

CHAPTER 9

DESCRIPTION OF SAMPLE CHARACTERISTICS

9.1 INTRODUCTION

This chapter presents a description of the sample of 509 respondents included in the research. Frequency tables will provide a description and summary of the dispersion of the respondents across the demographic variables, viz gender, age, home language, religion, educational qualifications, occupational level, population group and work experience. From these frequency tables and associated graphs the general characteristics of the sample will be evident.

9.2 DESCRIPTION OF THE SAMPLE BY MEANS OF FREQUENCY TABLES

The nature of descriptive statistics was described in Chapter 8. Frequency tables also form part of descriptive statistics. Ferguson (1981: 17) views frequency tables as a form of classification and description of numbers that contribute to the researcher's understanding and interpretation of the important features of the data obtained. Frequency distributions could be regarded as tables summarising the distribution of a variable by presenting "the number of cases contained in each category" (Healy, 1990:24). According to Howell (1995: 28) a frequency distribution could be described as "a distribution in which the values of the dependent variable are tabled or plotted against their frequency of occurrence". It is therefore used to describe a set of values on a single variable. Although a good frequency distribution will show a fairly even spread of scores across all groups (Mark, 1996: 306), this might not always be possible, i.e. when there is an uneven distribution of groups in the population from which the sample was taken.

Cumulative percentages will also be included in the frequency tables presented for the demographical variables. These percentages are obtained by successively adding the individual percentages. The primary purpose of the cumulative percentage column in a frequency table is to ascertain the percentage of values falling below (or above) a given score or class interval in the distribution (Theron, 1992: 374). It gives an indication of what percentage of values is "greater than" or "lesser than" a specified value.

In the remainder of this chapter Frequency Tables 9.1 to 9.9 will present the description of the 509 respondents across the demographic variables. In each table the values are indicated against the frequency of occurrence.

Histograms will be used to display the frequency distribution graphically. Table 9.1 and Figure 9.1 present the distribution of subjects across gender.

Table 9.1: Frequency distribution: Gender.

	Frequency	Percent	Cumulative Percentage
Male	438	86.1	86.1
Female	71	13.9	100.0
TOTAL	509	100.0	

As is evident from Table 9.1 the male respondents are by far in the majority. However, this distribution is representative of the male/female ratio in the total SAAF population, which is 85:15. Table 9.2 presents the distribution of respondents across age groups.

Table 9.2: Frequency distribution: Age.

	Frequency	Percent	Cumulative Percentage
20-24	48	9.4	9.4
25-34	239	47.0	56.4
35-44	161	31.6	88.0
45-54	51	10.0	98.0
55-64	10	2.0	100.0
TOTAL	509	100.0	

According to Table 9.2, respondents were quite evenly spread across the age groups, but with only 2.0% falling in the 55-64 years age category. For the purpose of statistical analysis a recoding of the age groups was done, through which the age groups 55 to 64 and 45 to 54 were combined to form the age group “45 and older”.

Table 9.3 presents the distribution of respondents across home language.

Table 9.3: Frequency distribution: Home language.

	Frequency	Percent	Cumulative Percentage
N-Sotho	15	2.9	2.9
Zulu	9	1.8	4.7
Xhosa	17	3.3	8.1
S-Sotho	9	1.8	9.8
Afrikaans	352	69.2	79.0
Tswana	12	2.4	81.3
Tsonga	1	.2	81.5
English	78	15.3	96.9
Swati	2	.4	97.2
Venda	8	1.6	98.8
Ndebele	5	1.0	99.8
Other	1	.2	100.0
TOTAL	509	100.0	

The high percentage of whites included in the sample also resulted in a low percentage of black indigenous languages in the sample. The SANDF (and SAAF) workforce has for many years been characterised by a high percentage of white Afrikaans and English speaking members. Although the transformation process was focussed on addressing these imbalances, the workforce is still predominantly Afrikaans and English speaking. Table 9.3 indicates that, from the black languages, Xhosa and North-Sotho are best represented. Also, as regards home language, a recoding was done for the purpose of statistical analysis. All the indigenous languages were clustered together.

In Table 9.4 the distribution of respondents across religion is presented.

Table 9.4: Frequency distribution: Religion.

	Frequency	Percent	Cumulative Percentage
Anglican	21	4.1	4.1
Dutch Ref(NG)	209	41.1	45.2
Metodist	34	6.7	51.9
Presbeterian	11	2.2	54.0
Pentacostal	25	4.9	58.9
Catholic	31	6.1	65.0
Reformed	18	3.5	68.6
Apostolic	51	10.0	78.6
Lutherian	5	1.0	79.6
Zionist	7	1.4	80.9
Misionary	2	.4	81.3
Independant	6	1.2	82.5
Islamitic	4	.8	83.3
Hindu	10	2.0	85.3
N H (Ned Herf)	19	3.7	89.0
Other	56	11.0	100.0
TOTAL	509	100.0	

Religion is also highly related to population group and home language. This explains the high occurrence of the members of the three Afrikaans sister churches, viz Dutch Reformed, Reformed and NH (N=246). More respondents belong to the Apostolic faith (N=51) than to the other religions (excluding Dutch Reformed). Taken into consideration the uneven spread of respondents across the different religious categories, a recoding was done for the purpose of statistical analysis.

Table 9.5 presents the distribution of subjects across the categories of the variable educational qualification.

Table 9.5: Frequency distribution: Educational qualification.

	Frequency	Percent	Cumulative Percentage
Std 6 (Gr 8)	2	.4	.4
Std 8 (Gr 10)	45	8.8	9.2
Std 10 (Gr 12)	325	63.9	73.1
Diploma	93	18.3	91.4
B.Degree or Higher Diploma	31	6.1	97.4
Hons Degree	10	2.0	99.4
Masters Degree	3	.6	100.0
TOTAL	509	100.0	

According to Table 9.5, 63.9% of respondents have matric, while only 8.7 % have university training. Only 13 of the 509 respondents (2.6%) have post-graduate qualifications. For purposes of statistical analysis, all graduate members were recoded to form a single group.

Frequency Table 9.6 presents the distribution of subjects across occupational level (military rank).

Table 9.6: Frequency distribution: Occupational level.

	Frequency	Percent	Cumulative Percentage
Amn to Sgt	134	26.3	26.3
F/Sgt to WO I	230	45.2	71.5
Lt to Capt	74	14.5	86.1
Maj to Lt Col	49	9.6	95.7
Col to Lt Gen	22	4.3	100.0
TOTAL	509	100.0	

In the SANDF occupational level is indicated by a formal military rank system. It is evident from Table 9.6 that the distribution of respondents according to rank is skewed towards the lower ranks. The sample consists of 28.5% officers and 71.5% non-commissioned ranks. This ratio is equivalent to the rank distribution in the total population. Top management is represented by 22 respondents.

Due to the fact that the researcher wants to compare managerial levels with each other in terms of the dependent variables (especially leadership behaviour), a recoding of the categories was not considered.

A presentation of the distribution of subjects according to population group is provided in Table 9.7.

Table 9.7: Frequency distribution: Population Group.

	Frequency	Percent	Cumulative Percentage
Asian	16	3.1	3.1
White	367	72.1	75.2
African	79	15.5	90.8
Coloured	47	9.2	100.0
TOTAL	509	100.0	

Whites form almost 65 % of the total SAAF population, while blacks represent 20% of the population. The inclusion of 15.5% black respondents and 72.1 % white respondents in the sample is therefore almost proportional to the occurrence of these groups in the population as a whole. Table 9.7 indicates that only 16 respondents (3.1%) are Asian and 47 (9.2%) are coloured. The coloured respondents form a representative sample of the total of 11.5% coloureds in the total SAAF population.

The sample of black respondents were further broken down into nine ethnic groups, as presented in Table 9.8. Due to the low frequencies of all these groups, this breakdown will not be used for the purpose of statistical analysis.

Table 9.8: Frequency distribution: Ethnic group.

	Frequency	Percent	Cumulative Percentage
Zulu	8	10.1	10.1
Transvaal-Ndebele	7	8.9	19.0
Venda	8	10.1	29.1
Xhosa	17	21.5	50.6
Shangaan-Tsonga	1	1.3	51.9
Swazi	2	2.5	54.4
Tswana	12	15.2	69.6
S-Sotho	9	11.4	81.0
N-Sotho	15	19.0	100.0
TOTAL	79	100.0	

Table 9.9 presents the distribution of objects across work experience.

Table 9.9: Frequency distribution: Work experience.

	Frequency	Percent	Cumulative Percentage
0-5 Years	47	9.2	9.2
6-10 Years	132	25.9	35.2
11-15 Years	126	24.8	59.9
16-20 Years	84	16.5	76.4
21-30 Years	91	17.9	94.3
More than 30 Years	29	5.7	100.0
TOTAL	509	100.0	

As is indicated by Table 9.9 the respondents with less than 15 years work experience comprise 59.9% of the sample. Due to the low frequency of members having more than 30 years work experience (5.7%) a recoding for the purpose of statistical analysis was done so that the last two groups are coded together, i.e. members with more than 20 years work experience equal 120 or 23.6%.

9.3 SUMMARY

In this chapter a description of the sample of 509 respondents was presented. When analysing the frequency distributions, it is clear that in terms of some of the variables, viz gender, home language, population group and educational qualification, the distribution is significantly skewed towards white Afrikaans male members with an educational level of matric and lower. However, with regards to all of these variables, the distribution of respondents is equivalent to the variable distribution found in the total population.