

## CHAPTER 2

# RESEARCH METHODOLOGY

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In order to ensure comparability with the 1998 national Victims of Crime survey, as well as ISS surveys in other African countries that were being conducted at the same time as the national survey, specific aspects of the survey design were predetermined. These included certain components of the questionnaire as well as the sample design.

### Sample design

Multi-stage cluster sampling was utilised, with Enumerator Areas (EAs) from the 2001 Census selected at the first stage of the sampling, households within the EAs at the second stage, and individuals within the household at the third stage. Based on the total number of households in South Africa (identified by the 2001 Census as 11,205,705), a total of 80,787 EAs were allocated. The total sample size was determined to be 4,050 households. The sample was calculated at a 95% confidence interval, and with a design effect of two. Ten interviews were collected from each EA. The distribution of the sample through the provinces is reflected in the table below. In total, a sample of 4,860 was realised (Table 1).

**Table 1: Sample distribution by province**

	Sample size	Sample realised
Eastern Cape	534	590
Free State	418	460
Gauteng	552	600
KwaZulu-Natal	498	550
Limpopo	334	370
Mpumalanga	538	600
Northern Cape	514	570
North West	488	540
Western Cape	520	580
South Africa	4,050	4,860

Households were selected randomly in the following manner. Maps of the EAs were obtained prior to entry of the EA, and random starting points selected. The household nearest to the starting point was selected, and a household interval randomly selected by the supervisor using the day, week and month of the interview. Every  $n$ th household was then completed until the target number of interviews was obtained. Respondents over the age of 16 years were then randomly selected for interview using a KISH grid.

### Questionnaire design

A basic questionnaire, based on those used in the ICVS, previous ISS studies, concurrent regional studies, and the 1998 Victims of Crime survey was used as a starting point. In order to minimise fieldworker error, and coding and capturing error, as well as any ambiguities in responses, the instrument was largely pre-coded. A number of drafts were prepared and presented internally to the ISS, and then to a stakeholder committee for input, before finalisation. An overview of the questionnaire is presented in Appendix 1.

The questionnaire was not translated into any vernacular languages. However, the introduction and definitions of crimes used by enumerators were translated and back-translated from English into Afrikaans, Zulu, and Sotho. Although every precaution was taken during fieldworker training to ensure that interpretations were correct, it is not inconceivable that errors may have occurred. Cross-checks were carried out on 20% of the questionnaires to ensure that the responses given were an accurate reflection of respondents' opinion. These cross-checks did not reveal any consistent error from the latitude ordinarily accorded interviewers in translating the original questionnaire.

### Training

Training of enumerators and field supervisors was undertaken over three days, and included a one-day field test. Training was conducted in four cities, namely Johannesburg, Durban, Cape Town and Port Elizabeth. During the training process, crime specific phrases and questions were verbally translated and back-translated to ensure that all enumerators were familiar with all the terms, and could convey these to potential respondents without losing their meaning.

### Fieldwork

An independent research company, Development Research Africa (DRA), with prior experience conducting victim and crime related surveys, was appointed to undertake the data collection, quality control, coding and capture process. Teams of four enumerators were supervised by one field supervisor.

Enumerators from each of the nine provinces were selected to ensure that all vernacular languages were represented in the teams. Fieldwork took place between 1st September and 30th October 2003. Enumerators were equipped with DRA t-shirts and identity cards to ensure that potential respondents could validate their credentials, as well as to differentiate them from any political or other party or organisation that might canvas or undertake household visits.

### Quality control

A three-tiered system of quality control was implemented. DRA enumerators checked each completed questionnaire on a daily basis. These were then handed to field supervisors who again checked the questionnaires to ensure all questions were answered and skip patterns were correctly followed. Any incomplete questionnaires were returned to enumerators for correction and where necessary enumerators returned to the relevant households. Once questionnaires were returned to the DRA office, they were checked for a third time prior to data capture. Call-backs, both telephonic and physical, were completed on 10% of randomly selected completed questionnaires.

In addition, representatives from the Crime and Justice Programme of the ISS undertook spot field visits to field teams all over the country, during which time the sampling procedures were checked as well as the quality of completed questionnaires.

### Data coding and capture

Capture was undertaken on Epi-Info. A process of double capture was undertaken in order to eliminate capture error. The completed data sets were finally validated.

In order to correct slight discrepancies between census data (based on the 2001 SSA Census) and the demographics of the sample achieved, the data was weighted by province, race, gender, age and employment status. This is consistent with the process followed in the 1998 Victims of Crime survey and ensured that the findings are truly representative of the South African population.

### Definitions of crimes

To enable comparison of the 1998 and 2003 data sets, the definitions used in the study were kept identical to those used in the 1998 survey, with the exception of attempted car hijackings and attempted housebreakings. In this study, car hijacks specifically only included successful incidents, rather than

including attempts as was the case in the 1998 study, while attempted housebreakings were excluded from this study.

For methodological purposes, the types of crimes were divided into those that affect the household, and those that affect individuals.

Household crimes are those crimes that are committed against people living together, eating together, and sharing resources. For example, burglary is a crime committed against a household rather than against an individual, since household goods are usually shared or used by all members. Vehicle theft is a household crime, since vehicles are usually shared by, or made available for, all household members. The following are household crimes:

- *Deliberate damage, burning or destruction of dwellings* includes acts of deliberately setting fire to, or damaging a household's dwelling, but excludes forced removals. This also includes outbuildings that might be used for household functions or for agricultural purposes, and household buildings or part of buildings that may be used by any member of the household for commercial purposes.
- *Deliberate killing or murder* includes a deliberately inflicted death, which could have happened during housebreaking, hijacking, assault including domestic violence, rape or in any other circumstances. Included in this are ritual or multi-related murders or killings. Murder is treated as a household crime because the victim cannot report its occurrence.
- *Hijacking of motor vehicles* occurs when someone uses force to steal or attempt to steal a car, truck, van or pick-up belonging to the household when a member or members of the household are inside, or just outside, the vehicle.
- *Housebreaking and burglary* occurs when someone breaks into the dwelling without permission and steals or attempts to steal something.
- *Theft of livestock, poultry and other animals* involves the actual stealing of animals such as cattle, sheep, goats, chickens and dogs.
- *Theft of motor vehicles* (excluding hijacking) occurs when somebody steals a car, van, truck or pick-up when nobody is present in the vehicle, regardless of where the vehicle was parked at the time.
- *Theft of goods from vehicles* includes theft of car radios or goods left in the car or parts of the car such as a car mirror or spare tyre.
- *Motor vehicle vandalism* occurs when someone deliberately damages a vehicle or parts of a vehicle, such as a car, van, truck or pick-up, for example through scratching the paintwork.

- *Theft of motor cycles* and scooters excludes bicycles.
- *Theft of bicycles* occurs when somebody steals a bicycle.

Individual crimes affect a single person rather than an entire household. The following are individual crimes:

- *Sexual offences (including rape and domestic sexual abuse)* include grabbing, touching or sexually assaulting or raping someone.
- *Robbery involving force* involves taking property from a person using force or the threat of force, for example, pointing a knife at someone and demanding that they hand over their jewellery.
- *Assaults and threats of assault (including domestic violence)* include being attacked, physically beaten or threatened by an attacker in a frightening way without the attacker taking any property from the victim.
- *Theft of personal property* includes pick-pocketing or theft of a purse, wallet, clothing, jewellery or sports equipment, without the use of or threat of force.
- *Consumer fraud* occurs when someone selling something to you or delivering a service cheats you in terms of quantity or quality of the goods or service.

### Difficulties encountered in the fieldwork

In addition to those limitations inherent to victim surveys identified above, a number of other challenges arose during the course of the fieldwork:

- Field teams often experienced difficulties gaining access to households, particularly in high-income areas, despite being in possession of a letter of introduction from the ISS.
- In a few instances, respondents feared that participating in the survey might result in negative consequences for them or their households.
- Despite the fact that EA maps from the most recent census were utilised, at times these were incorrect and reflected landmarks such as schools and other institutions where in fact there were none, as well as inaccurately reflecting the EA boundaries. In such instances, enumerators and supervisors made a concerted effort to determine accurately the boundaries of the EA. It is however possible that on occasion households falling just outside the EA might have been included within the selected EA.
- While community preparation was in most cases undertaken prior to arrival by the research company, in some instances access was initially refused as communities claimed they did not know about the study. Such difficulties were in most instances resolved.

- Some respondents did not understand the interval selection of households, and this created some suspicion as to why their household had been selected. However, this is unlikely to have impacted on the responses provided.
- The questionnaire generally took approximately 45 minutes to administer. Despite being informed of this at the outset of the interview, many respondents complained about the length of time taken to answer the questions.