of the arrest.
- The respondents who said that *drug trading* occurred often/very often in the neighbourhood where they had lived in the month before their arrest—rather than respondents who indicated the opposite—admitted *past 12 months' consumption of cannabis*. This group comprised especially persons who indicated that they could *easily get hold of a knife* if they wanted one, and who were inhabitants of the Western Cape, Northern Cape, KwaZulu-Natal, North West and Gauteng. A chi-square test showed a statistically significant association between past 12 months' consumption of cannabis and (a) *trying to get hold of cannabis/tobacco* when arrested, as well as (b) the type of offence they were arrested for. Past 12 months' consumers of cannabis were particularly common among the respondents who had been arrested for *rape* and a *drug law offence*.
- The respondents who had been convicted of an offence at some time in their life—rather than those who denied any such conviction—admitted *past 12 months' consumption of some drug or other*. This group included especially persons who had either *no education or a qualification not higher than Grade 7*, i.e. not higher than primary school level. This finding is in keeping with the finding in the related 1996 survey that "drug-crime connections emerge and are sustained within a context of differential socioeconomic opportunity" (Rocha-Silva & Stahmer, 1996:20).

4.7.2 Age of onset of drug consumption

Table 11 presents the findings of the 2000 holding cell survey on the age of onset of use of various types of drugs (illicit drugs, prescription medicine, steroids and inhalants) as reported by lifetime drug consumers among the surveyed detainees.

Table 11: Age of drug use onset among lifetime drug consumers

Age (years)	Inha-lants	Canna-bis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphe-tamines	LSD	Designer drugs	Prescription pain relievers	Prescription relaxants	Prescription sleeping tablets	He-roin	Ste-roids	PCP
	Weighted percentages														
<10	10.7	2.3	0.8	-	-	-	2.7	9.1	-	-	3.5	-	-	-	-
10-19	81.2	67.0	72.2	74.4	67.7	40.6	58.7	69.4	100.0	45.5	31.6	25.2	-	79.2	-
20-29	7.7	24.3	18.0	25.6	21.9	46.0	38.6	12.4	-	54.5	24.9	42.8	-	20.8	-
≥30	0.4	6.4	9.0	-	10.4	13.4	-	9.1	-	-	40.0	32.0	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-

Table 11 shows that the consumption of inhalants, steroids, mandrax, mixtures of cannabis and mandrax (methaqualone), LSD, cocaine (crack), cannabis and amphetamines generally started during the adolescent years (10-19 years). The onset age for non-medical consumption of prescription medicine tended to be older (20 years and older). Among lifetime consumers of drugs who reported a pre-adolescent age of onset, users of inhalants and LSD respectively constituted the highest (10.7%) and the second highest percentages (9.1%). This fairly common reporting of a young age of onset for inhalants coincides with the findings of related studies, e.g. the first phase of the three-metro study (Parry et al., 2000a:17) and the 1996 survey on pre-incarceration drug consumption among South African prisoners (Rocha-Silva & Stahmer, 1996:16-19). In the 2000 holding cell survey the median age of onset for inhalants was 14 years, for heroin 15 years, for LSD 16 years, for crack cocaine 16 years, for steroids 16 years, for cannabis 17 years, for the cannabis-mandrax mixture 17 years, for mandrax 17 years, for designer drugs 17 years, for amphetamines 19 years, for cocaine powder 20 years, for prescription pain relievers 20 years, for prescription relaxants 24 years, for prescription sleeping tablets 25 years, and for PCP 32 years. In the 1996 survey (Rocha-Silva & Stahmer, 1996:16-19) the median age of onset for cannabis was 17, for the cannabis-mandrax mixture it was also 17, and for the other illicit drugs it was 19. The age of onset for inhalants was 12 years.

- **Demographic differences (including interactions between demographic and other variables) in the reported age of onset of drug consumption**

A CHAID analysis of differences in the reported age of onset of drug consumption in the 2000 holding cell survey revealed the following patterns regarding the *onset age for cannabis use* (dependent variable):

- Among the respondents who often/very often *witnessed drug trading* in the neighbourhood where they lived in the month before the survey, reports of a relatively early age of onset (16 years or younger) for cannabis were more common than among those who either did not witness such trading or did so to a more limited extent.
- Moreover, among those respondents who often/very often witnessed drug trading and reported an early age of onset for cannabis consumption, persons who indicated that they had been *part of a gang* at some time in their life were particularly well represented.

- Among the respondents who reported that they were *trying to get hold of cannabis* when they were arrested, reports of an early onset age (16 years or younger) were more common than reports of an older onset age with regard to the consumption of cannabis, suggesting that an early onset age places the cannabis consumer at risk of developing a pattern of habitual or dependent consumption.

4.7.3 Frequency of drug consumption

Table 12 presents the findings of the 2000 holding cell survey on the frequency with which various drugs were consumed in the 12 months before the survey. As in the case of the age of onset of drug use, the focus in this section is on illicit drugs, inhalants, prescription medicine and steroids, as restricted interview time prohibited a more comprehensive focus in the questionnaire.

Table 12: Frequency of drug consumption among past 12 months' drug consumers

Frequency	Inha-lants	Cannabis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphe-tamines	LSD	Designer drugs	Prescrip-tion pain relievers	Pre-scription relaxants	Prescription sleeping tablets	He-roin	Ste-roids	PCP
	Weighted percentages														
Daily	40.8	52.7	55.4	43.5	26.3	56.1	31.8	28.8	22.2	14.6	5.0	9.0	-	12.9	-
3-4 days a week	33.3	20.5	9.3	25.7	60.0	-	-	52.7	-	12.2	9.2	31.8	-	-	-
1-2 days a week	12.6	17.1	14.8	3.3	-	33.7	8.8	13.8	20.2	8.6	30.2	31.8	-	-	-
3-4 days a month	6.5	5.1	9.0	13.9	-	10.2	59.4	4.8	-	-	9.2	6.3	-	87.1	-
1-2 days a month	-	3.4	9.3	6.1	13.8	-	-	-	57.6	61.2	-	19.0	-	-	-
3-4 days a year	4.2	0.8	-	7.4	-	-	-	-	-	3.4	-	-	-	-	-
1-2 days a year	2.7	0.5	22.2	-	-	-	-	-	-	-	46.4	2.1	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-

Table 12 indicates that regular drug consumption (at least once a week) in the 12 months before the survey was commonly reported, as was the case in the 1996 survey on pre-incarceration drug consumption among prisoners in South Africa (Rocha-Silva & Stahmer, 1996:12-13). Regular consumption occurred particularly in the case of cocaine (crack), LSD and to a lesser extent cannabis, mandrax and mixtures of cannabis and mandrax. This finding differed somewhat from the related findings in the 1996 survey. In the latter study regular consumption was reported with regard to especially cannabis and mixtures of cannabis and mandrax (Rocha-Silva & Stahmer, 1996:12-13). Table 12 also shows that daily consumption (within the 12 months before the survey) was especially common in the case of cocaine powder (56.1%), mixtures of cannabis and mandrax (55.4%), cannabis (52.7%) and to a lesser extent mandrax (43.5%) and inhalants (40.8%). Past 12 months' consumers of designer drugs (57.6%), prescription pain relievers (64.6%) and steroids (87.1%) mostly consumed these drugs on a monthly basis. (Detailed demographic analysis of the reported frequency of drug consumption was inhibited by low response rates to the questions concerned.)

4.7.4 Main reasons for drug consumption

Table 13 presents the reported main reasons for past 12 months' drug consumption in the 2000 holding cell survey. For the reasons mentioned in earlier sections, the table focuses on illicit drugs, prescription medicine, inhalants and steroids.

Table 13: Main reasons for drug consumption among past 12 months' drug consumers

Reasons	Inha-lants	Canna-bis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphe-tamines	LSD	Designer drugs	Pre-scription pain relievers	Pre-scription relaxants	Pre-scription sleeping tablets	He-roin	Ste-roids	PCP
	Weighted percentages														
To experience positive feelings (pleasure)	27.9	27.3	23.8	29.0	61.0	14.4	-	33.5	-	-	-	8.5	-	-	-
To help overcome negative feelings/actions	9.4	5.5	3.9	2.3	-	-	-		-	-	-	-	-	-	-
To cope with stress	13.5	15.1	10.0	11.2	-	-	-	-	-	-	51.4	-	-	-	-
To escape life problems	3.2	6.7	11.4	6.5	6.2	16.1	-	-	22.2	-	-	-	-	-	-
For health/ physical reasons; to sleep/relax/ get stamina	9.9	25.0	17.0	19.4	16.8	21.7	24.9	-	-	49.0	48.6	91.4	-	100.0	-
To get a "high"; become "drunk"	2.7	2.5	1.6	-	-	-	59.4	52.7	-	5.0	-	-	-	-	-
To "please" friends	5.6	3.4	9.0	10.1	-	-	-	-	-	-	-	-	-	-	-
For the taste	3.7	0.3	2.4	-	-	-	-	-	-	-	-	-	-	-	-
To warm up in winter	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-
To experiment	9.4	1.1	6.8	10.1	16.0	47.7	-	-	-	-	-	-	-	-	-
No particular reason	14.6	12.5	14.2	11.3	-	-	15.6	3.8	77.8	46.0	-	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-

Table 13 shows with regard to the consumption of illicit drugs, prescription medicine, steroids and inhalants in the 12 months before the 2000 holding cell survey that the respondents particularly reported mood change (to get "high" or "drunk"; experience positive feelings), improvement of physical condition (to sleep better, relax; to increase stamina, strength), and coping with stress or problems. This finding is in line with the findings of related earlier studies (Rocha-Silva & Stahmer, 1996:24-26). Experiencing positive feelings (pleasure) was an especially common reason given for using cocaine (crack), inhalants, cannabis, mandrax and cannabis-mandrax mixtures; and getting a "high" or becoming "drunk" for using amphetamines. Improvement of physical condition (to sleep, relax, build stamina) was important in the consumption of prescription medicine and steroids.

- **Demographic differences (including interactions between demographic and other variables) in reported main reasons for drug consumption**

A CHAID analysis of differences among the reported *main reasons for drug consumption* (dependent variable) in the 2000 holding cell survey showed the following patterns with regard to past 12 months' use of cannabis: Past 12 months' consumption of cannabis for mood change was more common among the respondents who said that in the month before the survey they had lived in a neighbourhood where they very often/often witnessed drug trading, than among the respondents who did not report witnessing drug trading very often/often. Past 12 months' consumers of cannabis who consumed this drug mainly for mood change and who had witnessed drug trading very often/often, particularly included persons who said that they could easily get hold of a knife if they wanted a knife, who were inhabitants of the Western Cape, KwaZulu-Natal, North West and Gauteng, and who had been detained for a violent or drug law offence.

4.7.5 Context of drug consumption

Table 14 presents the findings of the national holding cell survey on the context within which drugs were consumed in the 12 months before the survey. More particularly, the table focuses on the issue of whether various drugs were mostly consumed in company and/or alone, what type of company (if in company), the place where various drugs were mostly consumed, and the mode in which various drugs were taken.

Table 14: Context within which past 12 months' drug users consumed various drugs

Context	Inhalants	Cannabis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphetamines	LSD	Designer drugs	Prescription pain relievers	Prescription relaxants	Prescription sleeping tablets	Heroin	Steroids	PCP
	Weighted percentages														
Mode (mostly)															
Oral	-	0.4	-	6.1	-	-	40.6	13.8	100.0	100.0	100.0	94.4	-	100.0	-
Smoke	20.4	98.1	92.2	80.5	26.4	10.2	59.4	86.2	-	-	-	5.6	-	-	-
Inhale	79.6	1.4	5.6	4.8	66.4	89.8	-	-	-	-	-	-	-	-	-
Inject	-	-	2.2	5.4	-	7.2	-	-	-	-	-	-	-	-	-
Other	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-
Sharing of injecting equipment ("yes")	*	*	*	100.0	*	-	*	*	*	-	*	*	*	-	-
Alone/company (mostly)															
Company	73.8	55.7	74.6	78.4	87.5	73.3	83.8	100.0	57.6	-	5.0	9.0	-	100.0	-
Alone	16.7	23.7	7.6	4.8	-	11.4	10.8	-	-	82.6	86.7	91.0	-	-	-
Both	9.5	20.6	17.8	16.8	12.5	15.3	5.4	-	42.4	17.4	8.3	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-
Type of company (mostly)															
Spouse/partner	-	0.8	-	-	7.3	-	-	13.8	-	14.1	37.4	37.8	-	-	-
Relatives	3.4	5.6	-	10.0	-	-	17.4	-	57.6	35.4	-	-	-	-	-
Friends	96.6	91.6	100.0	90.0	92.7	100.0	82.6	86.2	42.4	50.5	62.6	62.2	-	100.0	-
Gang members	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
People in trouble with the law	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-
Place of use (mostly)															
Own home	16.4	35.2	14.5	9.8	52.6	-	85.8	66.5	57.6	54.3	91.7	94.4	-	12.9	-
Other's home	12.8	15.6	3.0	6.9	19.1	33.7	-	-	-	12.9	-	-	-	87.1	-
Shebeen/tavern/ lounge/club	6.5	1.7	6.5	14.1	-	-	-	7.2	-	-	-	-	-	-	-
Drug dealer's place	6.7	3.1	9.0	9.4	7.3	-	-	21.6	-	-	-	-	-	-	-
Any place	44.7	22.5	29.7	34.5	21.0	54.9	5.4	4.8	42.4	5.0	8.3	5.6	-	-	-
Other	12.9	22.0	37.3	25.3	-	11.4	8.8	-	-	27.9	-	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	-

* No data accumulated

- **Mode in which drugs were taken**

Regarding the mode in which drugs (other than alcohol, tobacco and over-the-counter medicine) were taken in the 12 months before the survey, Table 14 indicates the following patterns that are generally in line with local and overseas practices: Inhalants were mostly inhaled (79.6%) but sometimes they were smoked (20.4%). Cannabis (98.1%), mandrax (80.5%) or mixtures (92.2%) of these substances were mostly smoked, although injecting mandrax (5.4%) and the cannabis-mandrax mixture (2.2%), as well as inhaling these cannabis-related products, was also reported. The respondents who reported *injecting mandrax* also indicated that they had *shared injecting equipment at some time in their life.* Cocaine—whether as crack (66.4%) or in powder form (89.8%)—was mostly inhaled, although some respondents (7.2%) reported *injecting cocaine* powder. Designer drugs (100.0%), prescription pain relievers and relaxants (100.0%) and to a lesser extent steroids (94.4%) were taken orally. Whereas many (40.6%) of the past 12 months' users of amphetamines indicated that they mostly ingested these drugs orally, the majority (59.4%) said that they mostly smoked these substances. This finding—that many consumers of amphetamines mostly smoked these substances—is in line with recent patterns noted in Europe but in contrast with reports in the USA (United Nations Office for Drug Control and Crime Prevention, 1999a:141-143).

- **Company in which drugs were taken**

Table 14 also shows that past 12 months' users of illicit drugs, prescription medicine, steroids and inhalants typically took these drugs in company, especially that of *friends*. (Whereas this finding is in accordance with the findings in the 1996 survey among prisoners, it is in contrast with the finding in various earlier studies in the general population in South Africa in which users of illicit drugs tended to report that they mostly took the substances when alone (Rocha-Silva, 1998:46).) Exceptions were the following: First, consumers of prescription medicine for non-medical purposes generally indicated that they took the medicine when they were alone; second, many consumers of designer drugs (57.6%) and prescription pain relievers (35.4%) who reported that they mostly consumed these substances together with other people, said that the latter were *relatives*; third, many of the consumers of prescription (a) relaxants and (b) sleeping tablets (respectively 37.4% and 37.8%) who took these substances mostly in the company of other people, indicated a *spouse/partner* as their usual partner. Table 14, furthermore, shows that—as in the 1996 survey among prisoners (Rocha-Silva & Stahmer, 1996:26)—*cannabis consumers* who reported that they mostly took this substance

in the company of other people were the only illicit drug consumers who included persons (1.4%) who said that they mostly took the substance in the *company of people who at some time or other had been in trouble with the law*.

- **Place of drug use**

Table 14 indicates with regard to the places where the drugs under discussion were mostly taken that—as in the case of past national surveys of drug use in the general population (Rocha-Silva, 1998:26)—*private homes* (whether one's own or someone else's) were very popular, especially in the case of prescription medicine, steroids, amphetamines, LSD and crack cocaine. Table 14 also shows that many consumers of cocaine powder (54.9%), inhalants (44.7%), designer drugs (42.4%), mandrax (34.5%), the cannabis-mandrax mixture (29.7%) and cannabis (22.5%) reported that they *did not restrict themselves to a particular place*. Some users of mandrax (9.4%), the cannabis-mandrax mixture (9.0%), crack cocaine (7.3%), inhalants (6.7%) and especially LSD (21.6%) pointed out that they mostly consumed these drugs at the place of a *drug trader/dealer*. Similarly, *shebeens/taverns or clubs* were the places of choice of a fair number of consumers of mandrax (14.1%), LSD (7.2%), the cannabis-mandrax mixture (6.5%) and inhalants (6.5%).

- **Participation in drug trading/trafficking**

It is also important to note that many of the self-reported lifetime consumers of crack cocaine (39.6%), designer drugs (22.2%), the cannabis-mandrax mixture (27.0%), cannabis (21.4%) and cocaine powder (18.5%) in the 2000 holding cell survey admitted that at some time in their life they had participated in *illicit drug trading/trafficking*. In the three-metro study (Parry, Louw, Vardas & Plüddemann, 2001:21, 2000a:18, 2000b:21) fewer of these drug consumers admitted participation in drug trading. For example, in the first phase 9.0% of the respondents in the Cape Town research site, 5.0% in Durban and 6.0% in Gauteng reported that they had at some time or other traded in alcohol; 5.6% admitted selling cannabis at some time in their life and 5.0% said the same with regard to mandrax (Parry, Louw, Vardas & Plüddemann, 2000a:18).

- **Demographic differences (including interactions between demographic and other variables) with regard to the reported context of drug consumption**

A CHAID analysis of the *context in which various drugs were consumed* (dependent variable) in the 12 months before the 2000 holding cell survey revealed the following:

- Reports of witnessing drug trading often/very often in the month before the survey differentiated significantly per response category in respect of the question of whether or not cannabis was mostly consumed in the company of other people in the 12 months before the survey. The respondents who said that in the month before the survey they had often/very often *witnessed drug trading* in the neighbourhood where they lived were more likely to be past 12 months' consumers of *cannabis* who mostly *consumed* this drug *in* the *company* of other people. Furthermore, past 12 months' consumers of cannabis who mostly consumed this drug in the company of other people and who said that they had often/very often witnessed drug trading, were mainly inhabitants of the Western Cape, Northern Cape, North West and the Northern Province. A chi-square test also showed a statistically significant association between group consumption of cannabis and (a) *trying to get hold of cannabis/tobacco*, (b) *possession of a firearm* and (c) the type of alleged offence for which the person was arrested. Group consumption of cannabis was (a) more common among the respondents who were trying to get hold of cannabis/tobacco than among those who did not try to do so, (b) more common among those who had a firearm when they were arrested than those who did not have a firearm, and (c) more common among those who had been arrested for *rape* or, to a lesser extent, a *drug law offence* than among those who had been arrested for other offences.

- *Past 12 months' consumers of cannabis* who mostly consumed this drug in a *private home* (their own or another home) were more common among the respondents who had often/very often witnessed *drug trading* where they lived in the month before the survey than among those who had not witnessed drug trading or had done so to a limited extent. Past 12 months' consumers of cannabis who mostly consumed this drug in a private home and reported that they had often/very often witnessed drug trading in the month before the survey, comprised persons in the younger (18-29 years) rather than the older age group, and especially persons who did not have dependent children. A chi-square test also showed a statistically significant association between private home consumption of cannabis among past 12 months' consumers of the drug and reports of *trying to get hold of cannabis* when arrested at the time of the survey.

- Reports of *trading in cannabis* at some time or other were more common among the respondents who said that they had *witnessed drug trading often/very often* where they lived in the month before the survey than among those who had not witnessed drug trading or had done so to a limited extent. The respondents who had witnessed drug trading often/very often and admitted trading in cannabis at some time in their life especially comprised persons who said that *if they wanted a knife they could easily get hold of one.* They were also predominantly from the Western Cape, Northern Cape, KwaZulu-Natal, North West and the Northern Province, and *believed that ownership of a gun instilled respect in others*.

- Persons who admitted *trading in some drug or other* at some time in their life were more common among those respondents who indicated that they had *witnessed drug trading* where they lived in the month before the survey than among those who had not witnessed such trading. This group included especially inhabitants of the Western Cape, Northern Cape, KwaZulu-Natal, North West, Gauteng and the Northern Province. A chi-square test also showed a statistically significant association between lifetime participation in drug trading and *possessing a firearm* when arrested at the time of the survey.

4.7.6 Use of injectable drugs among lifetime drug consumers

Drug consumption (particularly drug injection) has been identified worldwide as a risky practice in terms of contracting and transmitting HIV, horizontally as well as vertically (mother-to-child). Of particular concern is that HIV infection among injecting drug consumers plays a major role in the escalation of the HIV epidemic through these people's association with groups who would otherwise not be at risk. HIV infection among drug consumers in treatment also increases the burden on drug-related treatment facilities and health care generally. Table 15 presents the extent to which lifetime users of various illicit drugs within various age groups admitted drug injection.

Table 15: Injecting drug use among lifetime drug users ("yes" responses)

Age (years)	Inhalants	Cannabis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphetamines	LSD	Designer drugs	Prescription pain relievers	Prescription relaxants	Prescription sleeping tablets	Heroin	Steroids	PCP
	Weighted percentages														
<10	*	*	*	-	*	-	*	*	*	-	-	*	-	-	-
10-19	*	*	*	15.1	*	37.6	*	*	*	5.6	18.5	*	-	37.0	-
20-29	*	*	*	-	*	-	*	*	*	-	-	*	-	-	-
≥30	*	*	*	-	*	-	*	*	*	-	-	*	-	-	-
Sharing of injecting equipment ("Yes")	*	*	*	50.4	*	81.5	*	*	*	23.1	-	*	-	100.0	-

* No data accumulated

Table 15 shows that many lifetime consumers of cocaine powder (37.6%), steroids (37.0%) and, to a lesser extent, prescription relaxants (18.5%) and mandrax (15.1%) reported that at some time in their life they had injected a drug for non-medical reasons and, thus, were at risk of HIV infection. (Detailed demographic analysis of the reported injection of drugs among lifetime drug consumers was inhibited by low response rates to the questions concerned.)

4.8 SELF-REPORTED DRUG-RELATED HARM

In the 2000 holding cell survey questions were asked as to whether lifetime consumers of drugs such as inhalants, cannabis, mandrax, the cannabis-mandrax mixture, cocaine, amphetamines, LSD, designer drugs, prescription medicine and steroids had ever had negative experiences (e.g. quarrels/fights) at the time or immediately after they took a particular drug. The respondents were also asked whether they were trying to get hold of particular drugs when they were arrested at the time of the survey. An affirmative answer was assumed to indicate participation in crime to support personal drug use habits. Table 16 presents the extent to which lifetime users reported experiences of drug-related harm, and Table 17 the extent to which the respondents were trying to get hold of particular drugs when they were arrested at the time of the survey.

Table 16: Experiences of drug-related harm among lifetime drug consumers ("yes" responses)

Experiences	Inhalants	Cannabis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphetamines	LSD	Designer drugs	Prescription pain relievers	Prescription relaxants	Prescription sleeping tablets	Heroin	Steroids	PCP
	Weighted percentages														
During/after drug use															
got involved in quarrels and/or fights;	21.6	16.5	22.5	29.9	39.9	47.8	29.7	-	79.8	5.2	-	9.5	-	42.5	-
used a firearm;	-	1.3	1.1	-	-	-	29.7	-	-	-	-	-	-	37.0	-
arrested by police;	15.4	26.3	22.7	25.0	54.2	12.1	32.4	14.2	-	-	3.9	1.8	-	37.0	-
lost job;	9.5	6.4	13.5	20.7	59.6	32.8	32.4	3.2	-	-	-	-	-	37.0	-
had accident while driving;	0.7	0.5	1.2	4.4	49.0	7.0	29.7	34.8	22.2	1.6	-	-	-	37.0	-
got hurt through road accident;	1.0	2.5	5.3	13.4	49.0	12.1	29.7	39.5	22.2	2.5	-	1.8	-	42,2	-
got hurt through another accident;	6.3	4.0	3.2	-	39.6	5.2	33.8	-	22.2	5.0	-	-	-	37.0	-
wished were dead.	9.0	5.7	15.9	27.2	74.0	51.3	6.8	14.3	20.2	2.0	7.5	-	-	7.6	-
Ever involved in drug trading.	6.5	21.4	27.0	13.8	39.6	18.5	-	9.2	22.2	16.4	-	3.5	-	7.6	-

Table 16 indicates the following patterns:

- Suicidal feelings ("wished were dead") were common among users of cocaine, whether in the form of crack (74.0%) or powder (51.3%).
- Involvement in violence ("quarrels/fights") was common among users of designer drugs (79.8%), cocaine powder (47.8%), steroids (42.5%), cocaine (crack) (39.9%) and, to a lesser extent, mandrax (29.9%), amphetamines (29.7%), the cannabis-mandrax mixture (22.5%) and inhalants (21.6%).
- Use of a firearm occurred widely among steroid users (37.0%) and amphetamine users (29.7%).
- Arrest by the police was common among users of crack cocaine (54.2%), steroids (37.0%), amphetamines (32.4%), cannabis (26.3%), mandrax (25.0%) and the cannabis-mandrax mixture (22.7%).
- Job loss occurred commonly among users of crack cocaine (59.6%), steroids (37.0%), cocaine powder (32.8%), amphetamines (32.4%) and mandrax (20.7%).
- Road accidents were common among users of crack cocaine (49.0%), steroids (37.0%), LSD (34.8%), amphetamines (29.7%) and designer drugs (22.2%).
- Road accident injuries occurred commonly among users of crack cocaine (49.0%), steroids (42.2%), LSD (39.5%), amphetamines (29.7%) and designer drugs (22.2%).
- Injuries in other accidents were common among users of crack cocaine (39.6%), steroids (37.0%), amphetamines (33.8%) and designer drugs (22.2%).

- **Demographic differences (including interactions between demographic and other variables) with regard to experiences of drug-related harm**

CHAID analysis revealed that the respondents who said that at some time in their life they had *stabbed someone with a knife*—rather than those who denied having stabbed someone with a knife—were *lifetime users of cannabis who reported negative experiences* such as quarrels/fights and suicidal feelings (dependent variable) during or immediately after they took cannabis. A chi-square test also showed a statistically significant association between reports of *negative experiences* accompanying cannabis use and reports of "*trying to get hold of cannabis*" when arrested at the time of the survey.

Table 17: "Tried to get hold" of various drugs when arrested at time of survey

Drugs	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North-West	Gauteng	Mpumalanga	Northern Province	Total
	Weighted percentages									
Alcohol										
Yes	31.8	19.6	5.7	12.3	3.8	4.5	16.0	4.1	2.2	17.7
No	15.5	12.9	4.4	4.9	17.8	6.6	28.3	6.3	3.2	82.3
Total (%)										100.0
Tobacco										
Yes	24.1	16.2	4.5	13.1	4.5	1.9	31.0	1.5	3.2	17.6
No	17.2	13.7	4.7	4.8	17.6	7.1	25.1	6.8	3.0	82.5
Total (%)										100.0
Prescription drugs										
Yes	45.7	2.8	-	-	-	-	51.5	-	-	1.2
No	18.1	14.3	4.7	6.3	15.5	6.3	25.8	6.0	3.1	98.8
Total (%)										100.0
Cannabis										
Yes	35.7	8.8	2.2	8.7	20.1	5.5	17.3	1.8	-	5.9
No	17.3	14.4	4.8	6.1	15.0	6.3	26.7	6.2	3.2	94.1
Total (%)										100.0
Drugs other than alcohol, tobacco and cannabis										
Yes	46.8	17.6	-	4.9	27.7	-	-	3.1	-	1.2
No	18.2	14.0	4.6	6.3	15.2	6.3	25.6	5.9	3.1	98.9
Total (%)										100.0

Table 17 shows that many respondents indicated that they were *trying to get hold of* alcohol (17.7%)—in the three-metro study (Parry et al., 2001:23, 2000a:20, 2000b:23) the percentages varied between 8.0% and 34.6%—and/or tobacco (17.6%) at the time of their arrest. Among the group who replied affirmatively to the question on alcohol, the respondents from the Western Cape constituted the highest percentage, followed by those from the Eastern Cape, Gauteng and the Free State. Among the group who replied affirmatively to the question on tobacco, the respondents from Gauteng constituted the highest percentage, followed by those from the Western Cape, Eastern Cape and Free State. Table 17 also shows that only 1.2% of the respondents replied affirmatively to the question on whether they were *trying to get hold of* prescription drugs at the time of their arrest. The majority of the respondents in this group came from Gauteng followed by those from the Western Cape. Table 17, furthermore, indicates that only 5.9% of the respondents replied affirmatively to the related question on cannabis. Most of the respondents in this group came from the Western Cape, followed by those from KwaZulu-Natal, Gauteng and the Eastern Cape.

Table 17, furthermore, indicates that only 1.2% of the respondents said they were *trying to get hold of a drug other than alcohol, tobacco, prescription medicines and cannabis* at the time of their arrest. This group comprised mainly persons from the Western Cape, KwaZulu-Natal and the Eastern Cape.

- **Demographic differences (including interactions between demographic and other variables) with regard to reports that efforts were made to get hold of drugs when arrested at time of survey**

A CHAID analysis of reports that *efforts were made to get hold of drugs when arrested* (dependent variable) at the time of the survey revealed the following patterns:

- Place of residence (province) differentiated most significantly per response category in respect of the question of whether respondents were trying to get hold of alcohol when they were arrested at the time of the survey. The respondents from the *Western Cape, the Eastern Cape, the Northern Cape* and the *Free State* were more likely to say that they had *tried to get hold of alcohol* when they were arrested at the time of the survey, apart from comprising especially persons (a) who had been arrested for a *violent or drug law crime*, and persons (b) who reported that they had often/very often *witnessed fights/quarrels* where they lived in the month before the survey.

- The respondents from the *Free State* and to a lesser extent from the *Western Cape, the Eastern Cape, the Northern Cape, Gauteng* and the *Northern Province* were more likely to indicate that they had *tried to get hold of tobacco* when they were arrested at the time of the survey. Respondents from the Western Cape, the Eastern Cape, the Northern Cape, Gauteng and the Northern Province also included mainly persons who had been arrested at the time of the survey for a *violent or drug law offence* and had *dependent children.*

- The type of offence for which respondents were arrested at the time of the survey most significantly differentiated per response category in respect of the question as to whether they tried to get hold of cannabis when they were arrested. The respondents who had been arrested at the time of the survey for a *drug law offence* were more likely to indicate that they had *tried to get hold of cannabis* when they were arrested at the time of the survey. These respondents were also mainly inhabitants of the *Western Cape, the Free State, KwaZulu-Natal and North West.*

4.9 DRUG DEPENDENCE AND RELATED TREATMENT EXPERIENCES

Table 18 indicates the responses of lifetime consumers of drugs to the questions: "Ever felt could not do without ...", "Ever received treatment for ...", and "If 'yes', what kind of treatment was received".

Table 18: Lifetime drug consumers: "Ever felt could not do without ...", "ever received treatment for ...", kind of treatment received ("yes" responses)

Age (years)	Inha-lants	Canna-bis	Cannabis-mandrax mix	Man-drax	Cocaine (crack)	Cocaine (powder)	Amphe-tami-nes	LSD	Designer drugs	Prescrip-tion pain relievers	Pre-scription relaxants	Prescription sleeping tablets	He-roin	Ste-roids	PCP
	Weighted percentages														
"Ever felt could not do without ..."	20.9	35.4	33.9	34.0	34.4	40.8	22.1	17.4	42.4	28.5	5.7	19.1	-	11.0	-
"Ever received treatment for ..."	4.4	10.9	12.3	9.0	51.5	-	47.0	-	-	12.6	11.5	8.0	-	37.0	-
Kind of treatment received:															
In-patient	28.5	29.0	10.9	-	-	-	-	-	-	20.0	-	27.6	-	-	-
Out-patient	71.5	70.3	89.1	100.0	100.0	-	100.0	-	-	80.0	100.0	72.4	-	100.0	-
Other	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 18 shows that many lifetime drug users replied affirmatively to the question as to whether they had ever felt they "*could not do without*" and, thus were dependent on the use of particular drugs. Affirmative responses particularly applied to the use of designer drugs (42.4%), cocaine powder (40.8%), cannabis (35.4%), crack cocaine (34.4%), mandrax (34.0%), the cannabis-mandrax mixture (33.9%), prescription pain relievers (28.5%), amphetamines (22.1%), inhalants (20.9%), prescription sleeping tablets (19.1%) and LSD (17.4%). With three exceptions—lifetime users of crack cocaine (51.5%), amphetamines (47.0%) and steroids (37.0%)—comparatively few of the lifetime users of various drugs reported that they had had *drug-related treatment* at some time in their life (between 4.4% and 12.6%). The great majority (between 70.3% and 100.0%) of those who reported drug-related treatment said that they had enrolled at an out-patient rather than an in-patient facility.

- **Demographic differences (including interactions between demographic and other variables) with regard to reports of dependence and drug-related treatment experiences**

A CHAID analysis of differences in the responses to the questions related to *drug-related treatment experiences* (dependent variable) revealed the following patterns:

- The respondents who had *witnessed drug trading very often* where they lived in the month before the survey were more likely than those who had not done so to be lifetime users of *inhalants* who at some time in their life had felt that they "*could not do without*" this drug. These respondents were also especially persons who had been *threatened with a gun* at some time in their life.
- The respondents who had *witnessed drug trading very often or often* where they lived in the month before the survey were also more likely than those who did not witness such trading to be lifetime users of *cannabis* who at some time in their lives had felt that they "*could not do without*" this drug. This group also included mostly people who said that (a) they could *easily get hold of a knife* if they wanted one, and (b) who were inhabitants of the Western Cape, Northern Cape, KwaZulu-Natal and Gauteng. A chi-square test, furthermore, showed a statistically significant association between reports of not being able to "*do without*" cannabis and (a) "*trying to get hold of cannabis*", as well as (b) "*possessing a firearm*" when arrested at the time of the survey. The respondents who reported that they "*could not do without*" cannabis were common

among those who "*tried to get hold of cannabis*" and who had a firearm with them when they were arrested at the time of the survey.

- The respondents who reported that before their arrest at the time of the survey they had been *convicted of an offence* were more likely to be lifetime users of the *mandrax-cannabis mixture* who at some time in their life "*could not do without*" this drug than those who had not been convicted.

- The respondents from a *non-African cultural background*—rather than those from an African cultural background—were lifetime users of *mandrax* who at some time in their life had "*not been able to do without*" this drug. This group also especially included persons in the age category *18-39 years* who had *witnessed drug trading* in the neighbourhood in which they lived in the month before the survey. A chi-square test, furthermore, showed a statistically significant association between reports of "*not being able to do without*" mandrax and (a) reports of "*trying to get hold of cannabis*", and (b) the type of offence arrested for at the time of the survey. The respondents who reported experiences of "*not being able to do without mandrax*" were common among (a) persons who were "*trying to get hold of cannabis*", and (b) persons who were arrested for *rape* at the time of the survey.

- The *male* lifetime users of *cannabis* were more likely than the female lifetime users of this drug to report that they had *received treatment* for this drug at some time in their life. Those males who had received treatment for cannabis at some time in their life were also especially persons who had *witnessed drug trading* often/very often where they lived in the month before the survey. A chi-square test, furthermore, showed a statistically significant association between reports of *treatment for cannabis* and "*possessing a firearm*" when arrested at the time of the survey. The respondents who had received treatment for cannabis at some time in their life were common among those who had a firearm with them when they were arrested at the time of the survey.

4.10 PERCEIVED TREATMENT NEEDS

Regarding expressions of a need for drug-related treatment among the survey respondents, it should be noted that, because of limited interview time, questions on immediate treatment needs were restricted to users of illicit drugs, inhalants and prescription drugs. Table 19 presents the responses to the questions on treatment needs in the survey.

Table 19: Drug-related treatment needs of respondents who used drugs in the 30 days prior to the survey ("yes" responses)

Treatment	Inha-lants	Cannabis	Mixture of Cannabis and Man-drax	Man-drax	Cocaine (crack)	Cocaine (powder)	Amphe-tamines	LSD	Designer drugs	Prescription pain relievers	Prescrip-tion relaxants	Prescription sleeping tablets	He-roin	Steroids	PCP
	Weighted percentages														
Want treatment now	44.3	53.8	50.8	59.0	85.4	57.1	82.9	7.5	100.0	47.4	19.3	-	-	-	-
Kind of treatment wanted:															
Social work	64.8	14.0	17.7	6.8	9.1	-	-	-	-	-	-	-	-	-	-
Psychologist	-	8.0	10.1	17.6	-	-	7.2	100.0	100.0	24.6	100.0	-	-	-	-
AA	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Drug counsellor	18.8	38.4	47.2	54.8	17.0	100.0	-	-	-	33.0	-	-	-	-	-
Medical practitioner	16.4	24.1	25.0	20.8	73.9	-	92.8	-	-	12.1	-	-	-	-	-
Church	-	10.2	-	-	-	-	-	-	-	30.4	-	-	-	-	-
Other	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	-	-	-

Table 19 shows that consumers of illicit drugs (as well as consumers of inhalants and prescription medicine) frequently expressed an immediate need for treatment. (This finding concurs with the related findings in the 1996 survey among prisoners in South Africa (Rocha-Silva & Stahmer, 1996).) While comparatively few LSD consumers (7.5%) indicated a need for treatment, the respondents who replied affirmatively to the particular question included especially persons who consumed designer drugs (100.0%), crack cocaine (85.4%), amphetamines (82.9%), mandrax (59.0%), cocaine powder (57.1%), cannabis (53.8%) and the cannabis-mandrax mixture (50.8%). Table 16 also indicates that those respondents who expressed a need for treatment for the consumption of designer drugs and/or LSD all indicated a preference for treatment by a psychologist, while those who wanted treatment for the consumption of cocaine powder (100.0%), mandrax (54.8%), the cannabis-mandrax mixture (47.2%) and cannabis (38.4%) tended to prefer the assistance of a specialist drug counsellor. Consumers of crack cocaine (73.9%) and amphetamines (92.8%) mostly expressed a need for assistance from a medical practitioner. Those respondents who wanted assistance for inhalant consumption (64.8%) expressed a preference for assistance from the social work profession, suggesting a need for a wide range of social services. (Detailed demographic analysis of the reported treatment needs was inhibited by low response rates to the questions concerned.)

4.11 LEVEL OF ACCESS TO AND DEMAND FOR DRUGS

Table 20 presents the findings of the 2000 holding cell survey on the extent to which the respondents experienced access to and a demand for drugs.

Table 20: Demand for and access to drugs ("yes" responses)

Demand/ access	Inhalants	Cannabis	Cannabis-mandrax mix	Mandrax	Cocaine (crack)	Cocaine (powder)	Amphe-tamines	LSD	Designer drugs	Prescrip-tion pain relievers	Pre-scription relaxants	Prescrip-tion sleeping tablets	Heroin	Steroids	PCP
	Weighted percentages														
Demand															
Ever heard of ...*	76.3	89.3	59.9	67.2	23.9	46.3	23.4	14.3	5.9	14.9	11.3	21.4	10.9	22.0	2.4
Ever offered ...**	11.3	34.5	13.3	7.8	5.7	3.1	7.8	12.2	5.3	18.2	13.6	12.8	-	9.4	6.5
Ever forced to take ...***	4.8	6.4	2.4	0.9	0.6	0.5	5.2	4.3	-	2.1	-	1.0	-	0.8	-
Access¤															
Most difficult	-	8.9	-	-	17.0	-	-	-	-	15.0	-	-	-	-	-
Difficult	-	11.9	8.0	24.1	9.1	65.8	-	16.9	-	22.9	-	-	-	-	-
Easy	26.4	41.6	60.5	36.1	65.0	-	100.0	83.1	-	-	100.0	100.0	-	100.0	-
Very easy	73.6	37.6	31.5	39.8	8.9	34.2	-	-	-	62.1	-	-	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	-

* All respondents

** "Ever heard" respondents ("yes" responses)

*** "Ever heard" respondents ("yes" responses)

¤ Drug users who reported use in the three days before the survey

Regarding access to drugs, Table 20 shows that respondents who reported consumption of one or more drugs such as inhalants, cannabis, mandrax, the cannabis-mandrax mixture, cocaine, amphetamines, LSD, designer drugs, prescription medicine and steroids in the three days before the survey, often said that it was easy or very easy to obtain these drugs. (The questions on the availability of drugs were administered to those respondents who consumed drugs in the three days before the survey.) However, the majority (65.8%) of consumers of cocaine powder reported that it was difficult to obtain this drug. Consumers of inhalants (73.6%) and of prescription pain relievers (62.1%) mostly reported that it was very easy to obtain these substances. In the 1996 survey among prisoners (Rocha-Silva & Stahmer, 1996:32) low percentages (between 13.7% and 30.4%) of the respondents—in comparison with the percentages in national holding cell survey—indicated that it had been easy/very easy to obtain some or other illicit drug in the 12 months before their incarceration. This suggests that in the mid-1990s illicit drugs were less available than in 2000 among persons who committed some or other offence. (Detailed demographic analysis of the reported availability of drugs was complicated because of comparatively low response rates to the particular questions.)

Regarding the extent to which the respondents in the 2000 holding cell survey experienced a demand for drugs, Table 20 shows that particular drugs were generally *widely known*. (As noted earlier, the relevant questions were restricted to inhalants, cannabis, mandrax and the cannabis-mandrax mixture, cocaine, LSD, amphetamines, designer drugs, prescription medicine, heroin, PCP and steroids.) Table 20 also indicates that experiences of *pressure to use* the drugs were not uncommon. Several respondents, especially in respect of cannabis, reported that they had been offered the drugs concerned at some time in their life. Some also reported that they had been forced to use particular drugs at some time or other, especially cannabis. More specifically Table 20 shows the following patterns:

- The majority of the respondents reported that they had *heard about* cannabis (89.3%), inhalants (76.3%), mandrax (67.2%) and the cannabis-mandrax mixture (59.9%); many had also heard about cocaine powder (46.3%), cocaine crack (23.9%), amphetamines (23.4%), steroids (22.0%), prescription sleeping tablets (21.4%), prescription pain relievers (14.9%) and LSD (14.3%).
- Many of the respondents reported offers of cannabis (34.5%), while some (between 3.1% and 18.2%) reported offers of prescription pain relievers, prescription relaxants,

the cannabis-mandrax mixture, prescription sleeping tablets, LSD, inhalants, steroids, mandrax, amphetamines, PCP, cocaine (crack and powder) and designer drugs.

- Some of the respondents (between 0.5% and 6.4%) also reported coercion to take certain drugs, particularly cannabis, amphetamines and inhalants.

- **Demographic differences (including interactions between demographic and other variables) with regard to reports of pressure to consume drugs**

A CHAID analysis of demographic differences among the survey respondents who *experienced pressure to consume drugs* (dependent variable) revealed the following:

- The respondents who said that they could *easily get hold of a knife* if they wanted one were more likely to say that they had been *offered and/or forced to use inhalants* at some time in their life than those who could not easily get hold of a knife. These respondents were also mostly from the *Western Cape, Free State, KwaZulu-Natal, North West and Gauteng*, apart from persons who *had used a knife at some time in their life while committing an offence*.

- The respondents from the *Western Cape and Northern Cape* were more likely than those from the other provinces to say that they had been *offered/forced to use cannabis* at some time in their life, apart from being especially persons who said it would be *easy for them to get hold of a knife* if they wanted one. The respondents from *KwaZulu-Natal, North West and Gauteng* who indicated that they had been offered/forced to use cannabis were mainly males who had *witnessed drug trading* where they lived in the month before the survey. A chi-square test also showed a statistically significant association between experiences of offers of and/or force to use cannabis and *trying to get hold of cannabis/tobacco* at the time of their arrest.

- The respondents from the *Western Cape*—rather than those from the other provinces—reported that they had been *offered/forced to use the cannabis-mandrax mixture* at some time in their life.

- The respondents from the *Western Cape* were more likely than those from the other provinces to indicate that they had been *offered/forced to use (a) mandrax* and/or (b) *cocaine (crack or powder)* at some time in their life.

- The respondents from *North West and Gauteng*—rather than those from the other provinces—indicated that they had been *offered/forced to use prescription pain*

relievers non-medically at some time in their life. This group also included especially persons who reported that they had been aware of *graffiti* on the walls of buildings and thus, by implication, were exposed to gang activities in their residential area in the month before the survey.

- The respondents from *Gauteng* were more likely than than those from the other provinces to indicate that at some time in their life they had been *offered/forced to use prescribed sleeping tablets non-medically.* This group also comprised mostly persons who reported that where they had lived in the month before the survey they had often/very often witnessed people *walking around at night without a weapon.*

- The respondents who estimated that at least three out of ten people in the neighbourhood where they lived at the time of the survey had *HIV/AIDS* were more likely than those who gave a lower estimate or no estimate to indicate that they had been *offered/forced to use some drug or other* at some time in their life. This group also consisted mainly of persons who reported that at some time in their life they had been *threatened with a weapon other than a firearm.*

4.12 SELF-REPORTED CRIMINAL HISTORY OF THE RESPONDENTS

Tables 21 to 23 present the self-reported criminal history of the respondents in the 2000 holding cell survey during three periods: (a) the period prior to the 12 months before the survey (Table 21), (b) the 12 months before the survey (Table 22), and (c) at the time of the survey (Table 23).

Table 21: Arrests and convictions prior to the 12 months before arrest at the time of the survey

Arrests and convictions	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Northern Province	Total
	Weighted percentages									
Arrests before the 12 months before arrest at time of survey										
Yes	22.4	12.6	8.2	4.3	9.7	8.2	25.4	7.2	2.0	24.7
No	17.1	14.7	3.5	6.9	17.1	5.5	26.4	5.4	3.3	75.3
Total (%)										100.0
Conviction for an offence before arrest at the time of the survey										
Yes	38.3	12.5	6.5	5.7	3.9	5.4	16.4	9.0	2.4	46.1
No	9.3	13.0	9.9	3.1	13.2	10.9	33.9	5.1	1.6	53.9
Total (%)										100.0
Type of offence mostly convicted for before the 12 months before arrest at the time of the survey										
Violent crimes	45.0	9.2	6.6	3.7	1.9	10.3	13.2	6.7	3.5	48.5
Property crimes	38.2	16.1	7.6	9.6	5.0	1.3	8.0	11.9	2.3	32.9
Drug-related crimes	29.0	21.8	7.8	4.1	5.8	-	19.4	12.2	-	12.3
Miscellaneous	21.0	5.6	-	6.5	12.6	-	45.5	8.7	-	5.4
Unknown	-	-	-	-	-	-	100.0	-	-	0.9
Total (%)										100.0
Age at very first arrest										
10-17 years	20.9	6.9	13.6	3.5	11.7	12.1	21.8	8.8	0.9	20.5
18-25 years	25.0	15.5	8.3	3.5	9.3	9.8	20.1	5.8	2.7	45.0
26-39 years	24.9	12.4	4.8	6.9	8.5	4.2	29.5	8.1	0.8	27.6
≥ 40 years	7.4	15.8	8.1	2.3	4.7	2.9	51.2	2.1	5.6	7.0
Total (%)										100.0
Offence at very first arrest										
Violent crimes	26.9	6.6	7.0	4.3	12.1	7.1	25.4	6.4	4.3	44.2
Property crimes	19.3	18.4	4.5	2.8	10.4	12.4	23.4	8.3	0.5	33.2
Drug-related crimes	27.1	20.1	22.1	4.7	2.6	1.2	14.2	8.1	-	16.3
Immigration	-	-	-	-	-	22.5	52.7	24.7	-	1.0
Miscellaneous	18.1	16.6	-	15.7	7.3	-	37.0	5.4	-	4.4
Unknown	-	-	-	-	-	-	100.0	-	-	1.1
Total (%)										100.0

- **Criminal activity prior to the 12 months before the alleged offence at the time of the survey**

In respect of the offences reported in the 2000 holding cell survey regarding the period prior to the 12 months before the survey, Table 21 shows that nearly a quarter (24.7%) of the respondents reported that they had been *arrested* for some offence before the 12 months before their arrest at the time of the survey. This group comprised especially persons from Gauteng, the Western Cape, Eastern Cape and Northern Cape. (Here and in the following reference, the results are reported from the highest to the lowest percentages achieved.) Table 21 also shows that nearly half (46.1%) of those who admitted arrest before the 12 months before their arrest at the time of the survey, reported that they had been *convicted* of an offence during this period. The convictions were for particularly violent crimes (48.5%), property crimes (32.9%) and drug law offences (12.3%). Among the group who reported conviction for violent crimes were especially persons from the Western Cape, Gauteng, North West and the Eastern Cape; those who reported conviction for property crimes were especially persons from the Western Cape, Eastern Cape, Mpumalanga and the Free State; those who reported conviction for drug law offences were especially from the Western Cape, Eastern Cape, Gauteng and Mpumalanga.

Table 21, furthermore, indicates that many of the respondents who indicated that they had been arrested for an offence before the 12 months before their arrest and detention at the time of the 2000 holding survey, reported (45.0%) that they had been in their late adolescent/early adulthood years (18-25 years) when they were arrested for an offence for the first time in their life. (The *median age of the respondents' first offence was 22 years*, i.e. an age that was generally older than that for first use of illicit drugs, inhalants and prescription drugs. The median age of onset for inhalants was 14 years, for heroin 15 years, for LSD 16 years, for crack cocaine 16 years, for steroids 16 years, for cannabis 17 years, for the cannabis-mandrax mixture 17 years, for mandrax 17 years, for designer drugs 17 years, for amphetamines 19 years, for cocaine powder 20 years, for prescription pain relievers 20 years, for prescription relaxants 24 years, for prescription sleeping tablets 25 years, and for PCP 32 years.) Table 21 also shows that the respondents reported as their first offences mainly violent crimes (44.2%), property crimes (33.2%) and drug law offences (16.3%). Those who reported violent crimes as their first offence were primarily from the Western Cape, and then from Gauteng, KwaZulu-Natal and North West. The respondents who reported property crimes as their first offence were primarily from Gauteng, and then from the Western Cape, Eastern Cape and North West. Those who reported drug law crimes as their first offence were primarily from the Western Cape, and then from the Northern Cape, Eastern Cape and Gauteng.

Table 22: Arrest history in the 12 months before the arrest at the time of the survey in 2000

Arrests and convictions	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Northern Province	Total
	Weighted percentages									
Arrest in 12 months before the arrest at the time of the survey										
Yes	23.1	22.9	7.2	5.0	13.5	5.7	15.0	4.5	3.2	26.1
No	16.8	11.1	3.5	6.7	16.0	6.4	30.2	6.3	3.0	73.9
Total (%)										100.0
Times arrested in 12 months before the arrest at the time of the survey										
2 times or less	18.5	25.2	34.0	6.0	14.7	6.6	17.3	4.2	3.6	84.0
3 times or more	50.1	8.8	21.6	1.0	3.9	1.2	6.5	5.3	1.7	16.1
Total (%)										100.0
Type of offences committed in 12 months before the arrest at the time of the survey										
Violent crimes	18.2	19.7	4.5	1.8	15.0	6.1	23.3	6.0	5.4	41.5
Property crimes	26.6	24.5	6.6	8.1	13.8	3.3	12.6	3.1	1.4	37.4
Drug-related crimes	28.3	28.5	15.1	5.7	10.7	4.1	4.0	3.6	-	17.1
Immigration	-	-	-	-	-	47.7	-	52.3	-	0.4
Miscellaneous	21.6	21.7	7.9	5.8	2.2	29.1	-	-	11.7	3.7
Total (%)										100.0
Conviction in the 12 months before the arrest at the time of the survey										
Yes	35.9	17.3	9.1	4.2	8.3	3.1	13.6	4.2	4.4	40.0
No	14.5	26.7	5.9	5.5	16.9	7.4	16.0	4.7	2.4	60.0
Total (%)										100.0
Type of offences convicted for in the 12 months before the arrest at the time of the survey in 2000										
Violent crimes	35.5	11.4	5.6	3.1	8.1	4.7	19.9	5.5	6.2	48.1
Property crimes	38.5	21.5	13.8	6.0	7.7	-	8.6	1.3	2.7	40.0
Drug-related crimes	34.5	31.1	2.8	3.6	14.7	-	8.3	5.1	-	10.6
Miscellaneous	44.8	24.3	-	-	-	-	-	-	30.9	1.3
Total (%)										100.0

- **Criminal activity in the 12 months before the alleged offence at the time of the survey in 2000**

Table 22 shows that many respondents (26.1%) indicated that they had been arrested in the 12 months before their arrest and detention, i.e. a slightly higher percentage than those who reported that they had been arrested before this period. (The percentages in the related three-metro study were lower, e.g. 23.7% in Cape Town, 16.7% in Durban and 15.2% in Gauteng in the first phase (Parry et al., 2000a:12).) Those who admitted such arrest were primarily from the Western Cape, followed by the Eastern Cape, Gauteng and KwaZulu-Natal. They also commonly reported (84.0%) that they had been arrested twice, at the most, in the period concerned. Table 22, furthermore, shows that those respondents who indicated that they had been arrested more frequently (three times or more) in the period concerned, were primarily from the Western Cape and to a lesser extent from the Northern Cape. As in the case of the types of offences for which the respondents had been detained at the time of the survey, violent crimes (41.5%), property crimes (37.4%) and drug law offences (17.1%) were particularly common. Among the group who reported violent crimes were especially persons from Gauteng, the Eastern Cape, Western Cape and KwaZulu-Natal. Among those who reported property crimes were especially persons from the Western Cape, Eastern Cape, KwaZulu-Natal and Gauteng. A somewhat different pattern emerged in the case of drug law offences. Within this group were especially persons from the Eastern Cape, Western Cape, Northern Cape and KwaZulu-Natal.

Table 22 also indicates that respondents who admitted arrests for offences in the 12 months before their arrest and detention at the time of the survey in 2000 were asked whether they had been *convicted* for any offence in this period. The two-fifths who replied affirmatively were primarily persons from the Western Cape and Eastern Cape. As to the type of offence for which they had been convicted, a pattern similar to that for arrests emerged, i.e. the respondents admitted conviction for violent crimes (48.1%), property crimes (40.0%) and drug law offences (10.6%). Among those who admitted conviction for violent crimes were especially persons from the Western Cape, Gauteng, the Eastern Cape and KwaZulu-Natal. Those who reported conviction for property crimes included especially persons from the Western Cape, Eastern Cape, Northern Cape and Gauteng. Those who indicated conviction for drug law offences included especially persons from the Western Cape, Eastern Cape, KwaZulu-Natal and Gauteng.

Table 23: Arrest at time of the survey in 2000

Arrest	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Northern Province	Total
	Weighted percentages									
Most recent and serious offence										
Violent crimes	12.1	12.3	4.9	4.9	18.1	8.4	29.3	5.7	4.4	37.6
Property crimes	13.0	19.1	2.3	4.1	21.4	5.5	23.4	8.5	3.0	32.1
Drug-related crimes	21.0	13.2	11.8	8.3	10.2	3.8	29.2	2.4	0.2	17.3
Immigration	5.5	-	-	47.4	-	17.4	-	18.6	11.1	1.2
Miscellaneous	11.8	16.0	2.1	12.9	6.5	5.1	36.5	6.0	3.1	11.5
Unknown	-	-	-	-	-	63.3	-	25.0	11.7	0.4
Total (%)										100.0
Firearm at most recent arrest										
Yes	17.6	10.2	-	5.2	24.3	4.4	31.0	6.6	0.8	3.3
No	18.5	14.3	4.8	6.3	5.0	6.3	25.9	5.9	3.1	96.7
Total (%)										100.0

- **Most recent alleged offence**

Table 23 shows that the *most serious offences* for which the respondents were being detained were particularly violent crimes (37.6%), property crimes (32.1%) and drug law transgressions (17.3%). (This finding is in line with the first phase but not the second and third phases of the related three-metro study (Parry et al., 2001:9-10, 2000a:9-10, 2000b:9-10).) Most of those who were detained for a violent crime were in Gauteng, followed by those in KwaZulu-Natal, the Eastern Cape and Western Cape. (In the three-metro study violent offences were particularly common in Cape Town (Western Cape) and to a lesser extent in Gauteng and Durban (KwaZulu-Natal) in the first phase. In the second phase violent crimes were particularly common in Durban (KwaZulu-Natal) and to a lesser extent in Cape Town (Western Cape) and Gauteng. In the third phase violent crimes were particularly common in Cape Town (Western Cape) and to a lesser extent in Durban (KwaZulu-Natal) and Gauteng.) Whereas a similar pattern emerged for property crimes, the situation regarding drug law offences was somewhat different. In this instance the "offenders" were primarily the respondents from Gauteng, followed by those from the Western Cape, Eastern Cape and Northern Cape.

A small percentage (3.3%) of the respondents indicated that they had been in *possession of a firearm* when they committed the alleged offence for which they were being detained. (The percentages in the three-metro study varied between 4.1% and 8.0% (Parry et al., 2001:14, 2000a:13, 2000b:14).) This group comprised primarily respondents from Gauteng, followed by those from KwaZulu-Natal, the Western Cape and Eastern Cape.

- **Demographic differences (including interactions between demographic and other variables) with regard to criminal history**

A CHAID analysis of demographic differences among the respondents in the 2000 holding cell survey with regard to their responses to the questions on their criminal history revealed that those who had been arrested for a *violent crime* at the time of the survey were more likely than those who had been arrested for another crime to report that they *had a firearm* (dependent variable) with them when they were arrested. This group also especially mentioned that in the neighbourhood where they had lived before their arrest, it was *important for a person to have his/her own gun.*

4.13 USE OF FIREARMS AND OTHER WEAPONS, AND INVOLVEMENT IN GANGS AND RELATED EXPERIENCES

A number of the respondents in the 2000 holding cell survey admitted stabbing someone with a knife (18.6%) at some time in their life and using a knife while committing an offence (13.0%). Reports of having been threatened with a gun (26.4%) or another weapon (34.7%), and having been injured with a weapon (especially a weapon other than a firearm (39.5%)), were even more common. (In the three-metro study somewhat higher percentages of respondents (between 24.0% and 37.0%) reported that they had at some time in their life been threatened with a gun (Parry et al., 2001:14, 2000a:13, 2000b:14).) In line with the 1996 survey among prisoners in South Africa (Rocha-Silva & Stahmer, 1996:48), a substantial percentage of the respondents (17.6% on a lifetime basis and 19.0% in the 12 months before the survey) in the 2000 holding cell survey admitted participation in gangs.

4.14 KNOWLEDGE, ATTITUDES AND PRACTICES RELATED TO HIV/AIDS

Asked whether they had heard of HIV/AIDS, the vast majority of respondents (98.0%) in the 2000 holding cell survey replied affirmatively. (This was in line with the results of the three-metro study (Parry et al., 2001:34, 2000a:31, 2000b:34).) A substantial percentage also indicated that they (a) had been tested for HIV/AIDS (24.6%) and (b) knew people who were living with HIV/AIDS (28.1%). When asked to mention two ways in which HIV/AIDS was transmitted, *unprotected sex*—as in the three-metro study (Parry et al., 2001:34, 2000a:31, 2000b:34)—was by far the most popular first "choice" (77.9%) and *blood transfusions* the most popular second "choice" (32.4%); *dirty needles* as a factor in the transmission of HIV/AIDS was put first by 2.1% of the respondents and second by 12.5%. A substantial proportion (44.1%) of the respondents could name only one means of transmission.

4.15 LINKS BETWEEN BROAD SOCIOECONOMIC DATA AND INDIVIDUAL DATA

The assumption in this study that a relationship exists between individuals' behaviour and psychological "make-up" (individual variables) and the broad socioeconomic context (population variables) in which they live was investigated through Geographical Information Systems technology, the HLM (Hierarchical Linear Models) computer program and data from

the 2000 holding cell survey as well as from the 1996 census. Due to budget constraints, the analysis was restricted to selected population variables (census data) and individual variables (survey data). The analysis should, accordingly, be seen as groundwork for more profound future analysis. In fact, the HLM analysis was restricted to population variables (e.g. population density) suggested in past South African studies (Rocha-Silva, 1997a:106-111), as they interact with drug-related individual data. Population data in the GIS analysis were restricted to available 1996 census data (at the magisterial district level) and 1998 SAPS figures of reported crime (at police district level). The individual data in the HML and GIS analysis were restricted to lifetime/past 12 months' consumers of the most commonly used drugs in the 2000 holding cell survey.

4.15.1 Hierarchical Linear Models (HLM) analysis

Through focusing on population density in magisterial districts as well as self-reported consumption of at least one illicit drug in the 12 months before the 2000 holding cell survey, self-reported arrest for an offence before the arrest at the time of the survey and self-reported witnessing of drug trading in the place of residence in the month before the survey, the HLM analysis revealed the following links between population and individual data:

- The probability of having consumed a drug in the 12 months before the survey was statistically significantly influenced by whether the respondents (a) had witnessed drug trading in their place of residence in the month before the survey, and (b) had been arrested before the arrest at the time of the survey in 2000. The analysis showed that the more the respondents had witnessed drug trading, the higher the probability that they had consumed a drug in the 12 months before the survey. Moreover, if the respondents had been arrested for an offence before the arrest at the time of the survey in 2000, the probability that they had been consuming a drug in the 12 months before the survey was even higher.

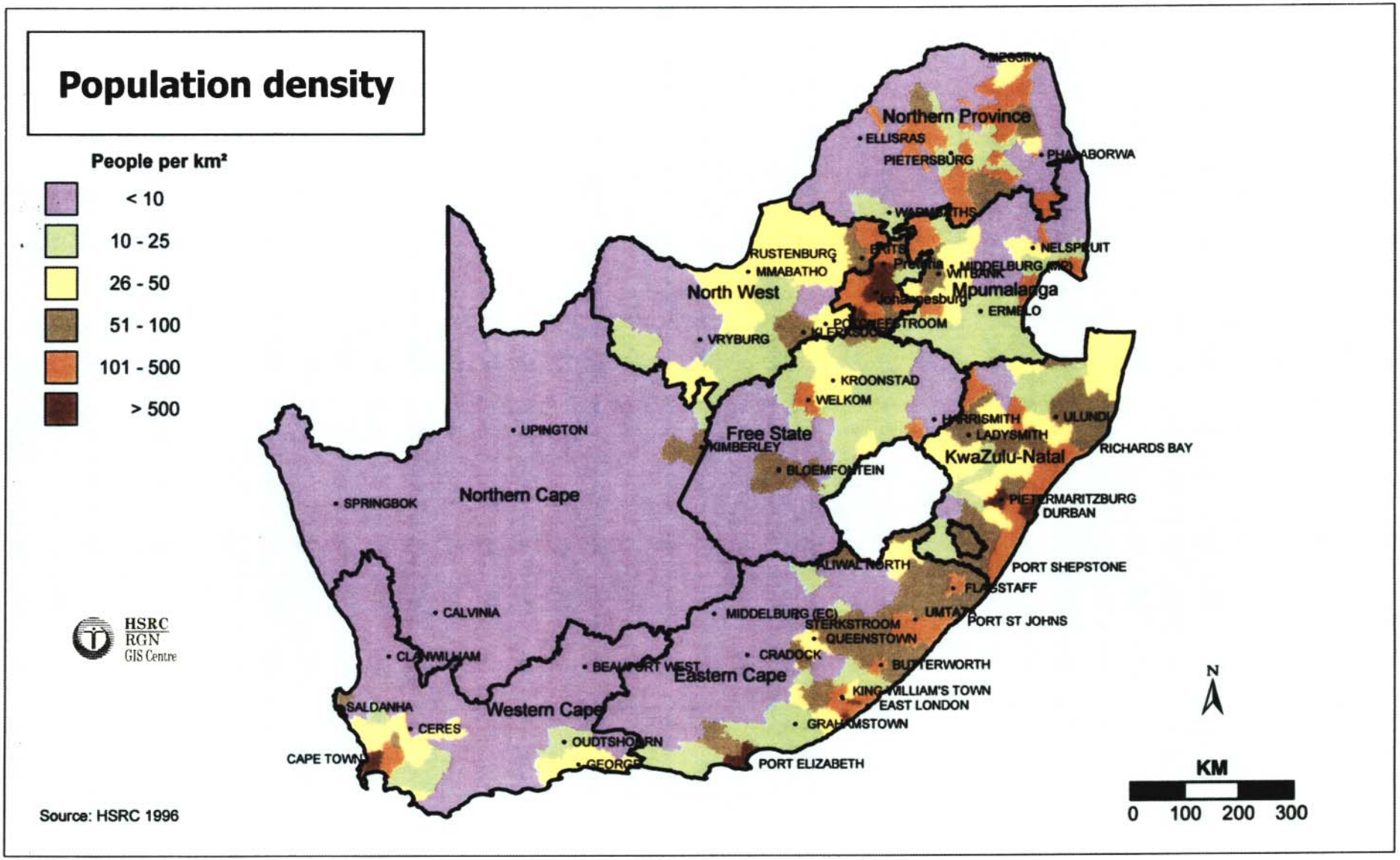
- Population density in the magisterial district where the respondents were arrested at the time of the survey influenced the likelihood of their reporting witnessing drug trading in the place where they lived before their arrest. For example, in magisterial districts with a high population density, reports of having witnessed drug trading in these neighbourhoods increased the probability of the respondents' reporting consumption of a drug in the 12 months before the survey, more than in areas where population density was not that high.

Through focusing on population density and housing structures in police areas as well as the respondents' gender, self-reported lifetime experience of having been threatened with a weapon other than a firearm, self-reported lifetime experience of having been stabbed with a knife and self-reported lifetime consumption of cannabis, the HLM analysis revealed the following:

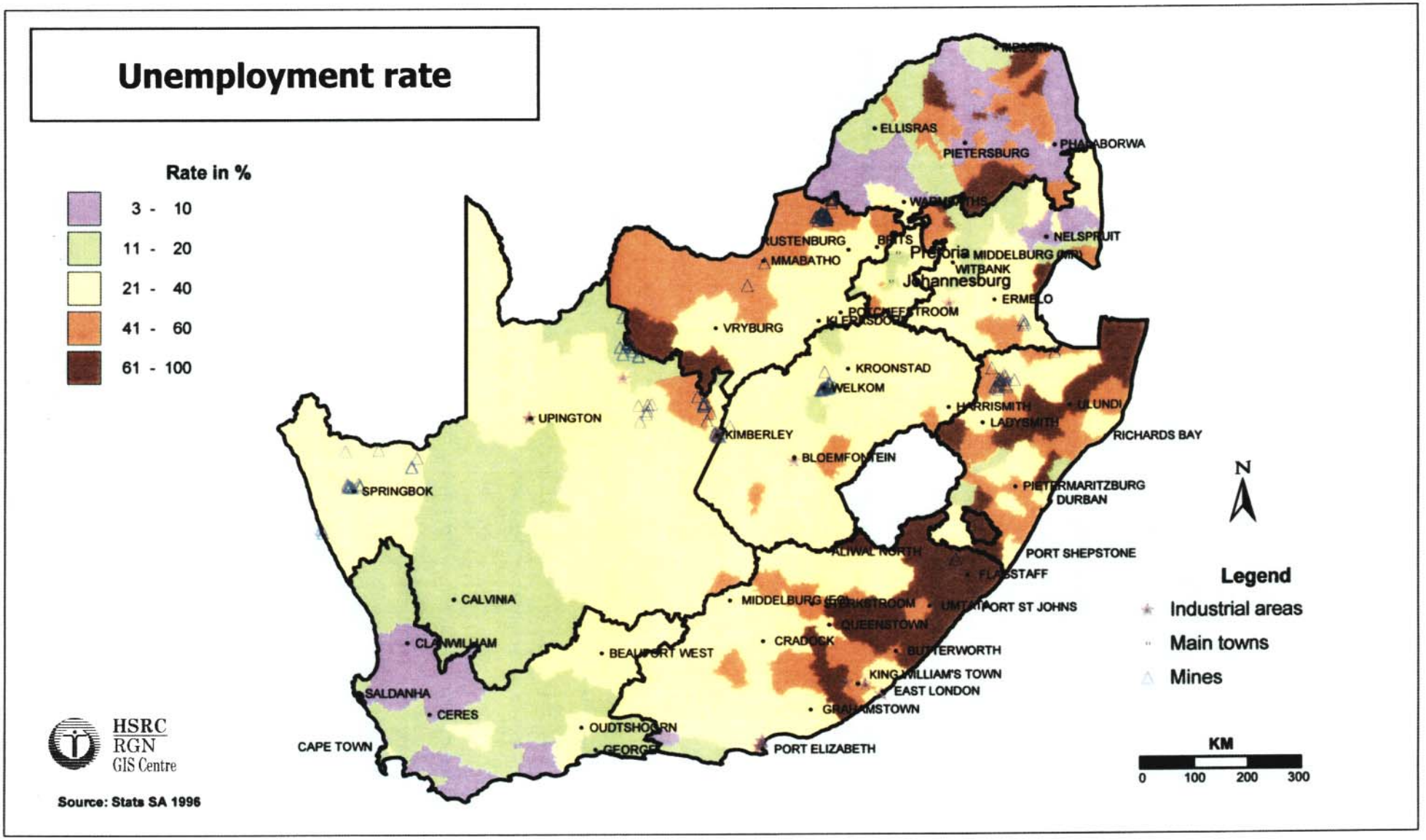
The variables gender, ever threatened with a weapon other than a gun and ever stabbed with a knife increased the occurrence of reports of cannabis consumption at some time in a respondent's life. The occurrence was even greater if the respondents were male and had at some time in their life not only been threatened with a knife but had also been stabbed with it. The occurrence of being stabbed increased with an increase in population density in the magisterial district where the respondents were interviewed. The male-female differential decreased as housing structures in the magisterial district concerned became more formal.

4.15.2 Geographic Information Systems (GIS) analysis

The maps present overlays of selected spatial data from the 2000 holding cell survey, from the 1996 census and from the 1998 reported crime figures of the SAPD.

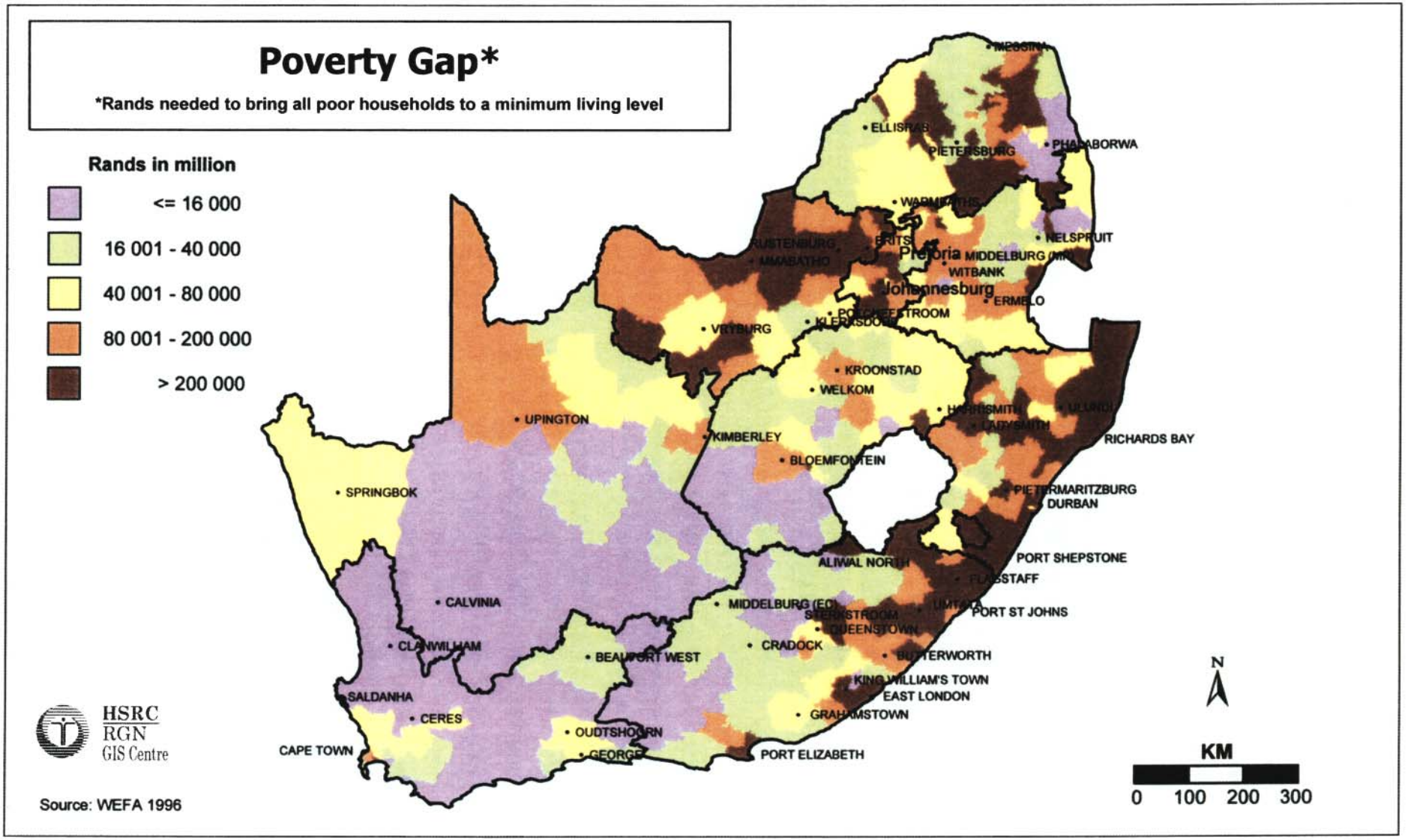

Population density
People per km²
< 10
10 - 25
26 - 50
51 - 100
101 - 500
> 500
HSRC
RGN
GIS Centre
Source: HSRC 1996
Northern Province
ELLISRAS
PIETERSBURG
PHALABORWA
NELSPRUIT
RUSTENBURG
MMABATHO
North West
Mpumalanga
ERMELO
VRYBURG
KROONSTAD
WELKOM
Free State
KIMBERLEY
BLOEMFONTEIN
HARRISMITH
LADYSMITH
ULUNDI
KwaZulu-Natal
RICHARDS BAY
DURBAN
UPINGTON
SPRINGBOK
Northern Cape
PORT SHEPSTONE
FLAGSTAFF
CALVINIA
MIDDELBURG (EC)
STERKSTROOM
QUEENSTOWN
PORT ST JOHNS
CLANWILLIAM
CRADOCK
BUTTERWORTH
Eastern Cape
KING WILLIAM'S TOWN
EAST LONDON
SALDANHA
Western Cape
CERES
GRAHAMSTOWN
OUDTSHOORN
CAPE TOWN
GEORGE
PORT ELIZABETH
N
KM
0 100 200 300

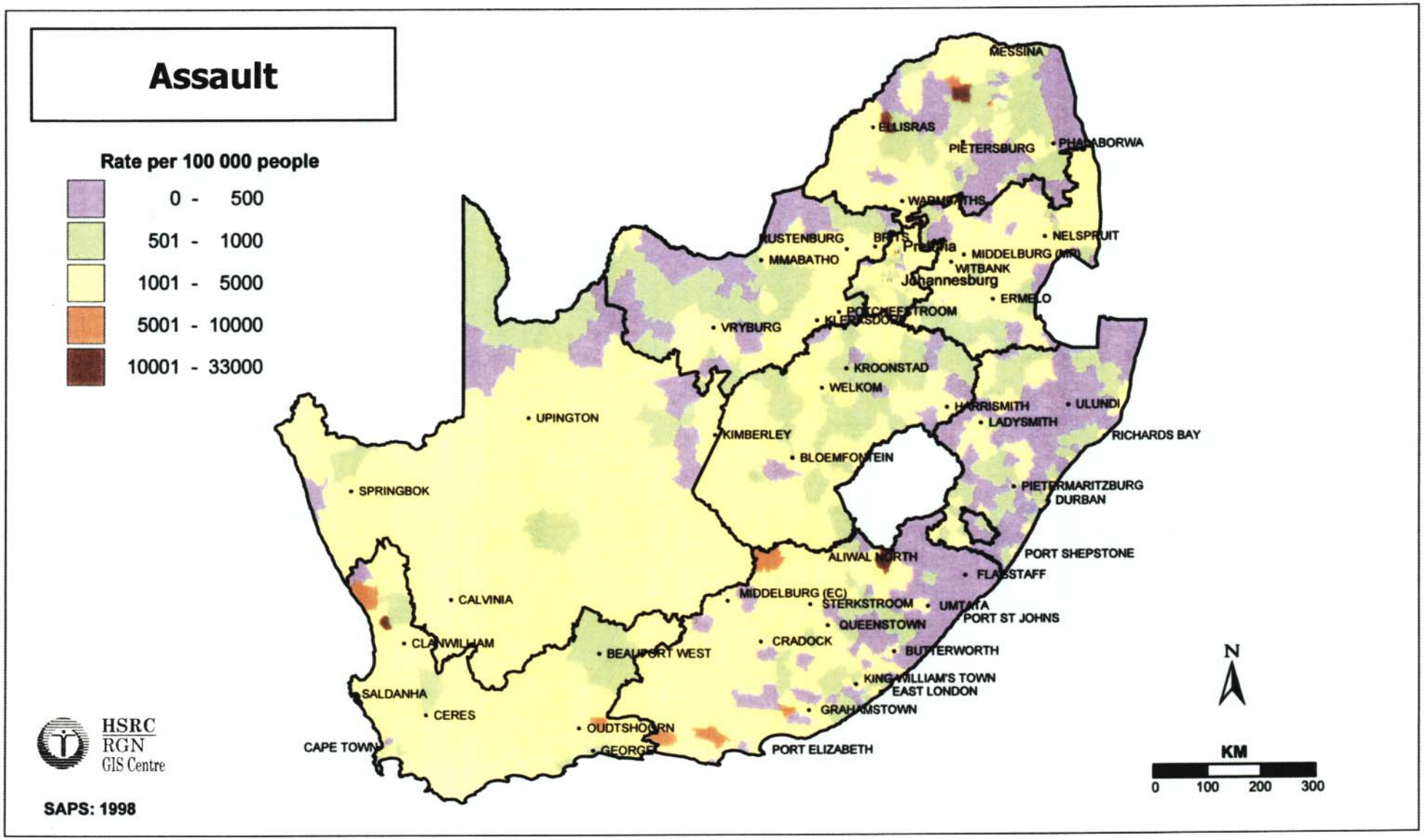
Unemployment rate



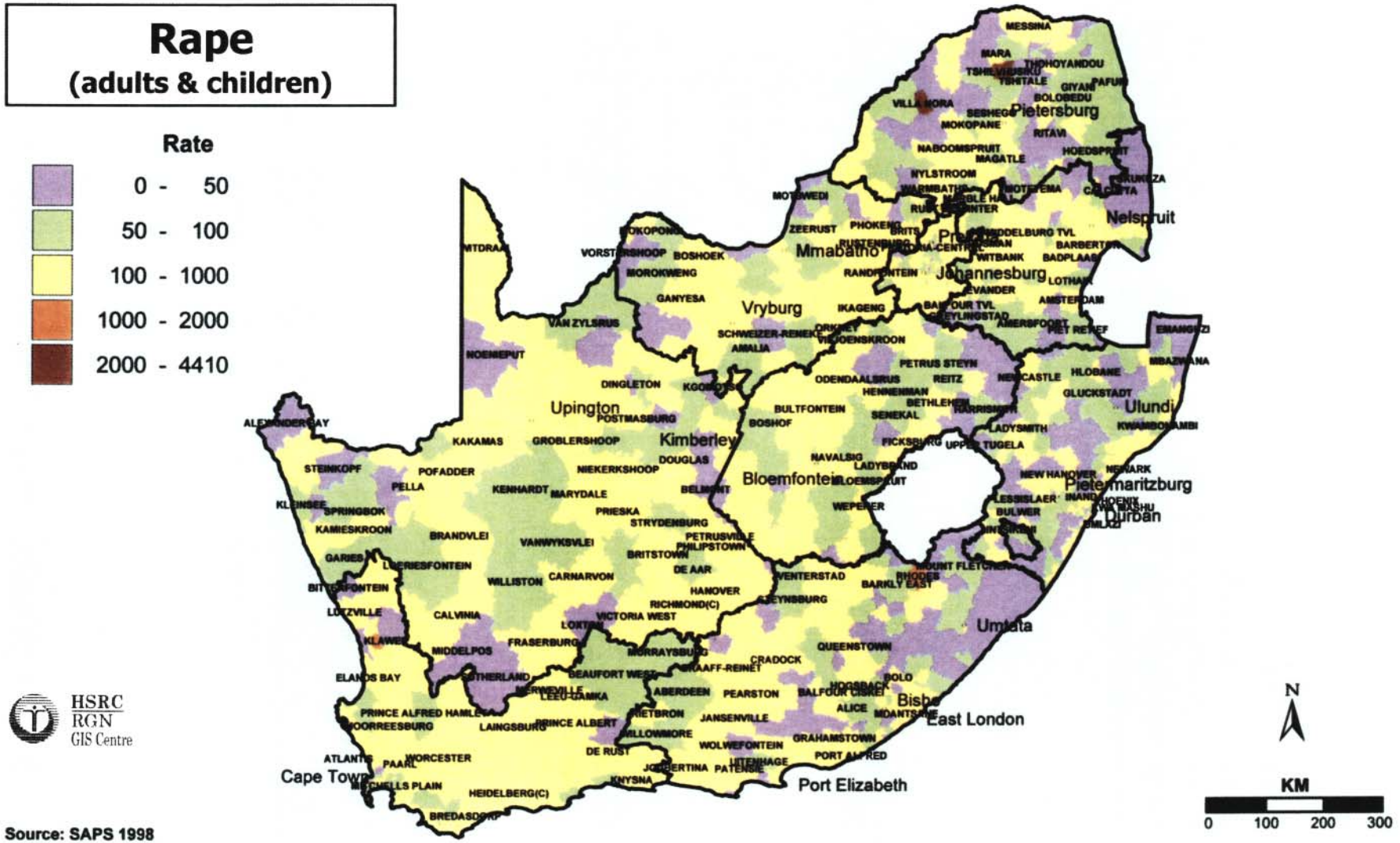
HSRC
RGN
GIS Centre

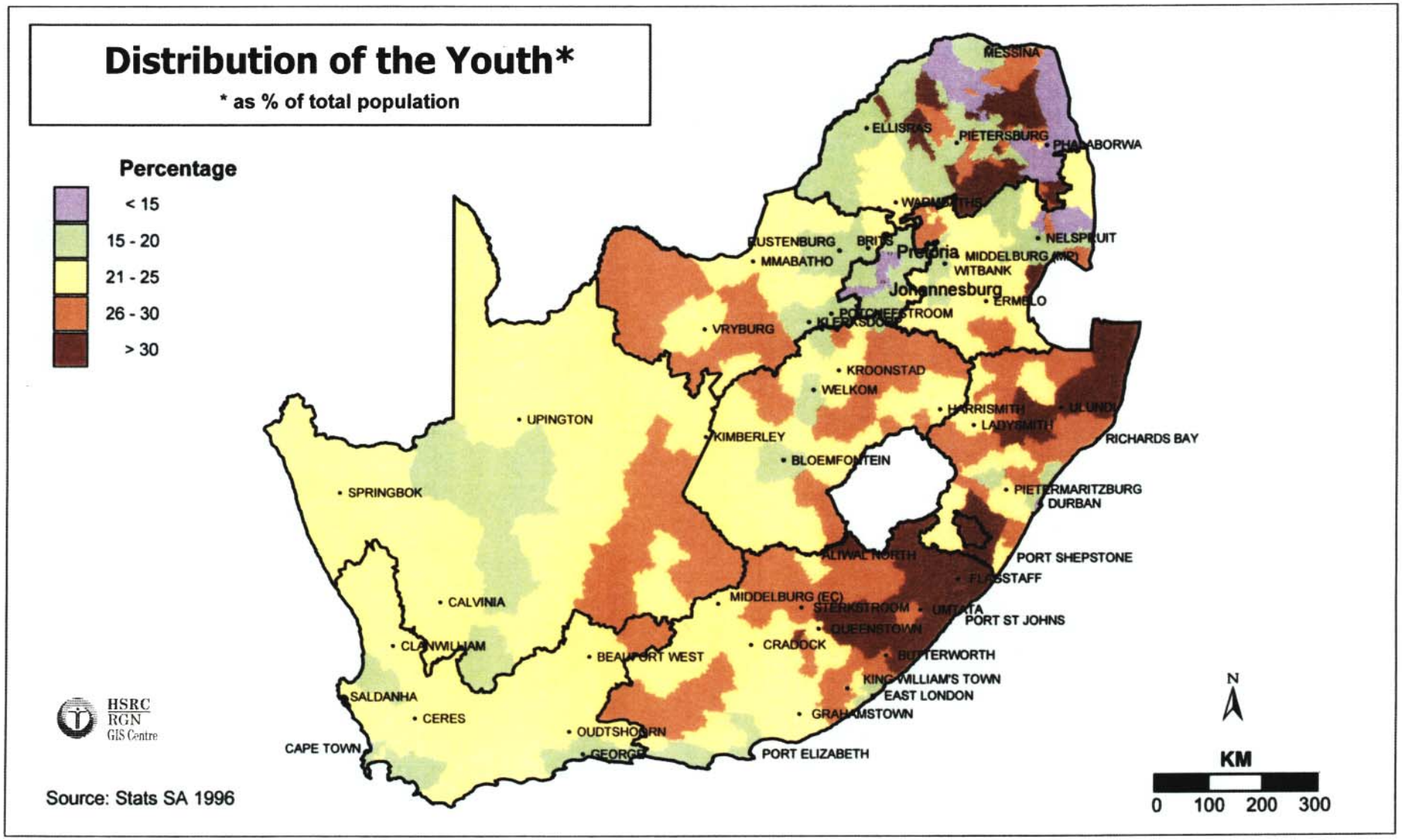
Source: Stats SA 1996


Poverty Gap*
*Rands needed to bring all poor households to a minimum living level
Rands in million
<= 16 000
16 001 - 40 000
40 001 - 80 000
80 001 - 200 000
> 200 000
ELLISRAS
PIETERSBURG
PHALABORWA
WARMBATHS
NELSPRUIT
BRITS
Pretoria
MIDDELBURG (MP)
WITBANK
Johannesburg
ERMELO
VRYBURG
KLERKSDORP
KROONSTAD
WELKOM
HARRISMITH
LADYSMITH
RICHARDS BAY
UPINGTON
KIMBERLEY
BLOEMFONTEIN
SPRINGBOK
PIETERMARITZBURG
DURBAN
ALIWAL NORTH
PORT SHEPSTONE
CALVINIA
MIDDELBURG (EC)
PORT ST JOHNS
QUEENSTOWN
CLANWILLIAM
CRADOCK
BEAUFORT WEST
BUTTERWORTH
KING WILLIAM'S TOWN
EAST LONDON
SALDANHA
CERES
GRAHAMSTOWN
OUDTSHOORN
CAPE TOWN
GEORGE
PORT ELIZABETH
N
KM
0 100 200 300
HSRC
RGN
GIS Centre
Source: WEFA 1996


Assault
Rate per 100 000 people
0 - 500
501 - 1000
1001 - 5000
5001 - 10000
10001 - 33000
MESSINA
ELLISRAS
PIETERSBURG
PHALABORWA
WARMBATHS
RUSTENBURG
BRITS
Pretoria
NELSPRUIT
MIDDELBURG (MP)
MMABATHO
WITBANK
Johannesburg
ERMELO
POTCHEFSTROOM
VRYBURG
KLERKSDORP
KROONSTAD
WELKOM
HARRISMITH
ULUNDI
LADYSMITH
UPINGTON
KIMBERLEY
RICHARDS BAY
BLOEMFONTEIN
PIETERMARITZBURG
DURBAN
SPRINGBOK
ALIWAL NORTH
PORT SHEPSTONE
FLAGSTAFF
CALVINIA
MIDDELBURG (EC)
STERKSTROOM
UMTATA
PORT ST JOHNS
QUEENSTOWN
CLANWILLIAM
CRADOCK
BEAUFORT WEST
BUTTERWORTH
KING WILLIAM'S TOWN
EAST LONDON
SALDANHA
GRAHAMSTOWN
CERES
OUDTSHOORN
CAPE TOWN
GEORGE
PORT ELIZABETH
N
KM
0 100 200 300
HSRC
RGN
GIS Centre
SAPS: 1998

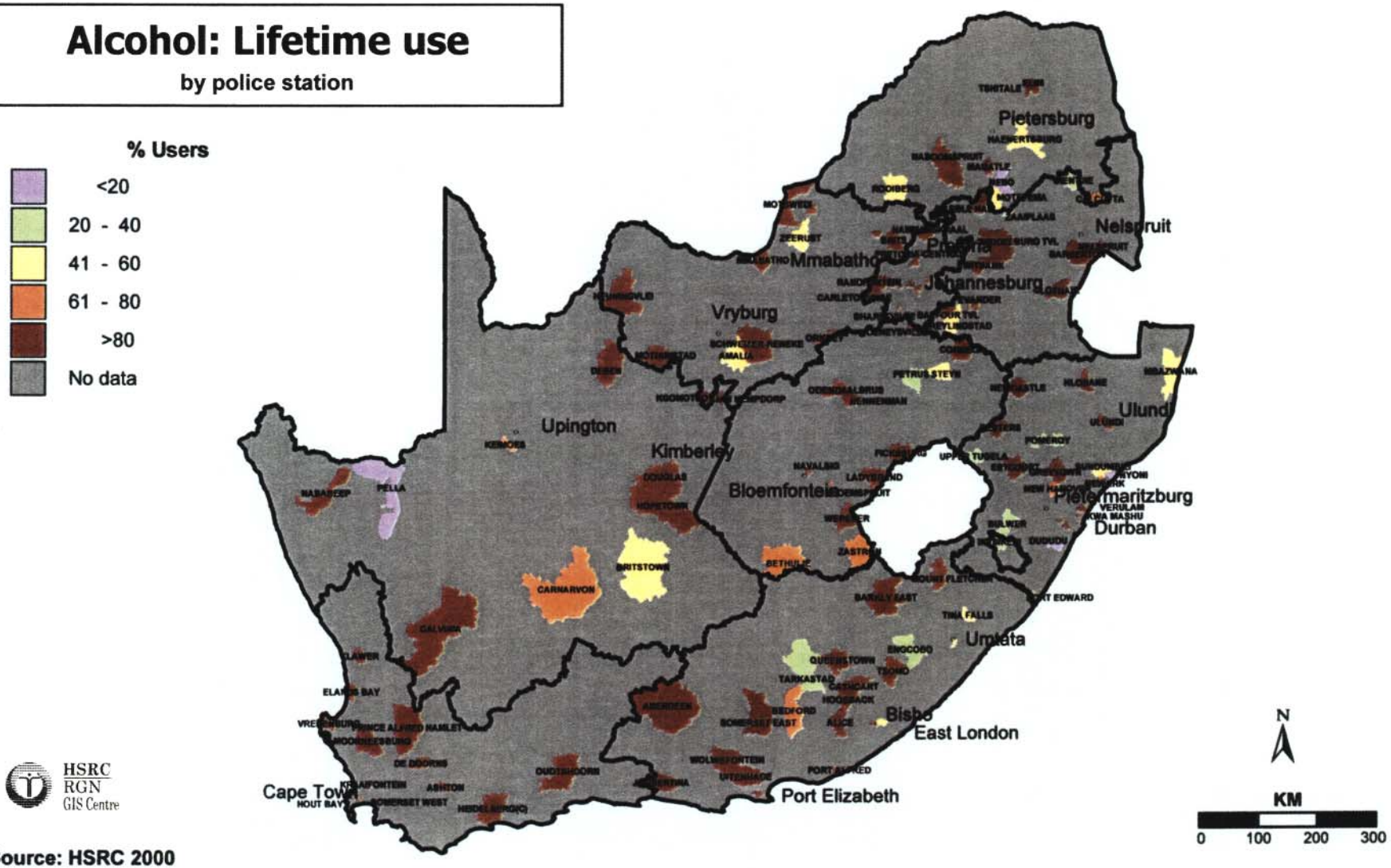
Rape
(adults & children)




Distribution of the Youth*
* as % of total population
Percentage
< 15
15 - 20
21 - 25
26 - 30
> 30
MESSINA
ELLISRAS
PIETERSBURG
PHALABORWA
WARMBATHS
RUSTENBURG
BRITS
Pretoria
MIDDELBURG (MP)
NELSPRUIT
MMABATHO
WITBANK
Johannesburg
ERMELO
POTCHEFSTROOM
VRYBURG
KLERKSDORP
KROONSTAD
WELKOM
HARRISMITH
LADYSMITH
RICHARDS BAY
UPINGTON
KIMBERLEY
BLOEMFONTEIN
SPRINGBOK
PIETERMARITZBURG
DURBAN
ALIWAL NORTH
PORT SHEPSTONE
FLAGSTAFF
CALVINIA
MIDDELBURG (EC)
STERKSTROOM
UMTATA
PORT ST JOHNS
QUEENSTOWN
CLANWILLIAM
CRADOCK
BEAUFORT WEST
BUTTERWORTH
KING WILLIAM'S TOWN
EAST LONDON
SALDANHA
CERES
GRAHAMSTOWN
OUDTSHOORN
CAPE TOWN
GEORGE
PORT ELIZABETH
HSRC
RGN
GIS Centre
Source: Stats SA 1996
N
KM
0 100 200 300

Alcohol: Lifetime use

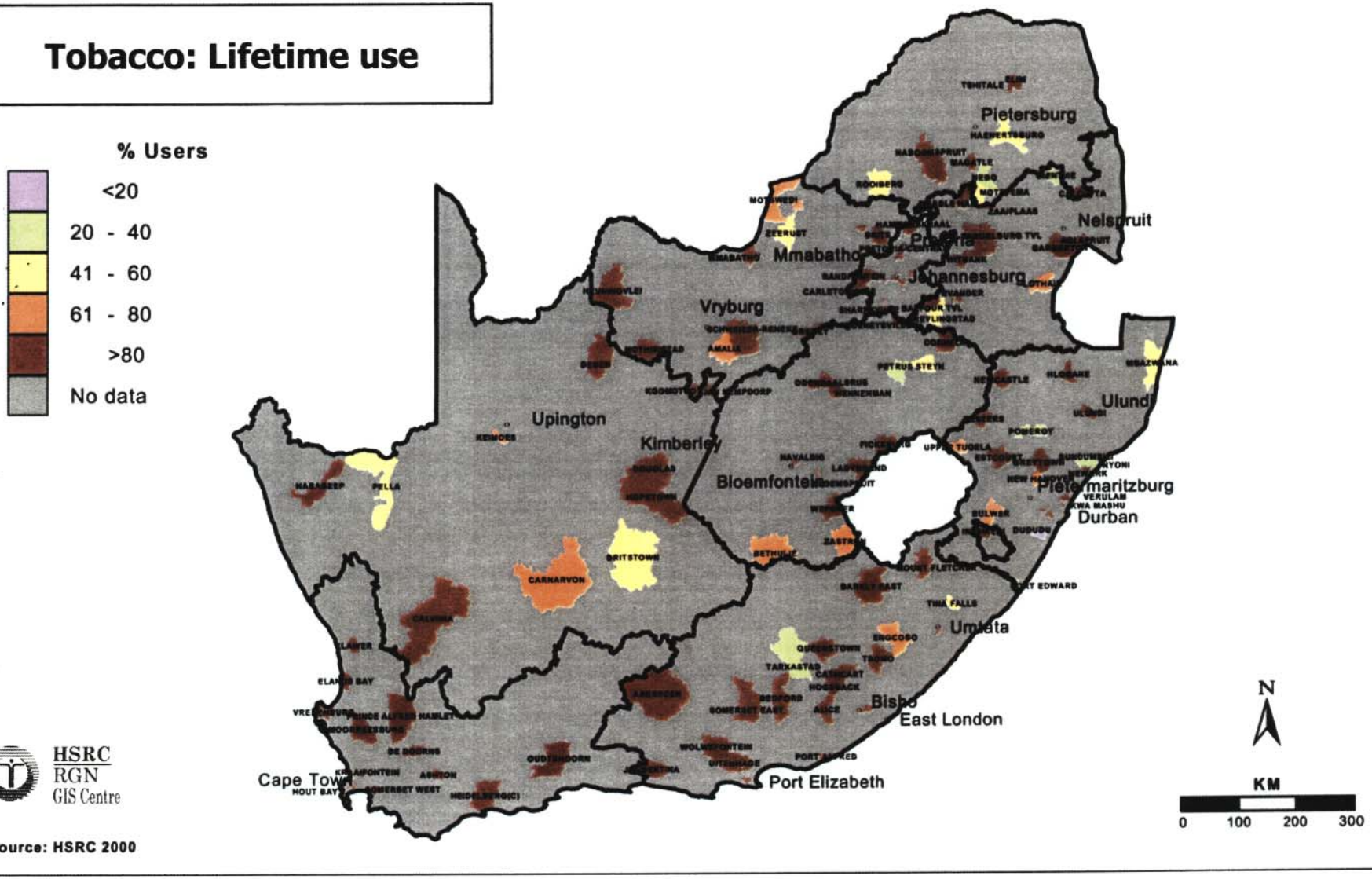
by police station



HSRC
RGN
GIS Centre

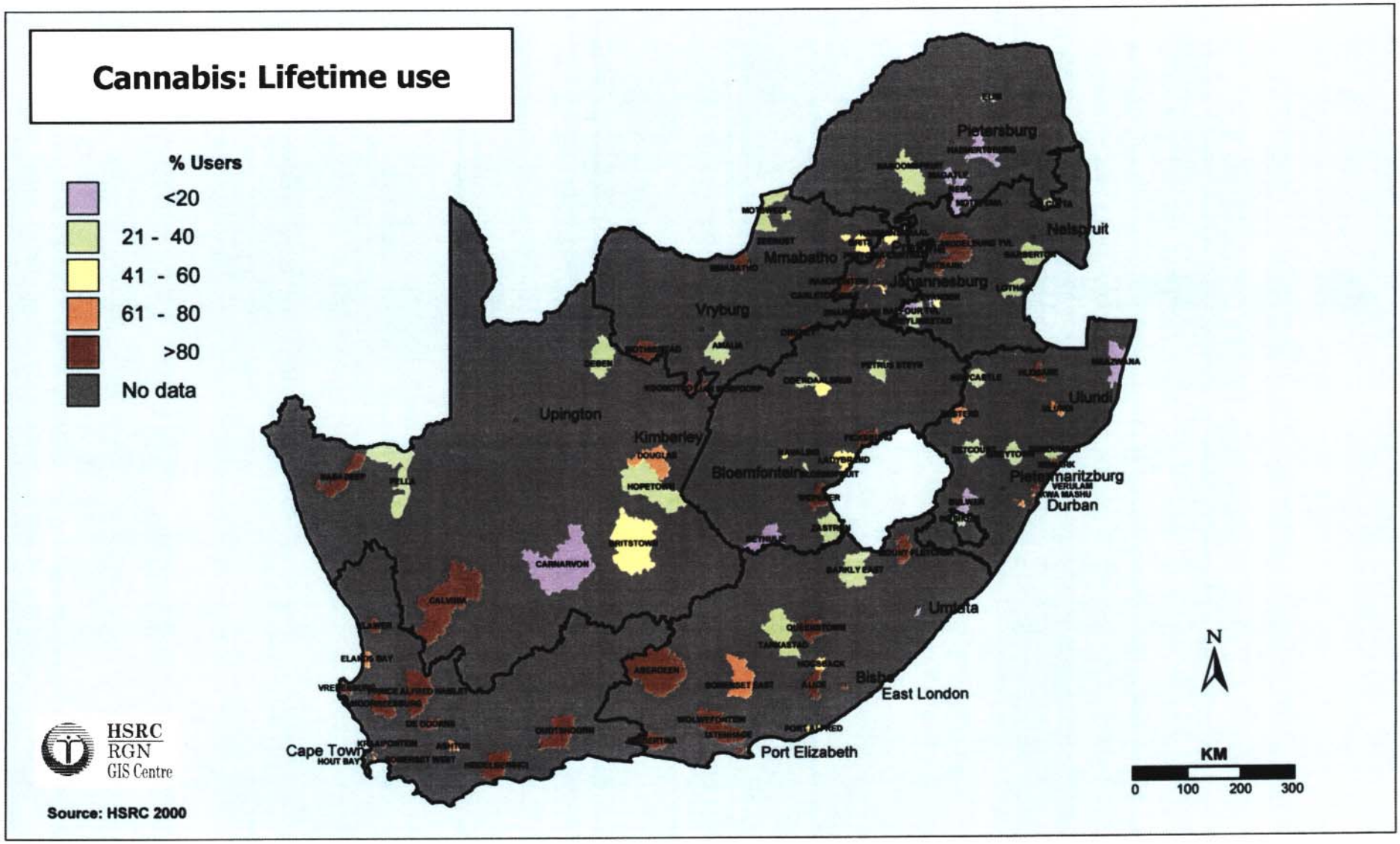
Source: HSRC 2000

Tobacco: Lifetime use

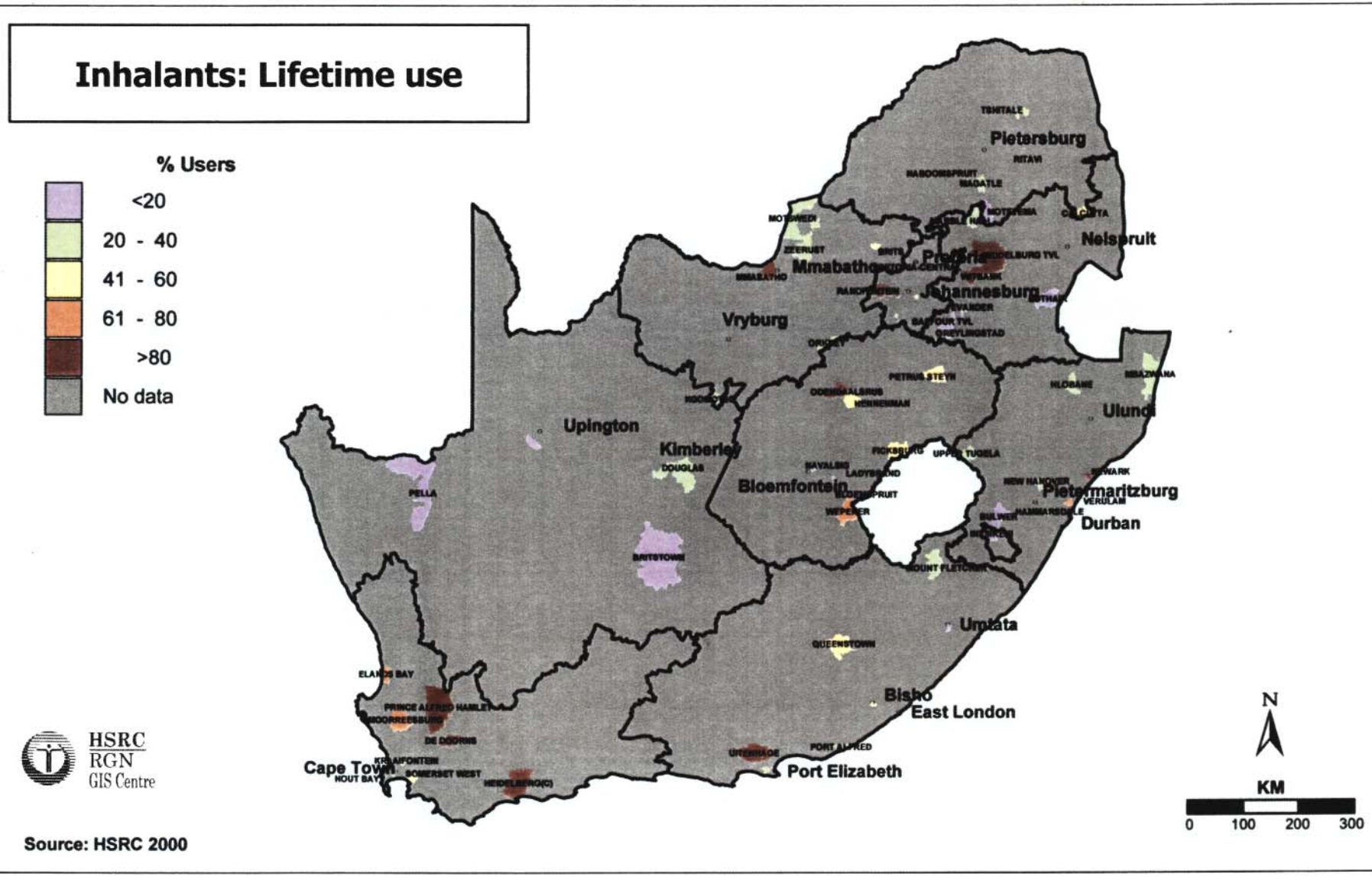


HSRC
RGN
GIS Centre

Source: HSRC 2000


Cannabis: Lifetime use
% Users
<20
21 - 40
41 - 60
61 - 80
>80
No data
Pietersburg
Nelspruit
Mmabatho
Johannesburg
Vryburg
Upington
Kimberley
Bloemfontein
Ulundi
Pietermaritzburg
Durban
Umtata
East London
Port Elizabeth
Cape Town
N
KM
0
100
200
300
HSRC
RGN
GIS Centre
Source: HSRC 2000

Inhalants: Lifetime use



Source: HSRC 2000

As reflected in the maps above, the overlays of selected spatial data from the 2000 holding cell survey, from the 1996 census and from the 1998 reported crime figures of the SAPS underlined the complexity of the individual-community relationship in drug use and related harm (e.g. crime). These data overlays also emphasise the importance of monitoring drug use (and related harm such as crime) widely and on an area/district-specific basis. The overlays show that in the following type of geographical areas high levels of lifetime cannabis use (61% or higher) were reported in the 2000 holding cell survey:

- Magisterial districts of comparatively *high population density* (101 or more people per square kilometre), e.g. Cape Town, Port Elizabeth, Durban, Johannesburg and Pretoria metropolitan centres.
- Magisterial districts of comparatively *low population density* (less than 101 people per square kilometre) but where *trading in cannabis* could be *expected* to be high, i.e. districts (a) known for growing cannabis, (b) close to cannabis-producing areas, or (c) known for mining activities and thus for recruiting migrant workers, often from cannabis-producing rural areas. Such districts are found in rural KwaZulu-Natal (e.g. Hlobane, Ulundi), towns on the border between the Free State and Lesotho (e.g. Ficksburg, Wepener), the central, southern and eastern parts of the Eastern Cape (e.g. Somerset East, Queenstown, Aberdeen, Joubertina, Alice), mining areas in Mpumalanga (near Witbank and Middelburg), and parts along the western, eastern and southern border of North West (e.g. Mmabatho, Orkney, Mothibistad).
- Magisterial districts characterised by (a) negative socioeconomic conditions such as high *unemployment* rates (41% or higher) and *poverty* (R40 001 million or more needed to bring all households to a minimum standard of living), by (b) *mining* activities which could be expected to facilitate the supply of cannabis through migrant workers, and by (c) being *close to or in cannabis-producing* areas such as districts along the border between North West and the Northern Cape (e.g. Mothibistad, Kgomotso), districts in the central (e.g. Queenstown) and northern border area (e.g. Mount Fletcher) of the Eastern Cape, as well as areas in northern and central KwaZulu-Natal (e.g. Hlobane, Ulundi).
- Magisterial districts marked by high levels of *violent crime* (assault (2 001 people per 100 000) and/or rape (1 000 per 100 000 of the population)) or regions close to such areas, which are often also close to cannabis-producing areas or accessible to drug

traders through seaports, e.g. Klawer in the northern part of the Western Cape, Mount Fletcher/Rhodes in the northern part of the Eastern Cape, Joubertina on the southern border of the Eastern Cape, and the Patensie-Uitenhage area bordering the Port Elizabeth metropole.

The maps above also show that in magisterial and in particular police districts where high levels (61% or higher) of lifetime consumption of cannabis were reported in the 2000 holding cell survey, generally high levels (61% or higher) of lifetime alcohol and tobacco consumption were also reported. High levels (61% or higher) of lifetime alcohol consumption were also ever so often reported in districts where access to alcohol could be expected to be high, e.g. the vine-growing areas in the Western Cape, the Aberdeen district in the Eastern Cape, and the districts of Douglas and Keimoes in the Northern Cape. High levels (61% or higher) of lifetime consumption of various drugs (e.g. cannabis, alcohol, tobacco and inhalants) were ever so often reported in districts characterised not only by high to medium levels (rate of 41% or higher) of unemployment but also by medium to high percentages (26% or higher) of youngsters (10-14 years) who were particularly vulnerable to initiation into drug consumption/drug trading. These districts inter alia included De Doorns, Ashton and Heidelberg in the Western Cape; Uitenhage (near the Port Elizabeth metropole) in the Eastern Cape; Wepener on the border between the Free State and Lesotho; and areas near Mmabatho on the border between North West and Botswana

4.16 CONCLUSION

In brief and as expected, the accumulated data in the 2000 holding cell survey show that before their arrest at the time of the survey various individual and environmental factors rendered the respondents vulnerable to taking drugs and experiencing related harm. The respondents' overall level of drug use was high and they lived in an environment conducive to drug taking, i.e. they were socially exposed to drugs/drug consumption, such consumption was socially supported and there was limited social discrimination against it. For example, self-reported lifetime as well as past 12 months' consumption of drugs, whether illicit or licit, tended to occur in neighbourhoods where illicit trading in drugs took place. Drug taking was commonly a group activity, mostly with friends (who could be—specifically in the case of cannabis users—persons who had come into conflict with criminal justice officials), and frequently occurred at trading outlets (e.g. illicit "drug houses", taverns, shebeens). Participation in illicit drug trading (at some time in the respondents' life) and thus easy access

to illicit drugs also occurred. Furthermore, experiences of direct social pressure to consume drugs—coercive and non-coercive—were reported. The environmental "pressure" to use drugs was strengthened by a personal attraction to (certain) drugs, and in particular a belief in the rewarding effect of drug use as well as in limited social censure against the use of drugs. The general level of drug consumption also concurred with the general level of involvement in crime. Both were high. Moreover, this concurrence reflected an interactive relationship. The respondents also noted experiences of drug-related harm—experiences that were to be expected, considering that the respondents manifested vulnerability on various levels.

Vulnerability to drug consumption and related harm (e.g. drug-crime links) differed across place (e.g. socioeconomic contexts, provinces) and individuals. For example, broad socioeconomic conditions contributed to demographic differences in drug use among the respondents. The greater the population density and level of formal housing in a neighbourhood (e.g. police area), the smaller the probability of gender differences in the occurrence of drug use (e.g. cannabis use). Greater population density in a neighbourhood increased the probability of individuals experiencing violent encounters (e.g. threats/stabbing with a knife). These encounters, in turn, increased the probability of the individuals concerned taking drugs (e.g. cannabis). The survey findings also showed that persons with limited educational and/or employment opportunities were particularly vulnerable to drug-crime links, even though educational and/or employment opportunities did not necessarily insulate people from involvement in a drug-crime lifestyle, especially when exposed to drug-related crime such as trading in illicit drugs. For example, exposure to trading in illicit drugs was found to increase the probability that a person with a comparatively high educational background (Grade 11 and higher) might use a drug (e.g. tobacco) and commit a drug law offence. Vulnerability to drug use and related harm also distributed unevenly and in a complex manner across the provinces and were particularly marked in the Western Cape.

Finally, the survey findings highlighted the importance of adopting a comprehensive and integrative approach in drug-related research, bearing in mind the interactive relationship between various contributors to drug use and between the consumption of different drugs.

CHAPTER 5
MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter summarises the main findings of the 2000 holding cell survey that was conducted as part of this investigation of the connection between drug consumption and crime. It also attends to whether the aims and objectives of the investigation have been achieved, and identifies areas for future research. The chapter concludes with a discussion of the implications of the findings for social work intervention, indeed with recommendations for preventing the drug-crime problem in South Africa. To place the discussion in perspective, the chapter first briefly restates the research problem addressed and the manner in which it was investigated.

5.2 OVERVIEW OF THE RESEARCH PROBLEM AND PROCESS

This section briefly summarises the problem and questions investigated in the study, as well as the aims, objectives, assumptions and methodology that guided the study.

5.2.1 Problem and questions investigated

The investigation of the connection between drug consumption and crime and the implications of this connection for social work arose from the following two general obstacles to an effective response to government calls for countering the drug-crime problem in South Africa:

- An inadequate knowledge base on the subject, particularly on the contribution of broad socioeconomic conditions to the drug-crime phenomenon and the interaction between these conditions and individual factors that contribute to the phenomenon; and
- The absence of a national system for systematically monitoring the dynamics of the phenomenon and the impact of counteraction, especially on entrants into the criminal justice system (detainees in holding cells at police stations).

These obstacles led to the following questions in relation to the research population:

- What are the nature and extent of drug consumption and crime and especially connections between drug consumption and crime among the research population?
- What individual-oriented and broad socioeconomic conditions contribute to vulnerability to drug consumption and to crime, and to connections between these two issues?
- How should the relevance of prevailing thinking on the subject and the impact of counter measures be monitored in South Africa?
- What measures—on the individual and broad socioeconomic level—should be instituted to counter the drug-crime phenomenon in South Africa proactively?

5.2.2 Aims and objectives of the investigation

Against the background of the above problem and questions, the primary aim of this investigation was to facilitate the prevention of the drug-crime problem in South Africa through researching the nature and extent of the problem as well as vulnerability to it, focusing on detainees in holding cells at police stations. Three secondary aims underpinned the above aim: The first was to advance insight into vulnerability to this problem on the individual as well as broad socioeconomic level. The second was to provide pointers for the development of a system for empirically monitoring drug-crime links among detainees in holding cells at police stations. The third was to extract preventive guidelines for social workers from the research. To achieve these aims, this investigation set the following objectives:

- To investigate the nature and extent of the drug-crime problem among the detainees as well as contributors (vulnerability) to this phenomenon on the individual and broad socioeconomic level
- To suggest a national system for monitoring the relevance of prevailing knowledge on and the impact of preventive action against the drug-crime phenomenon, with special emphasis on the detainees
- To frame guidelines for preventing the drug-crime problem, based on the research findings

5.2.3 Assumptions underlying the investigation

The main assumptions were the following:

- Social phenomena—including the drug-crime problem—are generally the outcome of a combination of individual issues (the behaviour and beliefs of individuals) and environmental issues (broad socioeconomic conditions).

- Drug consumption and criminal activity are patterned, dynamic, complex and interactively related social phenomena. "Drugs" are psychoactive substances, that is, substances that have the potential to affect perception, mood, cognition, and behaviour or motor function when taken into a living organism. Drugs are divided into licit substances such as alcohol, nicotine and over-the-counter medicine (cough mixtures, appetite suppressants, sedatives, tranquillisers) and illicit substances such as cannabis, cocaine, heroin and LSD.

- In conjunction with the abovementioned general conception of social phenomena, this investigation adopted a public health perspective (PHP) of the drug-crime problem. This perspective views the drug-crime phenomenon as the outcome of three interactively related issues that vary over time and location: agents (drugs, crime/violence), hosts (individuals who consume drugs and commit crime/violence) and environments. As such, and in contrast with conventional conceptions, which relate drug consumption and crime to (particular) individuals or (particular) environments, the PHP requires the drug-crime phenomenon to be investigated in a comprehensive and integrated manner and on an ongoing basis, focusing on individual as well as broad socioeconomic issues. It assumes that (a) the general level of drug consumption in a community is positively related to the general level of various forms of harm, including crime/violence, in that community, and (b) drugs are consumed in a community to the extent to which there is a demand for and access to them. A demand for drugs is assumed to exist in a community to the extent to which, first, the following sociocultural conditions prevail: sociocultural support for (a particular form of) drug consumption, lack of (or limited) sociocultural discrimination against (a particular form of) drug consumption, and sociocultural exposure to (a particular form of) drug consumption; and, second, the extent to which the following psychological variables exist: tolerance towards (a particular form of) drug consumption, a belief that discrimination against (a particular form of) drug consumption is mild or non-existent, as well as a belief in the

rewarding nature of and a personal attraction to (a particular form of) drug consumption. Drugs are seen as accessible to the extent to which sociocultural opportunities for engaging in drug consumption as well as knowledge/awareness of (a particular form of) drug consumption and ways of acquiring drugs exist in the community. The demographic characteristics of individuals and the broad socioeconomic conditions in which individuals live mediate access to and demand for drugs.

Although the main concern in the investigation was with drug consumption and crime, attention was also given to violent behaviour and level of awareness of HIV/AIDS-related issues. The decision to extend the investigation in this way is related to (a) the high level of violence in South Africa, (b) local and international evidence that violent behaviour tends to be intertwined with the drug-crime phenomenon, (c) the epidemic proportions of HIV/AIDS in South Africa, and (d) indications of a relationship between drug consumption and the spread of HIV/AIDS.

Furthermore, in accordance with the PHP, prevention was perceived as comprising interventions that

- focus in an integrated and balanced way on the individual and the environment (community/group);
- focus on individuals as subjects who can contribute positively to intervention;
- have a firm support base in the (wider) community within which preventive action occurs;
- involve target groups in prevention planning and implementation;
- combine demand reduction (e.g. through health promotion programmes that reduce socioeconomic inequities) and supply reduction (e.g. through control/law enforcement) in a balanced manner;
- are evidence/research-based and monitor and evaluate the characteristics of the application context at a particular point in time; and
- are implemented at one or more of the following three levels: at the *primary* level, where prevention is directed at reducing initial individual and environmental risks of developing drug-related harm (e.g. crime) (through, for example, social work programmes directed at enhancing life skills and reducing access to drugs); at the *secondary* level, which involves early detection of risk proneness with regard to the development of drug-related harm

(through, for example, social workers assisting staff at police stations in identifying drug-related risk factors among detainees and suggesting appropriate care); and at the *tertiary* level (usually called "treatment"), where the focus is on arresting intensification and perpetuation of drug-related harm (through, for example, social workers facilitating the placement of a person experiencing drug-related harm (e.g. dependence) within appropriate drug-related treatment facilities).

It was accepted that in performing preventive work, social workers proactively strengthen the capacity of persons, groups and/or communities to counter their vulnerability to take drugs and commit crime.

Finally, this study assumed that research has inherent validity problems that can be reduced through gathering various sets of independent but converging evidence.

5.2.4 Methodology employed in the investigation

To achieve the aims and objectives of the investigation, a sample survey was conducted amongst adults (persons 18 years and older) who were fit for interviewing and had been detained for not longer than 48 hours in holding cells in police stations in South Africa at the time of data collection. The design of the sample survey was determined by a review of the methodological and organisational character as well as findings of drug-related research conducted between 1960 and 2000, and a pilot study at three police stations close to the researcher's base and known to operate under difficult circumstances.

A two-stage stratified probability sampling design was used, which is essential for reliable inferences about the research population and the scientific monitoring of patterns and trends in the drug-crime link. In the first sampling stage 150 police stations were selected, stratified in terms of the nine provinces in South Africa, the districts within which police stations are grouped by the South African Police Service, as well as the demographic and reported crime characteristics of these districts. In the second sampling stage, eligible detainees at sampled police stations were systematically selected over a seven-day period to avoid selection bias.

Although an unanticipated low number of detainees at several of the police stations in the realised sample reduced the original sample size from 2 000 to 1 143 detainees for questionnaire administration, the integrity of the realised sample was reflected in various respects: (a) Weighting of the questionnaire responses—in order to compensate for

disproportionate sampling and for differences between the realised and originally designed sample—generally did not skew the response percentages; (b) the differences between the weighted and unweighted percentages were generally less than five percentage points; (c) 99.4% of the sampled persons who were approached for an interview consented; all of those approached for a urine specimen consented; (d) analysis showed that the sampled respondents and the recorded population of detainees from whom the respondents were selected were closely similar with regard to, for example, gender and the main offence category in terms of which a person was detained. Indeed, the close resemblance underlined the viability of selecting respondents in terms of probability principles—which is essential for the scientific monitoring of patterns and trends in the drug-crime link—rather than on the basis of "convenience" or "opportunity".

Data were gathered through an interview-administered and largely closed-ended questionnaire, supplemented with randomly administered biological tests (urinalysis) to determine the reliability of self-reports of drug consumption in the period immediately preceding the urinalysis. The results were positive, rendering the self-reports of drug consumption more reliable.

In the construction of the questionnaire, note was taken of local and international indicators/measures (questionnaire items) on drug consumption. To avoid loss of concentration among the respondents and interference with police routine, the questionnaire was generally administered within 30 minutes. Thus the section on licit drugs was dealt with less comprehensively than intended or recommended in related research. To facilitate standardisation, the fieldworkers were provided with a detailed fieldwork manual. Data collection took about four weeks (28 days). Care was taken to ensure confidentiality and voluntary participation in the interviews and provision of urine specimens.

Analysis of the data leaned towards multivariate analysis, and thus towards the examination of relationships between variables. Because of the large scope and quantitative nature of the study, data analysis was computer facilitated. The emphasis was on the manner in which the data patterned rather than on absolute figures. Descriptive analysis, focusing on frequency distributions, was facilitated by cross-tabulation and graphic display. Relationships were examined with the aid of Geographic Information Systems (GIS) technology and multivariate statistical analysis, including the use of the HLM (Hierarchical Linear Models) and CHAID computer programs. Budget constraints resulted in selective use of these programs.

5.3 FINDINGS

This section summarises the findings of the sample survey of the connection between drug consumption and crime. The summary illuminates the survey respondents' vulnerability to drug consumption and related harm (including crime) on the level of the individual and broad socioeconomic conditions, and with regard to the period before their arrest at the time of the survey. Vulnerability was defined in terms of the public health assumptions that underpinned the survey. As the emphasis in this section is on areas of vulnerability to drug-related harm (including crime), the discussion does not contain the figures noted in Chapter 4.

5.3.1 High level of drug consumption

A high overall level of drug consumption generally characterised the life of the respondents before the time of the survey, as illustrated by the following drug consumption patterns:

- Drug consumption was widespread, on a lifetime, past 12 months' and past month's basis, particularly in respect of licit drugs (alcohol and tobacco). Various other drugs (illicit drugs, inhalants, prescription drugs and steroids) were consumed on a lifetime and past 12 months' basis.
- Multiple drug consumption, i.e. the simultaneous use of two or more drugs (e.g. tobacco and cannabis), occurred.
- Lifetime injection drug consumption was reported. Apart from being a risk practice in terms of HIV infection, such consumption is generally indicative of multiple, prolonged and heavy drug intake.
- Among past 12 months' consumers of drugs, regular consumption (at least once a week up to daily) of illicit drugs (especially cocaine), inhalants and prescription drugs manifested.
- Experiences of dependence on illicit drugs, inhalants, prescription drugs and steroids—indicative of long-term and heavy intake—were reported, especially with regard to designer drugs, cocaine (powder) and cannabis. Dependent use of alcohol/tobacco particularly occurred—as implied by the respondents' reports of trying to get hold of alcohol/tobacco at the time of their arrest.

5.3.2 Social pressure towards drug consumption

Vulnerability to drug-related harm (including crime) was, furthermore, reflected in the finding that the respondents were living in an environment conducive to drug taking, i.e. they were socially exposed to drugs/drug use, such use was socially supported and there was limited social discrimination against it. For example:

- Initiation into the consumption of illicit drugs tended to occur during adolescence. This is the time when the young person moves away from the "parental" home with its closer social regulation/censure into the public domain with its more limited social regulation/censure.
- First use of LSD and to some extent cannabis occurred during the pre-adolescent years, suggesting that the respondents concerned were exposed to limited "parental" regulation/censure during their early formative years regarding the consumption of the particular drugs.
- Early initiation into the consumption of illicit drugs such as cannabis tended to coincide with witnessing dealing in illicit drugs and gang membership. With respect to initiation into drug consumption and especially an early onset age, cognisance also needs to be taken of evidence (United Nations Office for Drug Control and Crime Prevention, 2001:104, 108) that an early onset age of consumption of licit drugs (and, by implication, illicit drugs) places the consumer at risk of "progressing" to illicit or multiple drug intake. The findings of the survey also suggested that an early age of onset placed the consumer at risk of "progressing" to dependence. For example, a statistically significant association emerged between age of onset with regard to cannabis and *trying to get hold of cannabis/tobacco* (or, by implication, habitual/dependent consumption of cannabis/tobacco) when arrested at the time of the survey. Indeed, lifetime cannabis consumers who were trying to get hold of cannabis/tobacco at the time of arrest tended to report a younger (16 years and younger) rather than older age of onset for cannabis use.
- Self-reported lifetime as well as past 12 months' consumption of drugs, whether illicit or licit, tended to occur in neighbourhoods where illicit trading in drugs took place.
- Drug consumption was commonly a group activity, mostly with friends (who could be—specifically in the case of cannabis consumers—persons who had come into

conflict with the law), and frequently occurred at trading outlets (e.g. illicit "drug houses", taverns/shebeens).

- Participation in illicit drug trading (at some time in the respondents' life) and thus easy access to illicit drugs also occurred.
- Experiences of direct social pressure to consume drugs—coercive and non-coercive—were also reported.

5.3.3 Psychological pressure to consume drugs

Environmental "pressure" to consume drugs was strengthened by personal attraction to (certain) drugs, and a belief in the rewarding effect of drug intake as well as in limited social censure against the consumption of drugs. These factors contributed to a tendency to be tolerant towards consumption. For example, short-term hedonistic and escapist orientations (e.g. pleasure seeking, feeling "good", getting "high", escaping stress/life's problems) tended to encourage drug intake, with certain reasons applying to certain drugs in particular (e.g. the consumption of crack cocaine, amphetamines, inhalants, cannabis, mandrax and the cannabis-mandrax mixture in particular was motivated by a need for mood change and specifically "to get high"). Awareness of a wide range of drugs was widespread, as was the belief in easy access to most illicit drugs, inhalants and prescription medicine. The high self-admitted consumption of licit drugs confirmed their accessibility.

5.3.4 Drug-crime links

The findings also indicated that the level of drug consumption among the respondents generally concurred with their level of involvement in crime. Both were high. (This finding is in accordance with those in a 1996 national survey among prisoners (Rocha-Silva & Stahmer, 1996).) A chi-square test showed, for example, a statistically significant association between self-admitted lifetime/past 12 months' drug consumption and self-reported arrest for an offence before as well as during the 12 months that preceded the survey. Moreover, this concurrence reflected an interactive relationship.

More specifically, the survey findings suggested that drug consumption contributed to participation in criminal activity. For example, the onset of illicit drug consumption generally preceded the first formal involvement with the criminal justice system. The median age (22 years) of first arrest for an alleged offence was generally later than the respective median age

of onset of use (generally between 15 and 20 years) of various illicit drugs. The drug habit was also supported by involvement in criminal activity. Indeed, the findings suggested that participation in criminal acts contributed towards initiation into and maintenance of drug use. Exposure to trading in illicit drugs in combination with personal involvement in criminal acts was found to increase the probability of consuming some drug in the 12 months before the survey.

The concurrent participation in drug consumption and crime, furthermore, reflected a drug-crime lifestyle featuring the use of licit drugs (e.g. alcohol, tobacco, inhalants, over-the-counter medicine, steroids) as well as illicit drugs, and a wide range of offences, including acts of violence. For example, self-reports disclosed conflict with the criminal justice system (e.g. arrests by the police) at the time of or immediately after taking drugs. Involvement in acts of violence (e.g. quarrels/fights) at the time of or immediately after taking drugs was common, specifically in the case of designer drugs, cocaine, steroids, mandrax, amphetamines and cannabis-mandrax mixtures.

There was a statistically significant association between certain forms of drug consumption, certain drug consumption settings and type of crime involvement. Indeed, a statistically significant association was found

- between the type of offence for which the respondents had been arrested at the time of the survey and reports of past 12 months' consumption of some drug. Among the respondents who had been arrested for rape and to a lesser extent for a drug law offence or a property crime, reports of some form of drug consumption in the 12 months before the survey were particularly common.
- between type of offence arrested for during the 12 months before the survey and reports of past 12 months' consumption of alcohol. The respondents who had been arrested in the 12 months before their arrest for a drug law offence and to a lesser extent for a violent crime particularly included persons who reported alcohol consumption during the same period.
- between type of offence arrested for during the 12 months before the arrest and reports of past 12 months' consumption of tobacco. The respondents who had been arrested in the 12 months before their arrest for a drug law offence and to a lesser extent for a

property crime, particularly included persons who admitted using tobacco during the same period.

- between type of offence in the 12 months before their arrest at the time of the survey in 2000 and reports among past 12 months' consumers of cannabis of using this drug mostly in a private home. The respondents who had been arrested for a drug law offence in the 12 months before their arrest at the time of the survey particularly comprised cannabis users who indicated with regard to the same period that they mostly consumed this drug when they were in their own or someone else's home.
- between type of offence during the 12 months before their arrest at the time of the survey in 2000 and reports of consuming cannabis mostly in the company of other people during the same period. The respondents who had been arrested for a drug law offence in the 12 months before their arrest at the time of the survey particularly comprised consumers of cannabis who, during the same period, had consumed this drug mostly in the company of other people.

5.3.5 Variation in psychosocial vulnerability to drug-related harm

Vulnerability to drug consumption and related harm (including crime) differed across place (e.g. socioeconomic contexts, provinces) and individuals. For example:

- Broader socioeconomic conditions contributed to demographic differences in drug consumption among the respondents. In fact, as population density and level of formal housing increased in a neighbourhood (e.g. magisterial district), so did the probability decrease of gender differences in the occurrence of drug (e.g. cannabis) consumption. Furthermore, greater population density in a neighbourhood increased the probability of individuals experiencing violent encounters (e.g. threats/stabbing with a knife). These encounters, in turn, increased the probability of the individuals concerned taking drugs such as cannabis.
- Vulnerability to drug consumption and related harm distributed unevenly and in a complex manner across the provinces, even though it tended to be particularly marked in the Western Cape. In this province vulnerability featured on a wide range of levels, e.g. with regard to the range of drugs consumed, the prevalence of self-reported participation in and exposure to trading in illicit drugs, the prevalence of self-reported

exposure to acts of violence, and the prevalence of self-reported experiences of social pressure (coercive and non-coercive) to consume (illicit) drugs.

- Persons with limited educational and/or employment opportunities were particularly vulnerable to the drug-crime problem. (This finding is in accordance with the findings of the 1996 survey among prisoners (Rocha-Silva & Stahmer, 1996:10-35).) However, educational and employment opportunities did not necessarily insulate people from involvement in a drug-crime lifestyle, especially when exposed to drug-related crime such as trading in illicit drugs. For example, exposure to trading in illicit drugs increased the probability that a person with a comparatively high educational background (Grade 11 and higher) might use a drug (e.g. tobacco) and commit a drug law offence.

5.3.6 Drug-related harm

The survey respondents also noted experiences of various forms of drug-related harm. These included reports of dependence on one or more drugs and the following experiences during or immediately after the consumption of certain drugs:

- Suicidal feelings (*wished were dead*) were especially common in the case of cocaine consumption.
- Involvement in violence (quarrels/fights) was especially common in the case of designer drugs; to a lesser extent in the case of cocaine and steroids; and to an even lesser extent in the case of mandrax, amphetamines, the cannabis-mandrax mixture and inhalants.
- Job losses occurred especially among cocaine consumers and to a lesser extent among consumers of steroids, amphetamines and mandrax.
- Road accidents were especially common among crack cocaine consumers and to a lesser extent among consumers of steroids, LSD, amphetamines and designer drugs.
- Injuries in road accidents were especially common among consumers of crack cocaine and to a lesser extent among consumers of steroids, LSD, amphetamines and designer drugs.

The findings also suggest that some drug consumers were vulnerable to HIV infection, considering that some respondents admitted injecting drugs and sharing injection equipment.

5.4 CONCLUSIONS

This section discusses the extent to which the aims and objectives of the investigation have been achieved, the limitations of the study and its implications for future research and social work intervention. In fact, it makes recommendations for future research and social work intervention.

5.4.1 Extent to which the aims and objectives of the investigation have been achieved

Regarding the extent to which the aims and, more particularly, the objectives of the investigation have been met, the following needs to be noted:

- **Vulnerability to the drug-crime problem at the individual and broad socioeconomic level**

The objectives relating to the above issue were met in that the 2000 holding cell survey

- *confirmed* indications in the only other national study on the drug-crime phenomenon, the1996 survey among incarcerated persons (Rocha-Silva & Stahmer, 1996), that the drug-crime phenomenon (a) manifests in comparatively intense drug intake and comparatively intense criminal activity, and an interactive relationship between the two manifestations; and (b) develops within a context of social exposure to, support of and limited discrimination against drug use, as well as positive personal orientations towards such use;
- *deepened the insight* of the 1996 survey (Rocha-Silva & Stahmer, 1996) by illustrating (a) the influence of broad socioeconomic conditions on individual behaviour; (b) the importance of factoring violence (and, by implication, injury and death) into estimations of the costs of drug-crime manifestations; (c) the complexity and dynamics/variability of the manifestation and development of drug-crime links; and (d) the relevance and, thus, usefulness of a public health perspective on the drug-crime problem.

- **National system for monitoring the drug-crime link among detainees in holding cells at police stations**

The procedures (outlined in the fieldwork manual in Annexure 3) and questionnaire used in the survey provided a solid basis for the development of a permanent system for nationally monitoring the drug-crime phenomenon among entrants into the criminal justice system

(detainees in holding cells at police stations). In fact, a number of factors underlined the viability and usefulness of the fieldwork procedures employed in the investigation in illuminating the drug-crime phenomenon and in particular the nature and extent to which entrants into the criminal justice system were vulnerable to drug-related crime:

- The reliability of the data was highlighted by (a) the high response rate in the survey; (b) the general concurrence between the self-reports of drug consumption in the period immediately preceding urinalysis and the results of the urinalysis; (c) the logical consistency between the responses to various questions in the survey; and (d) the close similarity in, for example, gender and the main offence category in terms of which a person was detained between the sampled respondents and the recorded population of detainees from whom the respondents were selected.
- The similarity between the demographic characteristics of the sampled respondents and the detainees from whom they were selected highlighted the viability of sampling survey respondents in terms of probability principles—which is essential for the scientific monitoring of patterns and trends in the drug-crime link—rather than on the basis of "convenience" or "opportunity".
- The survey questionnaire used indicators/measures (questionnaire items) on drug consumption that have been shown (locally and internationally) to be useful in understanding the nature and extent of drug consumption.
- The usefulness of Geographical Information Systems (GIS) technology and HLM and CHAID computer programs for exploring the contribution of broad socioeconomic conditions to the drug-crime phenomenon and interactions between the latter conditions and individual-oriented factors was demonstrated.

- **The prevention of the drug-crime problem**

The findings of the 2000 holding cell survey also provided pointers for preventive action that are delineated in the preventive recommendations made in a subsequent section. It should however be noted here that the survey found—as did the 1996 survey among incarcerated persons (Rocha-Silva & Stahmer, 1996)—that substantial proportions of the respondents were amenable to drug-related remedial treatment. This finding, in conjunction with evidence that effective drug-related treatment reduces criminal activity, underlines the importance of regularly screening entrants into the criminal justice system and diverting those who test

positive into drug-related treatment. Furthermore, considering (a) that the survey has shown that vulnerability manifests at the individual and broad socioeconomic level, and (b) social work's traditional concern with problem solving with regard to individuals, groups and communities, indeed with individuals as well as the broad socioeconomic conditions within which individuals live, the survey points to the importance of social workers participating in preventive action regarding the drug-crime problem.

5.4.2 Limitations of the study

The investigation provides a basis for developing a more profound system for monitoring the dynamics of the drug-crime phenomenon and the impact of preventive efforts. However, as it was the first of its kind, the procedures followed need to be re-tested and developed to overcome the following difficulties that the investigation highlighted:

- Budget constraints inhibited efforts to supplement the quantitative data-gathering instruments with qualitative instruments. In-depth and focus group interviews could, for example, have provided deeper insight into the variations that occurred across demographic categories and locations.
- Budget constraints also inhibited comprehensive and balanced attention to various types of drugs in the survey questionnaire, and limited analysis of the extent to which broad socioeconomic conditions interacted with data on drug consumption and crime.
- Fieldwork was complicated by (a) unforeseen low levels of detainee intake at (selected) police stations, (b) poor staff cooperation and limited time available for administering the questionnaire at police stations with an unforeseen and exceptionally high detainee intake, and (c) an unforeseen low intake of female detainees.

5.5 RECOMMENDATIONS

This section formulates guidelines for social workers regarding prevention of drug-related harm and in particular drug-related crime. The guidelines take cognisance of the conceptual framework and findings of the study as well as the findings of various overseas studies that (a) reductions in the level of drug use concur with reductions in the level of crime in a community (McBride & McCoy, 1993:257-278), and (b) (coerced) placement of offenders in drug-related therapeutic programmes is a cost-effective way of reducing/preventing drug use and, consequently, reducing/preventing criminal activity and recidivism (Marlowe, 2003:4-14;

Anglin & Maugh II, 1992:66-90). The section concludes with recommendations for future research.

5.5.1 Basic preventive premises

Given the findings of the 2000 holding cell survey, preventive policy and action should consider strategies and actions that

- focus on the individual, on the environment/community/group in which the individual lives as well as on the use of drugs, and do so in an integrated and balanced manner;
- reach out to individuals not as objects to be acted upon but as subjects who can contribute positively to intervention;
- have a firm support base in the (wider) community within which preventive action occurs;
- involve target groups in preventive planning and implementation;
- combine demand reduction (e.g. through health promotion programmes that reduce socioeconomic inequities) and supply reduction (e.g. through control/law enforcement) in a balanced manner;
- draw on evidence/research and monitoring and evaluation of the characteristics of the application context at a particular point in time;
- operate on a primary, secondary and tertiary level, apart from addressing individuals' life circumstances holistically.

5.5.2 Preventive focuses

On the basis of the 2000 holding cell survey findings, the following behavioural, attitudinal and "environmental" factors should be taken into consideration in preventive action:

- Multiple drug use, including mixed use of licit and illicit drugs (e.g. tobacco and cannabis)
- Injection drug use and especially the sharing of injection equipment
- Regular use of drugs (at least once a week/daily)
- Habitual or dependent drug use
- Early onset of drug use, especially in the case of LSD and cannabis

- Drug taking to experiment, effect mood change (pleasure, fun) and cope with life's difficulties
- Exposure to and participation in the illicit drug trade
- Group use of drugs in places where activities centre on drug use (e.g. taverns, "drug houses")
- Involvement in criminal subcultures, e.g. gangs
- Involvement in criminal acts, especially drug law contraventions and violence (e.g. assault, rape)
- Coercive and non-coercive social pressure to use drugs
- Easy or "unregulated" access to drugs—licit and illicit—including over-the-counter medicine (e.g. pain relievers, cough mixtures, anti-allergy medicine) and prescription medicine (e.g. pain relievers, relaxants, sleeping tablets)
- Limited "parental" control/regulation during the early formative years
- Environments in which acts of violence (e.g. assault) are commonplace
- Broader socioeconomic conditions, e.g. population density and limited access to basic services (education, housing)

5.5.3 Preventive strategies

For comprehensive and integrated prevention, multifaceted initiatives at various levels within and outside the criminal justice system as well as close collaboration between agencies are essential. The following strategies should be viewed as equally important:

- **Preventive strategies in non-criminal justice settings: Demand reduction**
  - Individual-orientated strategies such as community-based and participatory educational programmes that inter alia demystify beliefs about the benefits of drug use and train people to counter social pressure.
  - Environment-orientated strategies such as participatory efforts at redressing socioeconomic deprivation and increasing opportunities for non-risky activities.

- Specialised and broad-brush clinical services that provide short and long-term therapy as well as additional services such as medical treatment and occupational training.
- Community-based information campaigns that assist the public to detect risky drug use early and access appropriate preventive services.

- **Preventive strategies in non-criminal justice settings: Supply reduction**

- Focused and "inconveniencing" policing in neighbourhoods known for illicit drug trafficking, specifically to discourage this and to identify and divert risk-prone people to appropriate services.

- **Preventive strategies in criminal justice settings: Pre-incarceration programmes (supply and demand reduction)**

- All arrestees should be screened for the use of drugs, e.g. through urinalysis and/or by drug recognition experts;
- Drug-screening records should be filed and consulted when pre-trial release or sentencing is considered;
- Persons who test positive should be tested in more depth as a first step towards "diversion" into appropriate treatment, if needed, and bearing in mind their treatment preferences;
- Care should be taken to record seized drugs and ensure that the drugs do not "disappear".

- **Preventive strategies in criminal justice settings: In-prison programmes (supply and demand reduction)**

- Prisons should be policed regularly and effectively to uncover drug trafficking and seize drugs.
- Inmates should be periodically screened for drug use, and those who test positive should be diverted into appropriate treatment, bearing in mind their treatment preferences.
- Inmates with a history of chronic drug use should be enrolled in compulsory treatment programmes of about nine to twelve months before they may be considered for parole, bearing in mind their treatment preferences.

- Specialised individual and group counselling services, self-help groups and specialised drug-related treatment (e.g. medical treatment) should be appropriately combined.
- The progress of subjects should be closely monitored, e.g. through regular drug screening.
- Competent staff should be employed.
- Community resources should be utilised where they are needed, available and feasible.
- Subjects should be intensively prepared for the post-release period.
- Long-term enrolment in community-based treatment programmes on release from prison should be enforced to prevent recidivism.

5.5.4 Recommendations for future research: National monitoring system

In view of ensuring evidence-based prevention, it is essential that the implementation of a system of long-term, comprehensive and integrated monitoring of drug-crime links among first entrants into the criminal justice system (detainees at police stations) be built into preventive efforts. It is also essential to re-test the usefulness/relevance of the system used in the present investigation as well as that of the collected data. In the design and implementation of the recommended system the following should be considered:

- In line with past experience in setting up surveillance systems in South Africa, the long-term sustainability of the recommended monitoring system should be ensured through (a) building an adequate and long-term budget into the system, and (b) developing the system as a core function of a permanent structure, e.g. a government department such as the South African Police Service.
- To facilitate (a) early and accurate identification of emerging patterns and trends in the drug-crime link, and (b) cost-effectiveness, the monitoring system should encompass a national sample survey, administered annually or at least every second year and at a set time.
- In the design and implementation of the recommended national sample survey, the following issues have to be considered:
  - The use of fieldwork procedures that are in line with the procedures noted in the fieldwork manual (see Annexure 3) of the 2000 holding cell study, including procedures for limiting fieldwork coordination difficulties.

- The construction of a survey questionnaire that gives comprehensive and balanced attention to various types of drugs.
- The extrapolation of the survey results to all police stations, using a combination of computer (e.g. a neural network computer software programme) and Geographical Information Systems (GIS) technology. (In this respect it should be noted that (a) the GIS Centre at the Human Sciences Research Council has demonstrated the reliability of the recommended extrapolation process (Rocha-Silva & Weir-Smith, 2001:52-53), and (b) research agencies abroad (e.g. Frischer & Heatlie, 2001:55-66) have demonstrated the usefulness of GIS technology and modelling techniques for increasing insight into clandestine practices such as drug use and criminal activity.)
- A comprehensive analysis of interaction between the survey data and broad socioeconomic conditions, using a combination of computer programs (e.g. the HLM (Hierarchical Linear Models) program) and GIS technology, as well as socioeconomic census data.
- The inclusion of qualitatively gathered data (e.g. data gathered in focus group and in-depth interviews) to increase insight into the survey results.

5.6 CONCLUDING STATEMENT

In the light of international evidence that rational and concerted intervention in the drug-crime link reduces crime as well as various health risks (e.g. HIV/AIDS) and social risks (e.g. unemployment), such intervention should be given high priority in governmental and non-governmental circles. This will reduce strain on law enforcement, welfare and health agencies and promote growth and development. Experience has shown that success can be achieved only through long term government commitment to preventive programmes, to building close partnerships in this respect, and monitoring and evaluating initiatives. As noted in the *World Drug Report 2000* ((United Nations Office for Drug Control and Crime Prevention, 2000:107):

[G]overnments must provide leadership and commitment for prevention to be effective, ...[by] establishing policy ... based ... on empirical evidence ... making resources available and setting standards of acceptable practice [and] ... maintaining ... commitment, even when resources are scarce or when crises divert attention ... [Government] can also exercise leadership by bringing together representatives of business, the media and non-government organizations to seek solutions.

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Appendix 1

LIST OF SAMPLED POLICE STATIONS

NAME	ID
ABERDEEN	SAPS1
ALBERTON	SAPS9
ALGOAPARK	SAPS14
ALICE	SAPS15
ALLDAYS	SAPS19
AMALIA	SAPS20
ASHTON	SAPS26
ASSEN	SAPS27
BALFOUR	SAPS39
BARBERTON	SAPS41
BARKLY EAST	SAPS42
BEAUFORT WEST	SAPS52
BEDFORD	SAPS53
BENONI	SAPS62
BERLIN	SAPS65
BESTERS	SAPS66
BETHULIE	SAPS71
BISHOP LAVIS	SAPS74
BOITHUSO	SAPS87
BOOYSENS	SAPS95
BRITS	SAPS115
BRITSTOWN	SAPS116
BRIXTON	SAPS117
BULWER	SAPS125
CALCUTTA	SAPS131
CALVINIA	SAPS134
CARLETONVILLE	SAPS140
CARNARVON	SAPS141
CATHCART	SAPS143
CORNELIA	SAPS170
DE DOORNS	SAPS190
DEBEN	SAPS194
DENEYSVILLE	SAPS200
DIENTJIE	SAPS205
DIEPRIVIER	SAPS207
DOUGLAS	SAPS217
DUDUDU	SAPS219
DUNCAN VILLAGE	SAPS1112
ELANDS BAY	SAPS242
ELIM	SAPS247
ELSBURG	SAPS251
ENGCOBO	SAPS259
ESTCOURT	SAPS265
EVANDER	SAPS267
FICKSBURG	SAPS277

NAME	ID
FRANKLIN	SAPS289
GRAVELOTTE	SAPS322
GREYLINGSTAD	SAPS324
GREYTOWN	SAPS325
HAENERTSBURG	SAPS336
HAMMANSKRAAL	SAPS338
HEIDELBERG(C)	SAPS354
HENNENMAN	SAPS361
HEUNINGVLEI	SAPS368
HLABABOMVU	SAPS375
HLOBANE	SAPS378
HOGSBACK	SAPS384
HOPETOWN	SAPS390
HOUT BAY	SAPS391
INTSIKENI	SAPS406
JAN KEMPDORP	SAPS417
JOUBERTINA	SAPS425
KABEGA PARK	SAPS428
KANONEILAND	SAPS437
KATLEHONG	SAPS442
KGOMOTSO	SAPS455
KING WILLIAM'STOWN	SAPS461
KLAWER	SAPS469
KRAAIFONTEIN	SAPS490
KWA MASHU	SAPS498
KWANDENGEZI	SAPS507
LADYBRAND	SAPS516
LOTHAIR	SAPS548
LOW'S CREEK	SAPS551
LOXTON	SAPS552
MAGATLE	SAPS573
MALETSWAI	SAPS586
MALVERN	SAPS590
MARBLE HALL	SAPS598
MBAZWANA	SAPS612
MIDDELBURG TVL	SAPS631
MMABATHO	SAPS640
MOORREESBURG	SAPS653
MOROKA	SAPS655
MOTETEMA	SAPS659
MOTHIBISTAD	SAPS661
MOTSWEDI	SAPS663
MOUNT FLETCHER	SAPS665
MPUMALANGA	SAPS671
NABABEEP	SAPS685
NABOOMSPRUIT	SAPS686
NAVALSIG	SAPS691
NEBO	SAPS694
NEW HANOVER	SAPS698
NEWARK	SAPS699
NEWCASTLE	SAPS700

NAME	ID
NGANGELIZWE	SAPS702
NORWOOD	SAPS720
NYONI	SAPS733
ODENDAALSRUS	SAPS735
ORKNEY	SAPS744
OUDTSHOORN	SAPS749
PELLA	SAPS768
PETRUS STEYN	SAPS771
PHILIPPI	SAPS776
PHOMOLONG	SAPS781
PINELANDS	SAPS790
POMEROY	SAPS797
PORT ALFRED	SAPS799
PORT EDWARD	SAPS800
PRINCE ALFRED HAMLET	SAPS816
PTA-CENTRAL	SAPS812
QUEENSTOWN	SAPS822
RANDFONTEIN	SAPS825
RIEBEECK EAST	SAPS839
RIEBEEK WEST	SAPS840
RITAVI	SAPS846
ROOIBERG	SAPS855
SCHWEIZER-RENEKE	SAPS877
SEBOKENG	SAPS882
SECUNDA	SAPS883
SHARPEVILLE	SAPS893
SOMERSET EAST	SAPS905
SOMERSET WEST	SAPS906
SOSHANGUVE	SAPS907
SPRINGFONTEIN	SAPS912
SUNDUMBILI	SAPS940
TARKASTAD	SAPS955
TINA FALLS	SAPS970
TSHITALE	SAPS988
TSOMO	SAPS991
TWEELING	SAPS997
UITENHAGE	SAPS1004
ULUNDI	SAPS1005
UPPER TUGELA	SAPS1016
VAN REENEN	SAPS1021
VERULAM	SAPS1036
VREDENBURG	SAPS1054
WEPENER	SAPS1077
WESTVILLE	SAPS1080
WIERDABRUG	SAPS1083
WITBANK	SAPS1090
WOLWEFONTEIN	SAPS1096
ZAAIPLAAS	SAPS1104
ZASTRON	SAPS1106
ZEERUST	SAPS1108

Appendix 2

INFORMED CONSENT

σ **READ OUT**

My name is ..... I am one of several researchers doing interviews here with people in holding cells for an **independent study**. This study is investigating the drug use of people in police holding cells. To do so, we have to ask you a few questions that will take about 30 minutes. You are welcome to page through a copy of the questionnaire. Answering the questions will not help or harm your case, as we do not work for the police, courts or prisons. In fact, the research is not linked in any way to the police investigation. You have been selected for this interview purely by chance and if you agree to answer the questions, your answers will be kept completely confidential. Your name will, for example, not be linked to what you write down. If you do not want to answer the questions, nothing will happen to you. You will merely be taken back to the cells. Also, if you agree to answer the questions, you can at any time ask me to stop, repeat or explain a question. I'd rather you told me that you do not want to answer than that you do not answer truthfully.

		Yes	No
A.	Do you have any questions?	1	2
B.	Will you do the interview?	1	2

σ **IF NO, THANK RESPONDENT AND TERMINATE INTERVIEW.**
σ **IF YES, AND NO URINE SPECIMEN IS REQUIRED GO TO QUESTION D.**
σ **IF YES, AND URINE SPECIMEN IS REQUIRED CONTINUE**

σ **READ OUT**

For the study to be complete, we also need a urine specimen from you. This is common procedure in studies of this kind. If you agree, you will be escorted to the toilet to give the urine specimen in a container in private after we have completed this questionnaire. Again, your name will not be linked to the urine specimen. It will be given a number, selected by chance, given to the questionnaire on which I will enter your answers.

		Yes	No
C.	Will you provide a urine specimen?	1	2

σ **ASK ALL**

		Yes	No
D.	Before signing this questionnaire would you like a little time to consider whether you would like to take part in this study?	1	2

σ **LET RESPONDENT SIGN CONSENT FORM**
σ **SIGN AS WITNESS**

Respondent _____ Signature

_____ Date

Witness _____ Signature

_____ Date

σ **AFTER COMPLETING THE INFORMED CONSENT FORM, TEAR IT OFF AND KEEP SEPARATE**
σ **HAND IN SEPARATE TO SUPERVISOR**

σ STICK URINE SAMPLE LABLE HERE

NATIONAL STUDY OF DRUGS-CRIME CONNECTIONS AND RELATED MATTERS

Card number; Questionnaire number	
Project number	

σ **TO BE FILLED IN BY SUPERVISOR**

Province number	
Police area code	
Crime segmentation code	
Police station	

σ **TO BE FILLED IN BY INTERVIEWER**

Interview starting time			H			M
Interview finishing time			H			M
Duration of interview			M			

σ **IF INTERVIEW TAKES PLACE MORE THAT 48 HOURS AFTER ARREST, NO URINE SPECIMEN CAN BE TAKEN**

	Yes	No
Urine specimen received?	1	2

SECTION A
BIOGRAPHICS

1. How old will you be at your next birthday in years? Years

2. Are you a South African Citizen?

Yes	No
1	2

σ **IF YES IN Q2, SKIP TO Q4**

σ **IF NO IN Q2, ASK**

3. What citizenship do you hold (Specify) _____

σ **ASK ALL**

σ **PROBE. MAKE SURE TO GET AN ANSWER FOR ALL 3 CATEGORIES**

4. Where were you born? (place of birth)

Country (Specify)	
Province – South Africa (Specify)	
Village/town/city – South Africa(Specify)	

σ **SHOW SHOWCARD 5**

5. Which of these categories best describe you?

Arab	1	Coloured	4
Asian	2	Indian	5
Black African	3	White	6
		Other (Specify).....	7

σ **SHOW SHOWCARD 6**

σ **MULTIPLE ANSWERS POSSIBLE**

6. What language(s) do you speak most often?

Afrikaans	0	1	Gujerati	0	9	South Sotho	1	7
English	0	2	Hindi	1	0	Tswana	1	8
Dutch	0	3	Tamil	1	1	Tsonga	1	9
French	0	4	Telegu	1	2	Venda	2	0
German	0	5	Urdu	1	3	Swazi	2	1
Greek	0	6	Zulu	1	4	Ndebele	2	2
Italian	0	7	Xhosa	1	5			
Portuguese	0	8	North Sotho	1	6			
Other (Specify)							2	3

σ **SHOW SHOWCARD 7**

7. What is your current marital status?

Married – Civil (church or magistrate	0	1	Divorced/ estranged	0	5
Married – Traditional (lobola/ bogadi)	0	2	Live together	0	6
Married – Civil and traditional (loboda/ bogadi)	0	3	Widower/ widow	0	7
Single	0	4	Other (Specify)	0	8

8. Do you have any dependent children?

Yes	1
No	2

9. Do you have any other dependants?

Yes	1
No	2

σ **SHOWCARD 10**

10. Which of the following best describes your present work situation?

Unemployed, not looking for work	0	1
Unemployed, looking for work	0	2
Work in informal sector, not looking for permanent work	0	3
Pensioner (aged/ retired/ sick/ disabled, etc.)	0	4
Housewife, homemaker, not looking for work	0	5
Housewife, homemaker, looking for work	0	6
Student/ pupil	0	7
Self-employed – full time (40 hours or more per week)	0	8
Self-employed – part time (less than 40 hours per week)	0	9
Employed part time (if none of the above) (less than 40 hours per week)	1	0
Employed full time (40 hours or more per week)	1	1
Other (Specify)	1	2

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

11. If you are presently working, where is this place of work?

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

12. What would you call the type of work that you are presently doing or, if you are presently not working, the type of work that you did the last time that you worked (e.g. labourer, clerk, domestic worker, teacher)?

.....

.....

σ READ OUT

Nowadays, people use more than one way to make money, to get food, clothes, etc. to survive. Thinking now of the **past calendar month** and what you did to survive:

σ CODE LEADING ZEROS

σ ROUNDED FIGURES ONLY

13. How much **money** (Rands) did you and those you are responsible for need **per day** (more or less) to survive?

R						

σ READ OUT STATEMENTS

14. From which of the following source(s) did you obtain the help you needed to survive over the **past calendar month?**

	Q14		Q15				
	Yes	No	Rands in total				
Formal salary/ earnings on which you pay income tax	1	2					
Contributions by **adult** (18 years and older) family members/ relatives	1	2					
Contributions by **young** (below 18 years family members/ relatives	1	2					
Government pensions/ grants (e.g. old age pension, disability grant)	1	2					
Grant/ donations by private welfare organisations	1	2					
Informal salary/ earnings on which you do not pay income tax:	1	2					
❖ Hawking	1	2					
❖ Spaza shop-keeping	1	2					
❖ Taxi driving	1	2					
❖ Prostitution	1	2					
❖ Dealing/ growing/ manufacturing drugs	1	2					
❖ Stealing/ selling stolen goods	1	2					
❖ Other (Specify)	1	2					
Other sources (Specify)	1	2					

σ IF YES, ASK Q15

σ IF NO ON ALL CATEGORIES, SKIP TO Q16

σ RECORD IN TABLE NEXT TO OPTION MENTIONED

σ CODE LEADING ZEROS

σ ROUNDED FIGURES ONLY

15. How many Rands in total did you get approximately from (**READ OUT ANSWER FROM Q14**)?

σ **ASK ALL**

σ **SHOW SHOWCARD 16**

16. What is your highest educational qualification, or the highest school standard/form which you have passed?

No school education	0	1	Grade 9/ Standard 7/ Form 2	1	0
Grade 1/ Sub A	0	2	Grade 10/ Standard 8/ Form 3/ NTSI	1	1
Grade 2/ Sub B	0	3	Grade 11/ Standard 9/ Form 4/ NTSII	1	2
Grade 3/ Standard 1	0	4	Grade 12/ Standard 10/ Form5/ NTSIII	1	3
Grade 4/ Standard 2	0	5	Technikon diploma/degree	1	4
Grade 5/ Standard 3	0	6	Grade 12/ Standard 10 and 1-3 years university training	1	5
Grade 6/ Standard 4	0	7	Grade 12/ Standard 10 and more than 3 years university training	1	6
Grade 7/ Standard 5	0	8	Other educational qualification	1	7
Grade 8/ Standard 6/ Form 1	0	9	(Specify)		

17. Do you belong to any faith, religion, denomination or belief?

Yes	1
No	2

σ **IF NO, SKIP TO Q20**

σ **IF YES IN Q17, CONTINUE WITH Q18**

18. To which faith, religion, denomination or belief do you belong?

---

19. In the **past month** did you attend religious services ...?

Regular (once a week)	1
Often (once or twice a month)	2
Seldom (once every three months or longer)	3
Never	4

σ **ASK ALL**

σ **SHOWCARD 20**

σ **ONE ANSWER ONLY**

20. Thinking about the **past month**, in which type of dwelling did you mostly live/ eside (i.e. sleep at night?

In a brick house/ dwelling	0	1	In a shack/ monjodolo	0	8
In a traditional African hut/ house	0	2	In a temporary shelter (e.g. plastic bags, cardboard box)	0	9
In townhouse/ cluster/ semi-detached	0	3	In a caravan/ tent	1	0
In a flat/ townhouse/ apartment	0	4	In jail/ prison	1	1
In an outside room/ flat/ house in backyard	0	5	In an alcohol/ drug treatment clinic/ centre	1	2
In room/ flat let not in backyard of main house/ building	0	6	No particular residence – on the street	1	3
Room, flat let in hostel	0	7	Other (Specify)	1	4

σ **IF Q20 (CODE 11-14) SKIP TO Q22**

σ **IF Q20 (CODE 1-10), ASK**

21. Do you own or rent ... **(READ OUT ANSWER IN Q20)**

Own	1
Rent	2

σ **ASK ALL**

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

22. What is the name of the **neighbourhood** in which you **mostly** lived/resided (i.e. slept) in the **past month**?

Name of city/ town/ district/ tribal authority _____ | | | |

Name of suburb/ village/ settlement/ farm _____ | | | |

23. In the **past month** what did you **mostly** do in your leisure time?

..... | | | |

..... | | | |

..... | | | |

..... | | | |

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

24. What is the name of the **neighbourhood** in which you **mostly** spend your leisure time in the **past month**?

Name of city/ town/ district/ tribal authority _____ | | | |

Name of suburb/ village/ settlement/ farm _____ | | | |

σ **SHOW CARD 25**

25. Now thinking of the neighbourhood in which you **mostly** lived/ resided (i.e. slept) in the **past month** how much, if at all did you witness each of the following? Please look at the show card and just give me the number.

σ **READ OUT STATEMENTS**

	Very often	Often	Seldom	Very seldom	Not at all
Fights (e.g. fist fights)	1	2	3	4	5
Gangsterism	1	2	3	4	5
Crime (e.g. theft, homicide, rape)	1	2	3	4	5
Empty/ abandoned buildings	1	2	3	4	5
Graffiti/ writing on walls in public places	1	2	3	4	5
People walking around at night without a weapon to defend themselves	1	2	3	4	5
Drug dealing/ selling	1	2	3	4	5

SECTION B
ARREST HISTORY

26. In the **12 months** before your current arrest, were you ever **arrested?**

Yes	1
No	2

σ **IF NO IN Q26, SKIP TO Q31**

σ **CODE LEADING ZEROS**

27. How many times were you arrested in the **past 12 months (excluding the current arrest)?** | |

28. For what offences were you arrested? (Specify)

..... | | | |

..... | | | |

..... | | | |

29. Were you convicted of any offence?

Yes	1
No	2

σ **IF NO IN Q29, SKIP TO Q31**

σ **IF YES IN Q29, ASK**

30. For what offences were you convicted?

.....

.....

.....

σ **ASK ALL**

31. Were you ever arrested for an offence **prior to the 12 months before your current arrest?**

Yes	1
No	2

σ **IF NO IN Q31, SKIP TO Q36**

σ **IF YES IN Q31, ASK**

σ **CODE LEADING ZEROS**

32. How old were you when you were **first arrested?**

33. For what offence were you first arrested?

.....

34. Were you ever **convicted** of any offence prior to the 12 months before your current arrest?

Yes	1
No	2

σ **IF NO IN Q34, SKIP TO Q36**

σ **IF YES IN Q34, ASK**

35. For what offence were you **mostly** convicted?

.....

SECTION C
CURRENT ARREST

σ **ASK ALL**

σ **READ OUT**

Thinking specifically about the incident for which you are **currently** under arrest:

36. What is the name of the neighbourhood where the alleged crime took place?

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

37. At the time of committing the alleged incident for which you are currently under arrest, were you trying to get hold of ....?

	Yes	No
Alcohol	1	2
Tobacco/ cigarettes	1	2
Prescription drugs	1	2
Dagga	1	2
Any other drugs	1	2

38. At the time of committing the alleged incident for which you are currently under arrest, did you have a firearm with you?

Yes	No
1	2

SECTION D
DRUG USE

σ **ASK ALL**

σ **READ OUT**

In this section we will be looking at various substances that can be used for **non-medical reasons**. When answering the following questions please answer for usage of substances for **non-medical reasons only.**

First of all we are going to focus on general substances used everyday.

D.1. SUBSTANCE: TOBACCO/ CIGARETTES, ETC.

σ **READ OUT**

Thinking about ... **(NAME OF SUBSTANCE)** please answer the following questions

39. Have you ever tried ... **(NAME THE SUBSTANCE)** without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.2. Q39**

σ **IF YES, ASK D.1 Q40 – D.1 Q42**

σ **ASK ALL**

40. Have you used ... **(NAME THE SUBSTANCE)** in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

41. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

42. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... **(NAME THE SUBSTANCE)**?

Don't know - 9

D.2. SUBSTANCE: ALCOHOL

σ **READ OUT**

Thinking about ... **(NAME OF SUBSTANCE)** please answer the following questions

39. Have you ever tried ... **(NAME THE SUBSTANCE)** without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.3. Q39**

σ **IF YES, ASK D.2 Q40 – D.2 Q42**

σ **ASK ALL**

40. Have you used ... **(NAME THE SUBSTANCE)** in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

41. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

42. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... **(NAME THE SUBSTANCE)**?

Don't know - 9

D.3. SUBSTANCE: SUBSTANCE THAT CAN BE BOUGHT OVER-COUNTER TO RELIEVE PAIN (e.g. Grandpa, Syndol)

σ **READ OUT**

Thinking about ... **(NAME OF SUBSTANCE)** please answer the following questions

39. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.4. Q39**

σ **IF YES, ASK D.3 Q40 – D.3 Q42**

σ **ASK ALL**

40. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

41. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

42. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

D.4. SUBSTANCE: OTHER SUBSTANCES THAT CAN BE BOUGHT OVER-COUNTER (e.g. Cough/ Allergy medicine, Lennons).

σ **READ OUT**

Thinking about ... **(NAME OF SUBSTANCE)** please answer the following questions

39. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.5. Q39**

σ **IF YES, ASK D.4 Q40 – D.4 Q42**

σ **ASK ALL**

40. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

41. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

42. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

σ **ASK ALL**

σ **READ OUT**

Now we are going to focus on **other** substances used by people that are classified as drugs. Please note that you should answer only with regard to **non-medical use** of these substances.

D.5. INHALANTS (e.g. glue, petrol)

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.5 Q43 SKIP TO D.6 Q43**

σ **IF YES, CONTINUE WITH D.5**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.6 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wish you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.5 Q71**

D.5. INHALANTS (e.g. glue, petrol) – Cont.

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... **(NAME OF SUBSTANCE)?**

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____ | | |

Name of suburb/ village/ settlement/ farm _____ | | |

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

..... | | |

..... | | |

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.5 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month? | |

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month? | | | |

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.5. INHALANTS (e.g. glue, petrol) – Cont.

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.6. CANNABIS/ MARIJUANA/ DAGGA

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.6 Q43 SKIP TO D.7 Q43**

σ **IF YES, CONTINUE WITH D.6**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.7 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

D.6. CANNABIS/ MARIJUANA/ DAGGA – Cont.

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wish you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.6 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62 Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

D.6. CANNABIS/ MARIJUANA/ DAGGA – Cont.

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

.....

.....

65. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.6 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... **(NAME THE SUBSTANCE)** in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... **(NAME THE SUBSTANCE)** in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... **(NAME THE SUBSTANCE)**?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

D.7. DAGGA & MANDRAX (White-Pipe)

σ **READ OUT**

Thinking about ... **(NAME THE SUSBSTANCE)** please answer the following questions

D.7. DAGGA & MANDRAX (White-Pipe) – Cont.

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.7 Q43 SKIP TO D.8 Q43**

σ **IF YES, CONTINUE WITH D.7**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.8 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.7 Q71**

D.7. DAGGA & MANDRAX (White-Pipe) – Cont.

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62 Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... (**NAME OF SUBSTANCE**)?

Name of city/ town/ district/ tribal authority _____ | | | |

Name of suburb/ village/ settlement/ farm _____ | | | |

64. What was your main reason for using ... (**NAME OF SUBSTANCE**)?

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.7 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.7. DAGGA & MANDRAX (White-Pipe) – Cont.

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.8. MANDRAX

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.8 Q43 SKIP TO D.9 Q43**

σ **IF YES, CONTINUE WITH D.8**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.9 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

D.8. MANDRAX – Cont.

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q52**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... (**NAME THE SUBSTANCE**) by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... (**NAME THE SUBSTANCE**) by needle?

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.8 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME**, share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

D.8. MANDRAX – Cont.

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62 Where did you **MOSTLY** use ... **(NAME OF SUBSTANCE)?**

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

.....

.....

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.8 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.8. MANDRAX – Cont.

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.9. CRACK/ ROCK

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.9 Q43 SKIP TO D.10 Q43**

σ **IF YES, CONTINUE WITH D.9**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.10 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q52**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

D.9. CRACK/ ROCK – Cont.

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.9 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... (**NAME OF SUBSTANCE**)?

Name of city/ town/ district/ tribal authority _____ | | | |

Name of suburb/ village/ settlement/ farm | | | |

64. What was your main reason for using ... (**NAME OF SUBSTANCE**)?

..... | | | |

..... | | | |

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.9 Q71**

σ **IF YES IN Q65, ASK**

D.9. CRACK/ ROCK – Cont.

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.10 COCAINE POWDER (Coke)

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.10 Q43 SKIP TO D.11 Q43**

σ **IF YES, CONTINUE WITH D.10**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.10 **COCAINE POWDER (Coke) – Cont.**

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.11 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q52**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... (**NAME THE SUBSTANCE**) by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... (**NAME THE SUBSTANCE**) by needle?

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.10 Q71**

σ **IF YES IN Q56, ASK**

D.10 COCAINE POWDER (Coke) – Cont.

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME,** share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... (**NAME OF SUBSTANCE**)?

Name of city/ town/ district/ tribal authority _____ | | | |

Name of suburb/ village/ settlement/ farm | | | |

64. What was your main reason for using ... (**NAME OF SUBSTANCE**)?

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.10 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

D.10 COCAINE POWDER (Coke) – Cont.

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.11. SUBSTANCE:AMPHETAMINES (e.g. Speed, Uppers, Diet Pills)

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.11 Q43 SKIP TO D.12 Q43**

σ **IF YES, CONTINUE WITH D.11**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.11. SUBSTANCE:AMPHETAMINES (e.g. Speed, Uppers, Diet Pills) – Cont.

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.12 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.11 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

D.11. **SUBSTANCE:AMPHETAMINES (e.g. Speed, Uppers, Diet Pills) – Cont.**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62 Where did you **MOSTLY** use ... **(NAME OF SUBSTANCE)?**

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____ | | |

Name of suburb/ village/ settlement/ farm _____ | | |

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.11 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

D.11. SUBSTANCE: AMPHETAMINES (e.g. Speed, Uppers, Diet Pills) – Cont.

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.12 SUBSTANCE: LSD (Acid, candy)

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.12 Q43 SKIP TO D.13 Q43**

σ **IF YES, CONTINUE WITH D.12**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.13 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.12 SUBSTANCE: LSD (Acid, candy) – Cont.

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wish you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.12 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/tavern/lounge/club	3	Other	6

D.12 SUBSTANCE: LSD (Acid, candy) – Cont.

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____ | | |

Name of suburb/ village/ settlement/ farm _____ | | |

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

65. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.12 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... **(NAME THE SUBSTANCE)** in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... **(NAME THE SUBSTANCE)** in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... **(NAME THE SUBSTANCE)**?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

D.13 SUBSTANCE: DESIGNER DRUGS (e.g. Ecstasy, Eve, Adam, Emphoria).

σ **READ OUT**

Thinking about ... **(NAME THE SUSBSTANCE)** please answer the following questions

D.13 **SUBSTANCE: DESIGNER DRUGS (e.g. Ecstasy, Eve, Adam, Emphoria). – Cont.**

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.13 Q43 SKIP TO D.14 Q43**

σ **IF YES, CONTINUE WITH D.13**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.14 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.12 Q71**

D.13 SUBSTANCE: DESIGNER DRUGS (e.g. Ecstasy, Eve, Adam, Emphoria). – Cont.

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... (**NAME OF SUBSTANCE**)?

Name of city/ town/ district/ tribal authority _____ | | |

Name of suburb/ village/ settlement/ farm _____ | | |

64. What was your main reason for using ... (**NAME OF SUBSTANCE**)?

..... | | |

..... | | |

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.13 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.13 SUBSTANCE: DESIGNER DRUGS (e.g. Ecstasy, Eve, Adam, Emphoria). – Cont.

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.14 SUBSTANCE: SUBSTANCES THAT RELIEVES SEVERE PAIN (e.g. Wellconal, Pethidine).

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.14 Q43 SKIP TO D.15 Q43**

σ **IF YES, CONTINUE WITH D.14**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.15 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

D.14 SUBSTANCE: SUBSTANCES THAT RELIEVES SEVERE PAIN (e.g. Wellconal, Pethidine) – Cont.

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... (**NAME THE SUBSTANCE**) by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... (**NAME THE SUBSTANCE**) by needle?

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wish edyou were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.14 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME**, share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... **(NAME OF SUBSTANCE)?**

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

.....

.....

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.14 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

D.14 SUBSTANCE: SUBSTANCES THAT RELIEVES SEVERE PAIN (e.g. Wellconal, Pethidine) – Cont.

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.15 SUBSTANCE: SUBSTANCES THAT HELPS PEOPLE TO RELAX (e.g. Valium, Librium, Activan).

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.15 Q43 SKIP TO D.16 Q43**

σ **IF YES, CONTINUE WITH D.15**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.16 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.15 SUBSTANCE: SUBSTANCES THAT HELPS PEOPLE TO RELAX (e.g. Valium, Librium, Activan).

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... (**NAME THE SUBSTANCE**) by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... (**NAME THE SUBSTANCE**) by needle?

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.15 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME,** share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

D.15 SUBSTANCE: SUBSTANCES THAT HELPS PEOPLE TO RELAX (e.g. Valium, Librium, Activan).

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... **(NAME OF SUBSTANCE)?**

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____ | | |

Name of suburb/ village/ settlement/ farm _____ | | |

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

65. In the **PAST MONTH**, did you use ... (**NAME THE SUBSTANCE**)

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.15 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... (**NAME THE SUBSTANCE**) in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... (**NAME THE SUBSTANCE**) in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

D.15 SUBSTANCE: SUBSTANCES THAT HELPS PEOPLE TO RELAX (e.g. Valium, Librium, Activan) – Cont.

70. In the past **THREE DAYS** have you used ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... (**NAME THE SUBSTANCE**)?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.16 SUBSTANCE: SUBSTANCES THAT HELP PEOPLE TO SLEEP (e.g. Amytal, Nembutal)

σ READ OUT

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.16 Q43 SKIP TO D.17 Q43**

σ **IF YES, CONTINUE WITH D.16**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.17 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

D.16 SUBSTANCE: SUBSTANCES THAT HELP PEOPLE TO SLEEP (e.g. Amytal, Nembutal)

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.16 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

D.16 SUBSTANCE: SUBSTANCES THAT HELP PEOPLE TO SLEEP (e.g. Amytal, Nembutal) – Cont.

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____ | | |

Name of suburb/ village/ settlement/ farm _____ | | |

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

65. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.16 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... **(NAME THE SUBSTANCE)** in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... **(NAME THE SUBSTANCE)** in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... **(NAME THE SUBSTANCE)**?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

D.17 SUBSTANCE: HEROIN (Junk, Smack)

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.17 Q43 SKIP TO D.18 Q43**

σ **IF YES, CONTINUE WITH D.17**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.18 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q55**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... (**NAME THE SUBSTANCE**) by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... (**NAME THE SUBSTANCE**) by needle?

D.17 SUBSTANCE: HEROIN (Junk, Smack) – Cont.

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.17 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME**, share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

D.17 SUBSTANCE: HEROIN (Junk, Smack) – Cont.

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

---

65. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.17 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... **(NAME THE SUBSTANCE)** in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... **(NAME THE SUBSTANCE)** in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... **(NAME THE SUBSTANCE)**?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

D.18 STEROIDS (e.g. Muscle Builders)

σ **READ OUT**

Thinking about ... **(NAME THE SUSBSTANCE)** please answer the following questions

43. Have you ever heard of ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN D.18 Q43 SKIP TO D.19 Q43**

σ **IF YES, CONTINUE WITH D.18**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... **(NAME THE SUBSTANCE)**?

Don't know - 9

45. Have you ever been **offered ... (NAME THE SUBSTANCE)**?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

47. Have you ever tried ... **(NAME THE SUBSTANCE)** without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO D.19 Q 43**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... **(NAME THE SUBSTANCE)**?

49. Have you EVER felt that you could not do without ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

50. Have you EVER received treatment for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q52**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... **(NAME THE SUBSTANCE)** by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... **(NAME THE SUBSTANCE)** by needle?

D.18 STEROIDS (e.g. Muscle Builders) –Cont.

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.18 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME,** share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/tavern/lounge/club	3	Other	6

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... (**NAME OF SUBSTANCE**)?

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

D.18 **STEROIDS (e.g. Muscle Builders) –Cont.**

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

65. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.18 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... **(NAME THE SUBSTANCE)** in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... **(NAME THE SUBSTANCE)** in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... **(NAME THE SUBSTANCE)**?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

D.19 **PCP (e.g. Angel Dust)**

σ **READ OUT**

Thinking about ... (**NAME THE SUSBSTANCE**) please answer the following questions

43. Have you ever heard of ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN D.19 Q43 SKIP TO Q73**

σ **IF YES, CONTINUE WITH D.19**

σ **MAXIMUM TEN**

σ **CODE LEADING ZEROS**

44. Out of every ten people in your neighbourhood how many over the age of 10, would you say have tried ... (**NAME THE SUBSTANCE**)?

Don't know - 9

45. Have you ever been **offered** ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

46. Have you ever been **forced** by someone to use ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

47. Have you ever tried ... (**NAME THE SUBSTANCE**) without being forced?

Yes	No
1	2

σ **IF NO, SKIP TO Q73**

σ **IF YES IN Q47, ASK**

σ **CODE LEADING ZEROS**

48. How old were you when you **FIRST** tried ... (**NAME THE SUBSTANCE**)?

49. Have you EVER felt that you could not do without ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

50. Have you EVER received treatment for ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

σ **IF NO IN Q50, SKIP TO Q52**

σ **IF YES IN Q50, ASK**

51. What kind of treatment have you received?

Inpatient	1
Out patient	2
Other (Specify)	3

σ **ASK ALL**

52. Have you EVER taken ... (**NAME THE SUBSTANCE**) by needle without a doctor prescribing it?

Yes	No
1	2

σ **IF NO, SKIP TO Q55**

σ **IF YES IN Q53, ASK**

σ **CODE LEADING ZEROS**

53. How old were you when you **FIRST** took ... (**NAME THE SUBSTANCE**) by needle?

D.19 PCP (e.g. Angel Dust) – Cont.

54. Have you ever shared a needle with someone while injecting ... (**NAME THE SUBSTANCE**)?

Yes	No
1	2

55. Did it EVER happen that at the time you were taking or after you took ... (**NAME THE SUBSTANCE**)

	Yes	No		Yes	No
You got involved in quarrels/ fights?	1	2	You had an accident while driving?	1	2
You used a firearm?	1	2	You got hurt through a driving accident?	1	2
You were arrested by the police?	1	2	You got hurt through another accident?	1	2
You lost your job?	1	2	You wished you were dead?	1	2

56. Have you used ... (**NAME THE SUBSTANCE**) in **THE PAST TWELVE MONTHS**?

Yes	No
1	2

σ **IF NO IN Q56, SKIP TO D.19 Q71**

σ **IF YES IN Q56, ASK**

57. How did you **mostly** take ... (**NAME THE SUBSTANCE**)?

Oral	1	Inject	4
Smoke	2	Other (Specify)	5
Inhale	3		

σ **IF Q57 CODE 4, ASK**

58. If you mostly injected ... (**NAME THE SUBSTANCE**) without a doctor prescribing it, did you **AT ANY TIME**, share a needle with someone?

Yes	No
1	2

59. On about how many days did you mostly take ... (**NAME THE SUBSTANCE**)?

Daily	1	1 to 2 days a month	5
3 to 4 days a week	2	3 to 4 days a year	6
1 to 2 days a week	3	1 to 2 days a year	7
3 to 4 days a month	4		

60. Did you use ... (**NAME THE SUBSTANCE**) **MOSTLY** in company of others or alone?

Company of others	1
Alone	2
Both	3

σ **IF Q60, CODE 2, SKIP TO Q62**

σ **IF Q60, CODE 1 OR Q60 CODE 3, ASK**

61. Who kept you company **MOSTLY**?

Spouse/partner	1	Members of a gang	4
Relatives	2	People who have been in trouble with the law	5
Friends	3	Other	6

62. Where did you **MOSTLY** use ... (**NAME OF SUBSTANCE**)?

Own home	1	Drug dealer's place	4
Other's home	2	Any place	5
Shebeen/ tavern/lounge/club	3	Other	6

D.19 PCP (e.g. Angel Dust) – Cont.

σ **PROBE FOR ANSWER FOR CITY AND SUBURB**

63. What is the name of the neighbourhood where you mostly got ... **(NAME OF SUBSTANCE)?**

Name of city/ town/ district/ tribal authority _____

Name of suburb/ village/ settlement/ farm _____

64. What was your main reason for using ... **(NAME OF SUBSTANCE)?**

.....

.....

65. In the **PAST MONTH**, did you use ... **(NAME THE SUBSTANCE)**

Yes	No
1	2

σ **IF NO IN Q65 SKIP TO D.19 Q71**

σ **IF YES IN Q65, ASK**

σ **CODE LEADING ZEROS**

66. On about HOW MANY DAYS did you use ... **(NAME THE SUBSTANCE)** in the past month?

σ **CODE LEADING ZEROS**

σ **ROUNDED FIGURES**

67. How much MONEY (Rands) did you all together spend to get/buy ... **(NAME THE SUBSTANCE)** in the past calendar month?

68. At this point in time do you **WANT HELP/TREATMENT** for ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **IF NO IN Q68, SKIP TO Q70**

σ **IF YES Q68, ASK**

69. What **KIND** of treatment do you want?

Social work	1	Medical practitioner	5
Psychological help	2	Church	6
Alcoholics Anonymous	3	Other	7
Drug counsellor	4		

70. In the past **THREE DAYS** have you used ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

71. In the neighbourhood/village/town where you MOSTLY lived/slept the PAST MONTH, would you say it is most difficult, difficult, easy, or very easy to get/buy ... **(NAME THE SUBSTANCE)**?

Most difficult	1	Easy	3
Difficult	2	Very easy	4

72. Have you EVER sold/resold ... **(NAME THE SUBSTANCE)**?

Yes	No
1	2

σ **ASK ALL**

73. Have you ever taken a combination of drugs at any one time? (excluding tobacco and alcohol)?

Yes	No
1	2

SECTION E

FIREARMS AND VICTIMIZATION

σ **READ OUT: There is always a chance of someone becoming a victim of crime**

74. Were you ever a victim of crime in the 12 months BEFORE your current arrest?

Yes	No
1	2

σ **IF YES Q74 ASK**

75. What type of crimes were you a victim of?

1 _____

2 _____

3 _____

4 _____

76.1 Have you EVER been threatened with a gun?

Yes	No
1	2

76.2 Have you EVER been threatened with another weapon?

(Specify) _____

Yes	No
1	2

77. Have you EVER been shot at?

Yes	No
1	2

78.1 Have you EVER been injured with a gun?

Yes	No
1	2

78.2 Have you EVER been injured with another weapon?

(Specify) _____

Yes	No
1	2

σ **READ OUT: Thinking of the neighbourhood in which you mostly lived/slept the PAST 12 MONTHS:**

79.1 Is it important to have your own knife (knife you fight with)?

Yes	No
1	2

79.2 Is it important to have your own gun?

Yes	No
1	2

80.1 Do people respect you more when you have your own knife?

Yes	No
1	2

80.2 Do people respect you more when you have your own gun?

Yes	No
1	2

81.1 If you want one can you easily get a knife?

Yes	No
1	2

82.2 If you want one can you easily get a gun?

Yes	No
1	2

83 Have you EVER shot at someone? (excluding in the line of duty)

Yes	No
1	2

84 Have you EVER stabbed someone with a knife?

Yes	No
1	2

σ **READ OUT: While committing an offence have you EVER ...**

85 Carried a gun with you?

Yes	No
1	2

86 Carried a knife with you?

Yes	No
1	2

87 Used a knife?

Yes	No
1	2

88 Used a gun?

Yes	No
1	2

89. Have you EVER been part of a gang?

Yes	No
1	2

σ **IF YES Q89 ASK**

90. Have you EVER been part of a gang IN THE PAST 12 MONTHS?

Yes	No
1	2

SECTION F
HIV/AIDS

σ **READ OUT: Let's now talk bout HIV/AIDS ...**

91. Have you HEARD/READ about HIV/AIDS?

Yes	No
1	2

σ **IF YES Q91 ASK**

σ **DO NOT READ OPTIONS OUT**

92. Can you name two ways by which HIV/AIDS is transmitted?

Way 1		Way 2	
None/ Don't know	1	None/ Don't know	1
Unprotected sex	2	Unprotected sex	2
Dirty needles	3	Dirty needles	3
Blood transfusions	4	Blood transfusions	4
Other	5	Other	5

93. Have you ever been tested for HIV/AIDS?

Yes	No
1	2

THANK YOU FOR ASSISTING US IN THIS STUDY!

SECTION G
QUESTIONNAIRE CONTROL

σ **INTERVIEW INFORMATION TO BE FILLED IN AFTER INTERVIEW ARE COMPLETED.**

Name of **INTERVIEWER** and address of field branch	Name of **FIELD SUPERVISOR** and address of field branch
.....	.....
.....	.....
.....	.....
Tel. No.	Tel. No. .....
Signature:	Signature: .....
Date of interview:.....	Date questionnaire was checked:.....

σ **TO BE COMPLETED FROM RECORDS BY FIELD SUPERVISOR**

1. Gender of respondent:

Male	1
Female	2

2. Respondent:

Arrested during commission of crime or during police pursuit	1
Arrested following a warrant	2

3. Offences for which respondent is held (see code list):

Most serious offence			
Second most serious offence			
Third most serious offence			

4. Number of hours since arrest in holding cell (max. 48hours) | | |

SECTION H
RESPONDENT'S CONSENT FOR INTERVIEW

σ **TO BE COMPLETED BY THE INTERVIEWER**

1. Did the respondent consent to the interview, or part of it?

Yes	1
No	2

2. If yes, what type of consent was given?

Consent for interview only	1
Consent for urine specimen only	2
Consent for interview & urine specimen	3

3. If the respondent declined the interview altogether, state reason(s):

.....
.....
.....
.....

Appendix 3

National sample survey among detainees at police stations: The connection between drug consumption and crime

Fieldwork manual

Foreword

This manual is a shorter version of the fieldwork manual that Lee Rocha Silva compiled for the 2000 holding cell survey on drug-crime connections among detainees in holding cells at police stations in South Africa. It is similar to the original document, except that the introduction has been shortened.

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1. Rationale and initiation of the national study among detainees at police stations

In view of (a) local indications of rising levels of crime and drug use, and (b) the findings of a number of studies in other countries that the general levels of drug use and crime in a community/country tend to concur and, indeed, interact, the Human Sciences Research Council (HSRC) investigated in some detail links between drug use and criminal activity among incarcerated persons in a national survey in 1996.[1] (The focus was on the pre-incarceration history of persons in prisons at the time of the survey.)

Drug-crime links

The 1996 HSRC survey[2] pointed to a complex intertwinedness between drug use and criminal activity, suggesting a need for more investigation. It underscored the importance of developing a cost-effective system for monitoring the nature of drug-crime links among persons entering the criminal justice system, specifically to inform and assess the impact of policy/action directed at "disentangling" drug-crime connections.

Effective policy and action against drug-crime links require a monitoring system

Subsequently and in collaboration with the Crime Information Analysis Centre (CIAC) of the South African Police Services (SAPS), the HSRC tentatively explored the feasibility of implementing a customised format of the USA Arrestee Drug Abuse Monitoring (ADAM) Program in South Africa. The very busy Hillbrow police station in Gauteng was used as experimentation site. (In the USA the ADAM programme provides local estimates of drug use among an otherwise hard-to-reach population of drug users who tend to increase the burden of agencies in health care, criminal justice, welfare, etc. ADAM unravels drug-crime links and serves as a platform for researching other issues, e.g. the prevalence of HIV/AIDS and links between HIV/AIDS and drug use, domestic violence, gun ownership, living on the streets.) The Hillbrow study demonstrated the viability of measuring drug use among detainees at police stations, indeed provided motivation and fieldwork directives for designing a national sample survey among detainees in holding cells at police stations in South Africa.

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1 Rocha-Silva, L. & Stahmer, I. 1996. *Research relating to the nature, extent and development of alcohol/drug-related crime.* Pretoria: Human Sciences Research Council. (Unpublished research report.)

2 *Ibid.*

2. Main objectives of the study

- To facilitate the cost-effective monitoring of the nature and development of drugs-crime links in South Africa;
- To facilitate up-to-date comprehensive knowledge base on the nature and development of drugs-crime links;
- To inform and monitor the impact of preventive policy and service delivery.

3. Design of the study

A national sample survey is to be conducted among persons who, at the time of data collection, were no longer than 48 hours in holding cells at police stations in South Africa. Data are to be gathered through an interviewed-administered questionnaire and urine specimens. The urine specimens are to be used to test the reliability of questionnaire reports on drug use.

Probability sample survey of detainees in holding cells at police stations for no longer than 48 hours

Sample

To enable reliable analysis and generalization to all police stations in South Africa, a sample of about 2 000 detainees and 150 police stations have to be drawn in terms of probability principles. Before selection, police stations are to be systematically ordered, after having been stratified in terms of the nine provinces, police station districts, and the sociodemographic and reported crime characteristics of these districts as indicated in the most recent available data sources (e.g. South African 1996 census data and SAPS reported crime figures for 1998). Within the respective strata, the required number of police stations are to be systematically drawn, and in proportion to the total number of police stations within the respective strata. The 2 000 detainees are disproportionally allocated to the sampled police stations, with a minimum of four detainees per station and taking account of the reported crime cases per police station during the fieldwork month and the year for which reported crime figures are available. To avoid selection bias over the survey period, recorded detainees are systematically selected at the sampled police stations over a seven-day period, excluding the hours 22:00 to 06:00, when contact with detainees is generally prohibited. The selection interval in the systematic sampling of the detainees per sampled police station is calculated in terms of the number of detainees recorded in the four weeks before data collection at the police station concerned, and the number of detainees to be selected at the relevant station.

Questionnaire

The questionnaire in the survey has been constructed in terms of related South African studies on drug consumption and the related research program (ADAM) on drug-crime links among detainees at police stations in the United States of America. It addresses the following matters:

- Drug intake

(a) at some time ("ever") in life (type of drug use, including combinations, drug injection and sharing of injection equipment, and age of onset)

(b) in past 12 months (type and frequency of use, alone/company (type of company) during use, type and name of place of use, ways of procuring drugs, main reason for use)

(c) in past month (type and frequency of use, money spent on drugs)

(d) in past 3 days (type of use)

- Drug trading/dealing ("ever")
- Drug "dependence" ("could not do without …")
- Expressed need for drug-related treatment/help
- Involvement in "quarrels/fights", use of a firearm, SAPS arrest, driving/other accident and/or death wish during/after drug taking
- Accessibility of drugs at place of residence over past month
- Social pressure to use drugs ("ever")
- Criminal/arrest record

a) at some ("ever"/before past 12 months) time (age of onset, type of first offense, number and type of conviction/offense)

b) in past 12 months (type and frequency of offense)

c) current arrest (place of offense, involved in getting drugs, in possession of firearm)

Attention is also given to:

- The respondents' biographical data, i.e. their

a) gender, age, ethnic affinity, language, educational status, religion/faith, marital status, dependents

b) religious and leisure activities

c) place of birth, residence, leisure, work

d) characteristics of residence and neighbourhood in which residence is placed

e) work situation (status, type)

f) past month income (amount and source)

- The number of hours the respondents' spent in the holding cells
- The offense(s) for which respondents are held
- New drugs on the market (type, manner in which distributed/sold, cost, effects)

- Knowledge, attitudes and practices related to HIV/AIDS

(Practical difficulties, e.g. restrictions with regard to the length/time available interviewing arrestees at police stations, resulted in limiting the questions on the abovementioned topics.)

Interview questionnaire: biographics, drug intake and trading, criminal history, victimisation, firearms, HIV/AIDS

Urine specimen collection

The questionnaire is supplemented with biological tests (on urine specimens) for drug intake among the respondents of every third police station in the list of police stations sampled in the survey.

Urine specimen tests

4. Fieldwork coordination

To ensure cost-effective data gathering, it is necessary to appoint an overall fieldwork coordinator as well as a fieldwork sub-coordinator per (subgroup of) police station(s) included in the survey. The overall fieldwork coordinator will take operational responsibility for the data collection. This responsibility includes (a) organising the fieldwork, (b) organising interview materials, (c) training interviewers, (d) appointing, training and supervising fieldwork sub-coordinators who are to organise and supervise data collection at the sampled police stations, (e) liaising with SAPS staff, and (f) preparing an overall fieldwork report.

Sub-coordinators will (a) abstract from the SAPS records the required information on the offence (s) for which sampled respondents are detained and do so with the permission of and in collaboration with the assigned SAPS staff, (b) coordinate the sampling of and the interviews with the respondents, (c) supervise the interviewers, (d) edit the completed questionnaires, (e) record/log on a daily basis the data collection at the police stations, (f) timeously identify the need for and take the lead in remedial action during data collection, as well as (g) prepare a fieldwork report.

The fieldwork sub-coordinator must be alert to any problems the interviewers might encounter with respondents or the police, and intervene as necessary. The sub-coordinator has to monitor each interviewer's data collection proficiency by checking the completed interview questionnaires and the urine specimens collected after each data collection session (e.g. on a daily basis). If the number of completed interview questionnaires or urine specimens is low, the coordinator must discuss the problem with the interviewer and remedy the interviewer's style so as to raise the numbers.

Since the completed questionnaires will be sent to data entry personnel who have no knowledge of the questionnaires, the sub-coordinator must ensure that the collected data are accurate, consistent, and error-free. Changes should be made only where it appears that the interviewer made a careless mistake and when compared to the obvious answer. If the interviewer could not decide on the correct category for a response but wrote down the relevant response, the sub-coordinator should assess the information and mark the correct response. The sub-coordinator should not change the interview data on the basis of guesswork. When more than one answer option have been circled for a question that calls for one answer, the sub-coordinator should attempt to determine the correct response. If it is not possible to determine the correct response, all answers should be crossed out. Information on the questionnaire should not be changed simply to make it consistent with other information if the respondent was the source of the inconsistency. After each questionnaire has been edited, a red check mark (√) should be placed in the upper right corner on the front page of the questionnaire to indicate that the questionnaire has been edited and is ready for data capture.

A primary task of the sub-coordinator is to reconcile questionnaires, specimens and laboratory requisition forms, e.g. at the end of each day of data collection.

Fieldwork coordinators to ensure appropriate data collection

The fieldwork coordinator and sub-coordinators are responsible for the orderly conclusion of data collection at the end of each day, and at the end of the fieldwork of the survey. If the sub-coordinators have supervised the interviewers and edited the questionnaires continuously and diligently, the conclusion phase of data collection should be relatively easy and fruitful.

5. Fieldworker orientation

Because confidentiality is required, it is essential that the fieldwork agency does not recruit fieldworkers who may have contact with the respondents/arrestees in any other capacity than that related to the survey. It is also imperative that fieldworkers *only* engage with persons *directly* involved in the data collection process at police stations, and that they remain courteous at all times.

For the sake of consistency and cost-effectiveness, it is necessary that fieldworkers are available throughout the survey and that coordinators identify and solve problems that arise during the fieldwork timeously (e.g. on the same day that it occurs).

Imperative

Do not recruit fieldworkers who may have professional or any other contact with detainees outside the fieldwork situation

Interviewer

The interviewer must understand that the quality of the entire survey depends on the validity of the data that are collected during the interview. It should also be born in mind that the data collected will not be useful if more than a small number of persons refuse to be interviewed.

Inevitably, interviewers will develop a personal "style" to establish rapport with the respondent. However, at the same time, interviewers must maintain an objective and focused approach to the interview.

There may be instances when an interviewer prefers not to interview a particular respondent. This is a matter that the interviewer must discuss with the fieldwork sub-coordinator. In other instances, an interviewer may be assigned to interview a respondent he/she knows personally. It is then incumbent on the interviewer to inform the fieldwork sub-coordinator of the situation and abide by the sub-coordinator's decision in this regard. Finally, there may be occasions when a respondent behaves in an inappropriate manner during the interview. Should this occur, the interviewer is to suspend the interview and immediately notify the fieldwork sub-coordinator.

Interviewer safety

For appropriate fulfilment of the task an interviewer has to know what is expected of him/her and confident that he/she will be able to comply. A factor that may influence the latter is the interviewer's safety. It is incumbent, therefore, on fieldwork coordinators to ensure the interviewer's safety, e.g. by taking the following precautions:

- Ensuring the *anonymity* of the interviewer and respondent, for instance by seeing to it that interviewers do not wear or carry any visible material that may indicate their identity, apart from confirming that interviewers do not know their interviewees and instructing interviewers not to use their last name when introducing themselves to their respondents;
- In consultation and collaboration with SAPS staff and before starting data collection, fieldworkers need to *familiarise* themselves *with the environment* within which the interviews will take place and consider clear and *detailed safety and emergency plans*. For example, fieldworkers need to adhere to and, indeed, sign the general SAPS protocol rules (see attached form) as well as adhere to the specific SAPS protocol rules (e.g. specific entrances, exits, parking and operational facilities) applicable to the individual police stations included in the survey. During the interviews, interviewers and respondents should be in full view of assigned SAPS staff members. Interviewers and SAPS staff may agree to adopt a "buddy" system, i.e. to make contact with one another at regularly scheduled intervals. Respondents should be positioned away from the exit to the interview area/room to prevent them from blocking the interviewer's escape route in case of an emergency. At no time should interviewers carry/use weapons or objects that can be fashioned into weapons. Fieldwork supplies should, thus, be kept

out of the interview area. In fact, it is advisable that interviewers take into the interview area only what is essential to the interview.

Detailed safety and emergency plans needed

Fieldworker-SAPS staff relations

The status of the fieldworkers in a police station is that of "guests". The fieldworkers do not serve any policing function in the station and will not attempt to engage in police activities. The operational needs of the police station will at all times take precedence over the fieldwork programme. In fact, fieldworkers will adhere to and sign the general (Appendix 3) SAPS protocol rules as well as those unique to individual police stations, apart from providing the survey project leader with a signed indemnity form prior to accessing any particular police station.

The interviewers' principal reference person in the police station is the fieldwork sub-coordinator. Any issues or problems that may arise between interviewers and SAPS staff at the police station are to go through the fieldworker sub-coordinator. Interviewers should have no interaction with SAPS staff members not associated with the survey, especially in order to prevent leaving the impression that they are sharing with the police information from an interview.

Interviewer-respondent relations

All interaction with the respondents should be limited to the context of the interview. Interviewers will maintain a professional demeanour, treat the arrestees with respect and sensitivity to their situation whether or not they agree to the interview, take care not to project fear but at the same time take reasonable safety precautions, be prepared to remedy an inappropriate situation and be constantly and sharply alert to happenings around them and between them and the respondents.

It is not appropriate for interviewers to socialise with an arrestee during or after completing the interview, or to do the respondent any favours. Most important, interviewers should never divulge information about themselves to the respondents.

Fieldworkers to limit their interaction with the respondents to the context of the interview

Some respondents may be somewhat agitated or nervous when first approached about the interview. In these cases, it is helpful to allow the respondent a few minutes to calm down before beginning with the interview. However, the interviewer has to terminate the interview if in the course of the interview:

- The interviewer realizes that he/she knows the respondent;

- It becomes clear that the respondent is under the influence of a drug, i.e. to the point of effecting the quality of his/her responses (e.g. by responding incoherently);
- The respondent becomes emotionally upset, menacing or aggressive;
- Anything occurs that will jeopardize the interview and agitate the interviewer or respondent.

The interviewer's principal responsibility is to conduct the interview in a manner that is consistent with the procedures outlined in this manual as well as in accordance with any other specifications that the coordinators may decide on in the course of the fieldwork. This is to maintain the highest ethical standards as well as highest standards for accuracy and objectivity.

The interviewers will at all times uphold the respondents' rights. That is, the interviewers will provide the respondents with clear explanation of the purpose of the survey, informed consent, voluntary participation, and confidentiality safeguards; and refrain from revealing the names of any respondent or disclose the substance of the interview session to any individual who is not part of the survey team. In fact, interviewers have to read to the respondents the front page of the questionnaire that informs the latter about the purpose of the survey and what is expected of the respondents, apart from asking whether the latter will be prepared to participate.

6. Ethical issues: Informed consent and confidentiality safeguards

Any detainee approached to participate in the survey must be advised of his/her rights regarding his/her participation. A prospective interviewee (selected according to pre-decided sampling criteria) will be brought to a private area set aside for the interview where the interviewer will await his/her arrival.

It is at this stage that the interviewer will work through the informed consent form on the front cover of the questionnaire. With the aid of the informed consent form, the interviewer will explain the purpose of the programme to the selected respondent/arrestee, that the information collected is for research purposes only, that he/she is welcome to page through the questionnaire, that his/her participation is voluntary, and should he/she decline to participate there would be no repercussions. The interviewer will further explain that the respondent/detainee can refuse to answer any of the questions during the interview, or end the interview at any time, and again not face any repercussions.

It is at this time that the interviewer will answer any questions the respondent/detainee may have about the survey or the questions. If the respondent/detainee chooses not to participate or at any stage during interviewing do not want to proceed with the interview, the interviewer will inform the responsible SAPS officer and the respondent/detainee will be returned to the cell.

The interviewer can commence with the interview once the selected respondent/detainee has been informed of his/her rights, seems capable of participating (e.g. mentally, behaviourally) and agrees to participate.

Commence with the interview once the selected detainee has been informed of his/her rights, seems capable of participating (e.g. mentally, behaviourally) and agrees to participate

All interviews and urine specimen collection are administered anonymously, and safeguards are in place at all times to protect the identities of the participating arrestees and the confidentiality of their responses. For example, no personal identifiers will be used on the questionnaires or urine specimens. Instead, a unique research number is assigned to each detainee in order to link the urinalysis results with the questionnaire data, and to keep track of each case in the data system. Furthermore, the fieldwork (sub-)coordinators and interviewers will handle all materials associated with the survey. The interviewers will not discuss any information disclosed during an interview, or about an individual detainee, to anyone who is not part of the research team.

On some occasions, a detainee will want to know why he was selected or how the information will be used for research. The interviewer can answer these concerns by explaining the sampling process and that all the information collected is combined to create a group profile. Moreover, the group profile information is then a resource for communities to determine the need for prevention and/or treatment programmes. The detainee can also be told that the research is important because it provides insight into why some people have problems with drug or alcohol use and that the information is useful to help others avoid similar problems.

Before conducting any interviews, all interviewers will sign a pledge to maintain respondent/detainee confidentiality, and any interviewer who violates the pledge will be discharged from employment.

7. General interview instructions

Accurate completion of the questionnaire is paramount. Thus, right at the initiation of the interview the fieldwork sub-coordinator will provide the interviewers with a questionnaire for each detainee, and will have completed—with the permission and assistance of the relevant SAPS officer—the questionnaire section on the selected respondent's current arrest before the latter goes to the interviewer. The interviewer should scan this section of the questionnaire to ensure that it is complete. If any information is missing, the interviewer is to notify the sub-coordinator. Responses must be recorded legibly and accurately on the questionnaire sheet.

Accurate completion of questionnaires is paramount

Standardisation

A major issue in conducting the interviews is the standardisation of data – that is, its organisation within uniform, mutually exclusive categories such that variations and irregularities either in the interviewer's perceptions or in the recording of information are minimised.

While the personal interaction between the interviewer and the respondent may vary greatly from interview to interview, the structure of each of the interviews must be identical, and it is the interviewer's responsibility to "control" the interview situation accordingly. In fact, to ensure that the recorded data are accurate and complete and that the data collected by a particular interviewer can be compared to that collected by other interviewers, individual interviewers must ask the questions and record the responses in a uniform way, i.e.:

- Regarding the questions, interviewers must (a) use the exact words printed in the questionnaire, (b) read the questions slowly and clearly, (c) ask every question and follow the sequence of the questions in the questionnaire;
- Regarding the recording of answers, interviewers must (a) never suggest or assume responses, (b) record responses according to the instructions in the questionnaire, and (c) if in doubt about the correct coding of a response, write down the respondent's exact answer next to the question.

It is especially important that the interviewers use the exact words printed in the questionnaire. Any deviation from the exact wording of a question, whether deliberate or not, can easily change the task the respondent is asked to perform.

Even the most experienced interviewers occasionally consciously or unconsciously suggest answers to arrestees. This is most likely to occur when the interviewer already has partial information on the upcoming question. The tendency to put bits of information together and come up with answers to be "verified" by the respondent must be avoided.

Furthermore, it is the interviewer's responsibility to ensure that the respondents do not feel that they are taking a test or are being cross-examined. Nothing in the interviewer's voice or manner should imply criticism, surprise, approval or disapproval either of the questions asked or of the respondent's answers. Thus, interviewers should know the questions well enough to read each one smoothly and move on to the next without any hesitancy.

In situations where the respondent appears not to understand the question, misinterprets it, seems unable to decide on a response or strays from the subject, the best course of action is probably to repeat the question as it is printed in the questionnaire. After hearing the question a second time, the detainee may realise what he/she is being asked.

Where a respondent tries to discuss the recording process and/or disagrees about the interviewer's coding of his/her answer, interviewers are again advised to repeat the relevant questions and/or code the respondent's answer in the way that he/she requested while writing the respondent's verbatim answer in the margin next to the question, checking the relevancy of the coding after the interview and, if needed, discussing the latter with the sub-coordinator.

Interviewers must ask the questions and record the responses in a uniform way

Probing

If the respondent gives an incomplete, irrelevant, unclear, ambiguous, inconsistent or contradictory answer, does not answer the question, does not understand the question, finds it difficult to answer in terms of the response options in the questionnaire, loses track of a question or changes to another topic, it is the interviewer's responsibility to elicit an appropriate response through careful, neutral or non-directive techniques. Probing is the technique used in such cases. In fact, probing is generally directed at:

- Motivating the respondent to elaborate on or clarify his answers;
- Helping the respondent to focus on the specific content of the interview instead of on irrelevant or unnecessary factors.

In order to know when to use a probe, the interviewer must understand the objectives or intent of each question and know what constitutes an acceptable response. Probing techniques include:

- *Non-directive* and clarification probing: The interviewer expresses a need for a thoughtful and precise/specific response without suggesting answers, using neutral statements/questions (e.g. What else; Tell me more; Tell me more about your thinking on that; What do you mean/think; Why do you feel that way; Please be more specific);
- A *silent* probe: By pausing, appearing to wait for more information, the interviewer may encourage communication in the easiest and most neutral manner;
- *Repeating* a question: This technique is useful when the respondent misunderstands a question, appears uncertain of his/her response, does not respond or strays from the topic.

A respondent may indicate that the list of fixed responses to a question may not fit his/her circumstances or that he/she would choose different options under different conditions. In the case of sensitive questions, a statement on the part of a respondent that the response options to a particular question do not fit his/her circumstances may be a way of avoiding answering. In these situations the interviewer should help the interviewee to *generalize* or make an overall judgement. One way to do so is to say, for example, "Well then, in most cases or in general, what would your answer be ...", or "What would be your best estimate ...", and then repeat the question and response options.

For previously mentioned reasons, interviewers must probe when a respondent refuses to answer a question. One way to do so is to remind the respondent why each question has to be asked and that the information that the respondent provides will not affect the outcome of his/her case. Indeed, without arguing with the respondent, an interviewer can follow a respondent's refusal with a statement such as: "I understand, but remember your name will never be associated with the answer you give me. Even though you certainly have the right to refuse to answer any question, my interview will not be complete without your answers".

Probe incomplete, irrelevant, unclear, ambiguous, uncertain, inconsistent or contradictory answers, refusals: Repeat question, ask for clarification, pause

Types of questions

There are two types of questions in the survey questionnaire. These two types require slightly different recording techniques. Open-ended questions require of the interviewer to record the complete, spontaneous response of the arrestee. In recording the answers to open-ended questions, the interviewer must write the respondent's complete response in his/her own words, in the space provided in the questionnaire.

Closed questions are easier to deal with in that all or part of the response choices is included in the question wording and the interviewer can mark a pre-coded answer option in accordance with the respondent's answer. If a respondent gives an answer to a closed question that does not "fit" any of the pre-coded answer options, the interviewer does not arbitrarily allocate the response into a pre-coded category. The response is recorded either in the space provided for "Other (specify)" responses, or next to the pre-coded choices, in the exact words of the respondent. If for any reason the respondent does not answer a question the interviewer will note the reason for the non-response. A question should not be left blank, unless it is not applicable to a particular respondent.

Questions: Fixed response options or open-ended

Reviewing the questionnaire

Upon ending the interview, the interviewer must review the questionnaire for completeness and clarity. This activity will facilitate the editing and data capturing, which should expedite the turn-around time for the analysis.

Always review questionnaire for completeness and clarity

8. Urine specimen collection

Before discussing procedures for procuring urine specimens, it is important to stress that serious efforts must be made to persuade the respondents to provide the specimens. Failure to obtain the urine specimens reduces the value of the information obtained. Thus, interviewers must develop techniques for ensuring cooperation from the respondents while preserving their rights.

Once the questionnaire has been completed and the respondent has agreed to provide a urine specimen, the interviewer gives him/her a container with instructions to fill it nearly to the top and to put the cap on tightly. Give female respondents a small disposable cup with the container. An assigned SAPS officer then escorts the respondent to the toilet and observes from a discrete distance to ensure that the respondent does not attempt to dilute the specimen with water or spill it.

When the respondent returns with the container, the interviewer puts on a pair of fresh rubber gloves and takes the container. The interviewer checks to see that the container is at least half full. If the container is less than half full, ask the respondent if he/she can provide additional urine. Give the respondent a second container to try again. If he/she is successful a second time dispose of the first container. If the respondent is unable to provide a second specimen have him/her drink some water and try later. If the respondent is still unable to provide more urine, accept the amount given. The same procedure is followed for those who are unable to provide urine on the first attempt.

After having received a satisfactory specimen from a respondent, the interviewer:

- Wipes the container with a tissue and ensures that it is closed tightly;
- Attaches a duplicate number sticker (the same as that attached to the questionnaire the respondent completed) to the container;
- Makes sure the pairs of stickers on the respondent's questionnaire and the container with the respondent's urine specimen match;
- Places the container with the urine specimen in the assigned cooler box;
- Removes his/her rubber gloves and discards them into the assigned rubbish bag (the interviewer has to use a new pair of gloves for each specimen that he/she handles).

The interviewer has to remove the materials used in the collection of the urine specimens (indeed all the materials used during the interviewing process) at the end of a day of interviewing. Furthermore, before leaving the SAPS station with the cooler bags with urine samples, the interviewers and the Fieldwork Sub-Coordinators have to ensure that the urine samples are packed securely, e.g. by filling empty spaces up with newspaper/plastic packets.

Sub-Coordinators will ensure that urine specimens are delivered to the contact persons or depots of the agency responsible for testing the specimens for drugs.

SOUTH AFRICAN POLICE SERVICES (SAPS) PROTOCOL

1. ACCESS PROCEDURES

- Survey company supervisor in conjunction with the provincial Crime Information Analysis Centre (CIAC) office must timeously consult with the relevant Station Commander on dates and times when fieldwork will be conducted. Logistical issues should also be addressed for example should the relevant station not have adequate furniture, the survey company should provide their own.
- The Station Commander must designate the interview area, and co-ordinate personnel arrangements.
- All survey personnel and associated researchers must sign the indemnity before entering the SAPS facilities. The original indemnity form should be handed to the co-ordinating CIAC provincial office and copies supplied to the relevant Station Commander at chosen site.
- Survey personnel and associated researchers may not have access to the cells should family/friends/acquaintances of the former be detained. The former must inform the survey supervisor and SAPS hereof and access must be prohibited for the period of the latter's detention.
- The survey company supervisor must report to the Community Service Centre Commander before and after every shift at the relevant station, so that an Occurrence Book entry (OB) is made wherein times of arrival, names of survey staff and other persons associated with the research, time of departure and the number of arrestees (not names) interviewed is recorded. It is important that the given information be recorded as the arrestee can at a later date in court claim that he collaborated with someone. Without some proof of the survey teams visit to the station, the State's case in court could be affected.
- Survey personnel and associated researchers should visibly wear a uniform photo identification at all times, ensuring a clear distinction between researchers and investigating officers. Additionally, the SAPS also has control over who is entering the cell area. Persons failing to wear such identification will not be permitted to enter the cell area. A civilian identification must also be displayed to verify the abovementioned identification.
- Survey personnel and persons associated with the research will be body searched on entering and leaving the cell facilities of the SAPS.

2. GENERAL CONDITIONS

- Survey personnel and associated researchers accessing the SAPS facilities must sign the indemnity form as outlined above as well as sign the given protocol thereby agreeing to abide thereto.
- Survey personnel and associated researchers are reminded that they are subject to South African law. Any contravention could lead to prosecution.

- Survey personnel and associated researchers are not members of the SAPS and therefore have no right to act as such.
- Access to juveniles is limited, as the SAPS have to work within a certain frame, interference could cost the State the case.
- Arrestees recorded in the cell register but hospitalised will not be available for interviewing.
- Reasonable requests from Cell Commanders must be adhered to at all times.
- Reasonable requests from Investigating Officers must be adhered to. Should the arrestee be required for investigation purposes the interview should be ended.
- No firearms and other weapons are allowed in the cells and must be booked into the SAP 13 register for safekeeping and an OB entry made thereof.
- No camera or tape recording devices may be brought into the cells.
- Valuable items (for example jewellery, briefcases, etc.) brought into the cells should be limited as far as possible as the SAPS will bear no responsibility therefore.
- Should the survey personnel or persons associated with the research be intimidated or offered rewards or bribes from the arrestees, the interview should be ended immediately and the circumstances reported to the Cell Commander on duty.
- Necessary restraints may be used for prisoners at the discretion of members of the SAPS during interviews (for example handcuffs and/or leg irons), especially in case of dangerous prisoners.
- In high profile cases it is at the discretion of the court and/or Investigating Officer to indicate whether or not the arrestee may have visitors (be interviewed) except the legal representative, should such visits not be in the interests of justice.
- Members of the SAPS may not handle any specimen collected from the arrestee.
- Only arrestees being interviewed at that point may be removed from their cells and returned before the next arrestee is collected. Arrestees may not queue or wait to be interviewed.

3. ACCESS TIME STIPULATIONS

As the times for activities outlined hereunder could differ from station to station, detail in this regard must be ascertained from the relevant Station Commander.

- Interviews may not be conducted during the meal time periods for breakfast, lunch and dinner.
- It should be noted that family/legal representatives have preference. Should the arrestee have a visitor the interview should be ended. He/she must be given the option to end the interview.

4. POST ACCESS BEHAVIOUR

- Interviewers may not have access to any cell keys.
- Survey personnel and persons associated with the research should at no time escort prisoners or have access to individual/communal prisoner cells. Interviews should thus be conducted in

an area in the secure confines of the cell facilities allocated by the relevant Station Commissioner.

- Prisoners may under no circumstances be removed from SAPS cell facilities other than the area designated for interviewing by the relevant Station Commissioner.
- No sharp instruments may be given to the prisoners (e.g. pens/pencils).
- No other items or foodmay be given to the priosoners without prior approval of the Station Commissioner concerned, who will ensure that policing principles are adhered to in this regard.
- Interviewers should not discuss or interfere in the case against the arrestee or influence the arrestee in any way.
- Questions posed by the arrestee not related to the interview should not be answered by the interviewer.
- Survey personnel and persons associated with the research may not receive any item/s or written communication (other than those required in the research) from arrestees.
- Survey personnel and persons associated with the research may not comply with any requests made by the arrestees, for example make a telephone call on the arrestee's behalf.
- The use of cell phones will not be admissible in the cells, and retrieval of messages should be limited to times when interviews can not be conducted (as outlined hereunder) that is outside the confines of the cell facilities.
- The timeframe (30 minutes) set for the questionnaire completion must be complied with as far as possible, as an increasing time factor increases the risk of scape.
- A member of the SAPS must be in close proximity (not hearing proximity) at all times.
- A member of the SAPS must escort the arrestee at all times including during all specimen collections, which may not occur outside the secure confines of the cell area.

5. UNDERTAKING

I ..... ID/passport number: ..... agree to abide by the given protocol.

The Community Service Centre Commander, Cell Commander, Station Commander or any person designated by the Station Commander will have the authority to request any person seriously contravening the protocol to vacate the relevant station.

Signed at: ..... on this ..... day 2000

Signature: .....

Witnesses: 1. .....

2. .....

SOUTH AFRICAN POLICE SERVICE

Whereas I ....., identity number/passport number: ....,
In my capacity as a permanent employee/contract worker/field worker of: ...., wish to interview persons detained by the South African Police Service for purpose of research for the survey on drug consumption and crime among detainees in holding cells at police stations, and whereas all interviews with detained persons will be confidential and not in the presence of members of the South African Police Service, and whereas I am fully aware of the inherent risks involved in interviewing detained persons or being in the presence of detained persons,

I declare as follows:

- I conduct the program and any interview at my own risk and accept that members of the South African Police Service have no specific duty of care towards me;
- I hereby indemnify the Government of the Republic of South Africa, the Minister for Safety and Security, the South African police Service and any member of the South African police Service against any injuries, damages, costs and expenses which occur or result from the program or any interview;
- That I will in no way whatsoever interfere with the activities of the South African Police Service; and
- That I will obey any request put to me by any member of the South African Police Service.

Signed at ..... on this ..... day ..... 2000.

Signature: .....
Witnesses: 1. .....
2. .....

Appendix 4

CHAID computer programme[1]

G.V. Kass developed the CHAID computer programme in 1980 at the University of the Witwatersrand, South Africa. CHAID is one of the so-called AID (Automatic Interaction Detection) procedures used to identify interaction between independent variables (predictors) in regression-type of data. Indeed, CHAID is a procedure for predicting the outcome of a categorical (nominal or ordinal) dependent variable Y on the basis of predefined independent categorical variables (predictors) that contribute *most* to the variation in Y (Du Toit et al., 1984). More specifically Du Toit et al. (1984:190-193) state the following:

For a given dataset a CHAID analysis involves a number of steps, each of which has the following form:

- *Stratification of each predictor in respect of the dependent variable Y. This occurs because the categories (levels) of a particular predictor are checked and possibly regrouped into a number of classes, say k, each of which is more or less homogeneous in respect of the Y values. Suppose the six categories of a predictor are indicated by the symbols A, B, C, D, E and F. These categories are for instance then reduced to three classes, namely (A, D), (B) and (C, E, F) and in such a way that there are significant differences between the three classes in respect of Y, but not between the categories in each class.*
- *After each of the predictors has been analysed in the above manner, the predictor that explains most of the variation in the Y values, is used to divide the data into k subsets.*

Subsequently each subset is analysed according to [the] steps ... described above. The process is continued until no statistically significant division of the data into subsets is possible.

The statistical criteria used in CHAID for subdividing data into subdata sets are as follows:

- *The x^2 statistic used in (r x c) contingency tables, where r indicates the number of levels of y and c the number of levels of the predictor under discussion*
- *Bonferroni intervals for the levels of significance of the test. Suppose the original categories of a predictor can be subdivided into classes in B different ways, then a 100 (1-a) % Bonferroni interval is calculated by determining the critical intervals of the particular test statistic at a a/B level of significance.*

[It is also important to note that] CHAID is not reliable for use with small datasets and progressively provides more meaningful results as the number of observations in a CHAID analysis increase (a dataset of approximately 400 suffices). A further restriction concerns the number of levels or categories of the predictors, which should not exceed 10.

The independent variables (predictors) and their respective codes in the present study's CHAID analysis were as follows:

Province: Western Cape (1), Eastern Cape (2), Northern cape (3), Free State (4), KwaZulu-Natal (5), North West (6), Gauteng (7), Mpumalanga (8), Northern Province (9)

[1] Extracted from: Rocha-Silva, L. 1991. *Alcohol and other drug use by blacks resident in selected areas in the RSA*. Pretoria: Human Sciences research Council, pp. 20-21.

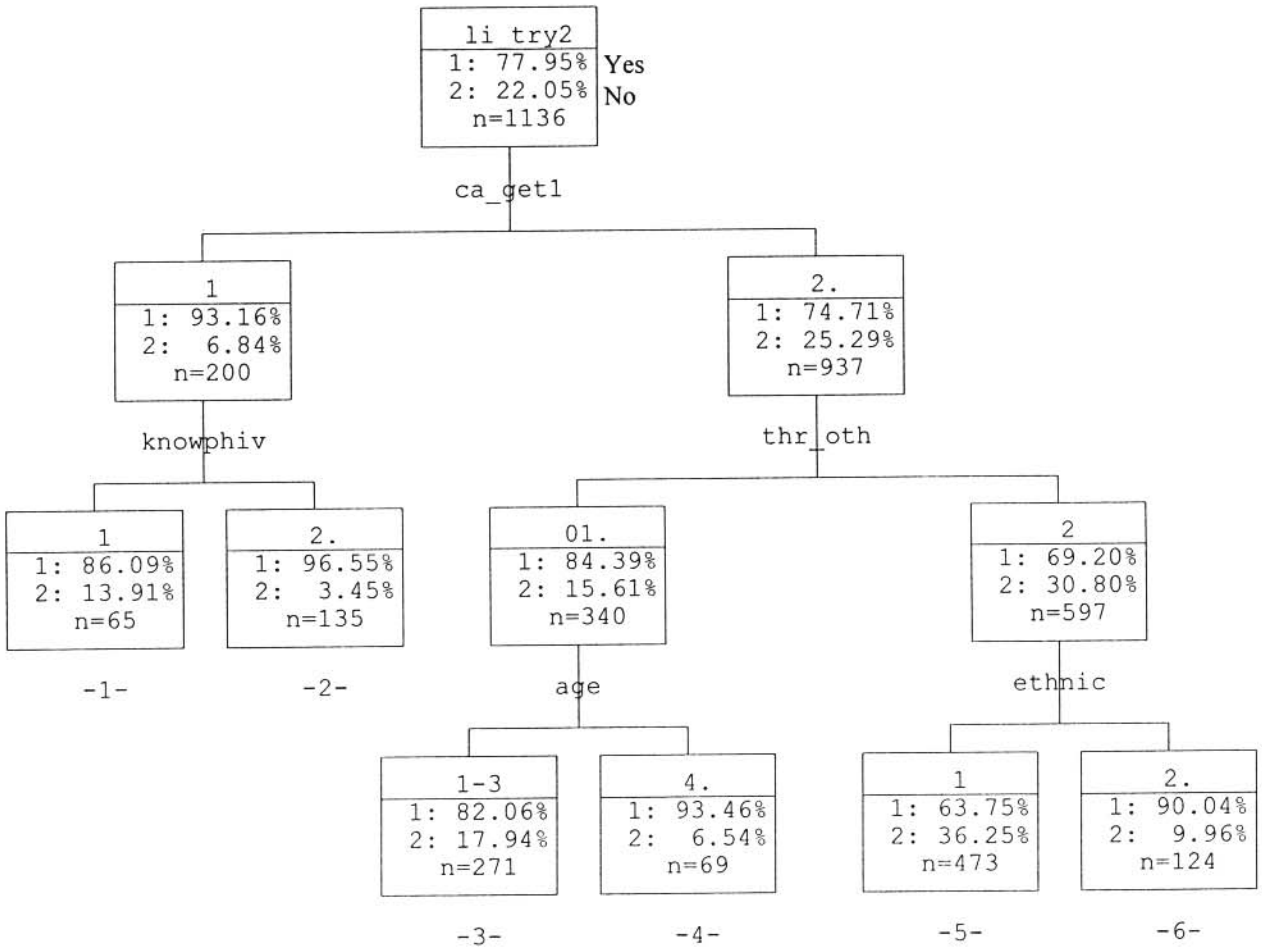
Age:	18-24 years (1), 25-29 years (2), 30-39 years (3), 40 years and older (4)
Ethnic status (ethnic):	African Black (1), Other (2)
Marital status (marital):	Married (1), Single (2), Divorced (3), Living together (4), Widow/widower/other (5)
Dependent children (children)	Yes (1), No (2)
Other dependents (otherdep)	Yes (1), No (2)
Work situation (worksitu):	Unemployed (1), Work in the informal sector (2), Pensioner Housewife Student/pupil Other (3), Self-employed (4), Employed part/fulltime (5)
Money needed a day (money_pd):	R90 or less (1), More than R90 (2)
Salary for survival over past month (help1):	Yes (1), No (2)
Contributions from others to survive in past month (help2):	Yes (1), No (2)
Educational qualification (qualify):	None (1), Grade 1-Grade 4 (2), Grade 5-Grade 7 (3), Grade 8-Grade 10 (4), Grade 11-Grade 12 (6), Higher qualification (7)
Belong to a religion/ faith (faith):	Yes (1), No (2)
Attended religious services in past (relig_at) month:	Do not belong to a faith (0), Regular attendance (1), Often attended (2), Seldom attended (3), Never attended (4)
Witnessed fights in past month (witness1):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)
Witnessed gangs in past month (witness2):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)
Witnessed crime in past month (witness3):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)

Witnessed empty buildings in past month (witness4):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)
Witnessed graffiti in past month (witness5):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)
Witnessed people walking at night without a weapon to defend themselves in past month (witness6):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)
Witnessed drug dealing in past month (witness7):	Very often (1), Often (2), Seldom (3), Very seldom (4), Not at all (5)
Arrested in 12 months before current arrest (arrested):	Yes (1), No (1)
Times arrested in past 12 months, excluding current arrest (times_ar):	None (0), Once (1), More than once (2)
Convicted of offence in past 12 months (convict):	Yes (1), No (2)
Arrested prior to 12 months before current arrest (pre12_ar):	Yes (1), No (2)
Age when first Arrested (agefirst):	Not arrested (0), 21 years or younger (1), 22 years or older (2)
Convicted prior to 12 months before current arrest (pre12_co):	Yes (1), No (2)
Trying to get hold of alcohol at time of current arrest (ca_get1):	Yes (1), No (2)

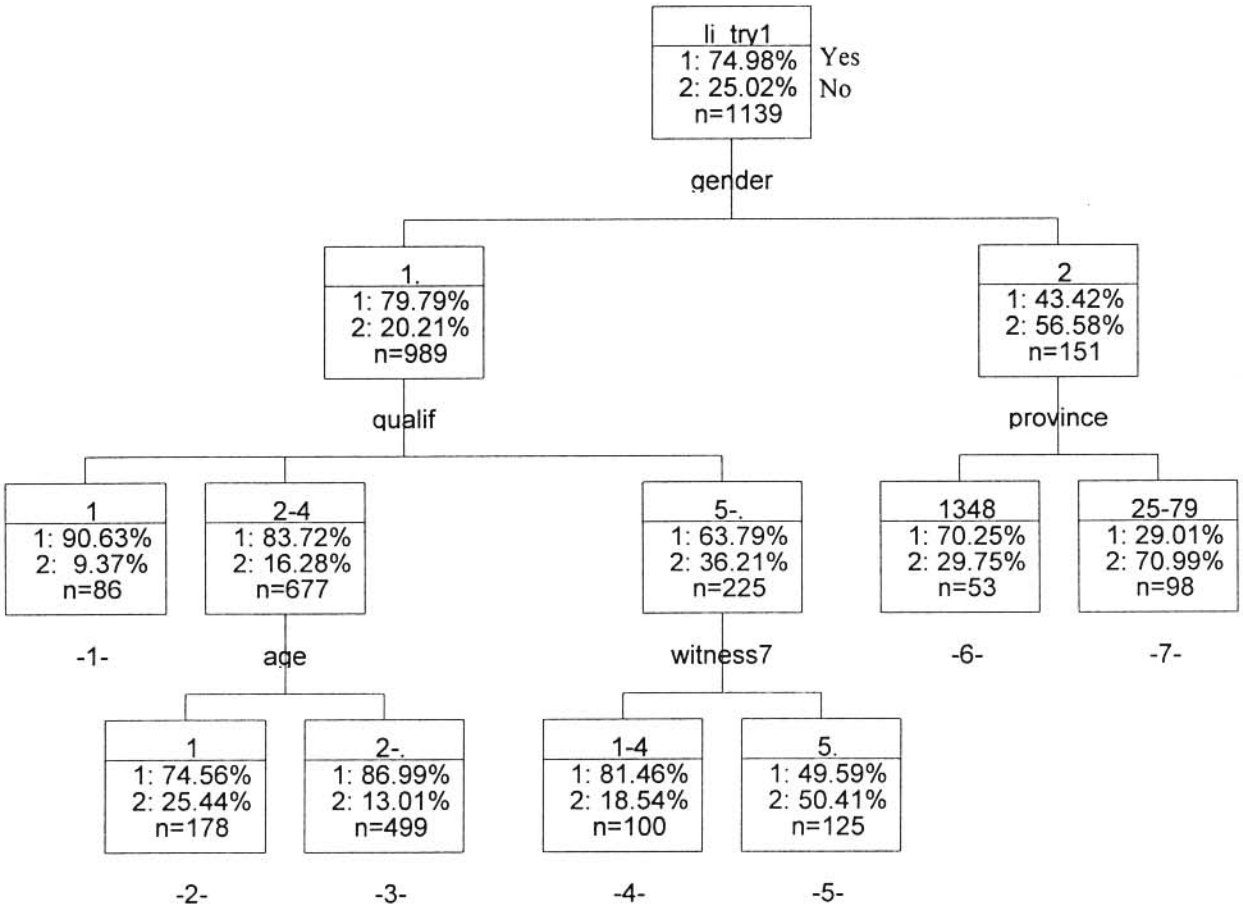
Trying to get hold of tobacco at time of current arrest (ca_get2):	Yes (1), No (2)
Ever victim of crime in 12 months before arrest (victim):	Yes (1), No (2)
Ever threatened with gun (thr_gun):	Yes (1), No (2)
Ever threatened with another weapon (thr_oth):	Yes (1), No (2)
Important to have own knife (imp_knif):	Yes (1), No (2)
Important to have own gun (imp_knif):	Yes (1), No (2)
More respect from people if own knife (resp_kn):	Yes (1), No (2)
More respect from people if own gun (resp_gu):	Yes (1), No (2)
Can easily get knife (acc_knif):	Yes (1), No (2)
Can easily get gun (acc_gun):	Yes (1), No (2)
Ever stabbed some-one (stab):	Yes (1), No (2)
While committing an offence, ever carried a knife (off_ckni):	Yes (1), No (2)
While committing an offence, ever used a knife (off_ukni):	Yes (1), No (2)
Ever part of gang (gang):	Yes (1), No (2)
Know people with HIV/AIDS (knowphiv):	Yes (1), No (2)
Out of 10 people, how many have HIV/AIDS (rate_hiv):	Yes (1), No (2)

Out of 10 people, how many died of HIV/AIDS (rate_hivd):	Yes (1), No (2)
Ever tested for HIV/AIDS (hiv_test):	Yes (1), (No (2)
Gender (gender):	Male (1), Female (2)
Type of arrest (type_arr):	Arrested during commission of crime/during police pursuit (1), Arrested following a warrant (2)
Type of current most serious offence (type_off):	Violent (1), Property (2), Drug law (3), Immigration law (4), Miscellaneous (5)

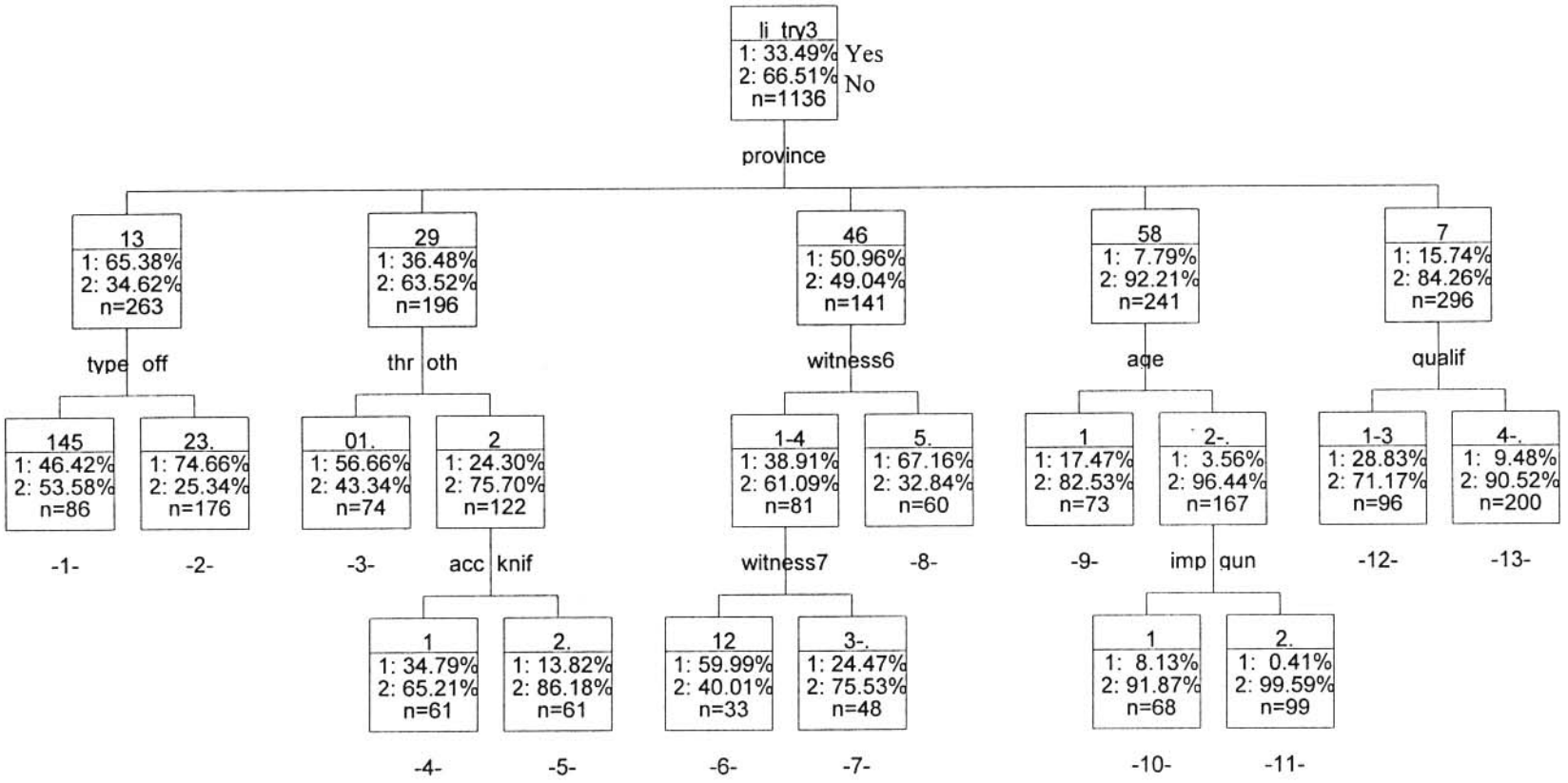
Ever tried alcohol?



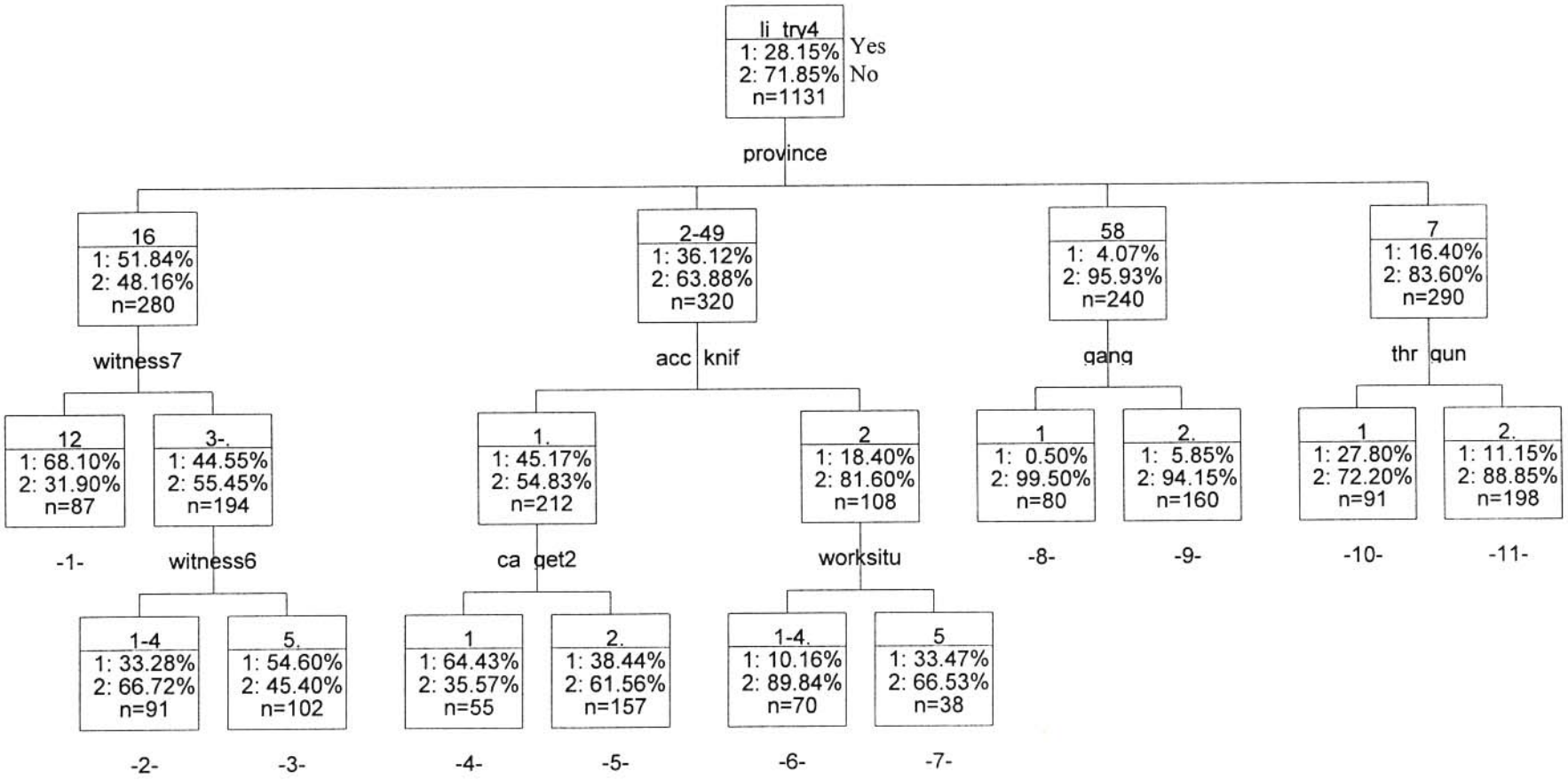
Ever tried tobacco?



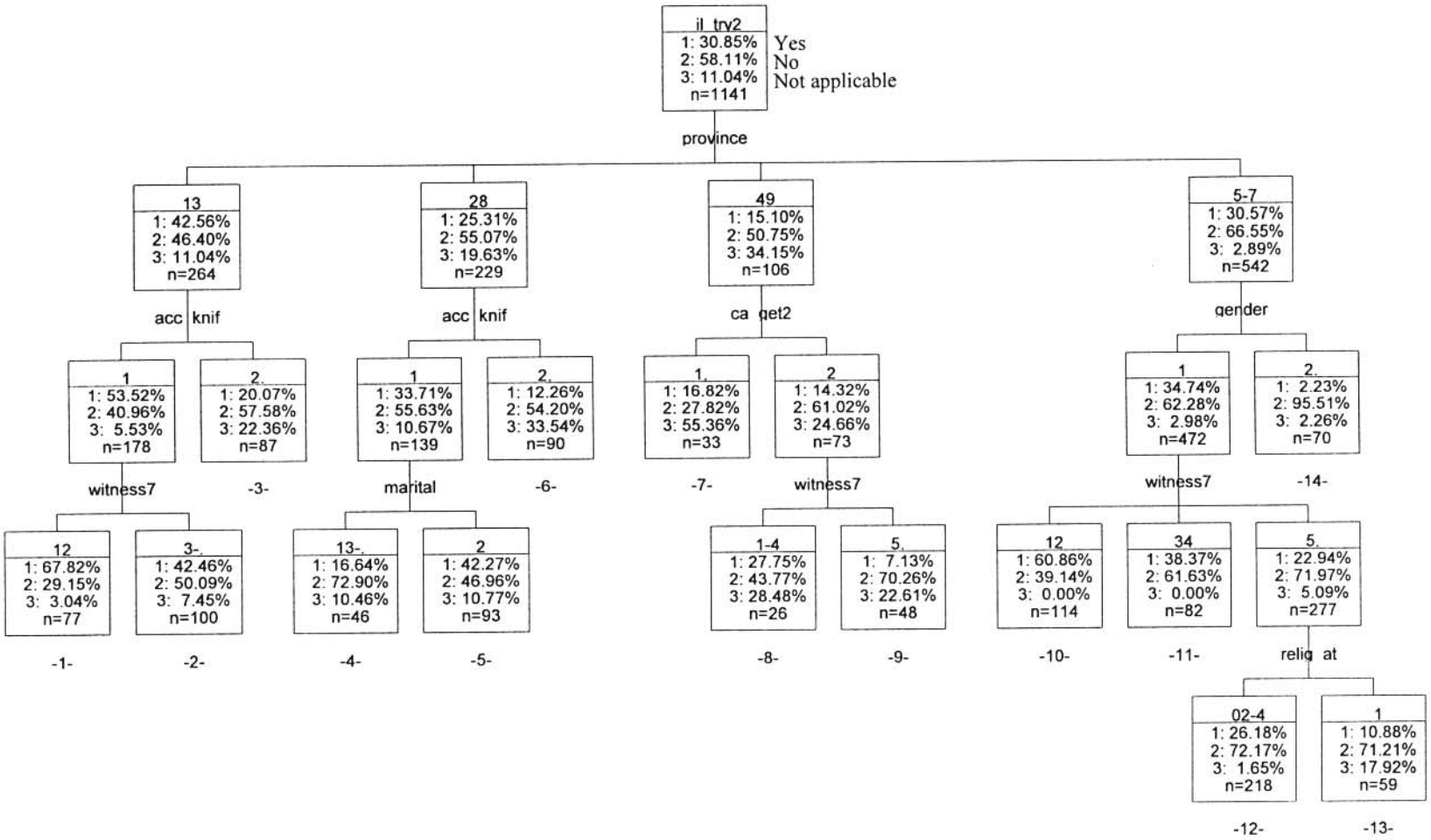
Ever tried over-the-counter pain relievers?



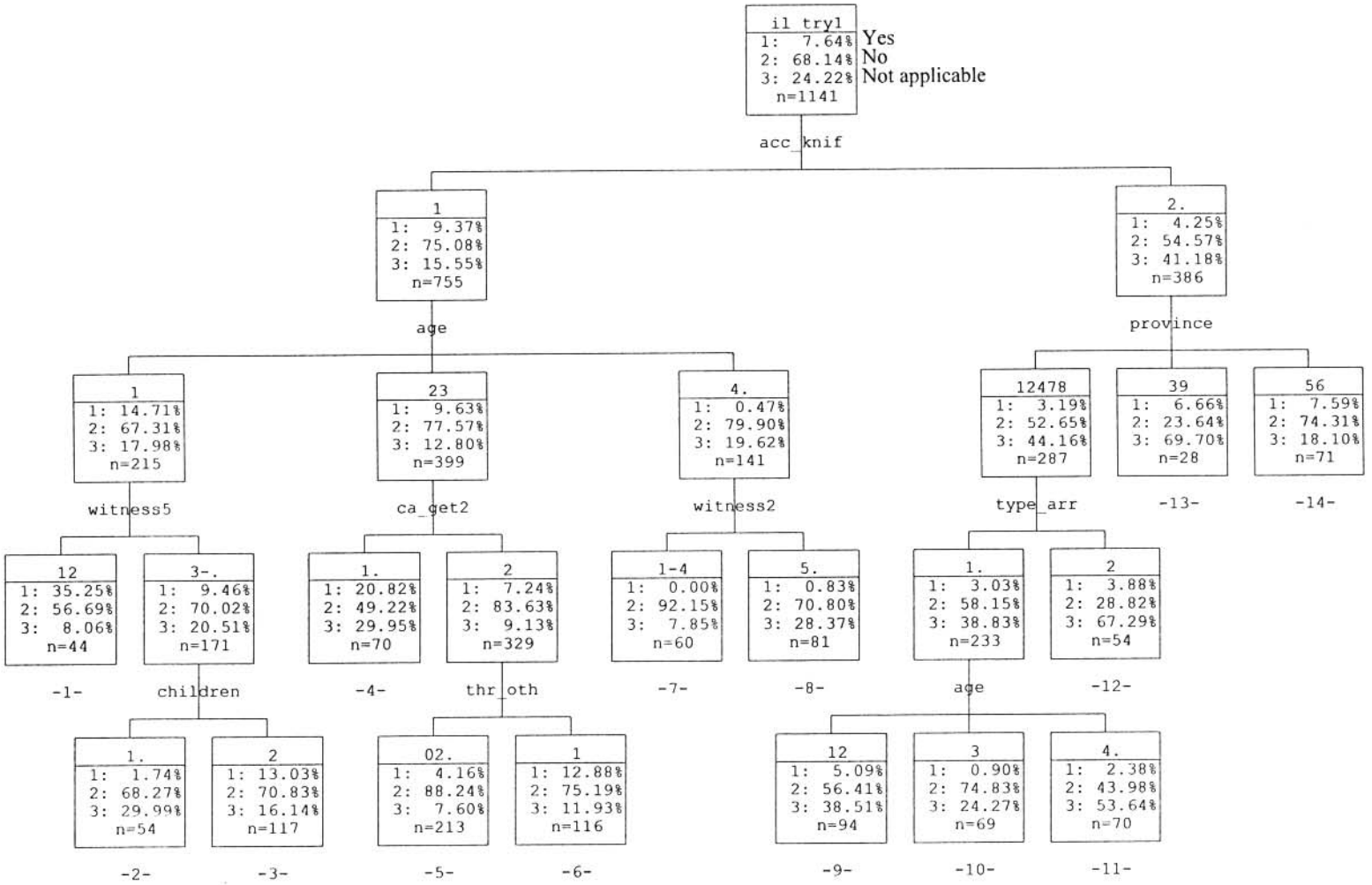
Ever tried over-the-counter non-pain-relievers?



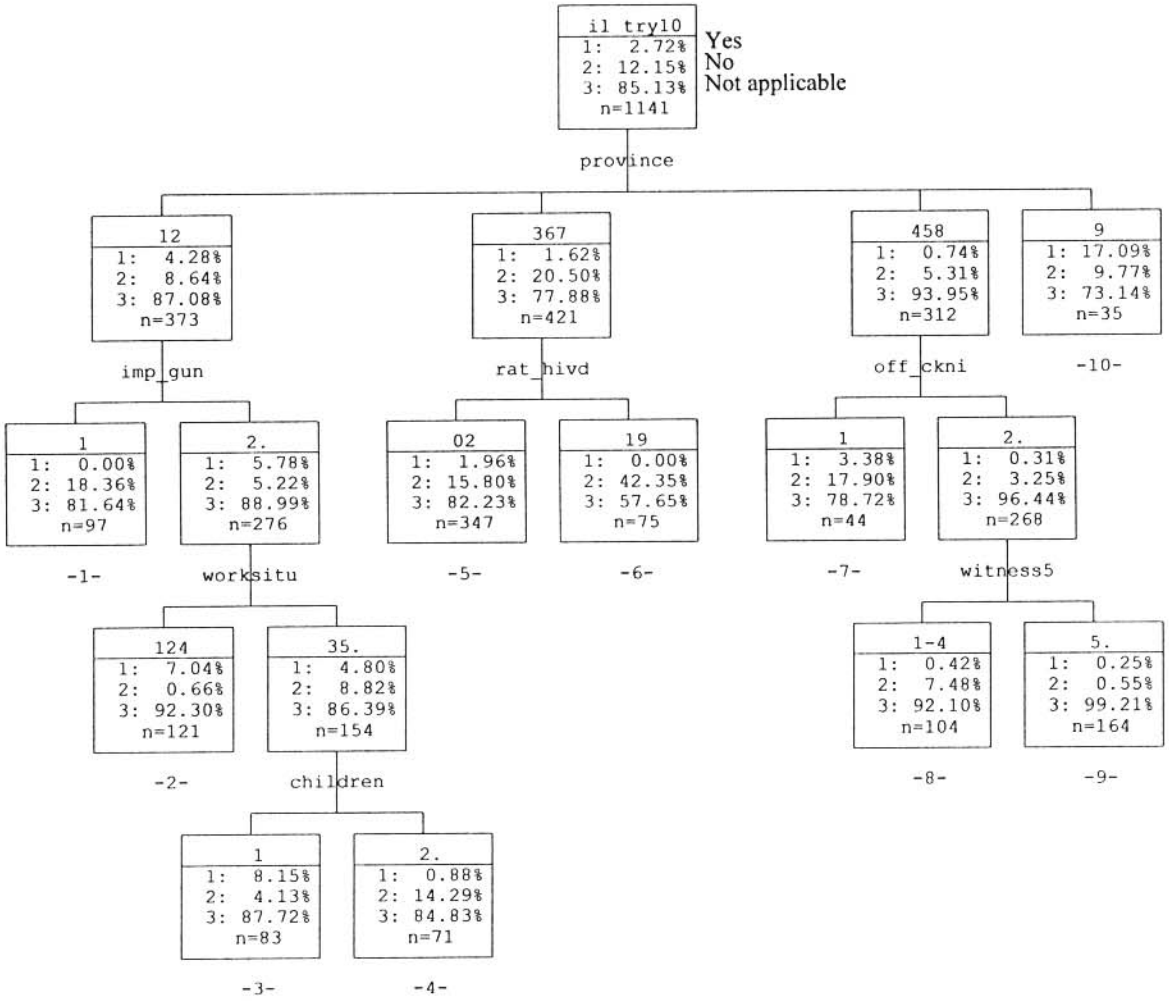
Ever tried cannabis?



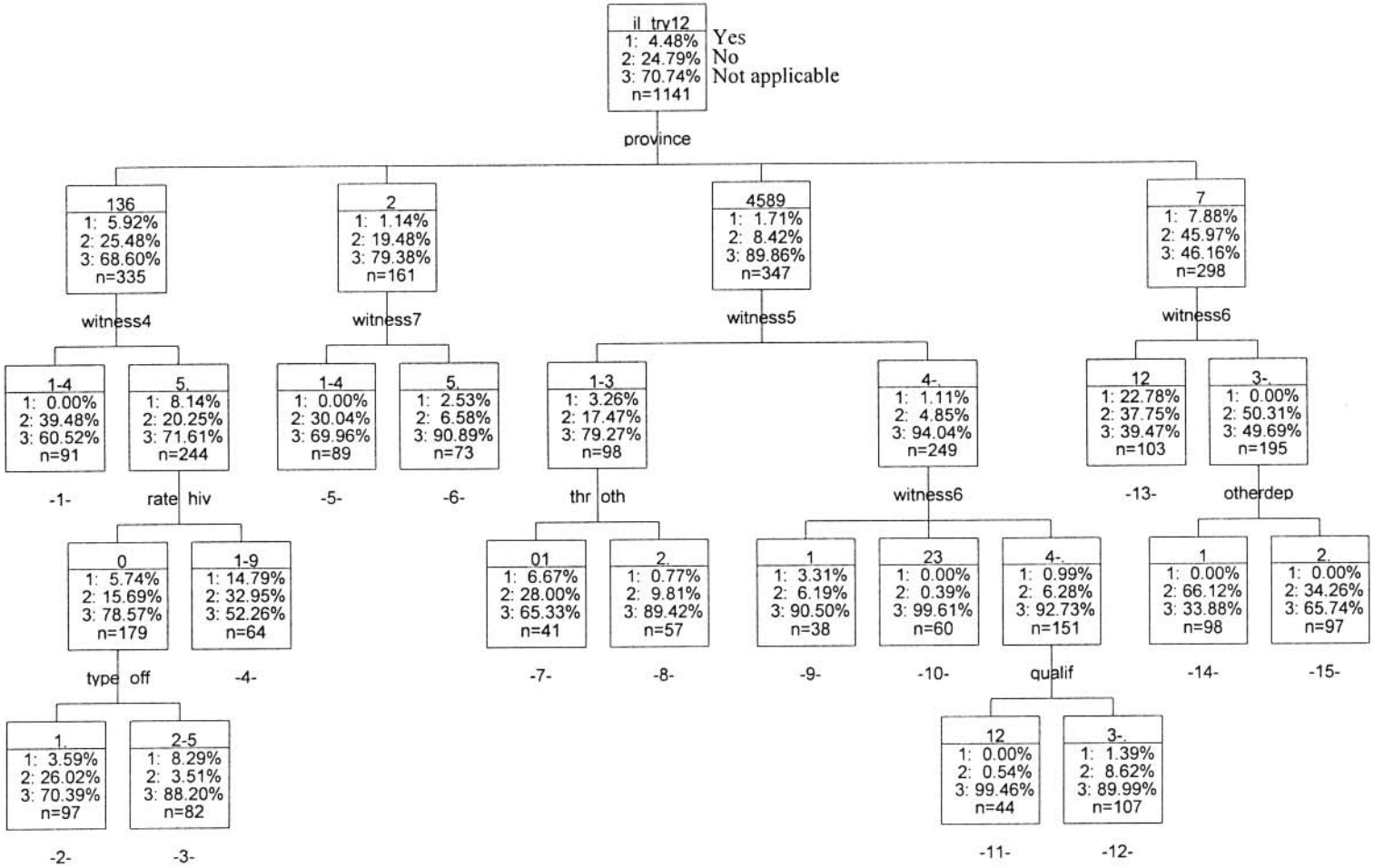
Ever tried inhalants?



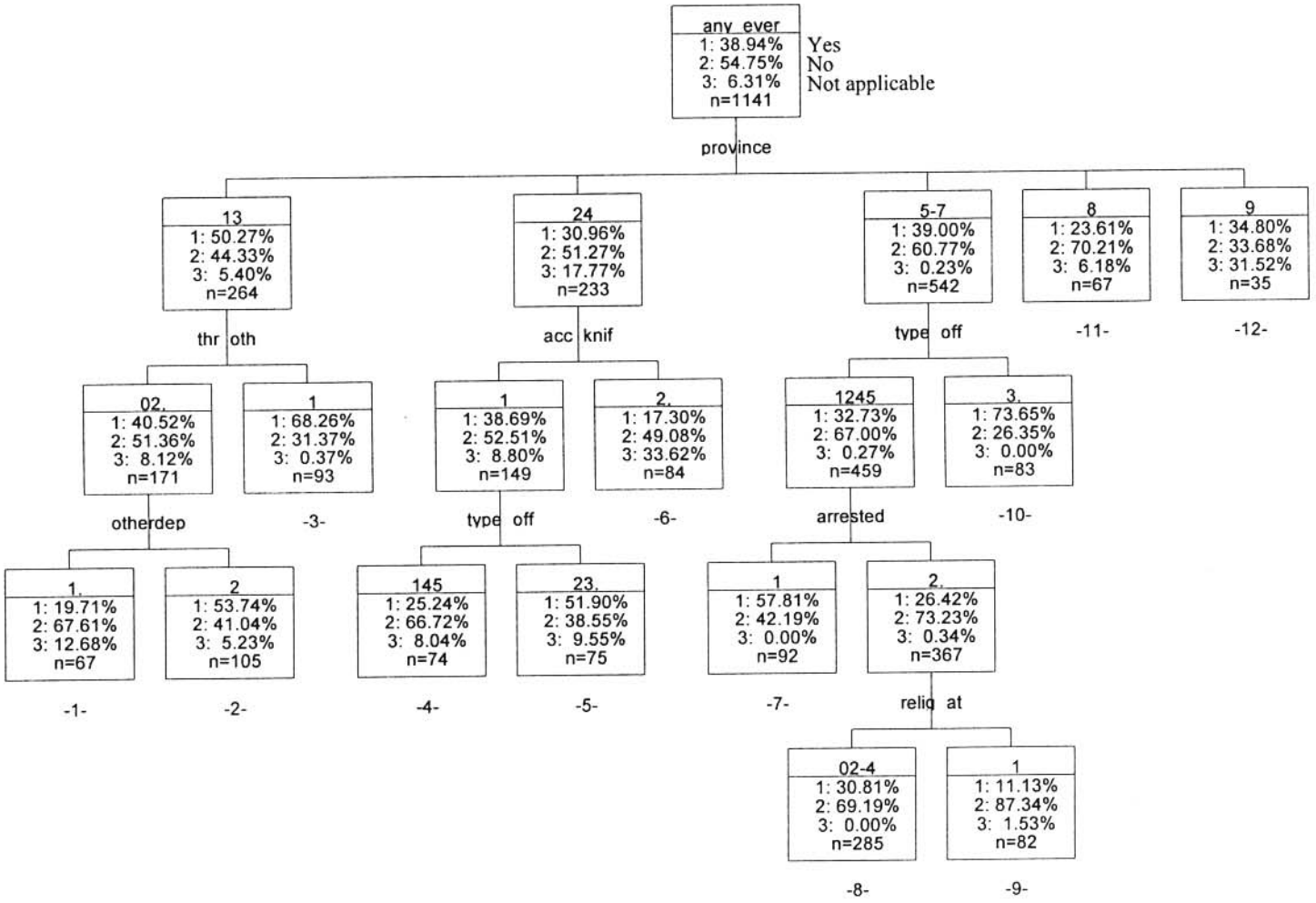
Ever tried severe pain relievers?



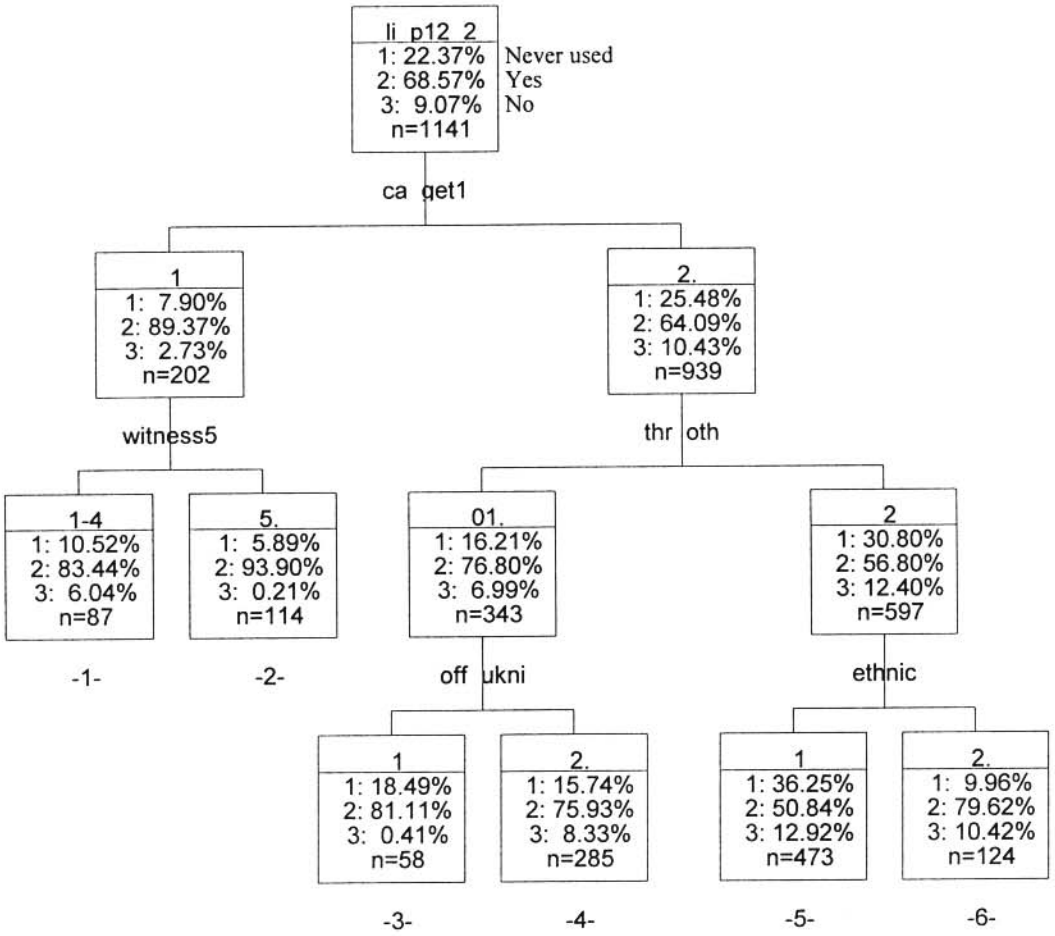
Ever tried drugs for sleeping?



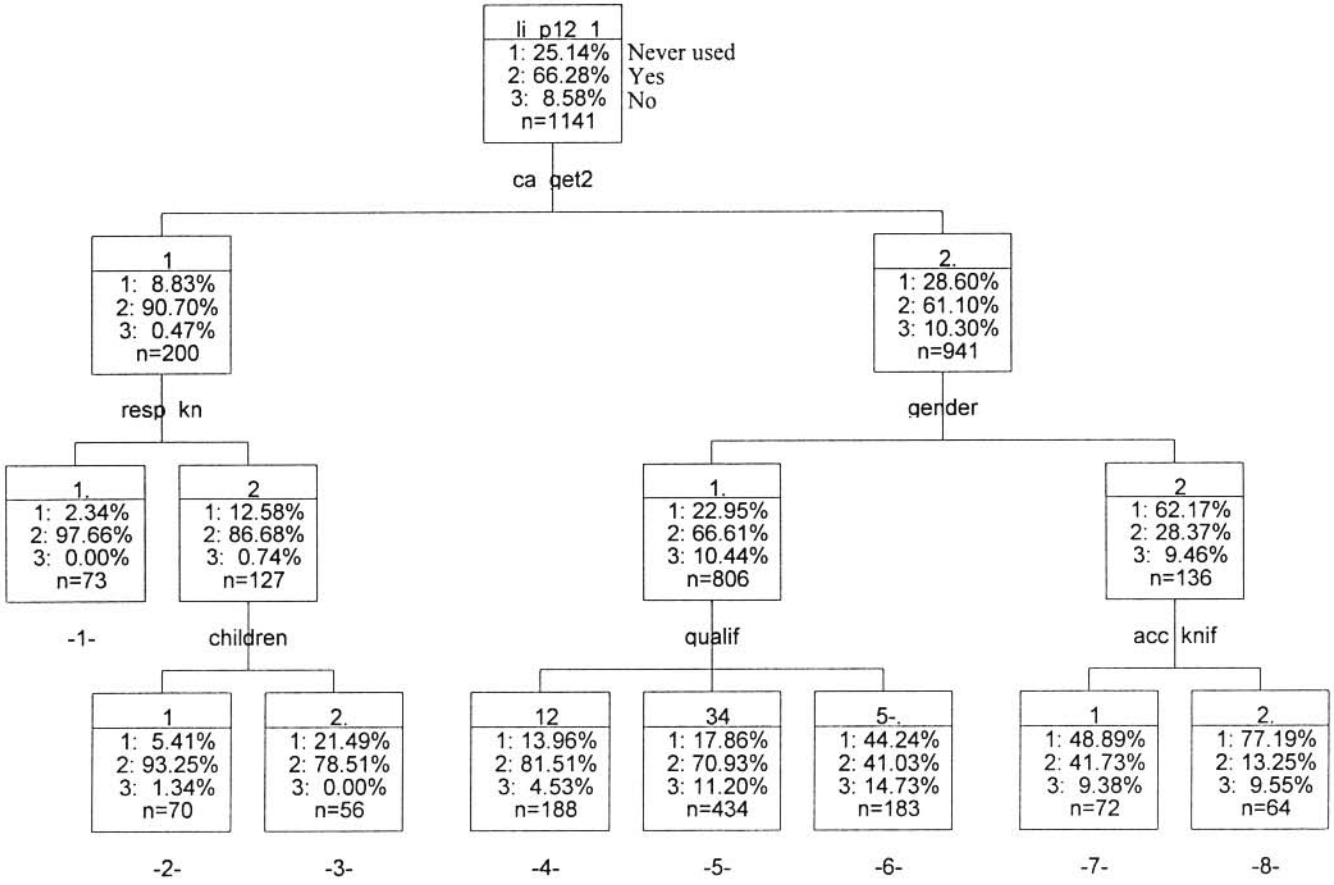
Ever tried some drug or other?



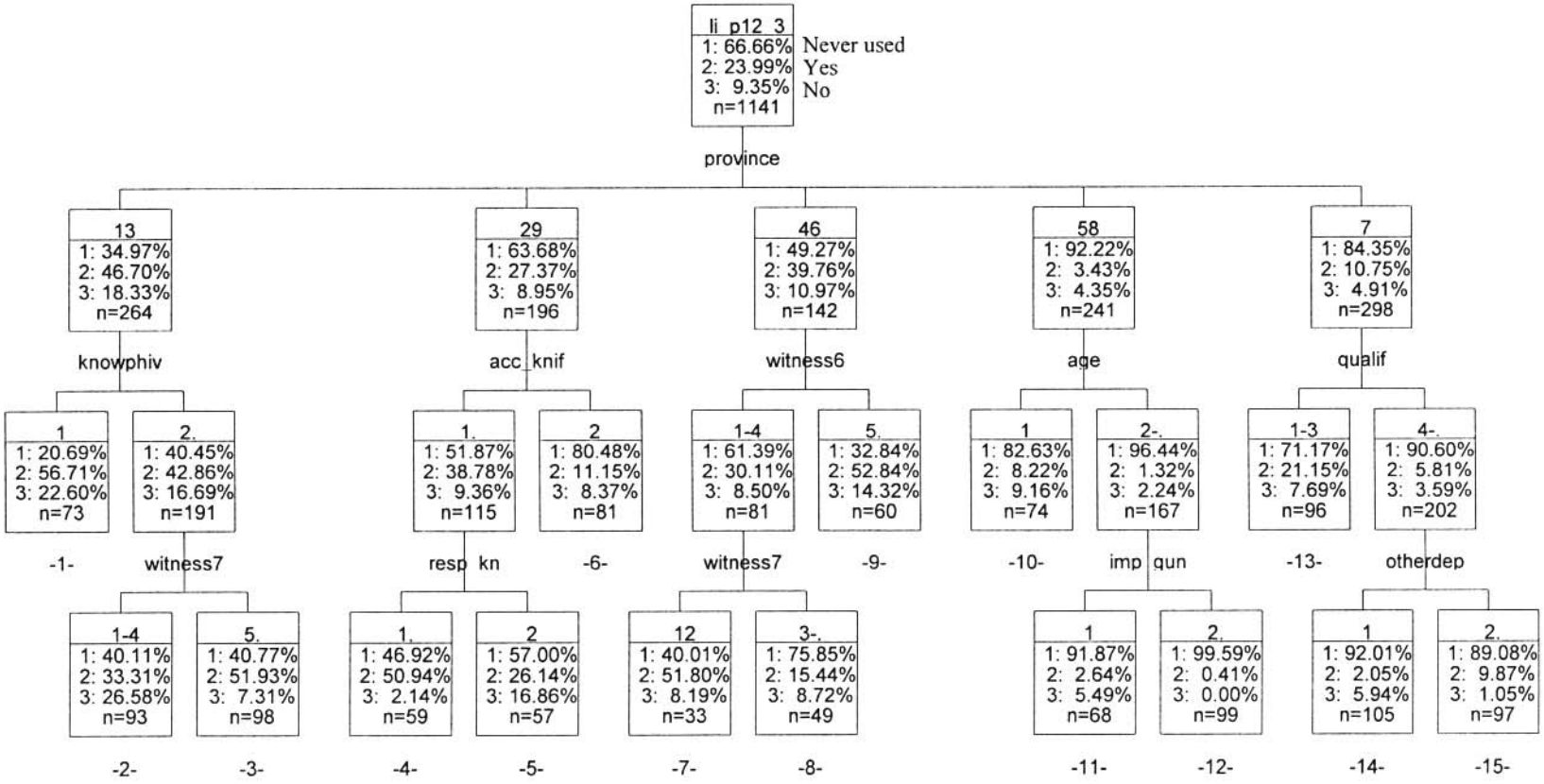
Past 12 months' users of alcohol



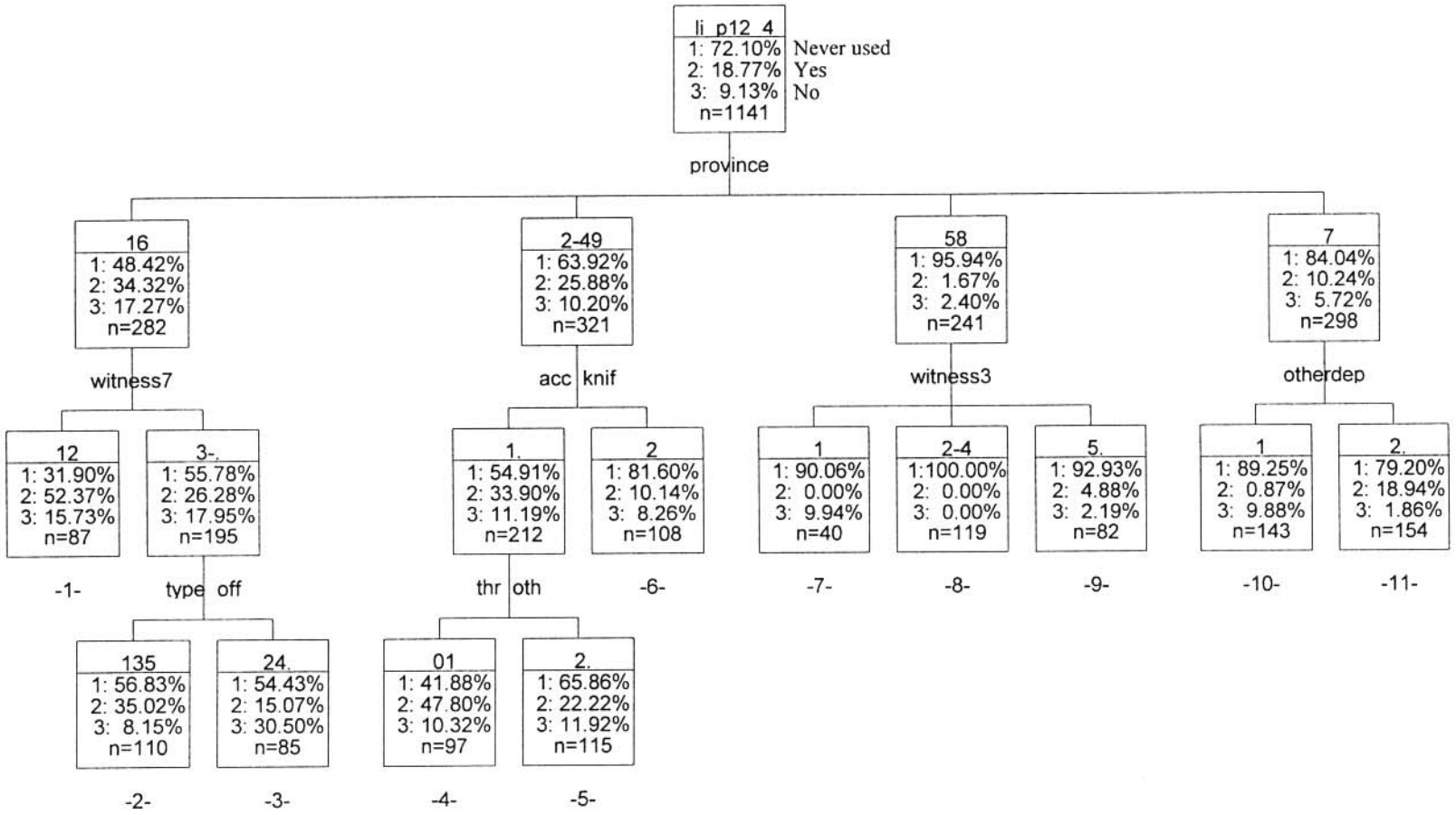
Past 12 months' users of tobacco



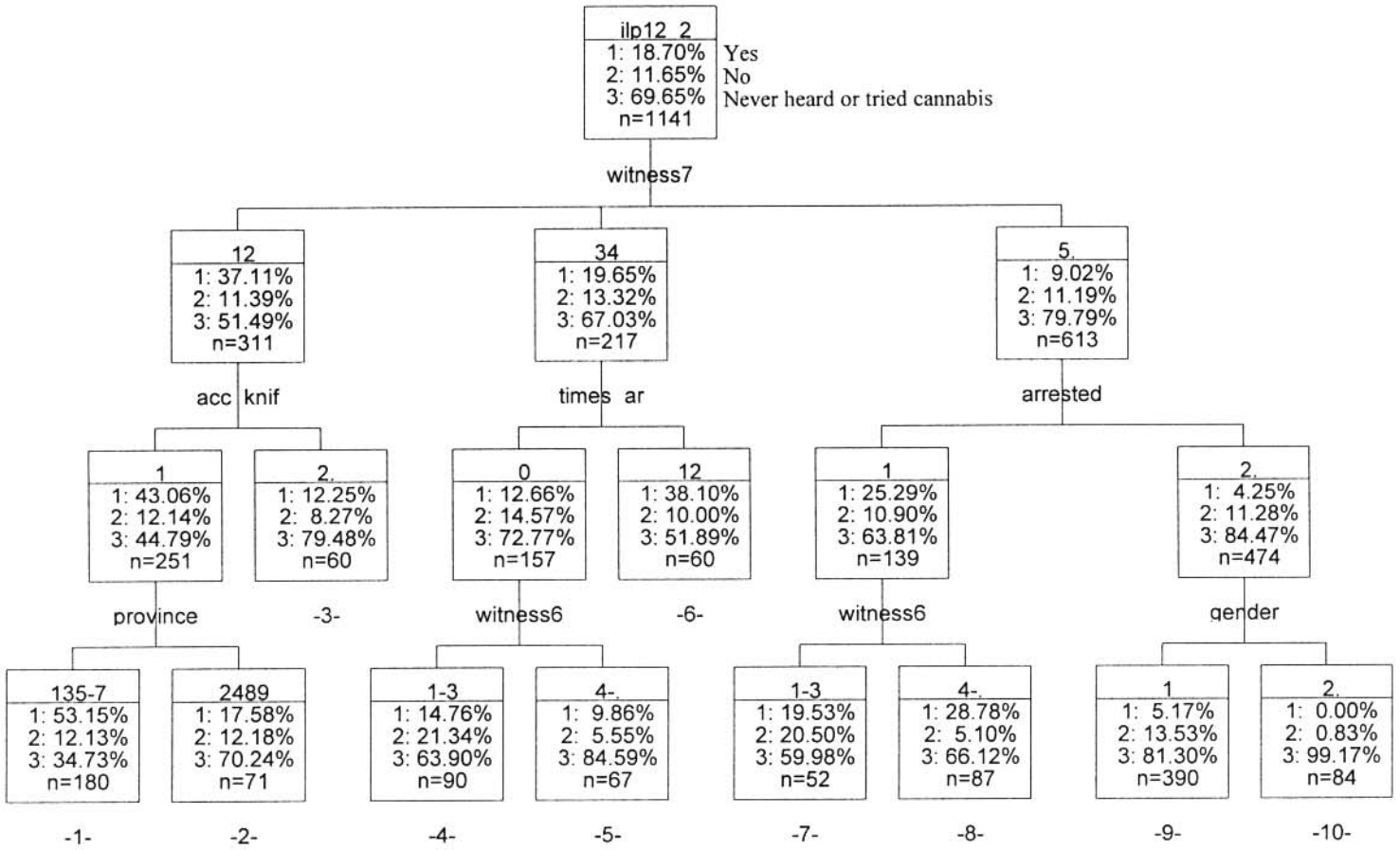
Past 12 months' users of over-the-counter pain-relievers



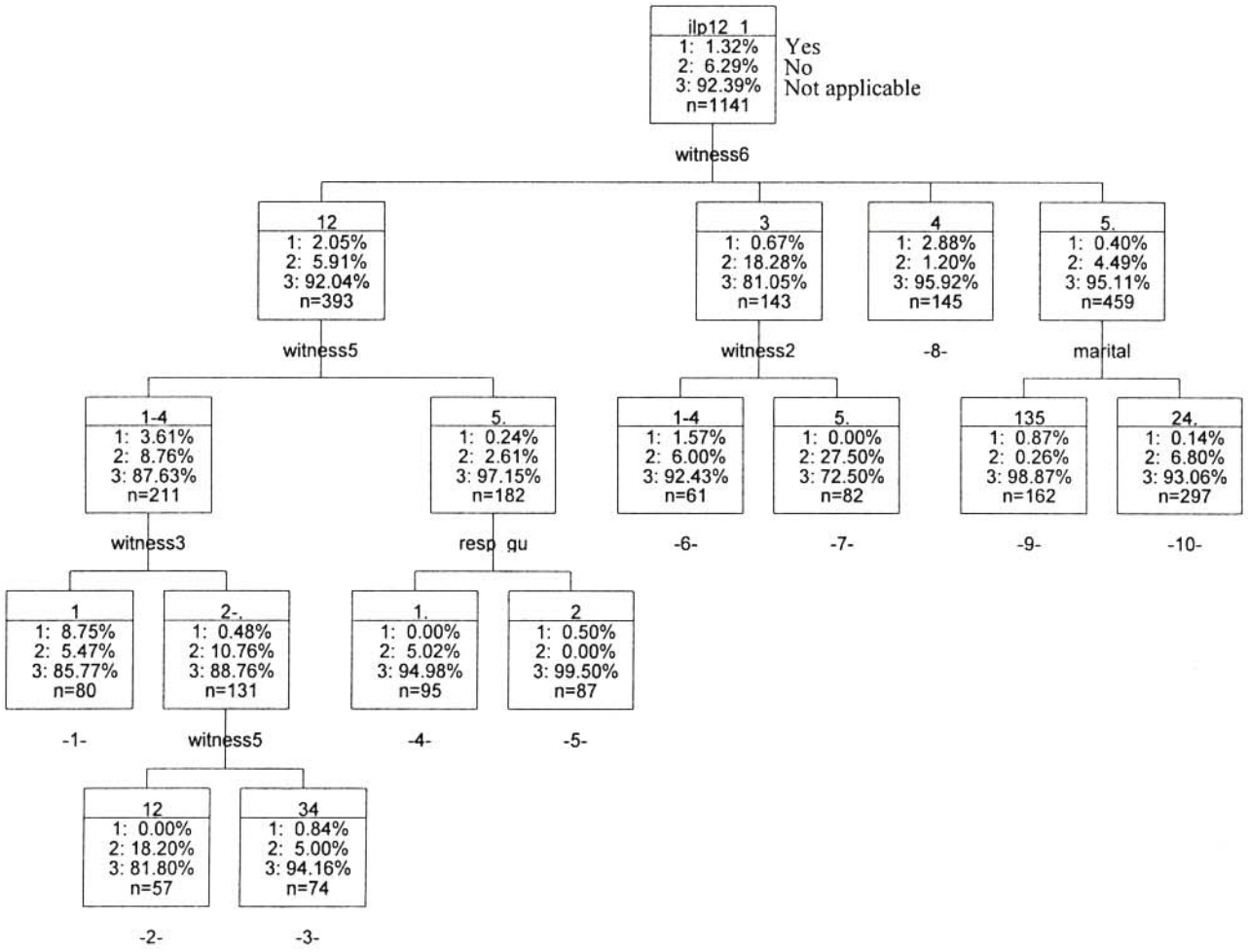
Past 12 months' users of over-the-counter non-pain-relievers



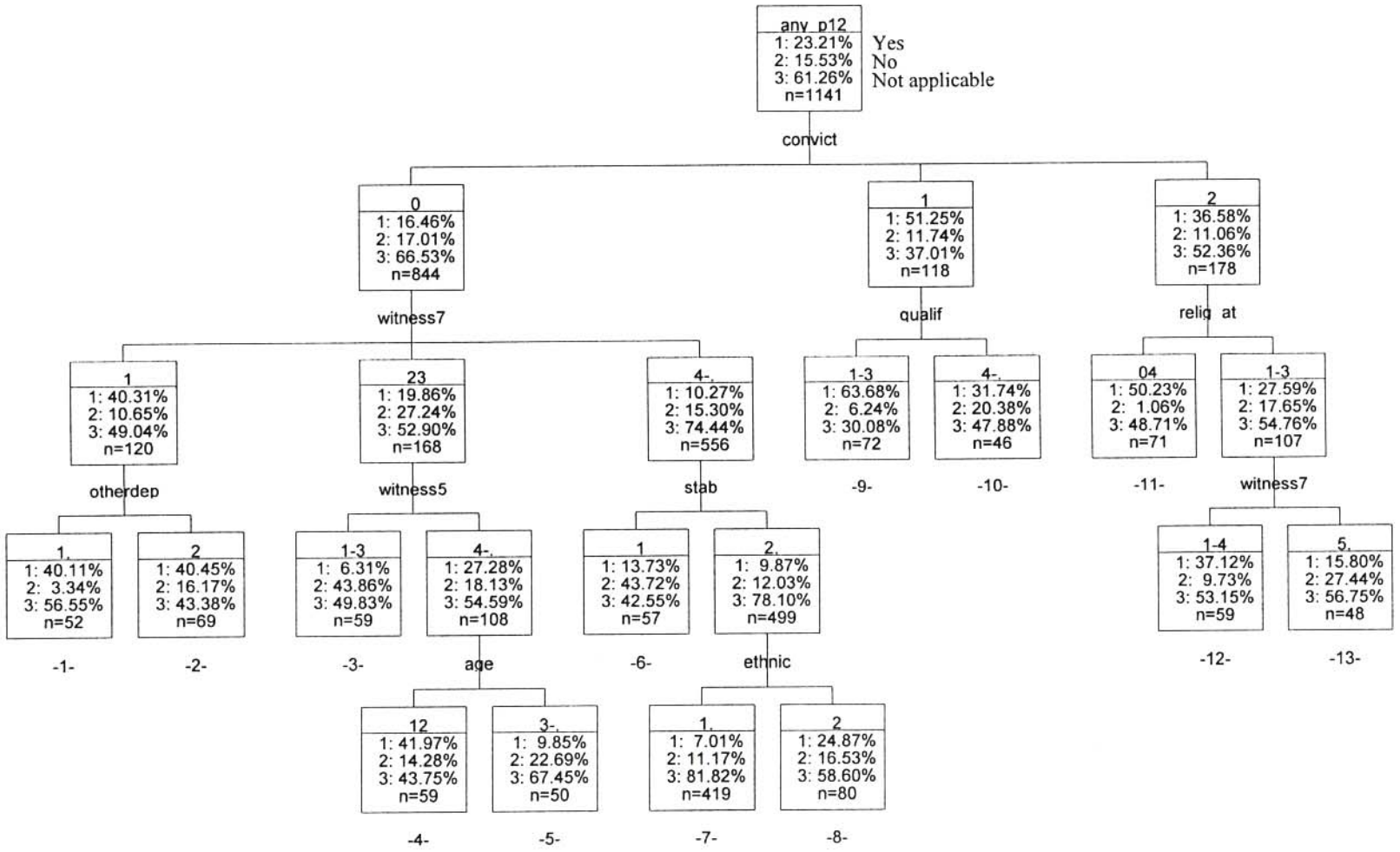
Past 12 months' users of cannabis



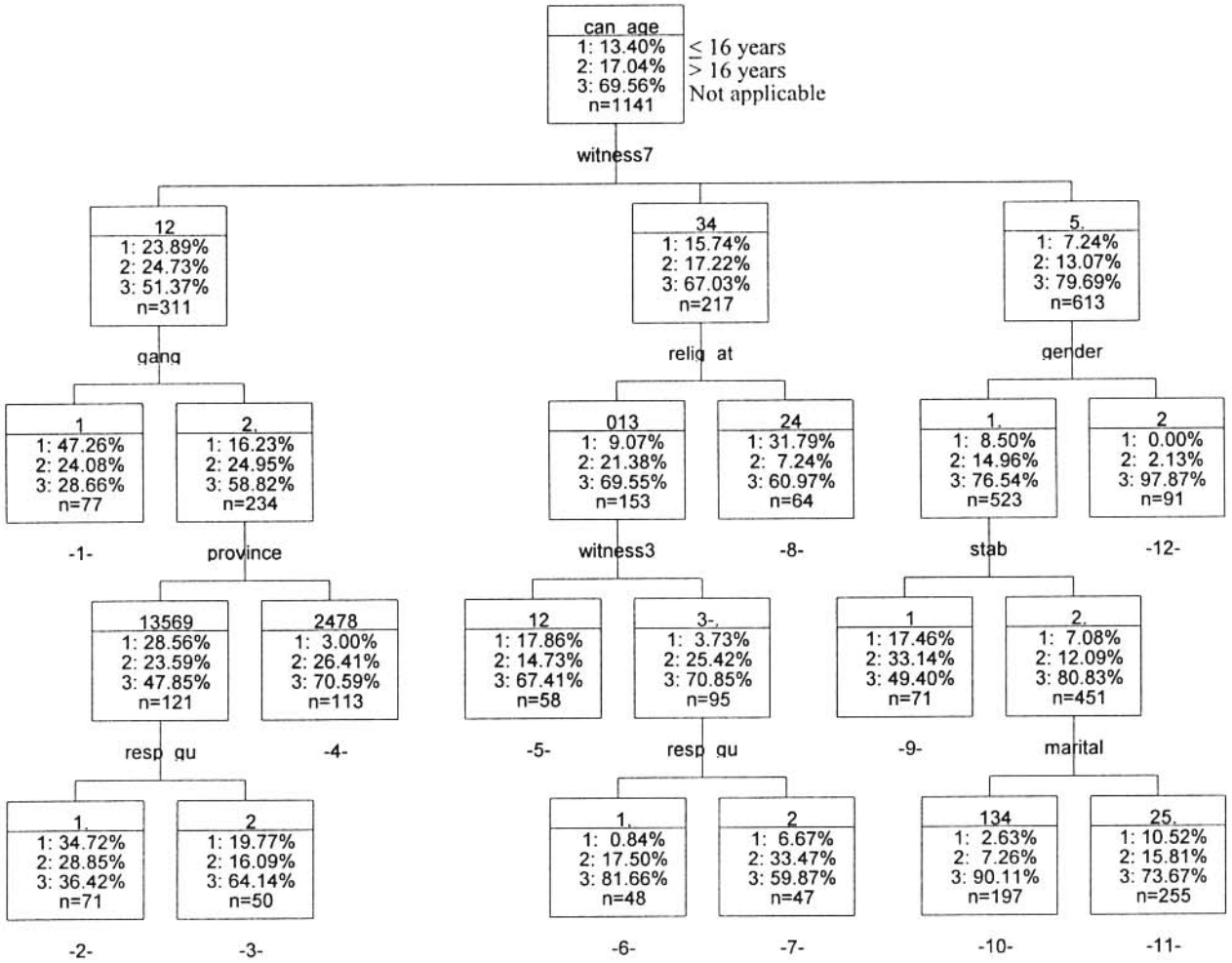
Past 12 months' users of inhalants



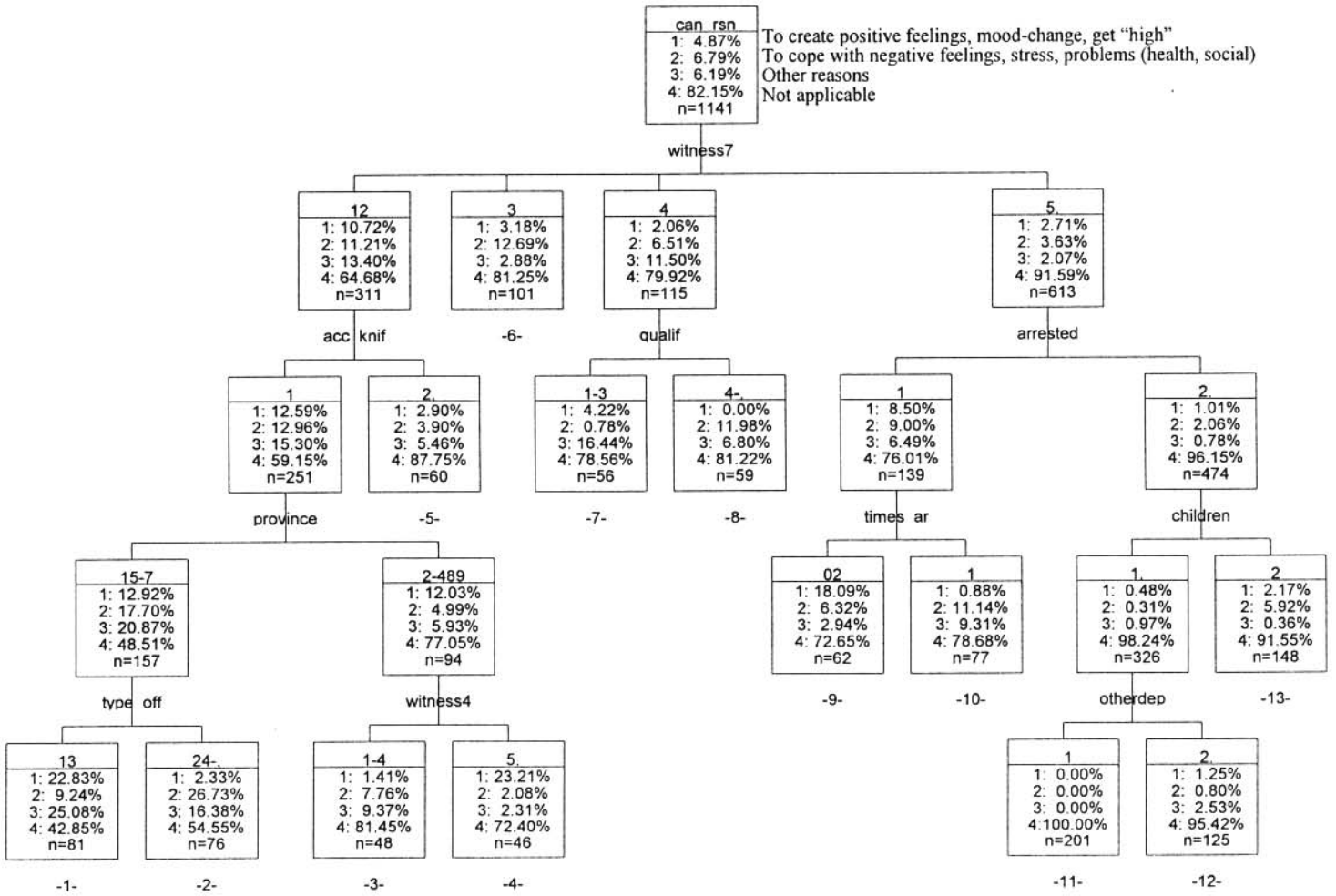
Past 12 months' users of some drug or other



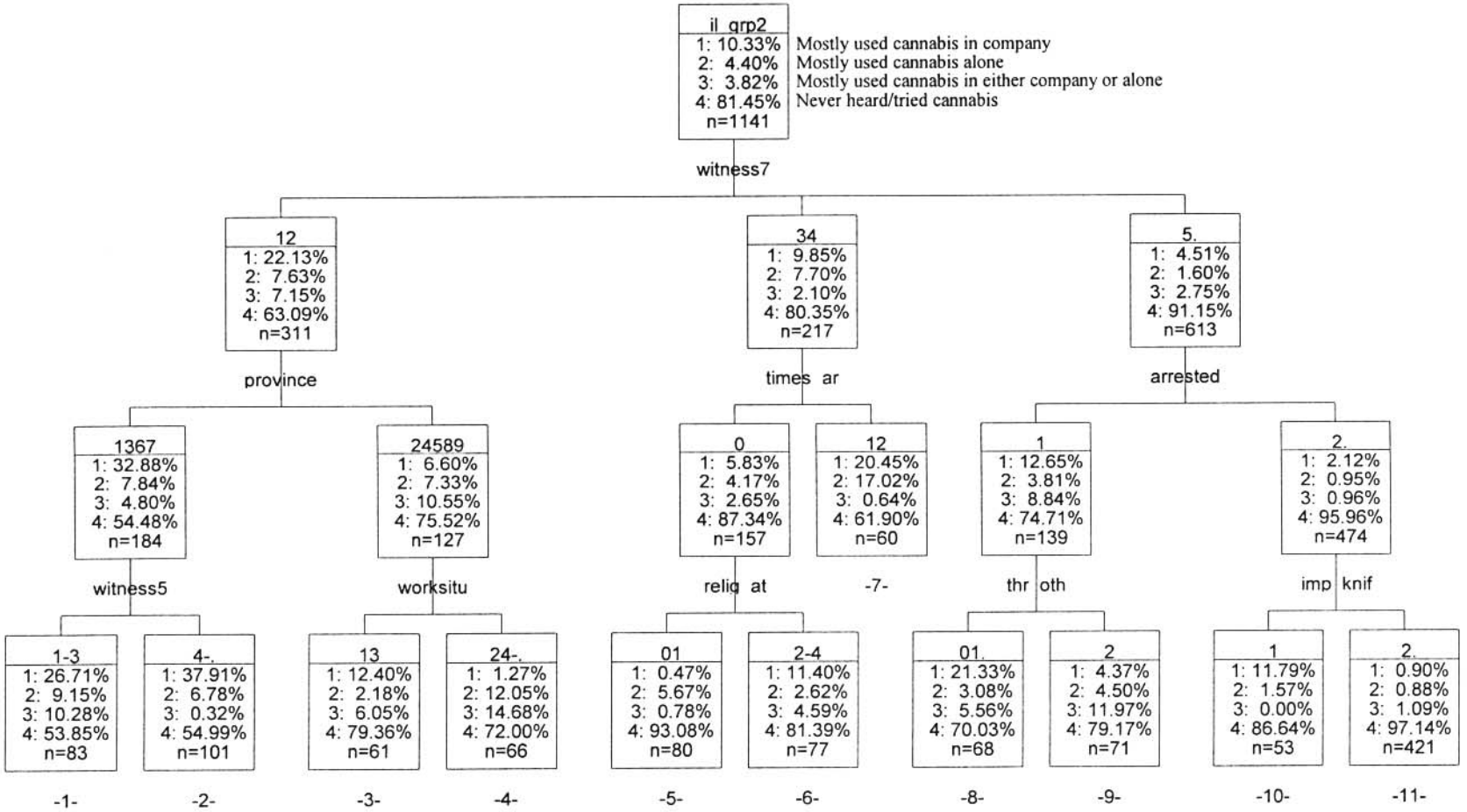
Age of onset of cannabis use



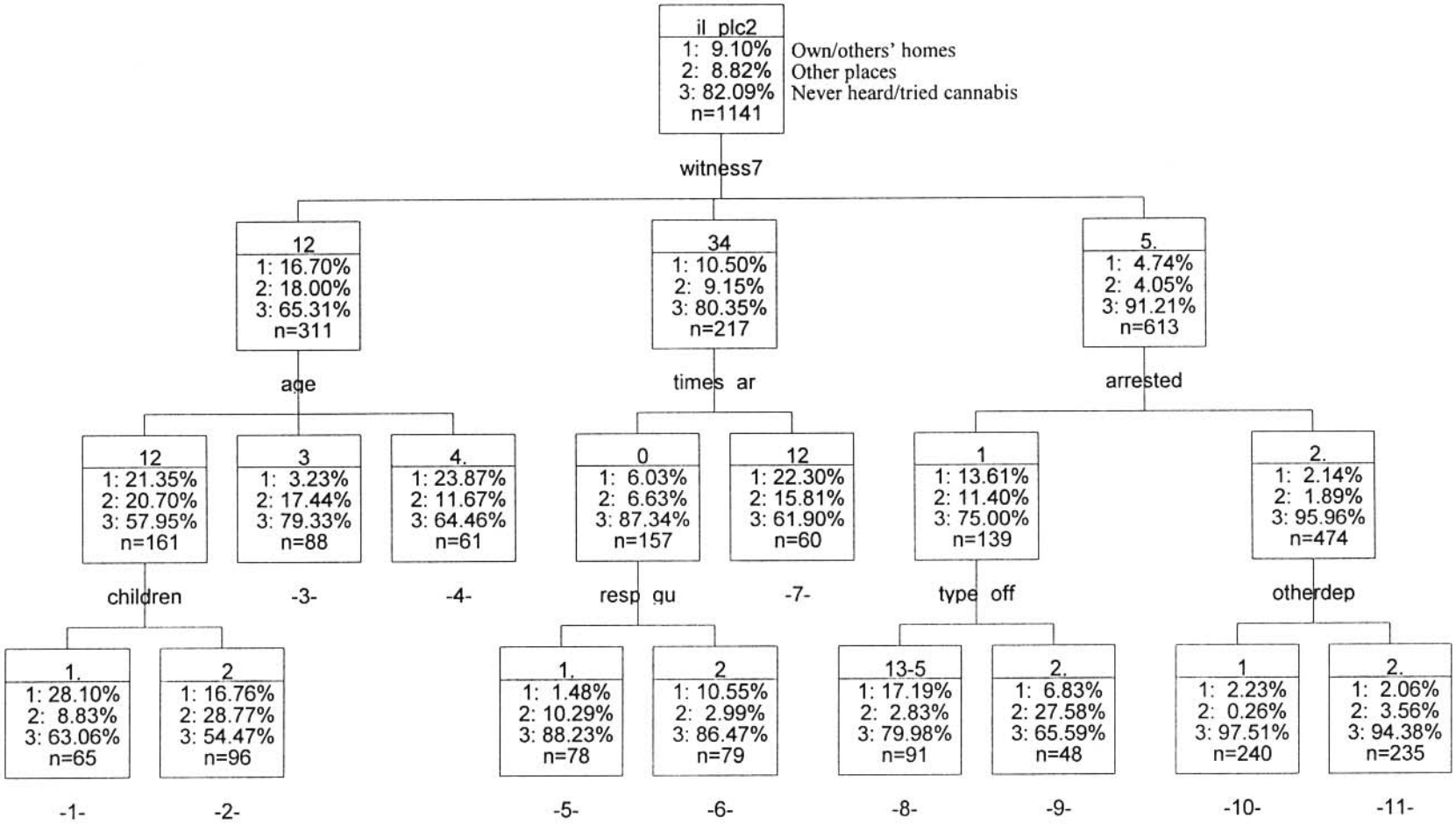
Main reason for cannabis use in the 12 months prior to the survey



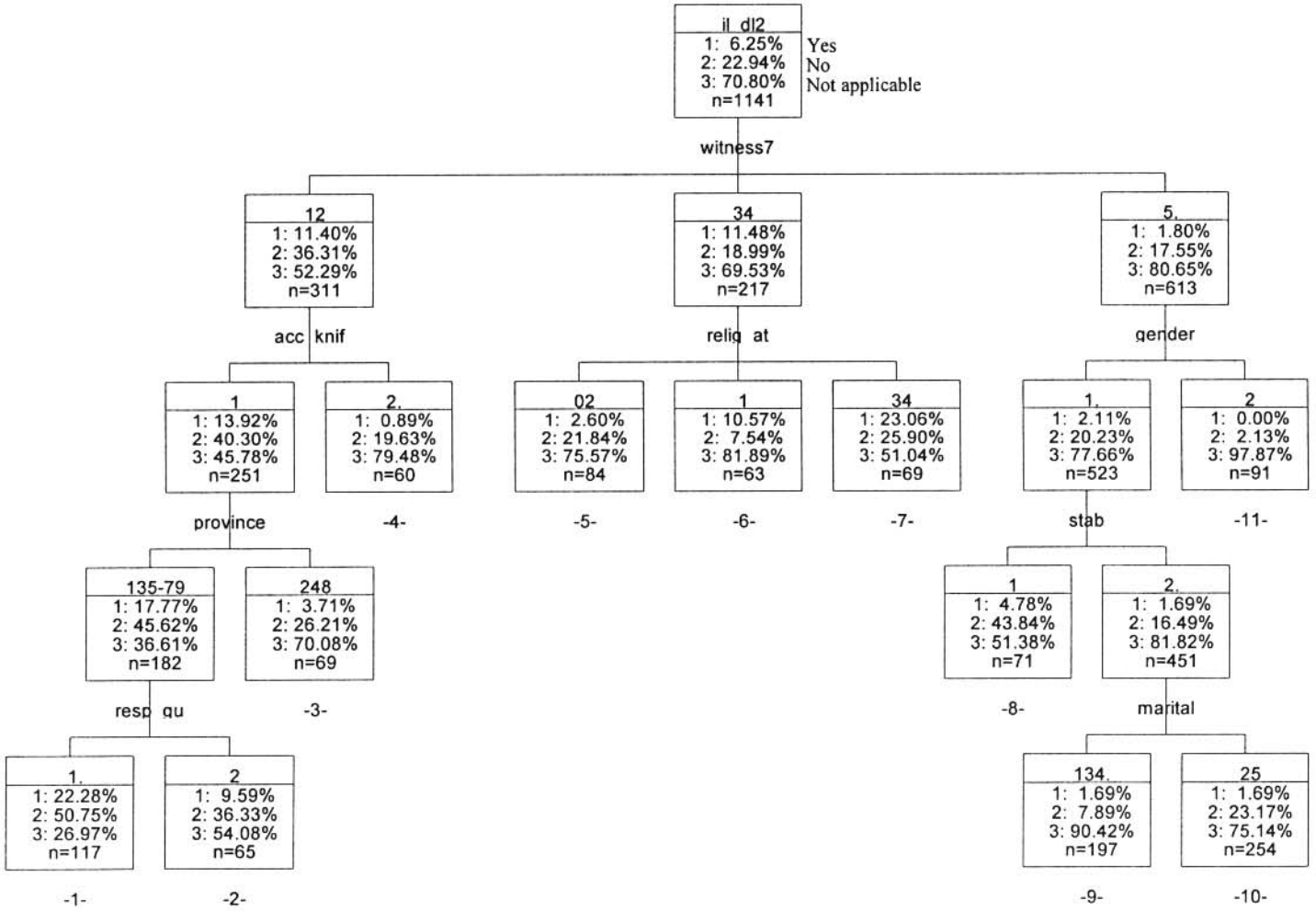
Group use of cannabis any past 12 months' users of cannabis



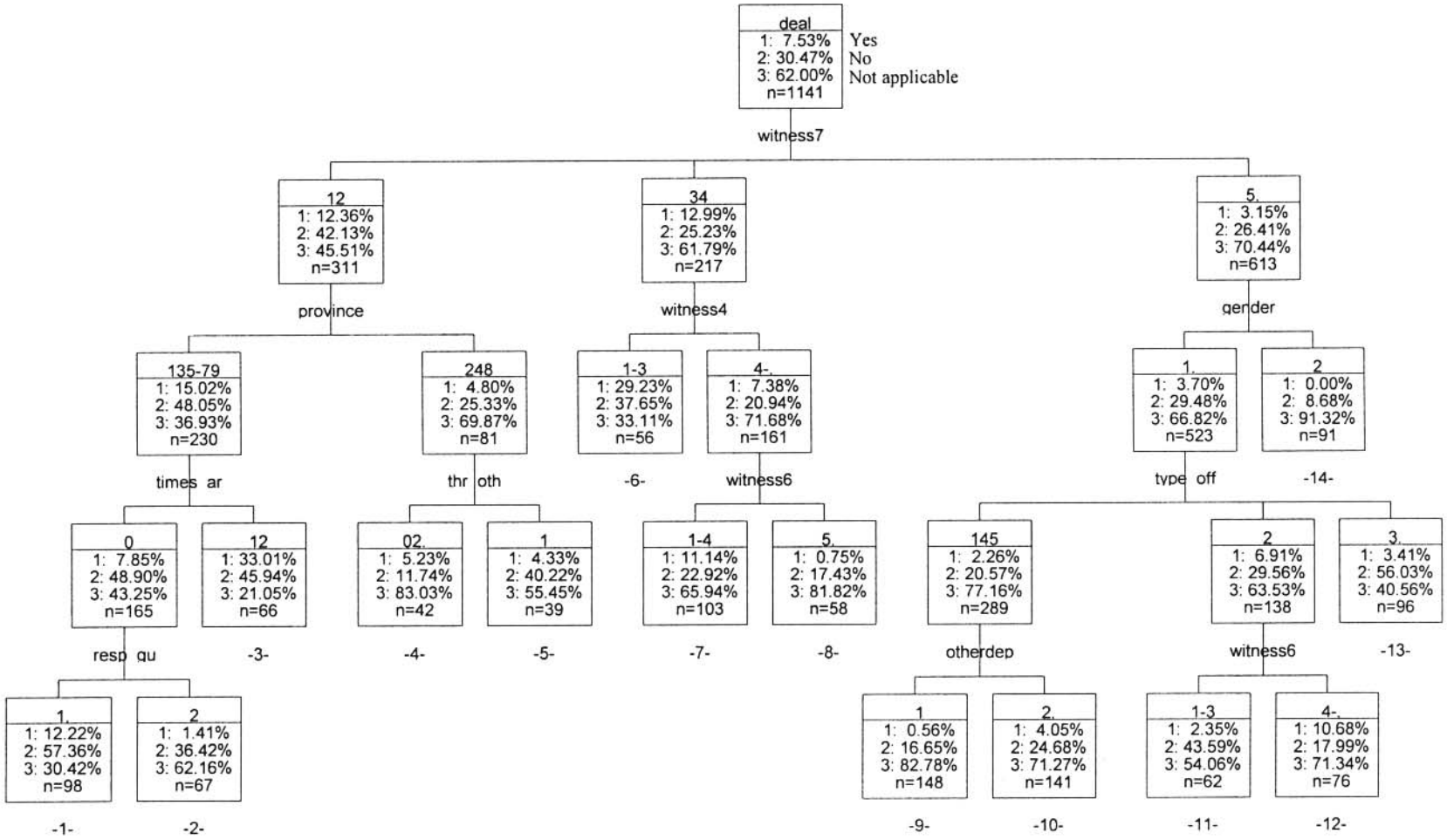
Place where past 12 months' users of cannabis mostly used this drug



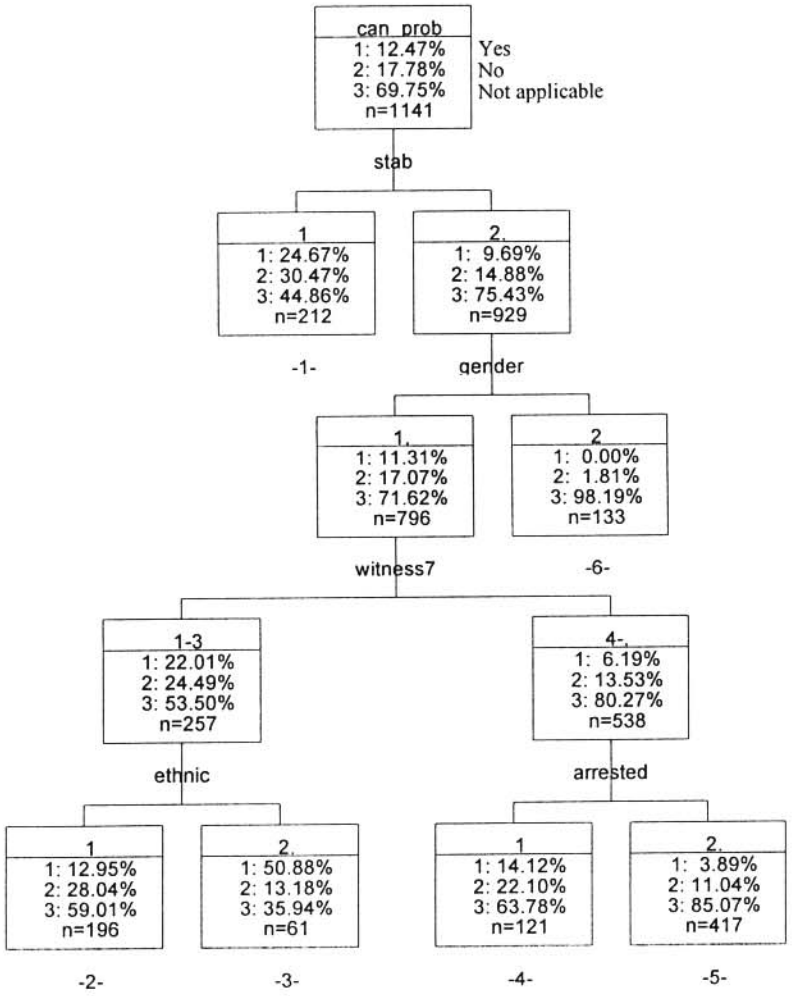
Trading in cannabis among lifetime users of cannabis



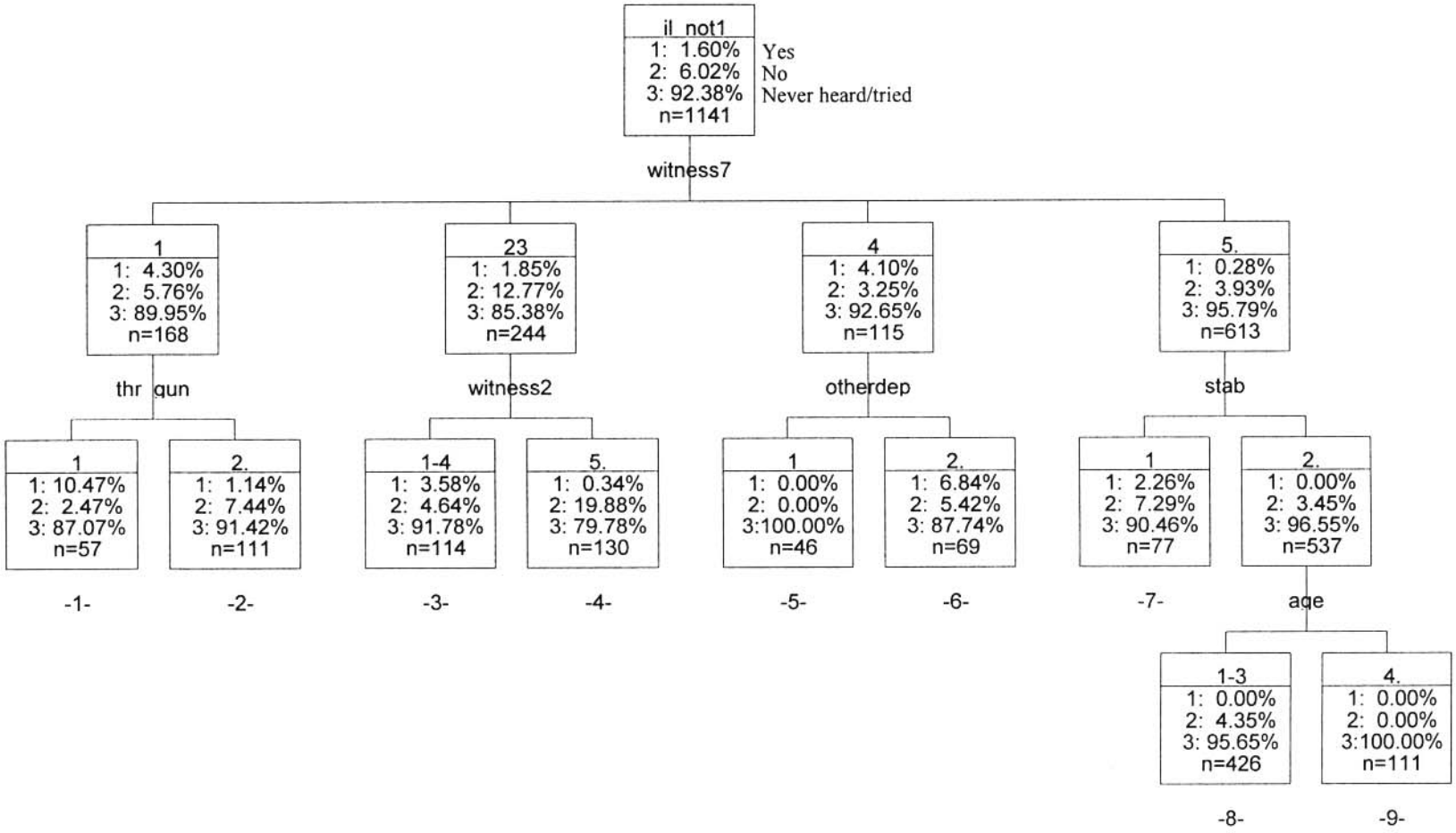
Trading in some drug or other among lifetime users of some or other drug



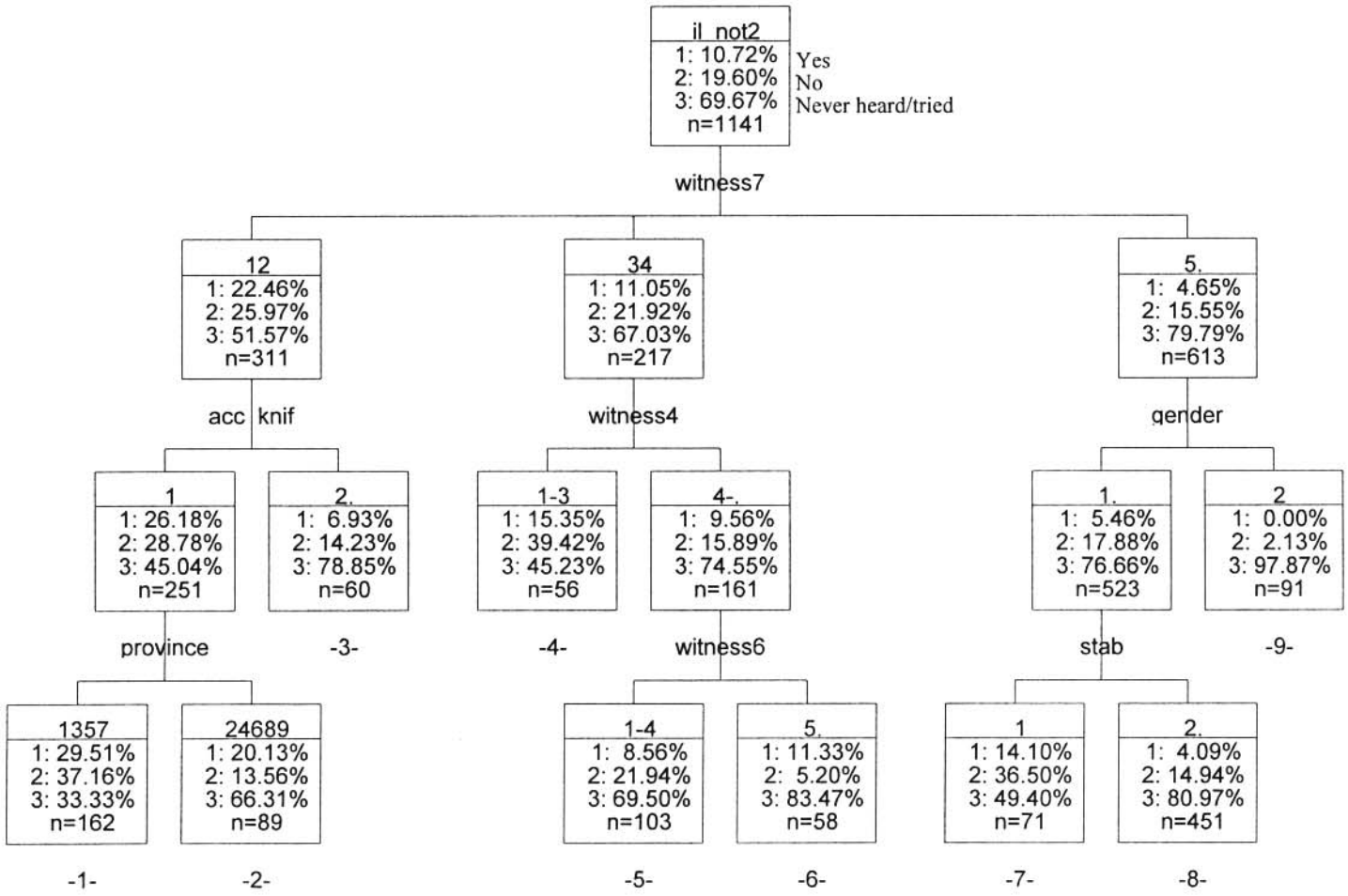
Lifetime users of cannabis who had negative experiences at the time or after they took the drug



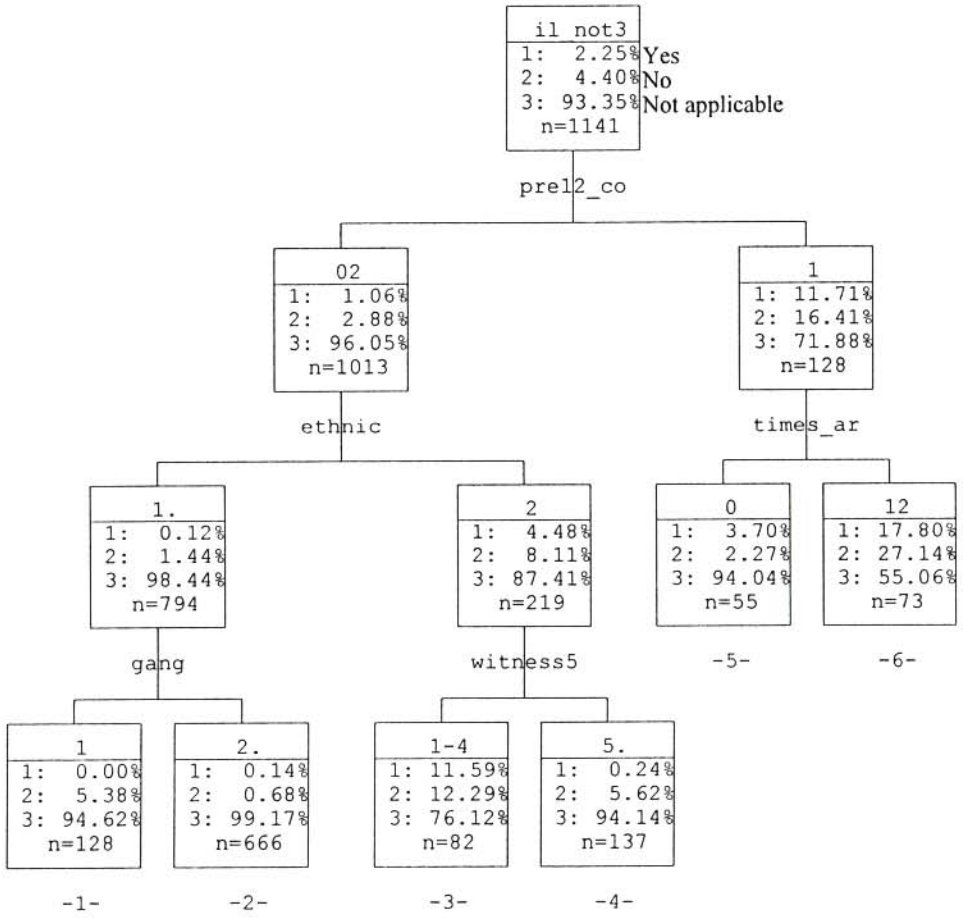
Lifetime users of inhalants who could not "do without" this drug



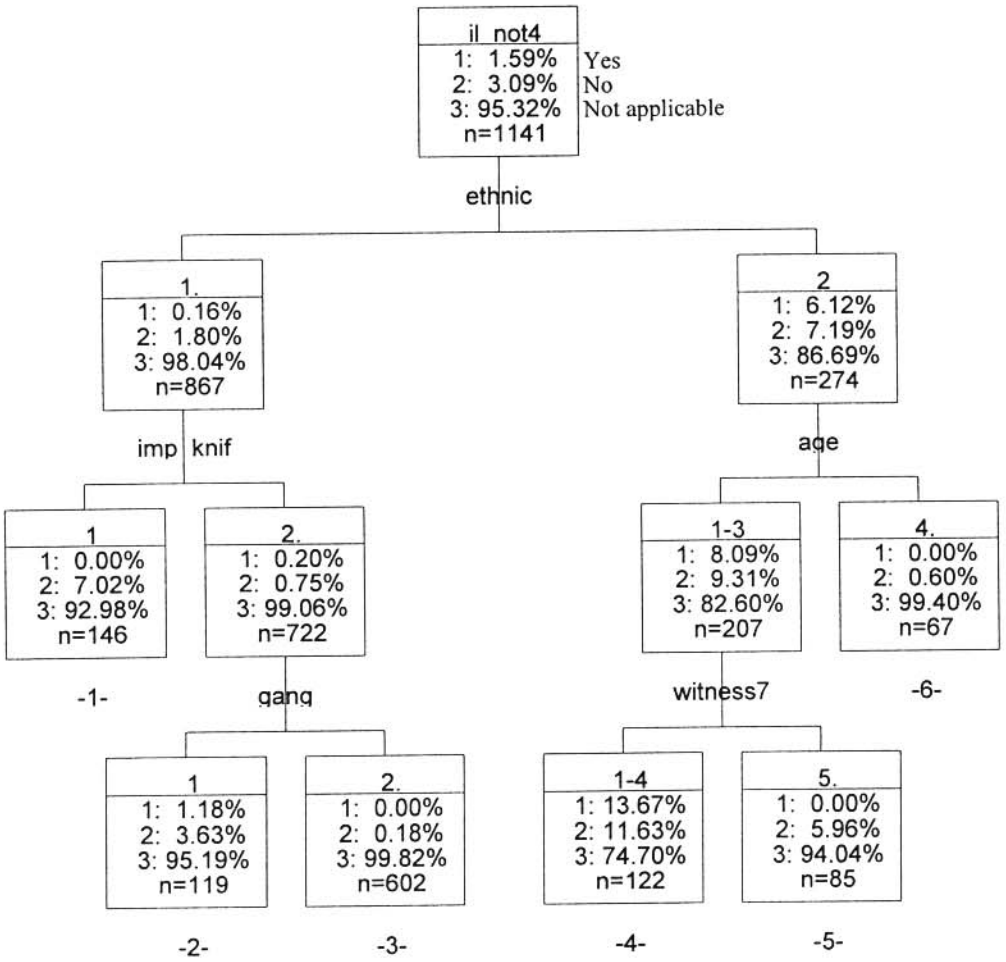
Lifetime users of cannabis who could not "do without" this drug



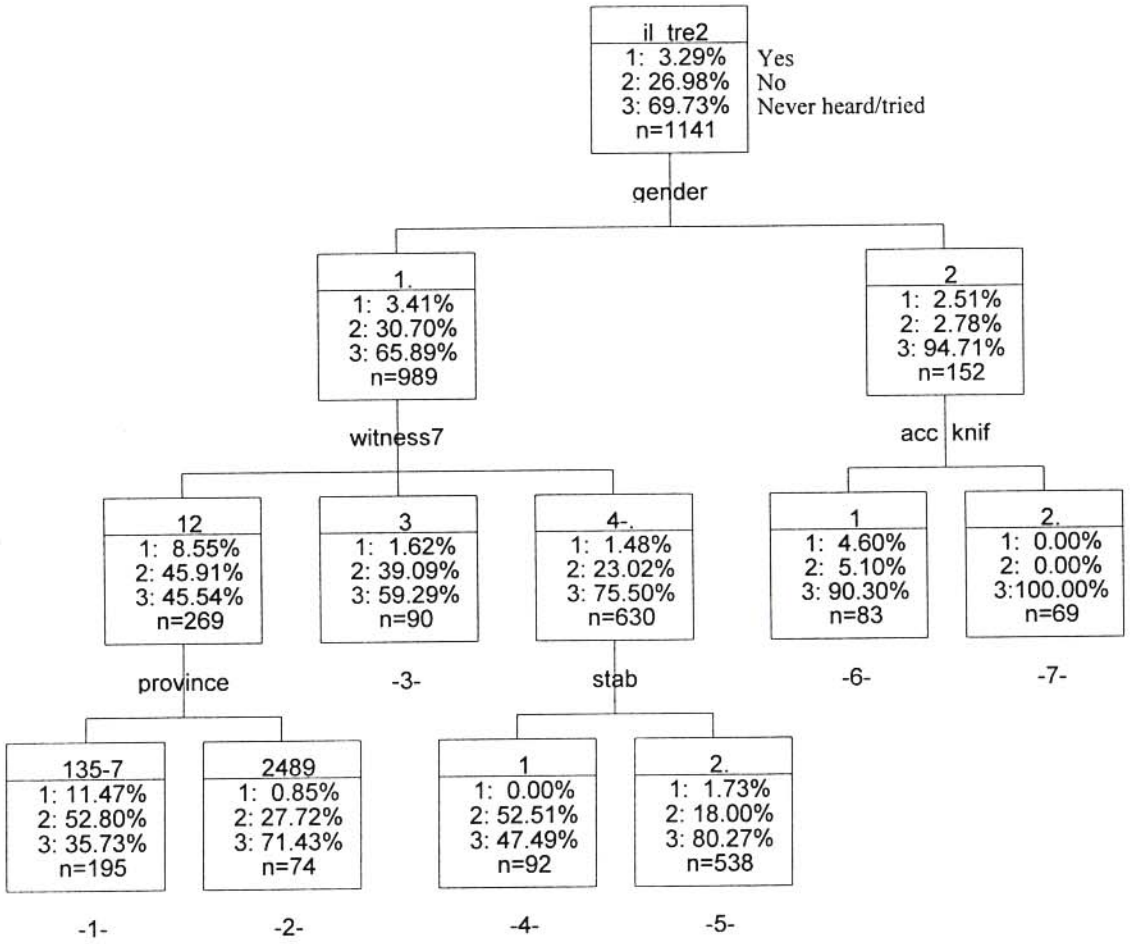
Lifetime users of mixtures of cannabis and mandrax who could not "do without" this drug



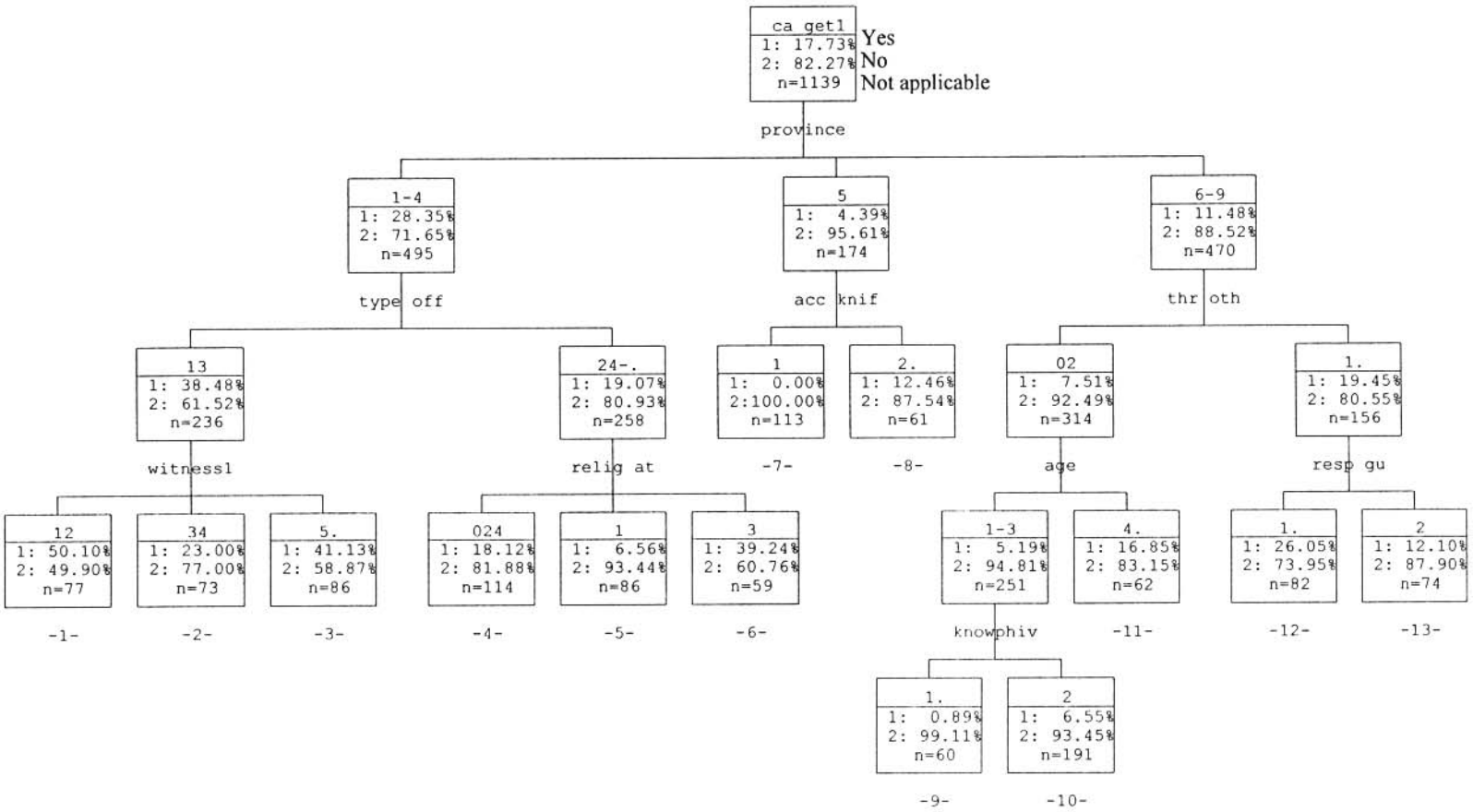
Lifetime users of mandrax who could not "do without" this drug



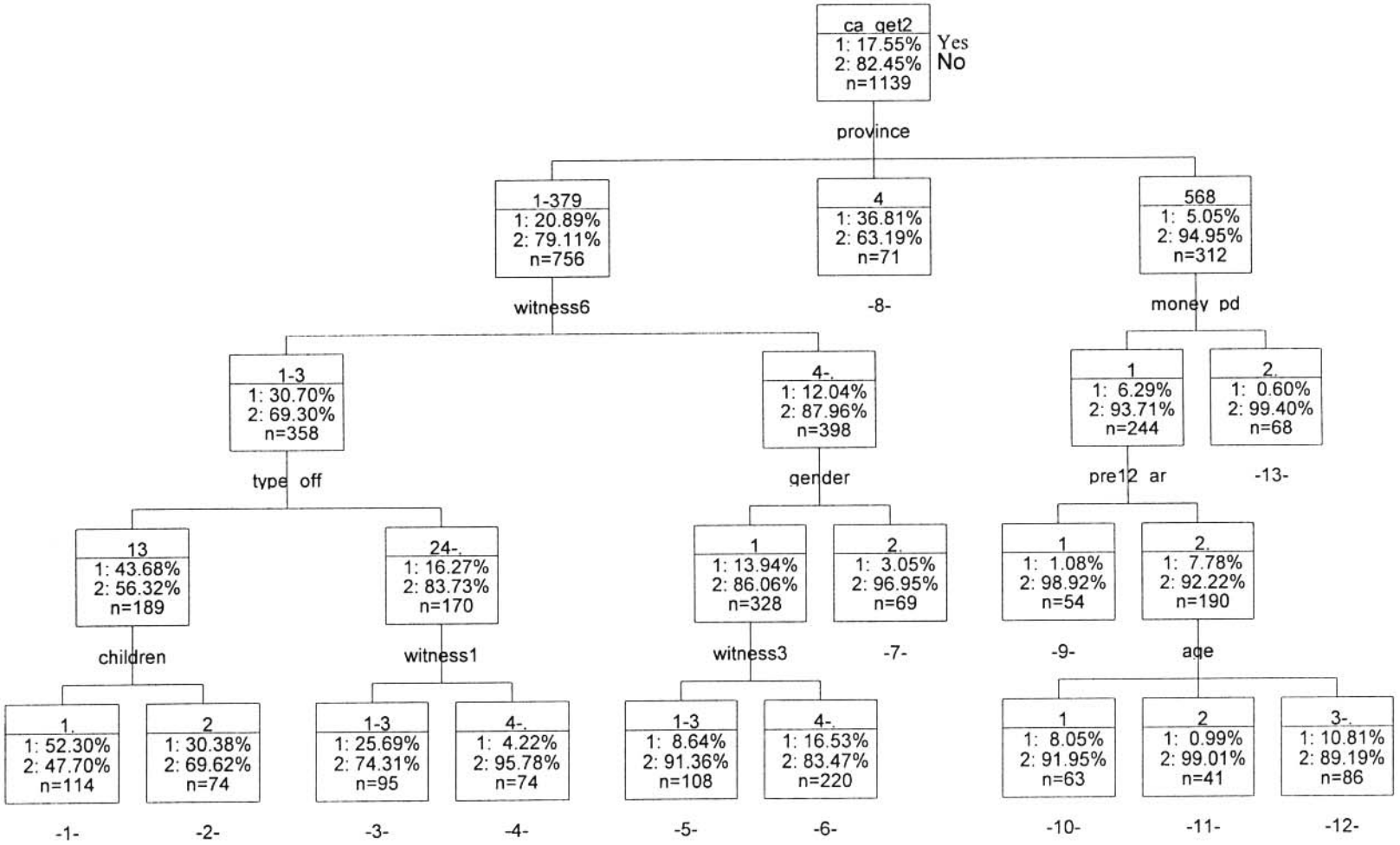
Lifetime users of cannabis who reported that at some time in their life they had received treatment for this drug



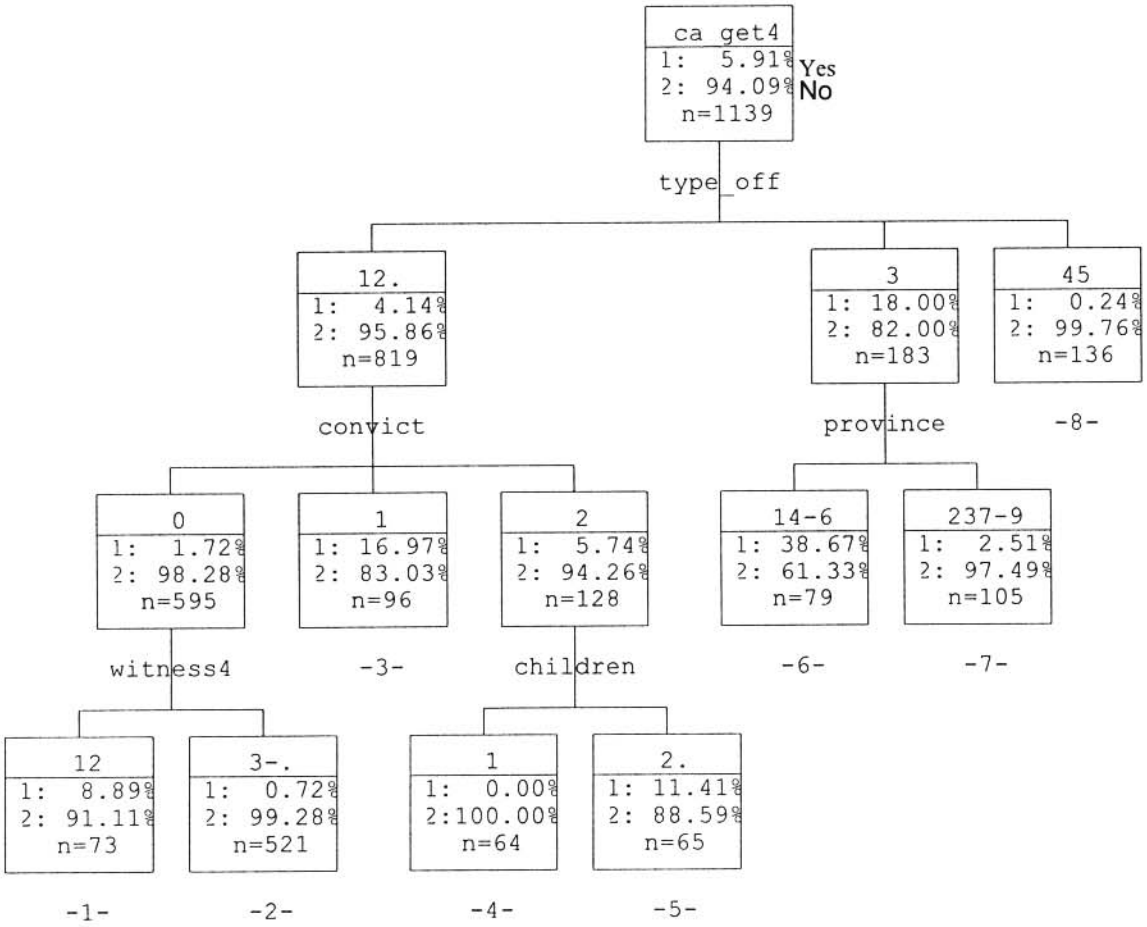
Respondents who reported that they tried to get hold of alcohol when they were arrested for an alleged offence at the time of the survey



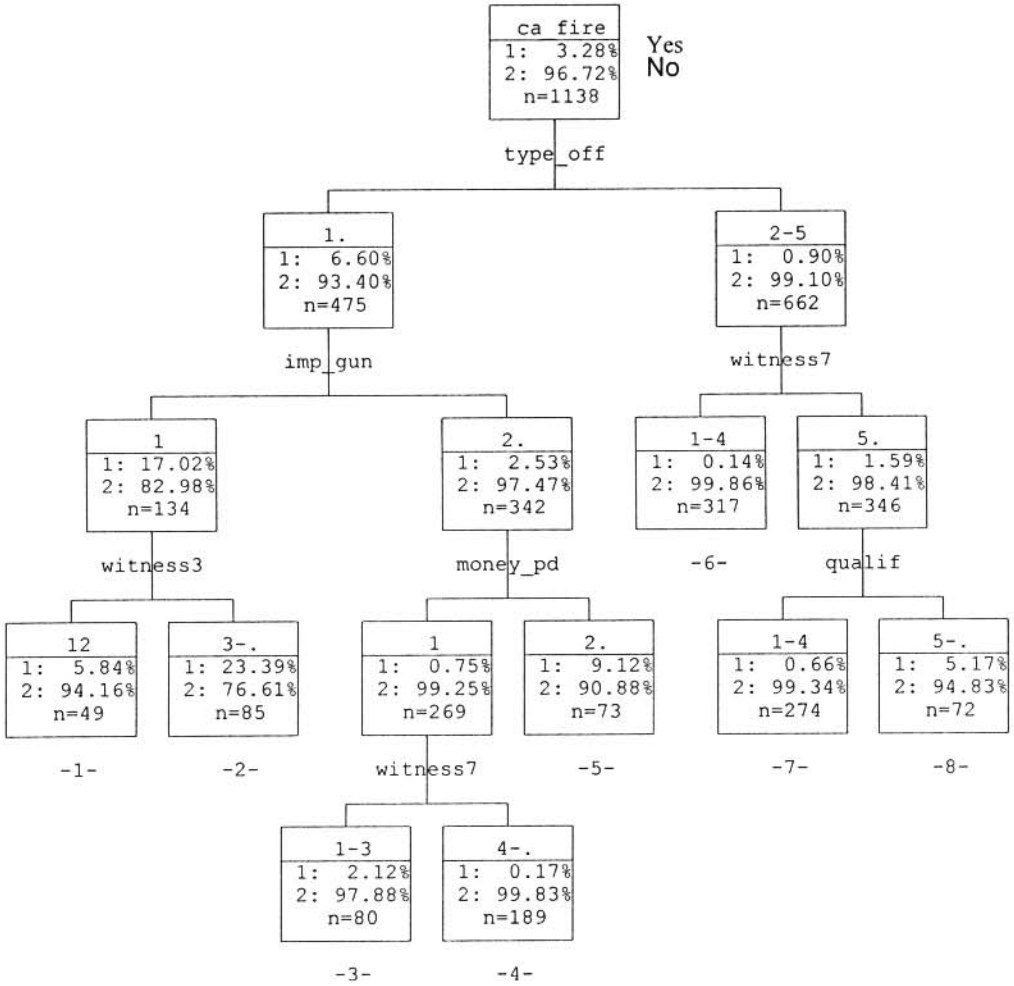
Respondents who reported that they tried to get hold of tobacco when they were arrested for an alleged offence at the time of the survey



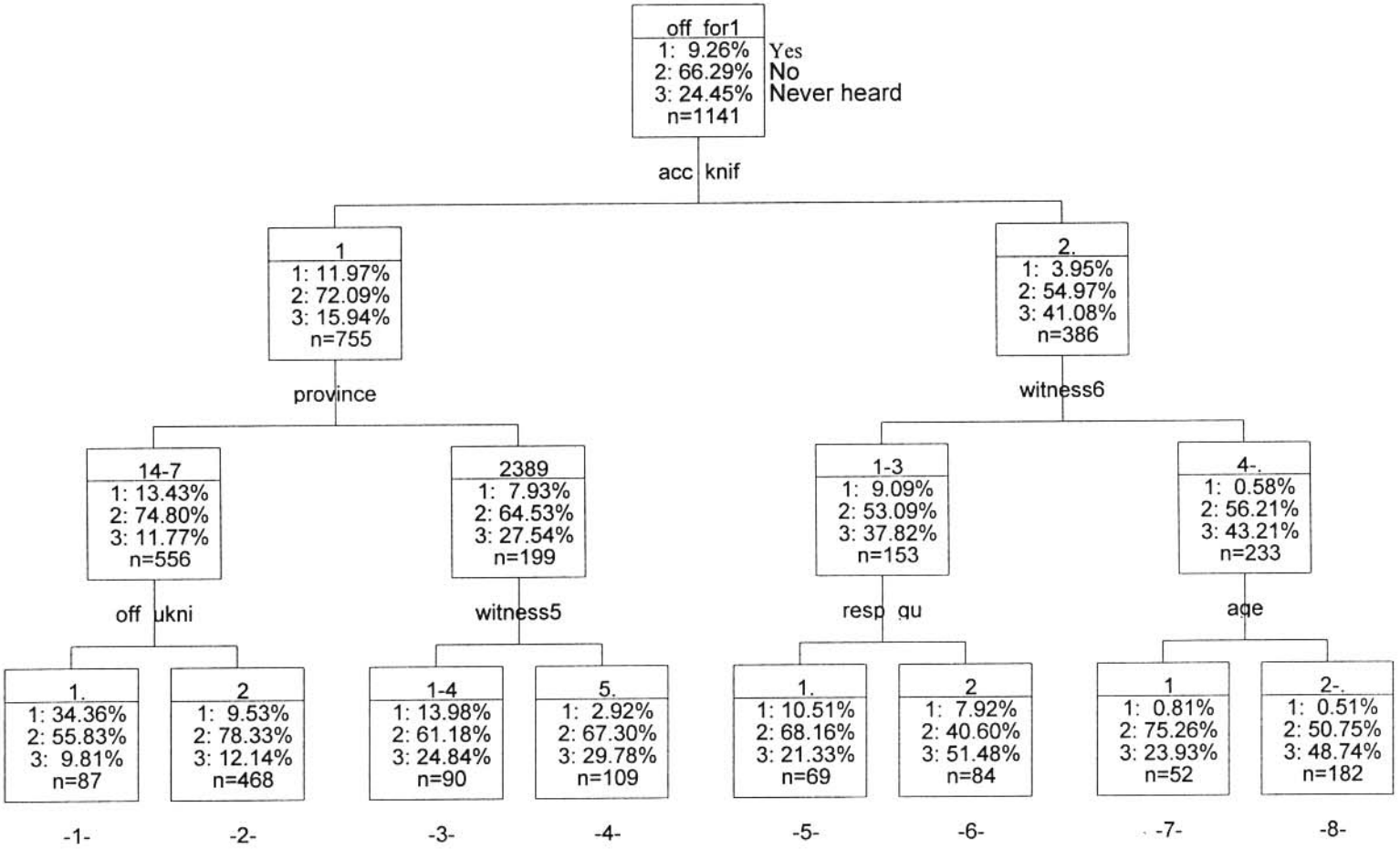
Respondents who reported that they tried to get hold of cannabis when they were arrested at the time of the survey



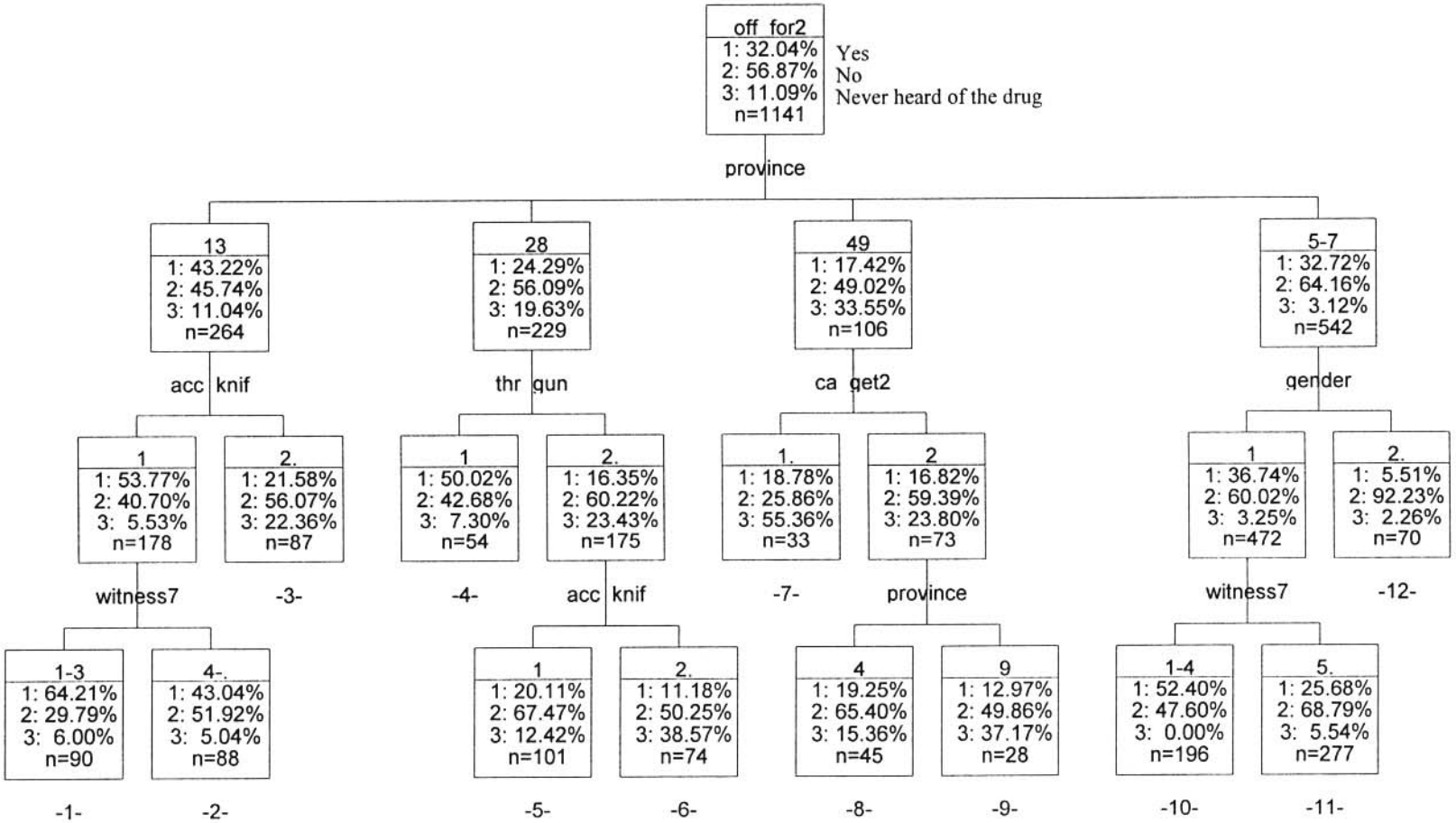
Respondents who reported that they had a firearm with them when they were arrested for an alleged offence at the time of the present survey



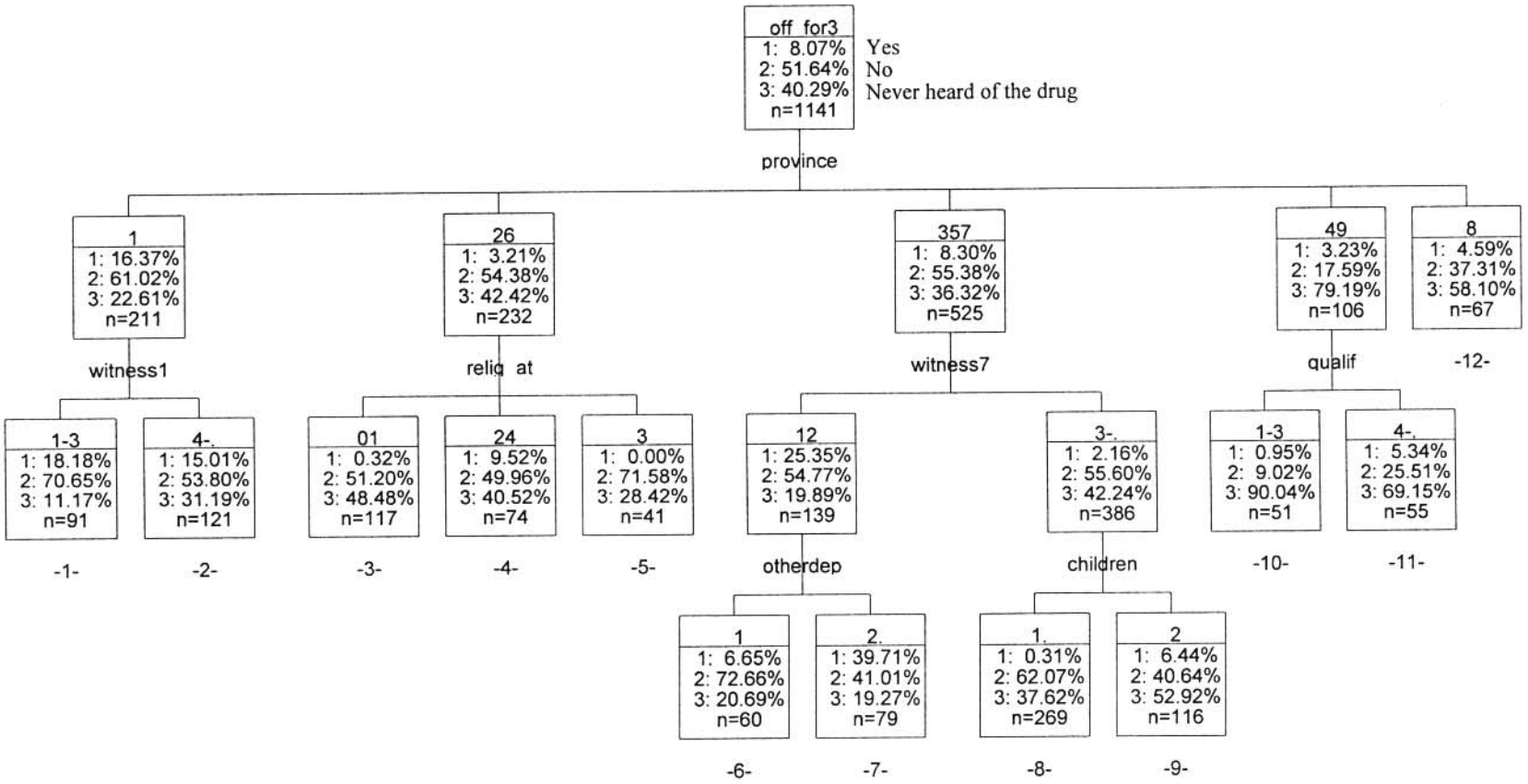
Respondents who were offered inhalants and/or forced to use it



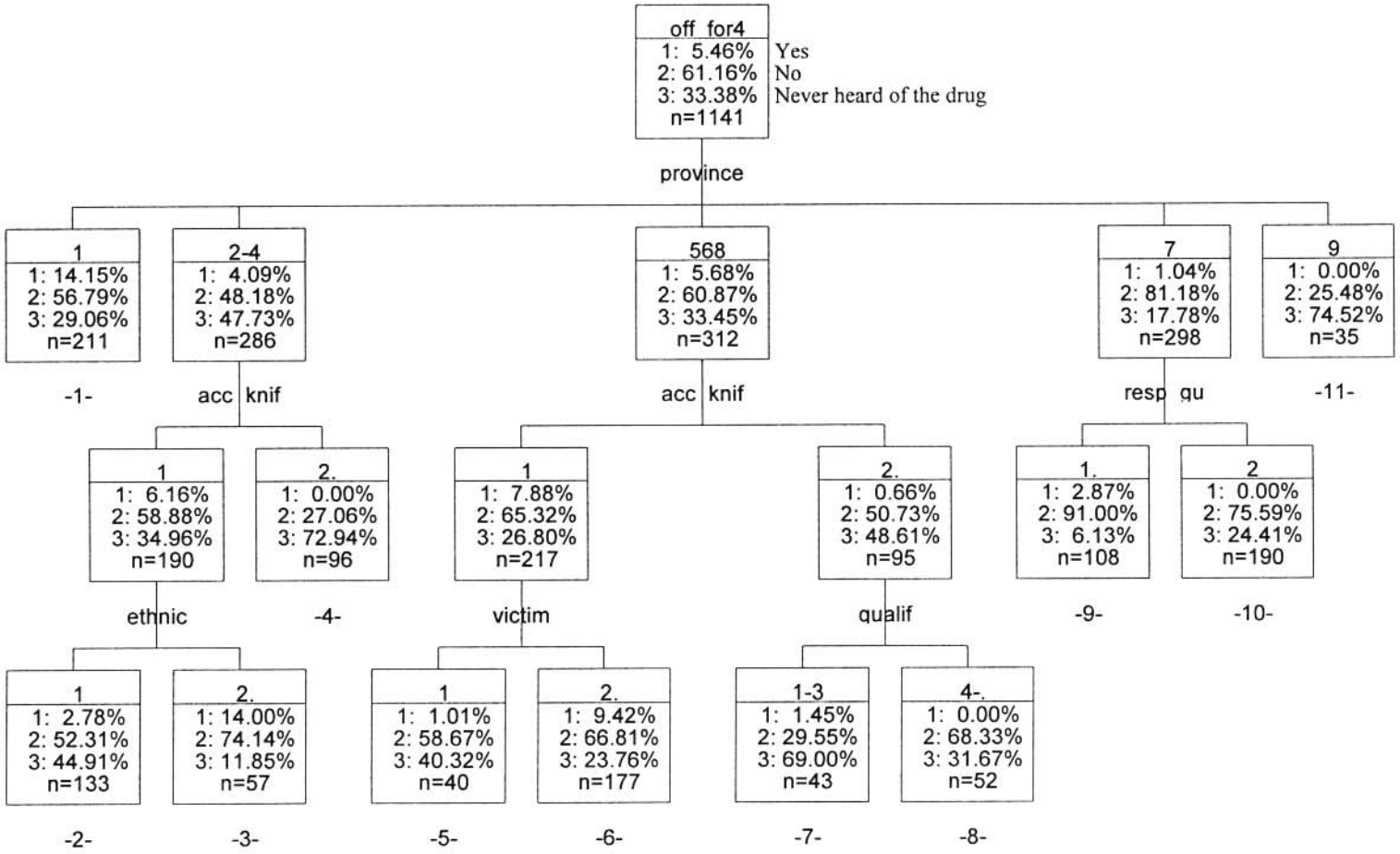
Respondents who were offered cannabis and/or forced to use it



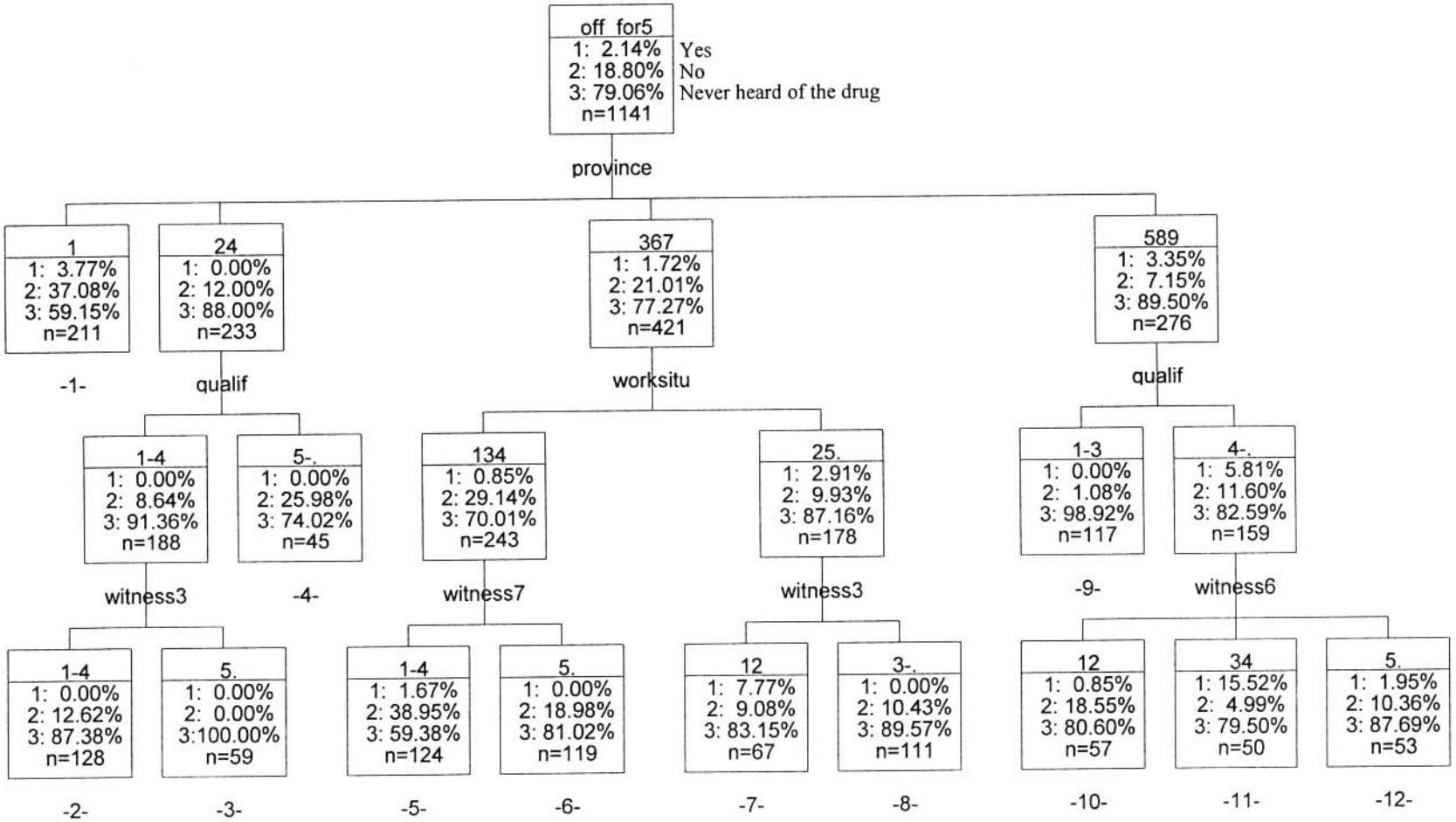
Respondents who were offered the cannabis-mandrax mixture and/or forced to use it



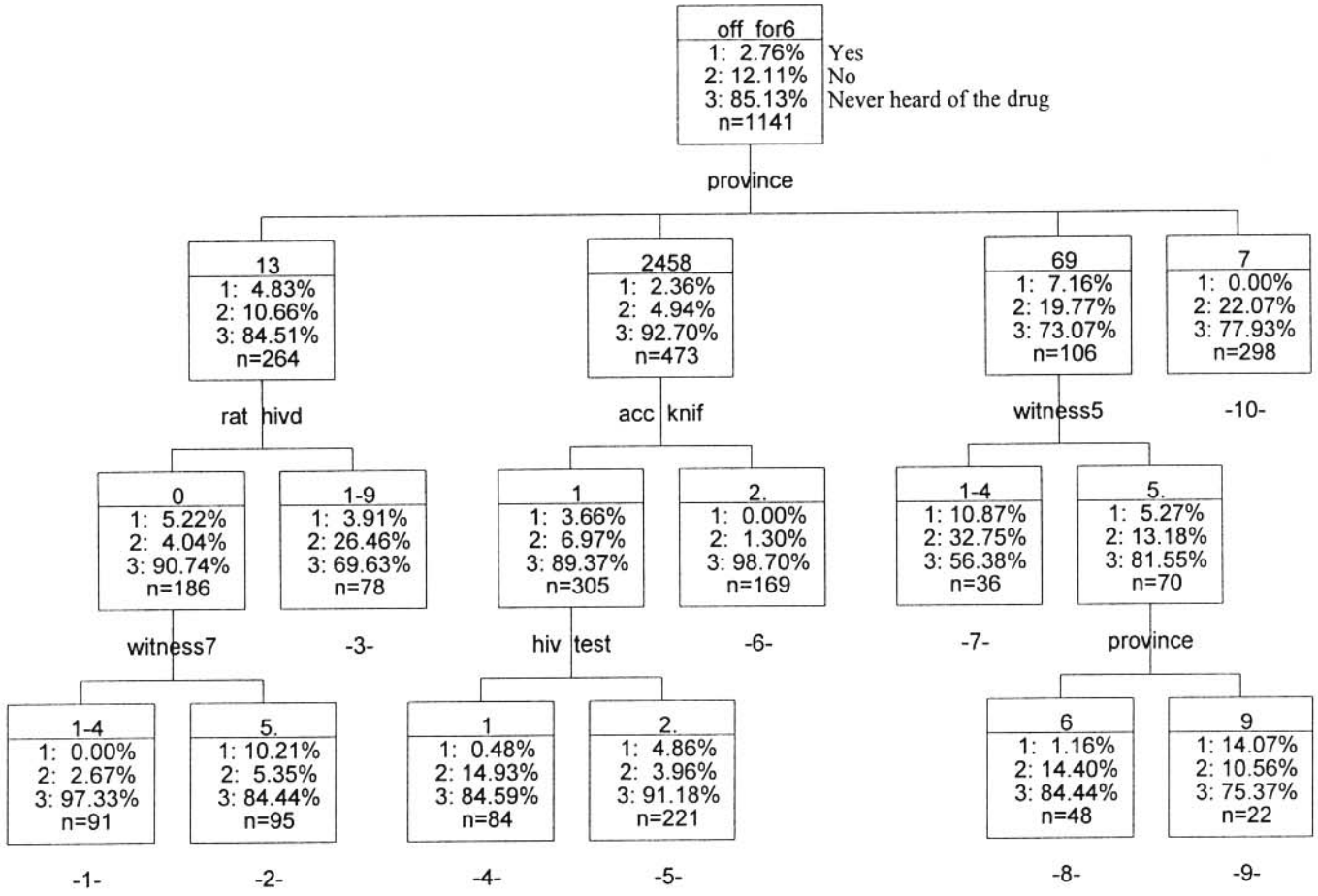
Respondents who were offered mandrax and/or forced to use it



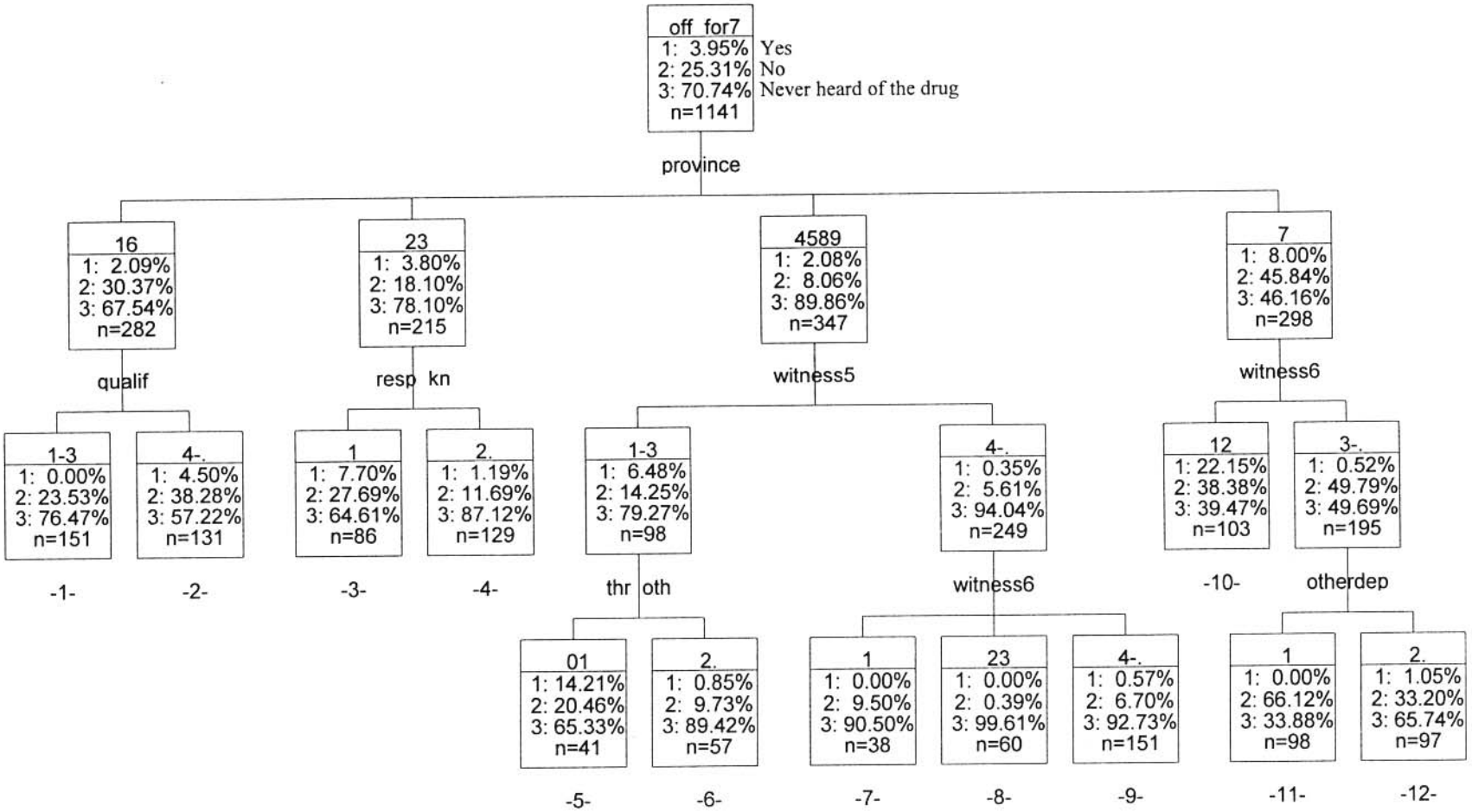
Respondents who were offered cocaine (crack or powder) and/or forced to use it



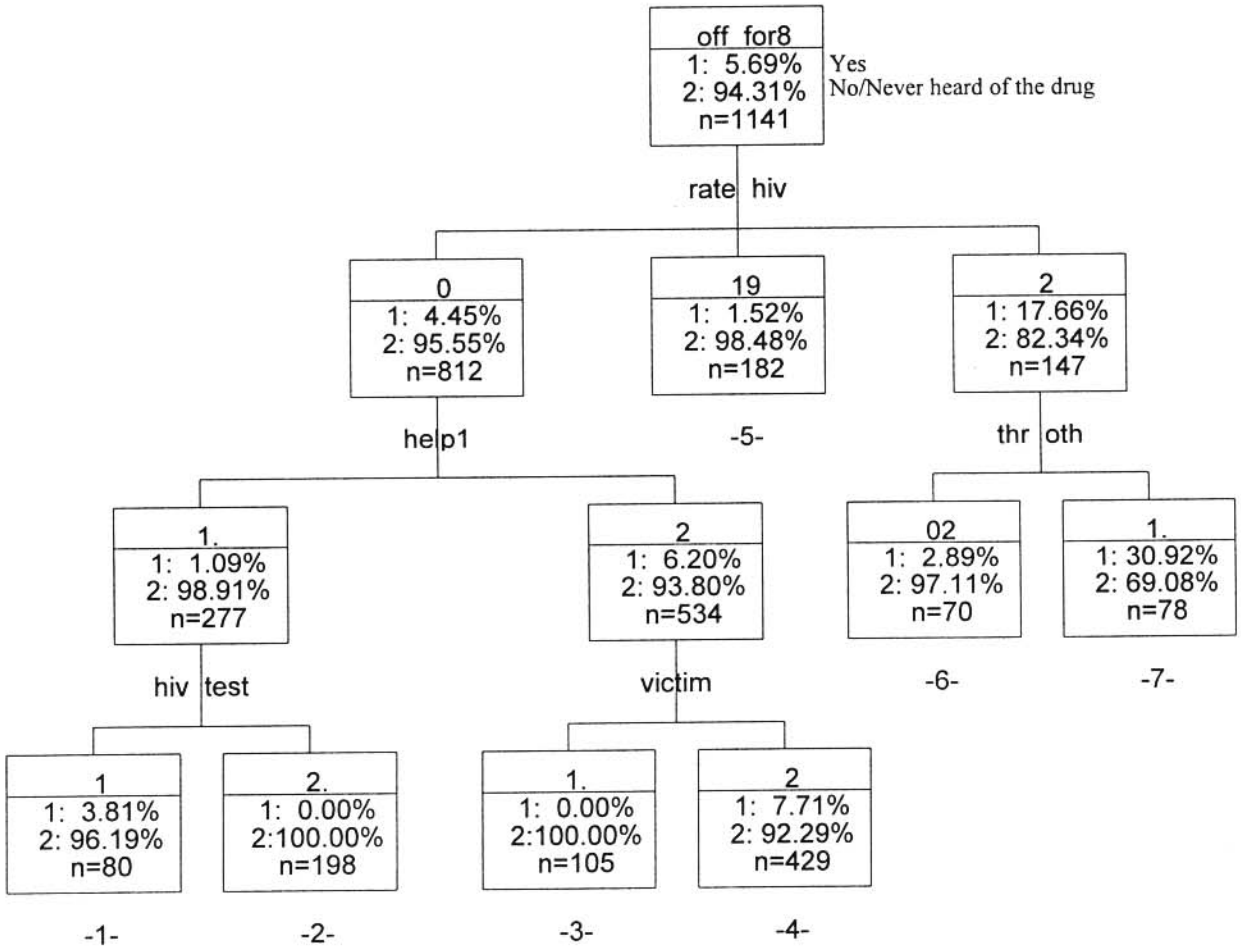
Respondents who were offered prescription severe pain relievers and/or forced to use it



Respondents who were offered prescription sleeping tablets and/or forced to use it



Respondents who were offered some drug or other and/or forced to use the drug



Appendix 5

Multilevel analysis, using HLM (Hierarchial Linear Models) computer software

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Introduction

Multilevel analysis is a term reserved for the analysis of multilevel or hierarchical data. Hierarchical data involve measurement at multiple levels such as individuals clustered within natural groups. In this study we have data on individuals (e.g. individual drug use) within police station areas for which data are also available (e.g. population density, proportion formal dwellings).

When there is a single dependent variable measured on the individual level, random coefficient models can be used to include predictors that are also measured on the individual level, but whose regression coefficients or effects are modelled in terms of variables that are measured on the group level. For example, one may find a significant gender effect (i.e. males and females differ substantially) when predicting a certain dependent variable, but the group level information may indicate that this gender effect becomes less severe in areas that have more formal dwellings. In other words, males and females do not differ as much in formal areas as in less formal areas.

When should multilevel analysis be used and when not

Multilevel analysis should not be used when the observations are independent. Such an analysis is, however, recommended when some dependence between observations is present in the sense that the observations are clustered and that a non-zero intraclass correlation exists, meaning that some degree of homogeneity exists within the clusters.

Another requirement for using multilevel analysis is that the level 2 units (i.e. the groups or clusters) are a random sample from a population consisting of all such groups.

In order for the multilevel tests to be efficient and to have the power to detect relationships in the population, an adequate sample size is necessary. For instance, simulation studies by Kreft (1996) found adequate statistical power in the case of 30 groups of 30 observations each, 60 groups with 25 observations each and 150 groups with 5 observations each.

Part of the results obtained in the present study through use of the HLM software:

The outcome variable is IL_TRY2 (Ever tried Cannabis)

Fixed Effect	Coefficient	Standard Error	T-ratio	Approx. d.f.	P-value
For INTRCPT1, B0					
INTRCPT2, G00	-2.9225	0.1624	-17.994	35	0.000

LDNS, G01	0.0431	0.0801	0.538	35	0.593
FORM, G02	0.0235	0.0103	2.284	35	0.029
For THR_OTH slope, B1					
INTRCPT2, G10	0.3607	0.2339	1.542	35	0.132
LDNS, G11	0.0589	0.1453	0.406	35	0.687
FORM, G12	0.0309	0.0205	1.509	35	0.140
For STAB slope, B2					
INTRCPT2, G20	1.3134	0.2773	4.736	35	0.000
LDNS, G21	0.2455	0.1317	1.865	35	0.070
FORM, G22	-0.0243	0.0289	-0.841	35	0.406
For GENDER slope, B3					
INTRCPT2, G30	1.8657	0.2002	9.319	35	0.000
LDNS, G31	-0.0615	0.1042	-0.590	35	0.559
FORM, G32	-0.0253	0.0142	-1.786	35	0.082

Kreft, Ita G. G. (1996). *Are multilevel techniques necessary? An overview, including simulation studies.* Obtained online on Feb. 14, 2001, at http://www.calstatela.edu/faculty/ikreft/quarterly/quarterly.html.