

CHAPTER 5

EMPIRICAL STUDY

5.1 INTRODUCTION

The study conducted for this dissertation focuses on the enactment of employment equity legislation which came into effect in 1998, and the effect that this would have on gender issues within the organisation under discussion. Gender, in this context, refers to the effect of employment equity on females, and the effect that the whole concept of employment equity would have on females in the organisation. The study was conducted in a parastatal organisation in 2002, after the introduction of employment equity legislation and after the establishment of an Employment Equity Committee, being one of the requirements of the Act.

The study was also conducted after the first submission of employment equity plans to the Department of Labour in 2000 and 2001. Thus the organisation had already been sensitised to the concept of employment equity and would understand the focus and implementation of such a concept.

5.2 OBJECTIVE OF THE STUDY

The objective of the study was to ascertain how employees of the organisation would relate to the effects of employment equity principles and assertions being introduced into the organisation, and above all the concepts imposed on the organisation as a national intervention within the country as a whole. The embracing of employment equity principles was thus not a natural process, but one that was imposed from outside.

The main objectives of the study were to:

- Measure the attitude of employees of the designated company towards employment equity in an effort to understand and determine employees' sentiments towards women employees;

- To ascertain whether the implementation of the Employment Equity Act No 55 (1998) laid a foundation for the promotion of gender equality and consequently embracing cultural diversity;

5.3 POPULATION AND SAMPLE

A population “refers to all of the events, things, or individuals to be presented, and a sample refers to any number of individuals less than the population” (Christensen, 1994, p. 65).

The population of the organisation at the time of doing the study was 486 employees, of whom 384 were male and 102 were women. The number of Black males was 180, White males 204, Black females 61 and White females 41. The sample was a convenience sample, as a questionnaire was sent to all employees of the organisation.

The organisation is situated in Johannesburg, in the Northern suburbs, with regional offices throughout the country.

5.4 THE RESEARCH INSTRUMENT

The research instrument is a validated research instrument that has been used previously in other studies. Certain additional statements which are “female” specific were added to the instrument.

5.4.1 Rationale and background

The research instrument encapsulates broad components of employment equity dimensions. It is a fairly new instrument dating to 1999, and is focused on components in the field of employment equity.

5.4.2 The objective of using the research instrument

The objective of using the research instrument is to gather data on male and females in the organisation studied, so as to measure the effect that employment equity principles have on them.

5.4.3 Contents of the questionnaire

The questionnaire is divided into two sections. Section 1 comprises the following:

5.4.3.1 Section 1

The beginning of section 1 provides the subject with instructions on how to fill in the questionnaire. This is done by explaining the Lickert scale. The Lickert scale is employed for responses to each statement. The scale is a four point scale, as follows:

| | | | |
|-------------------|----------|-------|----------------|
| 1 | 2 | 3 | 4 |
| Strongly disagree | Disagree | Agree | Strongly agree |

The scale can be interpreted as follows:

- a 1 - Strongly disagree: A subject would select this scale if he/she believed that under no circumstances the statement applied to him/her;
- b 2 - Disagree: A subject would select this statement if he/she agreed with the statement;
- c 3 - Agree: A subject would select this statement if he/she believed that the statement applied to him/her;
- d 4 - Strongly agree: A subject would select this statement if he/she had no doubts that the contents of the statement applied to him/her.

The section comprised 194 statements.

5.4.3.2 *Section 2*

Section 2 contains biographical information.

The biographical information provides the following information about the subject:

- a Length of employment in the organisation
- b Age group
- c Disability
- d Racial grouping
- e Level of qualification
- f Language group
- g Gender
- h Salary scale/grading
- i Department/division employed

5.4.4 Dimensions measured

5.4.1.1 *Dimensions*

When the instrument was developed the statements were compiled to elicit information on the following aspects:

- Company image
- Employment equity processes
- Fairness of employment practices
- Information on employment equity process
- Job evaluation
- Management skills
- Organisational values
- Performance appraisal/salary
- Policy and procedures
- Processes

- training and development
- promotions
- recruitment and appointment
- Relationships
- Relationships towards women
- Skills development
- Unfair discrimination

Additional statements were added to investigate gender equity in the organisation with specific focus on females.

5.4.1.2 *Factors*

The questionnaire was examined by means of factor analysis to analyse and integrate the data. The reason for this was that to make a meaningful interpretation of the data, the information had to be arranged into some type of order. A factor solution with 24 factors was extracted. Only eigenvalues of plus one were considered to be significant. These factors are as follows:

- FACTOR 1 Staff development
- FACTOR 2 Discrimination based on gender and race
- FACTOR 3 Attitude towards female employees
- FACTOR 4 Relationships among race groups
- FACTOR 5 Equality of remuneration
- FACTOR 6 General discrimination
- FACTOR 7 Recognition of merit
- FACTOR 8 Employment equity

5.4.1.3 *Explanation of the factors*

a Factor 1 Staff development

The meaning of staff development is as follows: Ensuring that employees within an organisation are provided with continuous training on and off the job. This would be

by way of formal technikon/university training, in-house courses, seminars, short certificate programmes and mentoring programmes.

Examples of the types of this factor are as follows:

- Employees of all race groups are assisted by supervisors to develop to their full potential.
- In my department employees are encouraged to develop their competencies.
- I am given the opportunity to develop without unfair constraints.
- I feel that my immediate supervisor trusts me.

b Factor 2 Discrimination based on gender and race

Discrimination based on gender and race means that employees are disadvantaged because they are not treated equally in comparison with other employees. The basis of discrimination would be a person's being male/female or Black/Coloured/Indian.

Typically the following statements were included in the survey:

- I personally experience no unfair discrimination on the grounds of race.
- I do not feel discriminated against by the organisation.
- I personally experience no unfair discrimination on the grounds of language.
- I personally experience no unfair discrimination on the grounds of gender.

c Factor 3 Attitude towards female employees

This factor measures the feelings of :

- i Males towards females within an organisational setting; and
- ii Females towards females within an organisational setting.

The following typical statements were included in the survey regarding this aspect:

- The organisation develops female employees.
- In the organisation, male employees accept the professional ability of females.

- The environment in the organisation is friendly towards women.
- Managers are sensitive towards women's needs (overtime, facilities, working environment, family responsibility).

d Factor 4 Relationships among race groups

Relationships among race groups measures inter- and intra-group interaction between White, Black, Coloured and Indian population groups. This ascertains if the relationship is harmonious, fraught with tension, positive and/or negative.

Some of the statements included in the survey were as follows:

- I think Black employees are treated better than other race groups in the organisation.
- I think that Whites are treated better than other groups in the organisation.
- Relationships among the different race groups in my division are good.
- I feel that relationships among the different race groups in the organisation are good.

e Factor 5 Equality of remuneration

The factor equality of remuneration measures whether if males and females, occupying the same or similar position, receive the same pay, the same status and the same fringe benefits, commensurate with that position.

The types of statements included were as follows:

- All employees in the organisation receive the same pay for the same work.
- Everybody in the organisation doing similar work is graded at the same level.
- All employees at the same levels have the same conditions of service.
- Employees display an attitude of doing their work right the first time.

f *Factor 6* *General discrimination*

The term general discrimination can be explained in terms of the direct definition from the Employment Equity Act. The definition is from paragraph 6 in the Act, which states that “No person may unfairly discriminate, directly or indirectly, against an employee, in any employment policy or practice, on one or more grounds, including race, gender, sex, pregnancy, marital status, family responsibility, ethnic or social origin, colour, sexual orientation, age, disability, religion, HIV status, conscience, belief, political opinion, culture, language and birth.”

The types of statements included in the survey were are as follows:

- I personally experience no unfair discrimination on the ground of family responsibility.
- I personally experience no unfair discrimination on the grounds of religion.
- I personally experience no unfair discrimination.

g *Factor 7* *Recognition of merit*

Recognition of merit is interpreted to mean that acknowledgement is given for work well done, and that employees are appointed and promoted according to competencies and abilities.

The following typical statements were included in the survey on this factor:

- It is important that each employee does their work well, irrespective of the race or gender.
- I think it is fair to appoint women at all levels of the organisation.
- The best people irrespective of race, gender etc. must be promoted.
- Employees of all races, genders, etc. must have the same opportunities for promotion.

This factor encapsulates paragraph 2 of the Employment Equity Act. The Act states that the purpose of employment equity is “promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination; and implementing affirmative action measures to redress the disadvantages in employment experienced by designated groups, in order to ensure their equitable representation in all occupied categories and levels in the workforce.”

The statements included for this factor were as follows:

- I think the organisation is serious about the employment equity process.
- Recruitment takes place without unfair discrimination.
- I personally experience no unfair discrimination on the grounds of culture.
- I think the employment equity process will speed up employee development.

5.4.5 Validity and reliability of the questionnaire

5.4.5.1 Validity

“Validity can be defined as the extent to which you are measuring what you want to measure” (Christensen, 1994, p. 201). According to Christensen (1994, p. 203) “Establishing the validity of the dependent variable involves obtaining evidence to support the hypothesis that the dependent variable actually measures the construct we want it to measure.”

Validity can be interpreted to mean: Is the study measuring what you think you ought to be measuring? Is the measure applicable, or is it not? The focus is thus on what is being measured. For this study, a task group was formed to assess whether the statements used were the right ones to elicit a response on specific dimensions measured.

In the case of this study, the independent variable is the introduction of employment equity legislation in the South African context. The purpose of the questionnaire is to establish whether the introduction of employment equity legislation will lead to gender

equity, relative to female employees. Statements regarding the eight factors were put in such a way as to elicit the required information.

5.4.5.2 Reliability

Reliability refers to the “extent to which the same results are obtained when responses are measured at different times. It also refers to consistency or stability” (Christensen, 1994, p. 201).

Internal consistency reliability

The current study computed the internal consistency reliability coefficient, namely the Cronbach alpha (Lemke & Wiersma, 1976), for each of the value subscales as well as the second-order value scales used. The coefficient of internal consistency reflects the degree to which item content (of the items or statements in the scale) is similar. Internal consistency focuses on the degree to which the individual items are correlated with each other and is thus often called homogeneity. Several statistics fall within this category.

Reliability of the dependent variable can be determined by way of the type of responses to the dependent variable. If subjects respond consistently in the same manner to the dependent variable, then the variable can be considered reliable (Christensen, 1994, p. 202). Reliability can therefore be regarded as the extent to which consistent measurements are obtained.

The research instrument has been used before in other studies. The factors measured were all the same except for the component of gender equity. Thus the instrument can be considered reliable, as similar responses were noted in other studies.

The reliability of the questionnaire, indicates how accurately the questionnaire measures what it is supposed to measure. Below is detailed Cronbach’s alpha reliability scores relating to the eight Employment Equity factors. All the Cronbach alpha’s reliability scores were satisfactory with the exception of factor 7 being 0.697.

This score falls below the satisfactory level of 0.75. However the score is only marginally lower.

Table 5.2 Results of analysis (reliability)

| Dimensions | No of questions | Cronbach's alpha |
|---|-----------------|------------------|
| Staff development | 11 | 0.903 |
| Discrimination based on gender and race | 9 | 0.864 |
| Attitude towards female employees | 7 | 0.804 |
| Relationships among race groups | 6 | 0,750 |
| Equality of remuneration | 6 | 0.743 |
| General discrimination | 6 | 0.786 |
| Recognition of merit | 5 | 0.698 |
| Employment equity | 8 | 0.762 |

5.4.6 Justification for using the instrument

The instrument is a validated instrument and, as has been noted in the preceding paragraph, has been used in previous Master's theses. With employment equity being such a profound concept in the South African working world, it was decided that it would add to existing research to use this instrument. This instrument was adapted to include questions on gender.

To cater for confidentiality, all surveys were sent in a self-addressed envelope to an external consultant (external to the organisation).

5.5 DATA COLLECTION

The questionnaire was sent out to the entire population of the organisation. The organisation's head office is situated in the north-west of Johannesburg, with offices operating in 16 towns and cities in South Africa.

The questionnaire was sent to each employee, in hard copy format, and they were asked to send back the completed questionnaire to an independent consultant to ensure confidentiality. Two hundred and fifty-nine (259) employees out of a total population of 535 responded. This represents a response of 48,41%.

5.6 DATA ANALYSIS AND STATISTICAL ANALYSIS METHODS

5.6.1 Introduction

The following statistical methods that were used in the study to make interpretations will be discussed:

- Mean scores of males and females on the employment equity factors.
- T-test: Comparison between males and females on the employment equity factors.
- Two-way ANOVA results between gender, grading and the employment equity factors.
- Mean scores of males and females in each position/grading.
- Two-way ANOVA results between gender and qualifications.
- Two-way ANOVA results between gender and race.
- Mean scores of males and females in each race group.
- Two-way ANOVA results between gender, language and the employment equity factors.
- Mean scores of males and females in each language group.
- One-way ANOVA results between age groups on the employment equity factors.
- Mean scores on the employment equity factors.

The statistical analysis was done using a statistical package called SPSS (Statistics Package for Social Scientists).

5.6.1.1 Mean

“The mean is the arithmetic average of a group of numbers. It is computed by dividing the sum of all the scores by the number of scores in the group” (Christensen, 1994, p. 423).

“One of the most important properties of the mean is that it is the point in a distribution of measurements or scores about which the summed deviations are equal to zero. Therefore the mean is a score or potential score that balances all scores on either side of it. The mean is very sensitive to extreme measurements when these measurements are not balanced on both sides of it” (Runyon & Haber, 1980, p. 77).

5.6.1.2 Standard deviation

Standard deviation is a measurement “of the extent to which a group of scores vary about their mean” (Christensen, 1994, p. 423).

The reason for making statistical measures by way of means and standard deviations is that they provide a means of making inferences about the population by way of data collected on a sample of subjects. This is referred to as inferential statistics (Christensen, 1994, p. 426).

In summary, “inferential statistics is a set of statistical tests that enable us, with some degree of error, to infer the characteristics of a population from a sample. This is accomplished by determining the probability of an event’s happening by chance. Through inferential statistical analysis, we can estimate the amount of difference that could be expected between the group mean scores by chance and then compare this value to what was actually found. If the actual difference is much greater than would be expected by chance, we say that the difference is a real one” (Christensen, 1994, p. 426).

5.6.1.3 Decision tree for selecting the appropriate statistical test

An excellent decision tree model depicting the choice of statistical tests to be applied, depending on the number of independent variables and the number of groups or number of levels of the independent variable, is illustrated in figure 5.1.

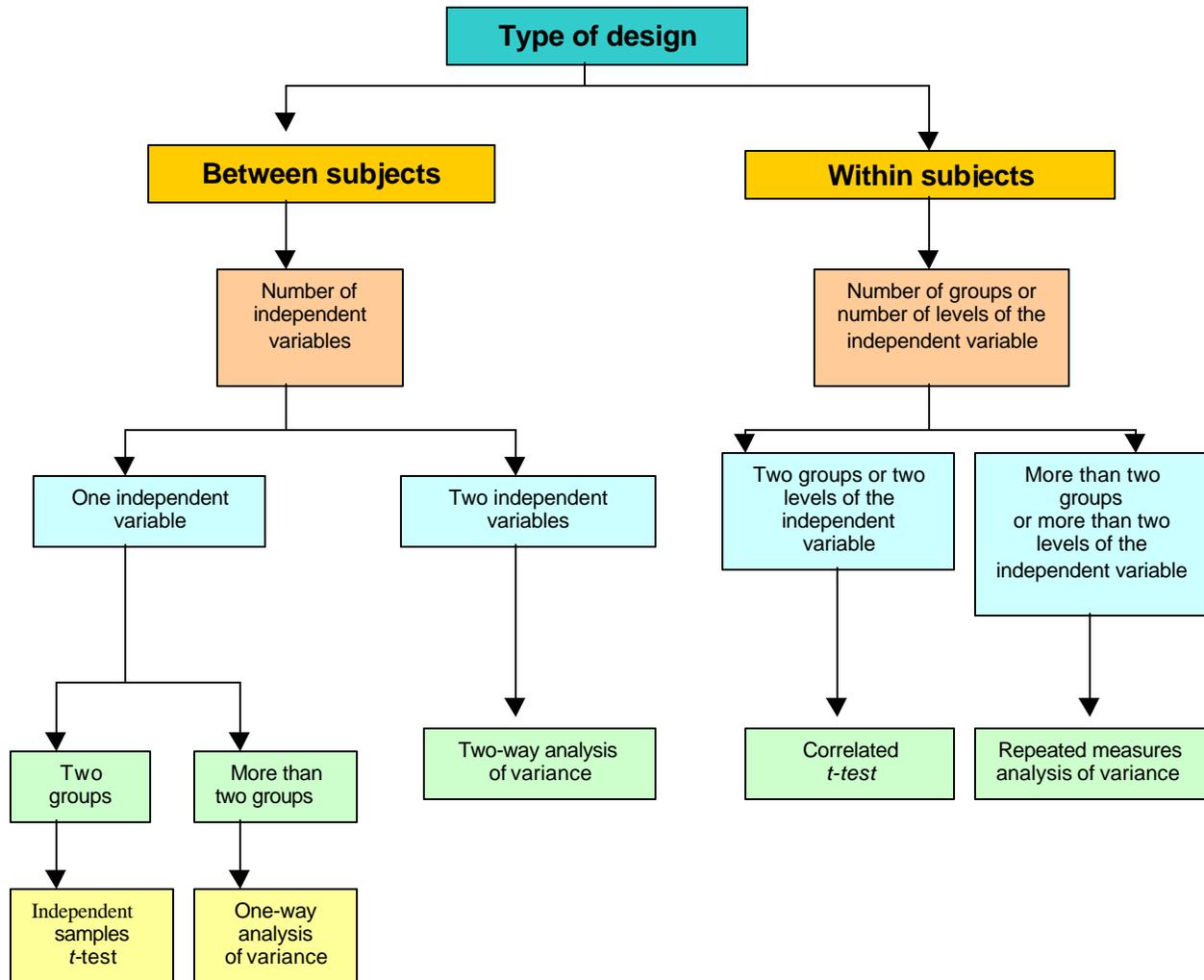


Figure 5.1 Decision tree for selecting the appropriate statistical test

Source: Christensen (1994, p. 428)

5.6.1.4 Independent samples: *t*-Test

The *t*-test is a “statistical test for analysing data collected from a two-group between-subjects design” (Christensen, 1994, p. 427). This “between-subjects design enables one to investigate the independent and interactive influences of more than one

independent variable” (Christensen, 1994, p. 310). In this statistical test one would have a main effect and an interaction effect. A “main effect is the influence of one independent variable in a factorial design”, and an “interaction effect is the influence of one independent variable on a second independent variable” (Christensen, 1994, pp. 310-311).

The t-test was employed to compare males and females on the employment equity factors. There was one independent variable and two groups: male and female.

5.6.1.5 Two-way ANOVA: Two-way analysis of variance

“Two-way analysis of variance is a statistical test for analysing data collected with a factorial design. ... The two-way ANOVA is the simplest form of test to apply to a factorial design; it is used to analyse data from studies that investigate the simultaneous and interactive effects of two independent variables” (Christensen, 1994, p. 440).

In the study the following two-way analyses of variance were employed to assess the interaction of the independent variables:

- a Two-way ANOVA between gender and grading and the employment equity factors: The aim is to establish the main effect of gender and grading and the interaction effect of the independent two variables.
- b Two-way ANOVA between gender and qualifications and the employment equity factors. The aim is to establish the main effect of gender and qualifications and the interaction effect of the two independent variables.
- c Two-way ANOVA between gender and race and the employment equity factors. The aim is to establish the main effect of gender and race and the interaction effect of the two independent variables.
- d Two-way ANOVA between gender and language and the employment equity factors. The aim is to establish the main effect of gender and language and the interaction effect of the two independent variables.

5.6.1.6 *One-way ANOVA: One-way analysis of variance*

One-way analysis of variance is a “statistical test for analysing data collected with a simple randomized design” (Christensen, 1994, p. 432). This statistical method was used to measure the following:

- a One-way ANOVA between age groups on the employment equity factors. Here we have one independent variable: employment equity, with more than two groups (age groupings) per factor.
- b With the one-way ANOVA test, an alpha of 0,001 was employed, so that a type 1 error would be minimised.

5.7 CHAPTER SUMMARY

The chapter is an introduction to the research results. The chapter sets the scene with the objective of the study, the population and sample, the research instrument used, the reliability and validity of the instrument used and the type of statistics employed in the study.

Details were given on the sample and population of the study. Eight factors were drawn for their significant effect in terms of the eigenvalues, namely staff development, discrimination based on gender and race, attitude towards female employees, relationships among race groups, equality of remuneration, general discrimination, recognition of merit and employment equity. Statistics employed are as follows: Mean and standard deviations, Two-way ANOVA and One-way ANOVA Analysis of Variance. Chapter six will deal with the results obtained in the study.