CHAPTER 5
RESEARCH METHODOLOGY

5.1 INTRODUCTION

The previous chapter concluded that, although some research studies have been performed on the effects of HIV/AIDS on organisations, no specific research study has been performed on the effects of the disease on the control environment. Various studies have indicated that management is aware of the risk posed by HIV/AIDS to their organisations (Barac & Otter 2001; Deloitte & Touche 2002). This issue is therefore not investigated further in this study. It has become apparent from the above discussion that no study has determined the role of internal auditors, as the right hand of management in issues such as risk management, control activities and corporate governance, regarding the potential risk of HIV/AIDS to organisations.

To enhance knowledge of the research topic in the internal auditing field and to provide a basis for further research on the issues concerned, the remainder of this dissertation focuses on an investigation of the effect of HIV/AIDS on the control environment as well as the role of the internal auditor regarding HIV/AIDS as a potential risk to an organisation.

In this chapter, the research methodology used to determine the effect of HIV/AIDS on the control environment, and the role of internal auditors regarding the management of the potential risk of HIV/AIDS to organisations are described in some detail. To determine the effect of HIV/AIDS on the control environment, data gathered by the Centre for International Health, Boston University School of Public Health are used to determine whether the costs related to HIV/AIDS in respect of specific issues such as absenteeism, and productivity is substantial, compared to the effect of the performance of the organisation. These issues are directly
linked to the elements of the control environment most likely to be affected by HIV/AIDS. The information focuses on six sectors of the private sector, namely heavy industry, agriculture, mining (processing), mining (extraction), retail and service.

Then, to determine the role of internal auditors regarding the potential risk of HIV/AIDS as well as the knowledge of internal auditors regarding the effects of HIV/AIDS on the control environment, survey research was conducted. This research involved various steps as described by Abdel-Khalik & Ajinka 1979:31 and Zikmund 2000:166, of which the following have been used in this study:

- the identification of the objectives and hypotheses of the study;
- the identifications of target groups;
- the selection and design of an instrument of measurement;
- data collection;
- the preparation of the data for processing and analysis;
- analysis of data;
- an interpretation of the results; and
- the drawing of conclusions and the making of recommendations on the basis of the research findings.

This chapter explains the research methodology used in this study to determine the role of internal auditors regarding the potential risk posed by HIV/AIDS to an organisation and the knowledge of internal auditors regarding the effect of HIV/AIDS on the control environment.

5.2 RESEARCH DESIGN

As was explained in 2.6.2 of this study, internal auditors have an assurance and consulting role to play regarding risk management, which would include the risk posed by HIV/AIDS. The question to be asked is whether internal auditors are supporting management with the task of managing HIV/AIDS by studying the effects of HIV/AIDS on their
organisations. With regard to assurance, internal auditors are control specialists; hence management relies heavily on internal auditing functions to evaluate the effectiveness of the control system, including the control environment as the basis of the control system.

This research study was designed to address these objectives and selected hypotheses flowing from the objectives by using a specific research method. The objectives, hypotheses and research methodology are discussed in more detail below.

5.2.1 Research objectives and hypothesis

It is an internal auditor’s duty, and the primary objective of this study, to understand the effects of HIV/AIDS on the control system of organisations, starting with the control environment. It was expected that such an investigation would increase understanding of, and give insight into the as yet relatively new potential risk and its implications for the internal auditing discipline. Furthermore, it was expected that the investigation would provide a justification for the development of an appropriate Guideline or Practice Advisory by the Professional Issues Committee or another group designated by the Guidance Planning Committee of the Institute of Internal Auditors Inc.

To attain the above objectives, two research methods were used. In the first instance, a literature review was used (see Chapter 2 to 4) to determine the theoretical basis for the research topic, the arguments relating to practical implementation issues, prior research conducted on various aspects relating to HIV/AIDS, and the world-wide situation regarding the subject. Information gathered by the Centre for International Health, Boston University School of Public Health was used to determine whether HIV/AIDS has an effect on specific issues, such as absenteeism, related to the control environment.
The second research method, namely survey research (as discussed in greater detail in this chapter) was used to analyse the views of chief audit executives on the role of internal auditing in managing the risk of HIV/AIDS, as well as the effects of the disease on the control environment. Similarities and differences between the perceptions of the interviewees were expected to enhance understanding of and give interesting insights into the various issues concerned and to provide a justification for the recommendations to be made to the IIA Inc. for appropriate guidance to members.

The primary problem in identifying the effects of HIV/AIDS on the control environment was divided into the following secondary problems:

1. Are internal auditors aware of the business risk that HIV/AIDS poses to organisations?
2. Are internal auditors part of management's plan to address the risk of HIV/AIDS for the organisation?
3. What is the knowledge and input of internal auditing in management's strategic plan regarding HIV/AIDS?
4. What is the risk of the effects of the disease on the competence of the workforce and how will this affect the control environment?
5. What risks do the consequences of the disease pose to the structure of the organisation regarding the day-to-day management of activities?
6. Which factors related to the management of human resources policies and practices pose a risk to the organisation and need to be addressed?
7. Are internal auditors aware of the possible effects that HIV/AIDS could have on the control environment?

To guide this study and to provide a framework for organisations to use the resulting conclusions and recommendations (Emory 1985:28; Kerlinger 1992:19; De Vos 1998:104) the following research hypotheses were formulated:
1 Internal auditing is aware of the HIV/AIDS epidemic and the consequences that this risk holds for organisations.

2 Internal auditing is assisting management with strategic objectives, strategies (plans) and related objectives regarding the risk of HIV/AIDS to the organisation.

3 HIV/AIDS, as a business risk, has an effect on certain elements of the control environment in organisations.

4 The effect of HIV/AIDS on the control environment can weaken the control system as a result of the loss of key elements in the system.

5 The costs involved in managing the risk of the consequences of HIV/AIDS must be undertaken to strengthen and/or maintain the control environment.

In view of the dearth of knowledge on the role of internal auditors regarding the potential risk of HIV/AIDS to an organisation, as well as the sensitivity of the subject, it was decided that the research would make the best positive contribution if it established authoritative viewpoints on the issues raised in the hypotheses. As this research can be regarded as a pioneering effort to promote knowledge on a topic as yet largely unexplored in the internal auditing field, the hypotheses were formulated without the reference to similar studies conducted. The main research problem as well as the sub-problems was thus tested against the above hypotheses.

Having established the objective and the hypotheses of the research, the rationale for the selection of target groups is explained in the next section.

5.2.2 Selection of target groups

The study focuses on the perceptions of chief audit executives of the role of internal auditors regarding the potential risk of HIV/AIDS to organisations. Two groups of chief audit executives were chosen, namely ones in larger organisations with more than 10 000 employees, and ones in smaller organisations with fewer than 10 000 employees. The reason for
this distinction is that the internal audit function at smaller organisations, although functionally the same as internal audit functions at larger organisations, could differ, as it is possible that fewer funds are made available for internal auditing activities in smaller organisations. If this is true, smaller organisations will also probably spend less on managing the potential risk of HIV/AIDS. This study was determined to ensure that if it was proven that internal auditors were aware of the risk of HIV/AIDS and were assisting management to monitor this risk, it should be proven true for all organisations, - large and small ones.

Statistical sampling was not applied in the study. The reason for this was that not all organisations have an internal auditing department. Also not all internal auditing departments function at their full potential because internal auditing is a relatively new profession in the South African business environment. Instead, two specialised population groups were selected with the help of the Institute of Internal Auditors in South Africa. It was assumed that if the chief audit executives of internal auditing departments that have a sound relationship with the governing body of all internal auditors in South Africa are interviewed, the results could be generalised reasonably safely to the rest of the internal auditing functions that have some link to the Institute. For the larger organisation group, six companies were chosen, namely one each from the service sector, mining, finance, and petroleum industry and two from retail. For the smaller organisation group, five companies were interviewed, namely one each from the telecommunication sector, the service sector, construction, production, and finance. This gave a broad overview of the different companies participating in the internal auditing field in South Africa. The list of people attending the Institute of Internal Auditor's Annual Conference during August 2003 was used as a basis to determine which sectors should be targeted. It should be noted that the public sector was not part of the investigation, as internal auditing is relatively new to local and national government.
Next, the research method used to determine the attitudes of the chief audit executives of the target companies is described.

5.2.3 Research method

The method used to gather the desired information on the role of internal auditing regarding the management of the potential risk of HIV/AIDS was survey research. This research method can be described as a fact-finding and hypothesis-generating process, according to which data is collected in a planned manner to discover the incidence, distribution and interrelation of certain variables. The data is commonly collected by means of personal interviews, mail questionnaires or telephonic questionnaires and data usually relates to facts, opinions, beliefs, attitudes or behaviour (Abdel-Khalik & Ajinka 1979:45; Zikmund 2000:190).

To implement the survey research methodology in this study, a personal interview was applied to test the attitudes of the chief audit executives of the selected target groups towards the subject of the study. The questions posed in the interview were designed mainly to determine the opinions of chief audit executives or other senior members of the internal auditing function (some internal auditing functions had separate risk management divisions within the internal auditing department and in such cases the heads of these risk management divisions were interviewed). This method was chosen as HIV/AIDS is a sensitive issue in South Africa (being a non-notifiable disease) and a questionnaire would probably not be completed as truthfully as answers to questions asked in an interview. Furthermore no other related studies regarding the role of internal auditors had previously been performed and it was uncertain what the knowledge of the chief audit executives would be regarding HIV/AIDS.

On the other hand, this research method has certain shortcomings that should be noted, especially when the conclusions drawn from the analysis of the data are considered (Buckley, Buckley and Chiang 1976:44; Oppenheim 1979:21; Emory 1985:158; Zikmund 2000:196). This includes
the fact that opinions are not factual but only present the impressions of the respondents. Secondly, the strategy has certain methodological shortcomings, such as biases inherent to the design and the wording of the questionnaire (the researcher sets the questions, determines the target and determines the time of the research), systematic biases where the targets tended to focus on favourable or strong statements, and systematic biases in the administration of the questionnaire. Thirdly, the quality and accuracy of the information gathered depended on the ability and willingness of the targets to co-operate. Lastly, errors could occur in the preparation, interpretation and analysis of the data and the results could be wrongly interpreted.

Although the limitations of this research method must be mentioned, they neither individually nor collectively appeared to affect the results of this study significantly, as special precautions were taken to minimise the effects of the problems. These include the setting of a formal questionnaire (see Annexure A) that was used during the interviews to eliminate biases inherent in the design and wording of the questions asked, and the identification of the most suitable person in the internal auditing department to be interviewed.

Against the background of these facts, the design of the personal interview questionnaire used in this study is explained in more detail below.

5.2.4 Personal interview questionnaire

In this section, various aspects relating to the design of the questionnaire are described. These include the context and layout of the questionnaire, reasons for the choice of questions, and the pre-testing of the questionnaire.

To attain the research objectives and test the hypotheses and supplementary information specified above, the questionnaire was divided into two main sections, namely the internal auditor's role with regard to
HIV/AIDS, and the elements of the control environment affected by the disease. The first section investigated general issues such as whether HIV/AIDS was classified as a risk to the organisation, whether internal auditing assists management with risk matters, what the role of internal auditors is or should be regarding HIV/AIDS, and the general knowledge and actions of the organisation as a whole as well as that of internal auditing regarding the disease.

The second section of the questionnaire was divided into three parts, namely the effects of HIV/AIDS on personnel commitment and competence at the workplace, the effects on the organisational structure, and the effects on human resources policies and practices. As previously discussed, these were the three main elements of the control environment most likely to be affected by HIV/AIDS. The results of the interpretation of the information gathered by Boston University were discussed with the interviewees. The questionnaire then focused on specific questions to investigate whether the interviewees knew these effects, whether they were aware of their organisation's knowledge regarding the information, and what the role of internal auditors were regarding these issues.

The questionnaire was pre-tested by circulating it to three researchers in the auditing environment. Their comments and suggestions were incorporated into the questionnaire. The questionnaire was also tested on a human resources manager. The reason for this is that in most organisations, HIV/AIDS is the overall responsibility of the human resources department and it was assumed that a human resources manager would be the best person to identify any lack of clarity and weaknesses or shortcomings in the questionnaire.

After the questionnaire had been compiled, interviews were arranged with the various chief audit executives.
5.2.5 Response

Chief audit executives from the list of companies identified by the Institute of Internal Auditors as active members of the Institute in South Africa were contacted for a personal interview. After the topic of the research study had been explained to them, all were eager to participate. In certain instances they referred the interviewer to the risk division (part of the internal auditing department) as they felt that these person(s) would have more knowledge regarding the topic of HIV/AIDS.

Each interviewee chose a venue and a time for his/her interview (they mostly opted for an interview at the interviewee's premises). All the interviewees eagerly participated in the session, replying to the questions asked and they indicated that they would like to receive a copy of the results of the study. They also indicated that a guideline from the Institute of Internal Auditors on the role of internal auditing regarding the risk of HIV/AIDS is necessary, as this risk does not fall within the normal boundaries of risk management for organisations.

After the interviewer had gathered the information, the data was prepared and processed to enable the information to be incorporated in the results of the research study.

5.2.6 Data preparation, processing and interpretation

The information gathered from the interviews was immediately summarised after each interview. After all the interviews had been completed, a spreadsheet was compiled to compare the responses of all the interviewees on each question. The results of the processing of the data gathered during the interviews as well as an interpretation of the results are presented and discussed in Chapter 6 of this study. Although great care was taken to obtain accurate and useful information, the research study had certain limitations.
5.3 LIMITATIONS OF THE RESEARCH

As has been mentioned in 3.2, HIV/AIDS is a relatively new potential risk to organisations and therefore the implications for the internal auditing discipline are somewhat unclear. Knowledge of the disease is limited, as even medical experts are uncertain about all the issues related to HIV/AIDS. This is underlined by all the new research being done and available on the medical aspects of the disease.

HIV/AIDS is also a very sensitive issue as government has determined that it is a non-notifiable disease (see 3.3.2) and the disease is currently greatly stigmatised. People fear the disease and do not like to talk about its existence. Furthermore, the hypotheses were formulated without the availability of similar studies previously conducted and could be incomplete. With all these limitations in mind, the results of the survey conducted are discussed in the next chapter.

5.4 SUMMARY

This study was performed using two research methods, namely literature and survey research. In this chapter the survey methodology has been discussed in detail: the research objectives and hypotheses, the selection of a target group, the research method used to gather the information, the questionnaire used in the personal interviews, the responses of the interviewees, and the data preparation, processing and interpretation. In the next chapter, the results obtained from the research are discussed in greater detail to test the hypotheses described in this chapter. Hence, Chapter 6 firstly determines whether HIV/AIDS does affect the control environment by analysing the data gathered by the Boston University. Secondly, the results of the interviews with the chief audit executives of internal auditing functions are interpreted to determine whether the internal auditing profession is aware of the possible risk posed by HIV/AIDS to an organisation and what the role of internal auditors should be.