

CHAPTER TWO - METHODOLOGY

In discussing the methodology used to investigate depression in psychologists in private practice, eight areas will be covered namely:

- 2.1 Research Design**
- 2.2 Sample**
- 2.3 Measuring Instrument**
- 2.4 Data Collection Procedure**
- 2.5 Data Analysis**
 - **Quantitative Analysis**
 - **Qualitative Analysis**

- 2.6 Limitations of the selected methodology**
- 2.7 Advantages of the selected methodology**
- 2.8 Ethical considerations**
- Summary**

2.1 Research Design

The research design, employed for this study was an exploratory sample survey design (non-probability), with individual respondents as the units of analysis. The survey design made use of a self-report questionnaire. According to Babbie (2001), this type of exploratory study is most typically done for three purposes:

- 1) 'to satisfy the researcher's curiosity and desire for better understanding
- 2) to test the feasibility of undertaking a more extensive study
- 3) to develop the methods to be employed in any subsequent study.' (p.92)

Initially the intention was to implement a national mail survey to a randomized group of psychologists. However, both resource and financial limitations required that the study be limited to a smaller group. The research design may be described as a non-experimental inquiry, as there was no attempt made to manipulate or change any of the variables, only to measure them. The research also did not permit access to the kinds of probability samples used in large-scale social surveys.

With due respect for the inherent limitations of a non-experimental research design, the design was selected for its potential to generate interesting ideas and hypotheses. Being unable to manipulate variables or assign subjects at random, the non-experimental survey research design seemed an appropriate vehicle for the collection of data which was thought may open up areas of interest and further research. The research design enabled an exploratory study of a group of subjects, who 'came to the study with their differing characteristics and experiences intact' (Kerlinger, 1986, p293).

The study could be described as a pilot stage, a precursor to more quantitative methods, and of building a sensitivity to the study of psychologists in private practice.

The research approach used in this study combines both quantitative and qualitative analyses. This combination was thought to strengthen the study as the non-probability sample limits the generalizability of quantitative information. To this end, the questionnaire was designed to elicit both quantitative and qualitative information.

Babbie and Mouton (2001) define quantitative research as the numerical presentation and manipulation of observations for the purpose of describing and explaining the phenomena that those

observations reflect. The quantitative results presented in this study are largely 'univariate analysis – that is, analyses based on one variable' (Baker, 1994). Most of the univariate analyses make use of frequency or central tendency distributions. Using this quantitative analysis, attempts were made to establish links and identify areas of interest where further quantitative studies could expand our present state of knowledge.

It was thought that the limitations of the quantitative aspect of this study would be compensated for by the strengths of an accompanying qualitative analysis. The qualitative aspect of this research meets quite different objectives compared to the quantitative approach, and therefore provides a distinctive kind of information. The purpose of qualitative research is to gather descriptions of subjective experiences of the particular phenomena being studied (Bogdan & Biklen, 1992). This has also been described by Bogdan (1975 cited in Babbie & Mouton, 1998, p.271) as 'an 'insider' perspective, namely an attempt to view the world through the eyes (perspective) of the actors themselves.'

This qualitative aspect of the study is descriptive and exploratory. It is descriptive in that existing theory and data collection methods were used to guide the study. It is exploratory in that it has aimed to gain insight into a phenomenon, using people's words and meaning as the data. (Bogdan & Biklen, 1992; Maykut & Morehouse, 1994). Research designs used to gain qualitative information include surveys. Qualitative research is also 'often used as a pilot study in order to gather information that may later lead to a quantitative study' (allpsych.com/research-methods/qualitative-research.html).

2.2 Sample

Participants for the research were purposively drawn from a population of psychologists in private practice in Gauteng. As this research

focused on understanding the meaning of a subjective experience within a particular work context, only those involved in this type of work were suitable for the sample. Therefore, purposive sampling was used, as this type of sampling seeks to include those elements that are of interest to the researcher.

Sampling within qualitative research often falls within the category of purposive sampling, as it is a strategy through which particular settings, people or events are deliberately selected from which to gather information (Maxwell, 1996). While purposive sampling may limit the potential for generalisability (Marlow, 1993), it was thought to be the most appropriate for this research.

An extension of purposive sampling known as snowball sampling was included in the sampling process. This happens when the purposively selected participants, 'supply names of other participants who also possess the characteristics of interest to the researcher' (Werebeloff, 1998, p.7). This occurred when a number of psychologists who were invited to participate offered to pass on a questionnaire to their colleagues.

Participants were accessed via a number of reading groups, peer supervision groups, individual psychotherapists and psychological organisations within the Gauteng psychotherapeutic community. In total, 90 potential participants were approached and invited to participate in the study.

The criteria for participation in the study were:

- That they were registered psychologists
- That they were a clinical, counseling or educational psychologists
- That they were in private practice

2.3 Measuring Instrument (Self-Report Questionnaire)

A 5-page questionnaire (See Appendix II) was designed to elicit both quantitative and qualitative information. An informal pretest of the questionnaire was completed, and the decision was taken not to pre-code the questionnaire in the interests of visual clarity.

Eight demographic questions were followed by 13 predominantly closed-ended questions, which forced the respondent to select a single response from a list. Some of these closed-ended questions were accompanied by open-ended contingency questions designed to elicit a more detailed subjective response/opinion. According to Babbie (2001), closed-ended questions are very popular in survey research because they provide greater uniformity of responses and are more easily processed.

Questions 14 through to 20 (with the exception of question 18) were designed as open-ended questions. The number of lines provided to accommodate the respondent's subjective and spontaneous thoughts and feelings easily identifies the open-ended questions.

Respondents who were invited to complete the questionnaire were deemed willing and competent to answer the questions. An attempt was made to keep the questions relevant, short, unambiguous and unbiased. Given that the order in which the questionnaire items are presented affect responses (Babbie, 2001), particular efforts were made to present the shorter, less threatening, closed-ended questions initially. Once engaged in the subject matter, the questionnaire gradually moved into open-ended questions, covering attitudes and more sensitive matters.

2.4 Data Collection Procedure

An exploratory, non-probability sample survey research method, utilizing a self-designed questionnaire was administered to gather the data in this study. The purposive sample of individuals was asked to answer a number of identical questions. Of the two primary modes of doing a survey (using questionnaires or giving interviews), the questionnaire method was selected as it was thought that it would:

- Ensure absolute confidentiality
- As a result, elicit more candid responses to some sensitive questions
- Allow them to be completed in the respondents' own time

A pre-stamped envelope containing a covering letter from the researcher, (See Appendix I) and the 5-page questionnaire were distributed to the participants. The covering letter contained an outline of the objectives of the study, the auspices under which the study was being conducted, the assurance of anonymity and an indication of when the questionnaire should be returned. Respondents were also told that if they would like more information about the survey, they could contact the student researcher, and contact numbers were provided.

Instructions on how to complete the questionnaire, and an estimated timeline for completion of the questionnaire were clearly communicated. In addition, respondents were told that upon request they would be sent a summary of the survey's results.

After completing the anonymous questionnaire, participants were asked to place it in the pre-stamped, addressed envelope, seal it and place it in a post box. The pre-stamped, self-addressed envelope ensured that the questionnaire would reach the researcher's mailbox.

Out of the 90 questionnaires distributed, 41 were returned. This is a 45% response rate. According to Babbie (2001, p.256), a response rate of 50% is adequate for analysis and reporting. A response rate of 60% is good; a response rate of 70% is very good. Babbie (2001) goes on to say that these figures are only rough guides, they have no statistical basis, and a demonstrated lack of response bias is far more important than a high response rate. Although slightly lower than a response rate of 50%, 45% was thought to be respectable response rate for an exploratory study such as this, but necessarily leaves the results open to bias and misrepresentation.

2.5 Data Analysis

The data was analyzed using both quantitative and qualitative analysis methods.

Quantitative Analysis

The first step was a quantitative analysis. The data was collected from the questionnaires; it was then converted into numerical equivalents for the purposes of quantitative analyses and statistical testing. The data was then cleaned, meaning that the accuracy of the data was checked.

No pre-established coding schemes were used. This post survey coding technique was selected, as, according to Baker (1994), it is 'particularly suitable for questions which might generate many different types of answers that you cannot fully predict in advance' (p. 323). This was particularly relevant to the open-ended questions, which required respondents to provide spontaneous descriptions of personal experiences, attitudes and beliefs. The coding scheme for open-ended questions was based on two guiding principles:

- 1) Codes must be applied consistently to preserve as much as possible the actual meaning of the responses, and of the variation presented in the data (Baker, 1994).
- 2) Coding choices should reflect the logic that emerges from the data (Babbie, 2001).

Dichotomous questions, questions which required a single number and response categories were easy to code, in that the responses fitted into exhaustive and mutually exclusive categories to which numbers were assigned.

A codebook was finally created to guide the data analysis, help to locate variables and to record what the codes represent. Some regrouping of coding categories was done in order to better represent the meaning of the variable. For example, dividing responses into negative and positive (theoretical motivation) or, (empirical motivation) combining/collapsing categories such as clinical, counseling and educational psychologists, as each group was thought to be too small to analyze on its own (Baker 1994). Initially, however, more categories were created than fewer, as it was thought that it would be possible to collapse irrelevant or subsume similar categories into other existing categories at a later stage.

Once the questionnaires were coded, the numerical data was transferred to a computer. Statistical analyses were then performed using the SAS^R Enterprise Guide Version 3.01, SAS 9.1 software package (SAS is a registered trademark of the SAS Corporation). Computer runs were used to establish frequency distributions, or what is also called a univariate analysis which involves 'describing a case in terms of a single variable – specifically, the distribution of attributes that comprise it' (Babbie, 2001, p.397). Measurements of central tendency (the average, mean, mode or median) were used, along with bivariate analyses of selected variables, where an attempt was made to determine possible relationships between variables. These

quantitative results are presented in Section Four with the help of various tables, charts and graphs with their accompanying explanations.

Qualitative Analysis

Thematic Content Analysis was selected as the qualitative method of analysis for this study.

Marlow (1993, p. 66) notes that qualitative research 'involves the non-numerical examination of phenomena. It focuses on the underlying meanings and patterns of relationships'. The aim is to present the text in ways that capture the essence of the respondents experiences and the context in which these occur (Schutt, 2004), without stripping the experiences of their meaning (Maykut & Morehouse, 1994). The qualitative data analysis places emphasis on an inductive approach. This entails an attempt to immerse oneself in the data, describing responses as accurately as possible, as they occur. In this way, the emphasis is on developing and building new, inductively based interpretations, rather than approaching the data with an existing theory. Categories, patterns and relationships in the data are identified through a process of discovery (Schutt, 2004).

As the intention of this research was to investigate and explore psychologists' experience of depression through examining both their personal and work experiences, this research has the exploration of meaning at its core.

Using the content of the responses to the open-ended questions, the data was analysed using thematic content analysis. The prominent themes were extracted by initially examining the surface structure (the manifest content) in the responses, for example '*makes me vulnerable to absorbing the depression in clients*', and then the deeper structural meaning of the response and their themes (latent content)... '*an*

emerging theme of countertransference.' This deeper meaning or latent content as described by Babbie (2001) allows one to tap the underlying meaning of communications. However, the advantage of this approach can come at a cost to reliability and specificity. According to Babbie (2001), this occurs mostly when there is more than one person coding the responses, as different coders may employ different definitions and standards and may not arrive at the same result.

Once this initial analysis of the content of the open-ended questions was completed, Miles and Huberman's (1994) framework for qualitative data analysis was used to identify relationships between phenomena through three stages of data reduction, data display and drawing and verifying conclusions (Punch, 1998).

During the first 'data reduction' stage, the data was segmented and summarized in order to reveal themes, clusters and patterns which could be coded for conceptualization and explanation (Miles & Huberman, 1994; Punch, 1998). Lists were made of all the themes that had emerged, with all of the quotations that supported each theme.

In the second 'display' stage, the data was compressed, organised and assembled. It was then displayed as working diagram or mindmap (a diagrammatic representation of the emerging clusters of meaning – See Appendix III), including the subthemes that had emerged by this stage – with examples of quotations. The third stage of Miles and Huberman's (1994), framework involves developing propositions for drawing and verifying conclusions, and meaning from the reduced and displayed data. This is done in order to integrate what has taken place in the previous stages, and to produce a meaningful and coherent picture of the data (Miles & Huberman, 1994; Punch, 1998).

At all times, effort was made to remain deeply embedded in the data (Glaser & Strauss, 1967, cited in Maxwell, 1996), because it is

important that no information is lost during the data reduction stage of analysis (Miles & Huberman, 1994; Punch, 1998). Simply put, the researcher embarked on a close and thorough reading of each response, before studying the existing literature on the subject. This was done in order to capture a relatively unfettered interpretation of the responses provided. Throughout this process, the researcher alternated between being immersed in the responses in order to find literal meanings (focused on content and form), whilst editing the lists on the mindmap to display emergent concepts and categories. Finally, a reflexive mode was utilized, where the researcher focused on themes, patterns, relationships, common experiences and orientations. A few tentative patterns began to emerge, such as:

- most psychologists appear to have experienced depression in their adolescence and early twenties
- psychodynamic psychologists are more vulnerable to depression
- psychologists who select a mixed theoretical orientation are less likely to experience depression
- psychologists who experience depression after starting private practice are more likely to cite work stress as a causal factor
- psychologists who experienced depression at an early age are less likely to report that their depression has a negative impact on their clinical work

These themes will be further explored in the discussion chapter.

2.6 Limitations of the Selected Methodology

- A self-report questionnaire is limited to narrow areas of data, because ideally it should not take more than 20 minutes to complete. This limitation was particularly relevant to this study as it was felt that psychologists do not have enough time during their day to attend to activities unrelated to their work.

- A self-report questionnaire does not lend itself to examining complex social relationships or intricate patterns of interaction. In retrospect, this limitation may have been overcome if face-to-face interviews had been conducted where subjects could be actively probed.
- A particularly relevant limitation of this study is that of response bias. This implies a bias toward those who are interested in the subject matter. Those who respond to the questionnaire are self-selected and may represent a specific group, which is not representative of the profession. Along with this goes the concept of non-response error. This concept highlights the possibility that people who do not respond may hold different views.
- The questionnaire needs careful structuring because there is no interviewer to offer clarification in the event of ambiguity. This limitation appeared to be particularly relevant to question 20 on the self-report questionnaire. Respondents were asked if they had spoken to any 'psychologist', and if so what was the response of these 'colleagues'. Without reading ahead to the second part of the question, the question proved to be misleading to many respondents.
- Response rates to mailed questionnaires can be low (at best we can expect returns as low as 30%)
- A follow up mailing, which may have increased the response rate, was not possible due to resource limitations.
- The research design did not allow for the establishment of causal relationships, as it was limited to an investigation of depression.
- The data collection instrument requires extensive testing in order to eradicate ambiguities and to eliminate leading questions. Although a brief pilot phase was built into the study, a greater focus on this phase is recommended for future research.
- Qualitative analysis puts a responsibility on the researcher to acknowledge and account for prejudices and preferences. Human subjectivity needs to be actively managed and controlled.

- And finally, with a purposive sample of limited size, generalisations to the larger population of psychologists cannot be made. However, the qualitative findings can be considered significant to the particular group of respondents.

Because of the methodological weaknesses of this study, any conclusions to be drawn must be regarded as tentative in nature. The sample size was small and was not representative of the psychology profession as a whole. Furthermore, it is not known whether psychologists who volunteer to participate in such a study differ significantly from those who choose not to. Finally, there was no control group to which subjects could be compared. With these limitations acknowledged, the results of this study nevertheless appear to be consistent with much of the literature that has been reviewed.

2.7 Advantages of the Selected Methodology

- Survey research is easy to administer and manage
- Of particular relevance to this study is the concept of confidentiality. A self-report questionnaire was selected as the data collection instrument as it was thought that respondents were more likely to respond honestly if they felt their answers would be confidential
- Research ethics such as anonymity and the freedom to participate were not compromised by this study.
- Self-report questionnaires can produce high quality information, and they allow one to develop operational definitions based on actual observations.
- Self-report mail questionnaires are more time and cost effective than interviews
- Of particular benefit to this study was the idea that self-report questionnaires are a good research tool for a highly select group of respondents. Questions can be carefully designed with a particular population in mind.

- Self-report questionnaires also allow respondents to take their time in answering, and to answer questions at times that are convenient. This was thought to be particularly relevant to this sample due to the demands of their professional lives.
- Self-report questionnaires also insulate respondents from the expectations of an interviewer
- Qualitative analysis allows for a more textured and sensitive approach to the underlying meanings within the data.
- Surveys using self-report questionnaires make large samples feasible. This is an important factor to consider in the event of further research on the subject. The current study has laid a foundation for future research

2.8 Ethical Considerations

- Confidentiality was assured through anonymous responses – the pre-stamped and addressed return envelope protected the anonymity of respondents, and no identifying questions were asked.
- The objectives of the study were clearly stated in the covering letter communicating transparency of motive
- Respondents were invited to participate in the study and no inducements were offered. Their freedom to participate or not to participate was upheld.
- Although this research may have forced participants to face aspects of themselves that they may not normally consider, it was thought that the sample selected would not be classified as a ‘vulnerable group’ and that the subject matter would not elicit undue distress.
- No deception was used to elicit responses and information about the study was provided, along with contact numbers, if participants required further information.
- Results of the study were offered to all respondents on request.

Summary

When considering how to achieve the objectives of this research study, two important factors emerged which guided the initial decisions about a suitable methodology. These two factors were anonymity and access to a sample of psychologists in private practice.

In order to achieve anonymity, the decision was taken to use survey research. A self-report questionnaire was selected as the measurement tool, which it was thought would be posted to a randomly selected sample of psychologists in private practice in South Africa. It was thought that a section of the Health Professions Council of South Africa's list of registered psychologists would be utilized. However, the costs related to postage, processing and list procurement were prohibitively high. An adjustment to the intended methodology had to be made.

This resulted in a smaller overall sample (90 potential respondents), but helped to contain the costs of the survey. The research design is a non-experimental inquiry, as it did not attempt to manipulate variables, only to measure them. The combination of survey design and purposive sampling evolved into non-probability survey research.

The measuring instrument or questionnaire was designed to elicit quantitative and qualitative data. This combination was selected to strengthen the study by providing both outsider and insider perspectives. The quantitative results using univariate and bivariate analyses are presented first, in tabular form, as a way of introducing the reader to a profile of the sample. The qualitative results follow, using the technique of thematic content analysis, and providing a richer and more textured 'insider' understanding of each individual's

subjective experience. The self-report questionnaire as the measuring instrument was selected to ensure absolute confidentiality, and allow respondents to complete them in their own time. Of the 90 questionnaires distributed, 41 were completed and returned. This amounted to a 45% response rate, which was thought to be a respectable response rate for an exploratory study such as this, but necessarily leaves the results open to bias.