

CHAPTER 4

THE RESEARCH DESIGN

4.1 INTRODUCTION

In chapter two and three some of the relevant areas concerning the need for training Life Orientation educators were discussed. The research design will be influenced by those findings.

In chapter two, attention was paid to the background of Life Orientation, its scope and the relevance to the future learners. The learning outcomes of Life Orientation reflected the emphasis on personal well-being and growth of learners as South African citizens. The researcher also decided to look at the developmental patterns of a Senior Phase learner as these also impact on the role played by the Life Orientation educator. In chapter three, attention was paid to highlighting the roles of the Life Orientation educators as in some instances skill development may be required on the part of the Life Orientation educator.

This research project will investigate the knowledge base of Life Orientation educators of: (a) their learning programme, (b) their skills in teaching the learning area effectively and (c) of the adolescents. It appears from the literature study that many Life Orientation educators lack the required teaching skills and therefore training in this regard may be necessary. A questionnaire will be used in this study to investigate the above-mentioned aspects.

4.2 HYPOTHESES AND NULL-HYPOTHESES

H₁: A significant number of Life Orientation educators have confidence in their knowledge of Life orientation content.

H₀₁: A significant number of Life Orientation educators do not have confidence in their knowledge of Life Orientation content.

H₂: A significant number of Life Orientation educators have confidence with their skills to present Life Orientation.

H₀₂: A significant number of Life Orientation educators do not have confidence with their skills to present Life Orientation.

H₃: A significant number of Life Orientation educators have confidence in their understanding of the Senior Phase learner.

H₀₃: A significant number of Life Orientation educators do not have confidence in their understanding of the Senior Phase learner.

H₄: There is a significant difference between different groups regarding their perceptions of their knowledge of Life Orientation content.

H₀₄: There is no significant difference between different groups regarding their perceptions of their knowledge of Life Orientation content.

H₅: There is a significant difference between different groups regarding their perceptions of their skills to present Life Orientation.

H₀₅: There is no significant difference between different groups regarding their perceptions of their skills to present Life Orientation.

H₆: There is a significant difference between different groups regarding their perceptions of their understanding of the Senior Phase learner.

H₀₆: There is no significant difference between different groups regarding their perceptions of their understanding of the Senior Phase learner.

The different groups mentioned in hypotheses four to six are: different genders, age groups, years of teaching experience, experience in teaching Life Orientation and having had Life Orientation training or not.

4.3 RESEARCH DESIGN

A quantitative approach was followed in which a survey design was used. In a survey design all respondents are accorded the same status. A sample of 50 Life Orientation educators was used to complete the questionnaires as will be explained in section 4.4.3.1. The research methods that were implemented are the following.

4.4 RESEARCH METHODS

4.4.1 Measures to ensure validity and reliability

Validity, according to McMillan and Schumacher (2001:181) refers to the judgment of the appropriateness of a measure for specific inferences, decisions, consequences or uses that result from the scores that are generated. Although there are also other measures to ensure validity such as criterion related or construct validity, the following measures were carried out to ensure validity of the data gathering in this project:

Content validity is the extent to which a measurement instrument is a representative sample of the content area being measured (Leedy & Ormrod 2001:98). The questionnaire was given to two practicing educational psychologists and three educators to check the test items and comment on whether they measure the intended content of the study. Some changes were made after this e.g. in question 48, the word appropriately was added to add more meaning to the question.

Face validity according to Gay (1992:156) refers to the degree to which a test appears to measure what it purports to measure. The questionnaire was given to two practising educational

psychologists to screen the test and to ascertain whether it measures what it purports to measure. The person responsible for the statistical analysis also checked for face validity. Hence changes such as grammatical errors and spacing were corrected in some questions.

Reliability refers to the consistency with which a measuring instrument yields a certain result when the entity being measured has not changed (Leedy & Ormrod 2001:31). The Cronbach alpha reliability coefficient was used to determine the reliability of the scaled items in the study. The Cronbach alpha reliabilities for the three factors were knowledge of content (0.9048), knowledge of adolescence (0.9425) and knowledge of Life Orientation skills (0.9303).

4.4.2 Pilot study

A **pilot study** was used in this research where two respondents were given the questionnaires to make their comments and suggestions concerning the direction, recording procedure and specific items (Ary, Jacobs & Razaviech 1990:109). They were also asked to comment on the items and indicate which items confused them or which words they did not understand. No changes were made as the respondents felt confident about the questionnaire.

4.4.3 Data collection

4.4.3.1 Sample

A combination of purposeful and convenience sampling was used. The sample was purposeful in the sense that only 50 Life Orientation educators from the Senior Phases were used in the study. The educators from Mabopane district were used which was convenient for the researcher in relation to proximity. No differentiation was made in respect of sex, race, culture and religion. The main objective of the study was to investigate the knowledge of life Orientation educators. This objective was explained to respondents and the permission for participation gained before the study commenced. Permission was also obtained from the relevant principals. (See appendix A). The Life Orientation educators were from 10 different schools.

4.4.3.2 *Questionnaire*

A questionnaire is a self-report data collection instrument that each research respondent fills out as part of a research study (Johnson & Christensen 2004:164). A questionnaire is completed by respondents at their own time or completed by respondents under the supervision of the researcher. A questionnaire is a versatile tool available and it includes multiple questions and statements (Johnson & Christensen 2000:127). If the questionnaire is properly administered, it is still the most appropriate instrument to elicit information from a big sample.

According to Best and Khan (1989:181), a questionnaire not only has the advantage of involving a large number of respondents in a single test, and makes it possible to obtain a high proportion of usable responses, but also accumulates an enormous amount of information in a short space of time.

The questionnaire designed in this study is closed-format with open ended options attached to some questions. Closed-form questions mean that the questions permit only prescribed responses (similar to multiple choice questions) and open-form questions mean that the respondents can make any response they wish (similar to an essay question) (Gall, Borg & Gall 1996:295; Gay 1987:224; Johnson & Christensen 2000:168). A closed-type of questionnaire facilitates the coding and analysis of responses of the respondents.

In this research project, the researcher compiled the items in the questionnaire with reference to the points mentioned in the literature study. The questionnaire was divided into four categories, namely, biographical information, respondents' perceptions of their own knowledge and teaching skills as well as their views of how knowledgeable they are of the adolescent. (See Appendix B) In Section A, questions one to five determined biographical information. This included gender, age, teaching experience, experience in the teaching of Life Orientation and whether training had been received in Life Orientation. Therefore four items gathered some additional information on Life Orientation training.

In Section B, questions ten to twenty four focused on their own confidence in their knowledge of Life Orientation content. These items were derived from sections 2.4.1.1 to 2.4.1.5 in the literature review.

Questions twenty five to thirty six relate to respondents' confidence in their knowledge of the developmental stages of the adolescent. The questions were derived from sections 3.3.1 to 3.4.5 of the literature review.

Questions thirty seven to fifty two focus on respondents' confidence in their skills to teach Life Orientation. The items are influenced by sections 3.5.3.1 to 3.5.3.13 of chapter 3. The questionnaire appears as in appendix B.

Finally, in section C six open-ended questions were formulated to obtain additional information on the perceptions of Life Orientation educators.

4.4.3.3 Methods of administering a questionnaire

The two most common methods of administering questionnaires are by means of postal or self-administered questionnaires. In this study a self-administered questionnaire was used. Self-administered questionnaires have the advantage of enabling the researcher to develop rapport with respondents, explain the purpose of the study and clarify the individual items if necessary. However, this method also has disadvantages. The respondents may not be available together at the arranged time and it might be difficult to contact a large sample.

Discussions were done telephonically with Life Orientation educators included in the sample about the dates on which the questionnaire would be brought to them for administration. During the discussion the researcher also explained the nature of the research to be undertaken.

4.4.4 Data processing

The statistical methods used in the study were descriptive and inferential statistics. These methods were used to summarize, organize and reduce the large numbers of observation (McMillan & Schumacher 2001:206).

4.5 CONCLUSION

In this chapter the research design was explained. It involves a quantitative approach, implementing a questionnaire in a survey design. Details of the research methods were given. The information collected was then submitted for analysis. In the next chapter, the results will be analyzed and interpreted.