

**A CUSTOMER BEHAVIOUR PROFILE
OF ALTERNATIVE MEDICINE USERS**

by

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CHAPTER 1

INTRODUCTION

1. INTRODUCTION

1.1 Statement of the problem

The legitimacy of alternative medicine is an issue of vital public concern. In South Africa the debate on the recognition of alternative medicine medical practices has stimulated a wide public interest. The period between 1971 and 1974, the registers of chiropractors and homeopaths, were closed, posing a threat to survival of these professions. In 1982, an Act was promulgated which provided for the establishment of a South African Associated Health Services Professionals Board to control the practice of alternative medical practitioners (Steenekamp:1985).

According to Lamarine (2001) several sources provide useful definitions of alternative medicine. Alternative medicine is sometimes called complementary medicine. Alternative therapies encompass a range of approaches including everything from dietary supplements, herbs, and biological agents to manual healing, bioelectromagnetics, mind-body interventions, and alternative medical practices.

According to Truter (2002b) alternative therapies became quite popular in the USA in the 1970's. The first national survey of alternative medicine in the USA, conducted by Eisenberg *et al.* cited in Truter (2002b) reported that one in three respondents (34%) used at least one form of alternative therapy during 1990. In 1998, a follow up survey reported that the use of at least one alternative therapy increased from 34% in 1990 to 42% in 1997. In both surveys alternative therapies were used most frequently for chronic conditions including back problems, anxiety, depression and headaches. Also in a survey of the UK general survey in 1999 there was an estimated 20% usage of alternative therapy. Alternative therapy has made a huge impact into the health care systems of many countries in recent years.

Almost every country has its own traditional medical system from which its alternative therapies originate. For the Chinese, it is acupuncture, for the French its magnetic healing and in Africa it is traditional African healers.

1.2 Objectives of the study

The research will investigate the “**Consumer behaviour profile of alternative medicine users**”. Current users of alternative medicine (namely homeopaths, chiropractors, ayurvedic) will be sampled. This research investigates perceptions, attitudes, motivations as well preferences, of patients utilising alternative medicine. The objectives of the study are as follows:

1. Determine how patients *perceive* alternative medicine.
2. To establish the reasons for undertaking alternative medicine ie. Why people consult/choose and *prefer* alternative healers?
3. To investigate and understand what *motivates* the users of alternative medicine.
4. To determine the *attitudes* of these patients towards alternative medicine.
5. To determine the *market segments* of alternative medicine users.

1.3 Background of the study

Living in a world where change is the only constant, people are in a continuous search for innovative ways to improve their lives and lifestyles. Different forms of lifestyles, food, religion and medicines are being explored in a concerted effort to improve the vitality of one's body and mind.

According to Lamarine (2001) alternative therapies continue to regularly cross the line into a mystical domain offering an appealing blend of pseudoscience and spirituality. It is an optimistic therapy that offers both medicine for the body and nourishment for the soul.

Alternative medicine is making new inroads in its popularity as consumers are continuously receiving benefits of treatments such as acupuncture, homeopathy and auyverda. The natural approach to solving ailments, make these practices extremely popular with their health and environmental concerns. (Solutions South: 2002)

According to Chatsworth Sun Solutions Reporters (26/3-26/4:2002) these are some views on alternative medicine:



Shandre Swart (26), a registered nurse of Durban:

After being in an accident I suffered from whiplash which was a real inconvenience. I underwent physiotherapy, however it was the acupuncture therapy I received which proved most effective.



Riane Bothma (16), student of Pretoria:

I don't believe in it at all. I only subscribe to tested medical practices.



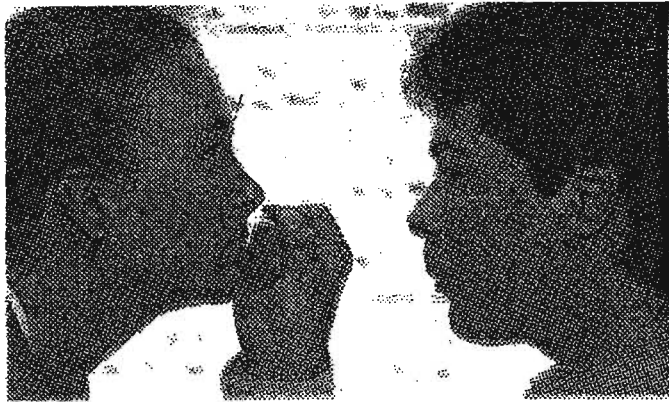
Ayesha Khan (36), self employed of Vereeniging:

I believe that alternative medicine is a natural and safe form of treatment. I prefer it to the western medication and have benefited from it considerably. I recommend it's use to others.



Anite Marais (17), student of Pretoria:

My grandmother has received acupunture therapy, but I wouldn't try something which is unproved.



*A practitioner practising the art of acupuncture
above pic courtesy Independent Newspapers*

1.4 Structure of the dissertation

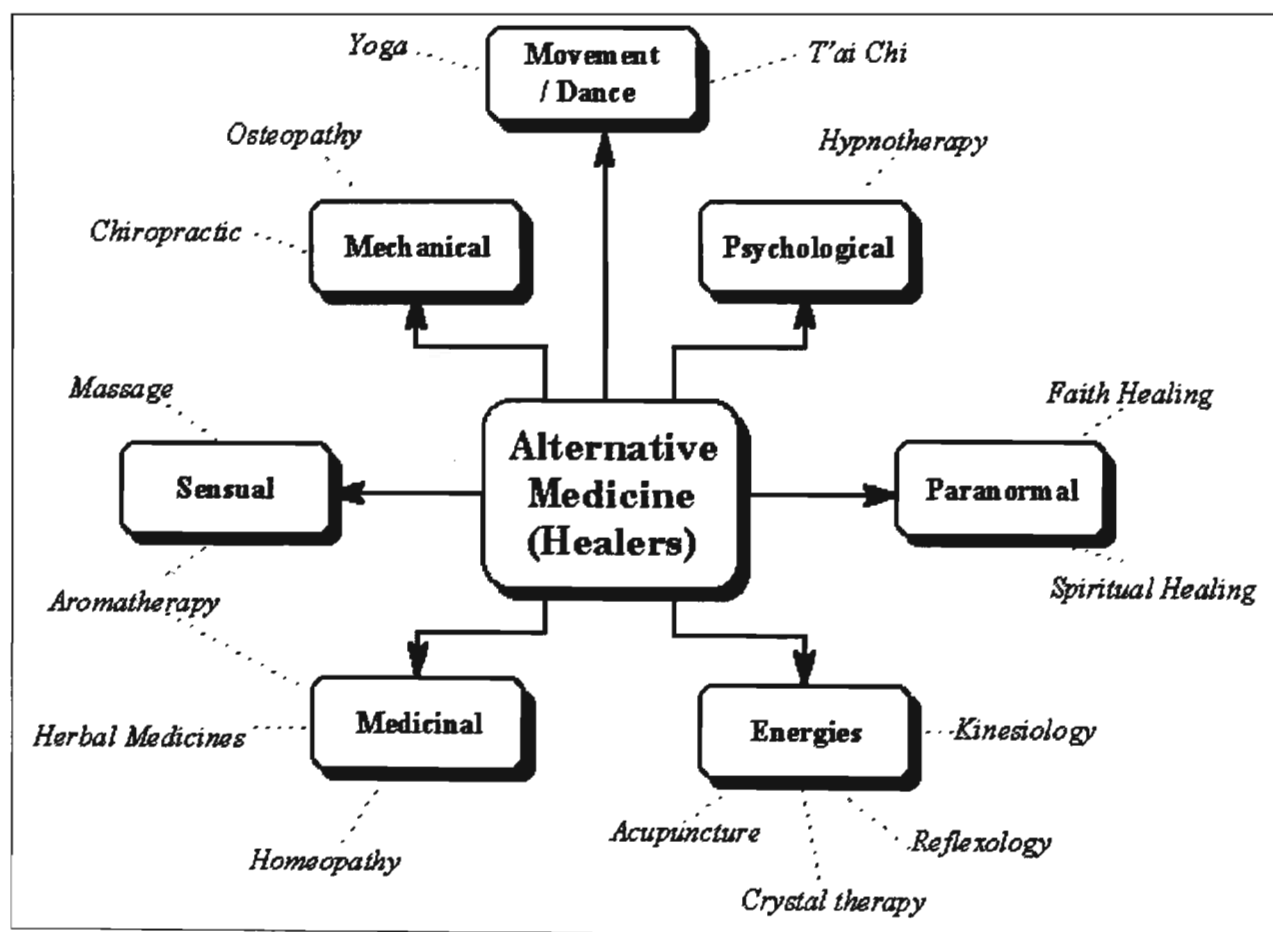
Chapter 2 will present some literature review and look specifically at what has been done concerning this topic. Chapter 3 presents the research methodology. Chapter 4 covers data analysis and findings. Tables and figures are discussed in this chapter. Chapter 5 presents the research conclusions and recommendations.

CHAPTER 2

LITERATURE REVIEW

2.1 Literature Review

Figure 2.1 Common Types of Alternative therapy



Tull (1997)

2.2 Why do users consult alternative healers?

Ursula Sharma (1986:p128) answers this simply, "Because they have illnesses which conventional medicine has not been able to cure."

Recent research provides an insightful profile of people most likely to use alternative medicine. According to Astin (1998), compared to non-users, alternative medicine users were better educated, more often reported lower than average health status, and were more likely to view alternative health care as more congruent with their own values, beliefs, and philosophies toward health and life.

The main benefit reported by users of alternative medicine was relief from symptoms of their illness. Surprisingly, users were not significantly more likely to report dissatisfaction or distrust of conventional medicine except for approximately 5% who relied primarily on alternative care to the exclusion of conventional medicine (Astin JA: 1998).

A recent study that surveyed women who received standard therapy for early-stage breast cancer indicated that, within this group, users of alternative medicine reported more depression, greater fear of recurrence, and less robust mental health (Burstein HJ,*et al.*1999)

Those patients who had not used alternative medicine prior to their cancer, but began to use alternative therapies after their diagnosis, presented more evidence of psychological fragility including lower levels of sexual satisfaction, greater fear of recurrence, and more severe physical symptoms (Burstein HJ,*et al.*1999).

According to Zollman and Vickers (1999), there are certain attributes that attracts patients to use alternative medicine, these attractions may include the relationship with their practitioner, the ways in which illness is explained, and the environment in which they receive treatment.

2.3 FACTORS ASSOCIATED WITH THE USE OF ALTERNATIVE MEDICINE

2.3.1 Dissatisfaction with allopathic medicine

According to Larsen (1999), allopathic medicine focuses on the relief of symptoms and rarely places emphasis on prevention or the treatment of the cause of a disorder. On the other hand, alternative medicine strives to find and treat the cause of a disorder and focuses on prevention of the disorder without covering up any symptoms.

Scientifically based, allopathic medicine subscribes to a more rigorous, evidence based, self-critical methodology. This approach is sometimes distasteful and viewed to be harmful and unpleasant to the patient.

A survey carried out by "Which" magazine, showed that 81 per cent of those who had consulted alternative healers after visiting their GP, did so as a result of dissatisfaction with their medical treatment for those conditions (Sharma:1986). The reasons for this disillusionment varied. Some patients said that they had not been cured, some claimed only temporary relief, while others could not be treated at all. After alternative therapy, however, 86 per cent claimed positive results, either from a cure or as a marked improvement (Sharma:1986)

Alternative practitioners attempt to make sense of patients - such as describing illness as a result of environmental factors or as physical expression of emotional patterns. Patients often turn to alternative medicine after having tried everything that allopathic medicine has to offer.

Alternative practitioners offer hope to such patients, in two ways. Firstly by attempting to influence the underlying diseases and secondly by addressing emotional states, energy levels, coping styles and other aspects which contribute to the quality of life.

2.3.3 Gentle form of treatment

Karnofsky (1997) claims that alternative treatments tend to be more gentle and less invasive than allopathic medicine and is more likely to call for lifestyle changes and healthy moods than for drugs.

Hence, alternative medicine believes in gentle, long-term support to enable the body's own innate powers to do the healing. Allopathic medicine on the other hand is perceived to use aggressive intervention to treat disease. Patients also fear that allopathic drugs might become habit forming. Furthermore patients also dislike the side-effects of conventional drugs and prefer alternative medicines which are safe to use and have no side-effects (Zollman and Vickers:1999)

other words, people in most times and places have a choice about whom they consult for their medical dispositions.

Pluralism arises from the contact between different cultures, social change and competing ideas about what disease and appropriate treatment should be. People are thus shopping around for the best healthcare, and critically examining their choices to what is available in the marketplace (Truter:2002a).

2.3.6 Self-empowerment of patients

Patients are now more than ever, empowered and want to take responsibility for their own health and do not like to be excluded in making the decisions for their own health. Alternative medical practitioners tend to emphasise the active participative role of the individual, who can make decisions about their health and treatment.

Truter (2002a) notes that for many people allopathic medicine has a clinical uncaring image. Allopathic practitioners display an authoritarian attitude towards their patients and dislike being questioned by their patients. According to Larsen (1999), allopathic doctors prefer patients to be passive and accept their treatment without too many questions. This can be viewed negatively by the patient and can be interpreted as depriving the patient of

his or her human rights which is to actively participate as a partner in the decision making process.

2.3.7 Time spent with patients

According to Truter (2002a), another difference between allopathic and alternative therapies is the amount of time alternative practitioners spend with their patients and the emphasis they put on healer-patient interactions.

Truter (2002a) further notes, that this time factor is crucial in gaining the trust of the patient and it is said to have a huge impact on the efficacy of the therapy, as the patients belief system is influenced. In the same vein, Zollman & Vickers (1999), also cite that the amount of time available for consultation serves as a reason for patients choosing alternative medicine, and contrasts this with their experiences of seeing allopathic doctors. Particularly when the problem is chronic and multifactorial, in which patients are encouraged to explain their experience and understanding of their problem, can in itself be therapeutic. Patients also generally see the same alternative over their course of treatment, and this continuity further facilitates the development of a therapeutic patient-practitioner relationship (Zollman & Vickers:1999).

2.3.8 Hope

Zollman & Vickers (1999) note that patients often come to alternative medicine practitioners after having tried everything that allopathic medicine has to offer. It is claimed that alternative practitioners can also offer hope to such patients, both by attempting to influence the underlying disease and, often more importantly, by addressing emotional states, energy levels, coping styles, and other aspects that contribute to quality of life. Zollman & Vickers (1999) further mention that this is important for patients with chronic diseases and no prospect of cure from allopathic medicine.

2.3.9 Touch

According to Zollman and Vickers (1999), many alternative treatments and diagnostic techniques involve more physical contact between patients and practitioners. This not usual in allopathic treatment. It is believed that touch can facilitate more open and honest communication, and patients may turn to the "low tech" consulting rooms of aromatherapists and reflexologists for a less distancing and more human experience of health care.

2.3.10 The role of spirituality

Truter (2002a) claims that some patients seek the spiritual element in healing, which patients find lacking in allopathic medicine. There is an increasing amount of people who

claim that are both the existence of spiritual as well as physical causes to disorders. Alternative healing acknowledges both the existence of spiritual as well as physical causes of diseases.

According to Zollman and Vickers (1999), some patients have existential concerns that allopathic doctors may not feel competent to address. Many alternative therapies and disciplines make no distinction between spiritual symptoms and any other types of symptoms. Alternative treatment is aimed at addressing this aspect of a person's life or illness.

2.4 Commonly used alternative therapies

Table 2.1 below lists the most commonly used therapies in eight European countries.

Belgium	France	Holland	England	West Germany	Switzerland	Italy	Finland
Homeopathy	Homeopathy	Homeopathy	Natural Medicine	Homeopathy	Homeopathy	Homeopathy	Natural Medicine
Manual Healing	Acupuncture	Natural Medicine	Osteopathy	Acupuncture	Manipulation techniques	Acupuncture	Massage
Chiropractic	Natural Medicine	Manual Therapies	Homeopathy	Procaine injection therapy	Acupuncture	Natural Medicine	Chiropractic +naprapathy +cupping
Osteopathy	Water cure	Healing	Acupuncture	Chiropractic	Natural Medicine	Prana therapy	Acupuncture
	Chiropractic	Acupuncture	Chiropractic	Ozone and oxygen therapy	Reflexology	Chiropractic	Homeopathy

Source: Ilse Truter (2002b)

Homeopathy seems to be a very popular choice amongst consumers of alternative medicine in eight European countries.

2.5 Push and Pull factors associated with alternative medicine

According to Ilse Truter (2002a), the factors contributing towards the use of complementary and alternative medicine can be divided into Push and Pull factors as illustrated in **Table 2.2**:

Table 2.2 – Push and Pull Factors

PUSH FACTORS	PULL FACTORS
<p>Dissatisfaction with orthodox medicine</p> <ul style="list-style-type: none"> - Ineffective - Adverse side effects - Poor communication with doctor - Insufficient time with doctor - Waiting lists 	<p>Philosophical congruence</p> <ul style="list-style-type: none"> - Spiritual dimension - Emphasis on holism - Active role of patient - Explanation intuitively acceptable - Natural elements
<p>Rejection of orthodox medicine</p> <ul style="list-style-type: none"> - Anti-science or anti-establishment attitude 	<p>Personal control over treatment</p>
<p>Desperation</p>	<p>Good relationship with therapist</p> <ul style="list-style-type: none"> - On equal terms - Time for discussion - Allows for emotional factors
<p>Cost of private orthodox medical care</p>	<ul style="list-style-type: none"> - Accessible - Increased well-being

A different way of to explain the use of alternative medicine amongst consumers is to classify them into push and pull factors. According to Truter (2002a) ‘push’ factors are factors that include dissatisfaction or rejection of allopathic medicine through prior

negative experiences or attitudes. People are 'pushed' away from conventional treatment in search of alternatives. Other factors 'pull' will attract patients towards the use of alternative medicine. These factors may include compatibility between the philosophy of certain therapies and people's own beliefs and a greater sense of control over one's own treatment (Truter: 2002a).

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Methodology

A questionnaire was designed to gauge the respondent's perceptions, preferences, motives and attitudes towards alternative medicine as compared to allopathic medicine. The researcher employed a descriptive research design method using quantitative methods to analyse the empirical data collected. The researcher also used a qualitative method, the collage in the questionnaire design stage of the research.

A total of 100 questionnaires were distributed during the April/May 2002, to various practices offering alternative medicine in the greater Durban area. The research utilised this approach as it was the most suitable and convenient way to obtain the required information.

To avoid a low response rate the researcher made follow up telephone calls and personal visits to the clinics.

3.2 Sampling

For the purpose of the study, the target population was defined as all persons, both males and females between the ages of 18 and over 55, residing in the greater Durban area, who were currently using or had used alternative medicine.

The random variables that were measured were identified as *inter alia*; the age of user, and his or her gender definition, income, employment, types of alternative practices utilised; attitudes, preferences, perceptions and motives for utilising/consuming alternative medicine.

A sample population consisted of 100 inhabitants residing in the Durban and surrounding areas. A total of 100 questionnaires were distributed of which 96 were returned. This yielded a 96% (96/100) response rate. This percentage is more than a third of the sample; thereby regarding it to be one with a high response rate. None of the questionnaires had to be excluded.

3.3 Questionnaire Design

The measurement instrument was pre-coded to enable the input of data directly from the questionnaire. The fixed alternative format for the questions relating to marketing and services was provided using nominal and interval scale (5 point- Likert scale) to achieve the objectives of the study. The questionnaire focused on statements that required the respondents to evaluate their responses using the Likert scale (5 point) whereby the lower the number the more favourable/ stronger association was recorded.

An exploratory research technique called collage was utilised to provide insight for the questionnaire design. Consumers were required to put their pictures together in a collage that reflected their views and feeling about alternative medicine. This approach allowed consumers to remember their experiences and report on them more completely. Having the consumers' to respond verbally or write about their thoughts and feeling elicited the researcher to use this information to gauge what consumers perceived of alternative medicine. The collages are included in APPENDICES B1-B7. The questions the researcher designed from the collage are:

- There is a growing importance of alternative medicine
- Alternative medicine is globally accepted
- Alternative medicine promotes a healthy lifestyle
- I am willing to reveal intimate details to the alternative healer
- Alternative medicine provides more cost-effective treatment compared to allopathic medicine

The questionnaire consisted of 54 questions pertaining to perceptions, attitudes, preferences, motives and characteristics of the users of alternative medicine as well as their biographical details. The questionnaire was divided into two sections namely:

Section A consisted of:

- **Demographics:** Information specifying gender, age, approximate gross income, race, highest level of education, and employment status.

This was employed for statistical and empirical purposes. This was done in order to determine what the dispositions of alternative medicine users were as well as the characteristics of the users of alternative medicine.

- Questions regarding the use of alternative medicine, was also placed here to gauge the use of alternative medicine.

Respondents were required to choose one of the alternative medical practices mentioned and complete the questionnaire using the chosen medical practice mentioned.

Section B consisted of questions relating to:

Perceptions, attitudes, preferences as well as motivation of alternative medicine users.

For easy reference the list of the objectives of the study:

- | |
|---|
| <ol style="list-style-type: none">1. Determine how patients <i>perceive</i> alternative medicine2. To establish the reasons for undertaking alternative medicine ie. Why people consult/choose and <i>prefer</i> alternative healers3. To investigate and understand what <i>motivates</i> the users of alternative medicine4. To determine the <i>attitudes</i> of these patients towards alternative medicine5. To determine the <i>market segments</i> of alternative medicine users |
|---|

1. Perceptions (Questions B8 to B23)

The main aim of this section was to investigate how patients using alternative medicine perceive it. This section addressed the first research objective.

2. Preferences (Questions B24-B44)

The purpose of this section was to gauge a more conceptual understanding of what makes a patient prefer alternative medicine as apposed to allopathic medicine. This section was further divided into subsections:

Culture : (Questions B24-B26)

Price : (Questions B27 –B30)

Service: (Questions B31 – B34)

Motivation: (Question B35 –B44)

This section and subsections addressed the second and third research objectives.

3. Attitudes Questions (B45 – B53)

These questions identified the attitudes that respondents have towards alternative medicine. This section addressed the fourth research objective, which was to determine the attitudes of patients towards alternative medicine. The respondents were asked to indicate the extent to which they ‘agree’ or ‘disagree’ with each statement by circling the appropriate numbers.

The numbers were:

1= Strongly agree; 2= Agree; 3= Unsure; 4= Disagree;5= Strongly disagree.

The questionnaire is attached as **Appendix A**.

According to Parasuraman (1991), the inclusion of a cover letter plays a vital role in a questionnaire as it has the capacity to affect the response rate. This survey was 9 pages long and contained just an introductory paragraph, not a letter, which was used to aid the co-operation of the respondent. It also informed the potential respondent of what the study entailed and the importance of participating in it (refer to Appendix A).

3.4 Research Validity and Reliability

The Cronbach Alpha was used for multi-item scales at the internal level of measurement.

The Cronbach's coefficient Alpha method was used to assess internal consistency for Section B (Questions 8 to 53), of the survey. The Reliability Coefficient Alpha obtained for all three sections indicated a high degree of internal consistency amongst the items in each section (see Appendix C).

- Questions B8 to B23 (perceptions of alternative medicine users) – produced a high reliability of 0.8114
- Questions B24 to B34 (preferences of alternative medicine users) – produced a high reliability of 0.8621
- Questions B35 to B43 (motivation of alternative medicine users)– produced a high reliability of 0.7509
- Questions B45 to B53 (attitudes of alternative medicine users) – produced a high reliability of 0.8783

As for validity, a face validity referring to professional agreement that confirms that a scale's content logically appears to accurately reflect what, was intended to be measured was implemented.

3.5 Representativeness

- **Sample loss**

Only 4 of the 100 questionnaires that were distributed were not completed. Those respondents who failed to respond or return the questionnaire may have had different opinions and views and suggestions from those who did respond to the questionnaire.

- **Reporting errors**

It is very difficult to eliminate reporting errors completely, but every precaution was taken in the questionnaire design to keep this to a minimum.

3.6 Limitations of the study

A convenience sample was employed in this study. Therefore respondents for surveys were restricted to areas and people most accessible at that time. This would result in some degree of selection bias.

Any study employing the use of surveys, more specifically, questionnaires may have some degree of weaknesses in the questionnaire itself. For example, a respondent may not fully grasp the essence of a question, thus affecting the quality of data obtained.

CHAPTER 4

EVALUATION OF DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The raw data from the questionnaires must undergo preliminary preparation before they can be analysed (Aaker *et al.* 2001). The first customary step therefore involved editing and data entry. This ensured accuracy of the data and its conversion from raw form to reduced and classified forms that were more appropriate for analysis.

The editing process detects errors and omissions to the responses. The researcher conducted the editing process prior to the data analysis. The measuring instruments for the survey included closed-ended questions that were pre-coded which simplified the data entry process.

The next step was to tabulate the data. The primary use of tabulation was to determine the empirical distribution of the variables in question and to calculate the descriptive statistics. A frequency distribution simply reports the number of responses that each question received (Aaker *et al.* 2001). Descriptive statistics helps to summarise the information presented in the frequency table.

Cross tabulations were used to assess or inspect the relationships between nominally scaled variables. Pie charts were used for relative comparisons of nominal data.

4.2 FREQUENCIES

Table 4.1 - Gender of respondents (n=96)

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	78	81.3	81.3	81.3
Male	18	18.8	18.8	100.0
Total	96	100.0	100.0	

In **Table 4.1** 81.3% comprises of females and 18.8 % are males. The reason for having more females respondents than males respondents in this study is due to the male respondents being reluctant to participate in the survey. Furthermore, it should also be mentioned that there was no sampling frame for this study therefore the respondents were randomly selected.

As shown in **Table 4.2** below, most of the respondents, 36.5% earned between R6000-R8000 per month. 30.2% of the respondents earned between R4000 –R6000. 7.3% of the respondents earned between R2000 –R4000. 10.4% of the respondents earned R2000. 9.4% earned between R8000 –R10 000. 4.2% earned above R10 000.

Table 4.2 – Monthly income of respondents (n=96)

Income	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 2000	10	10.4	10.5	10.5
2000-4000	7	7.3	7.4	17.9
4000-6000	29	30.2	30.5	48.4
6000-8000	35	36.5	36.8	85.3
8000-10000	9	9.4	9.5	94.7
10000+	4	4.2	4.2	98.9
Nil/Missing	1	1.0	1.1	100.0
Total	95	99.0	100.0	

Table 4.3 - Education levels of the respondents (n=96)

Education Level	Frequency	Percent	Valid Percent	Cumulative Percent
School Leaving	22	22.9	22.9	22.9
Degree	34	35.4	35.4	58.3
Technical Diploma	17	17.7	17.7	76.0
Post Grad	21	21.9	21.9	97.9
Other	2	2.1	2.1	100.0
Total	96	100.0	100.0	

As illustrated in **Table 4.3** above, most of the respondents (35.4%) have degrees followed by (22.9%) of the respondents who have a school-leaving certificate. Also 21.9% have a postgraduate qualification. 17.7% of the respondents have a technical diploma. This is also represented in **Figure 4.1** below.

Figure 4.1 – Education levels of the respondents

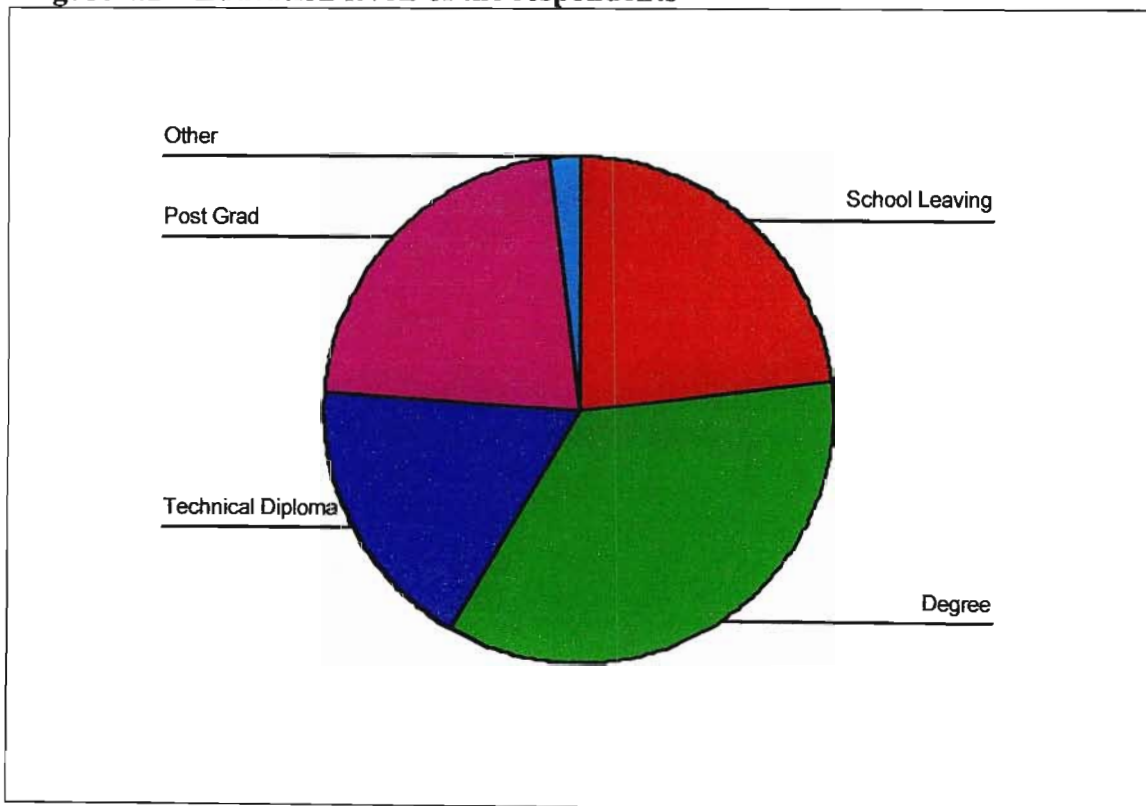


Table 4.4 - Age of the respondents (n=96)

Age Group	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	14	14.6	14.6	14.6
26-35	29	30.2	30.2	44.8
36-45	33	34.4	34.4	79.2
46-55	14	14.6	14.6	93.7
Over 55	6	6.3	6.3	100.0
Total	96	100.0	100.0	

Table 4.4 reflects that most of the respondents (34.4%) belonged to the '36-45' age group category. 30.2% belonged to '26-35' category, 14.6% belonged to '46-55' category, 14.6% belonged to '18-25' age group and a minority (6.3%) belonged to the 'over 55' category. This is also clearly represented by **Figure 4.2** below.

Figure 4.2 – Age of the respondents

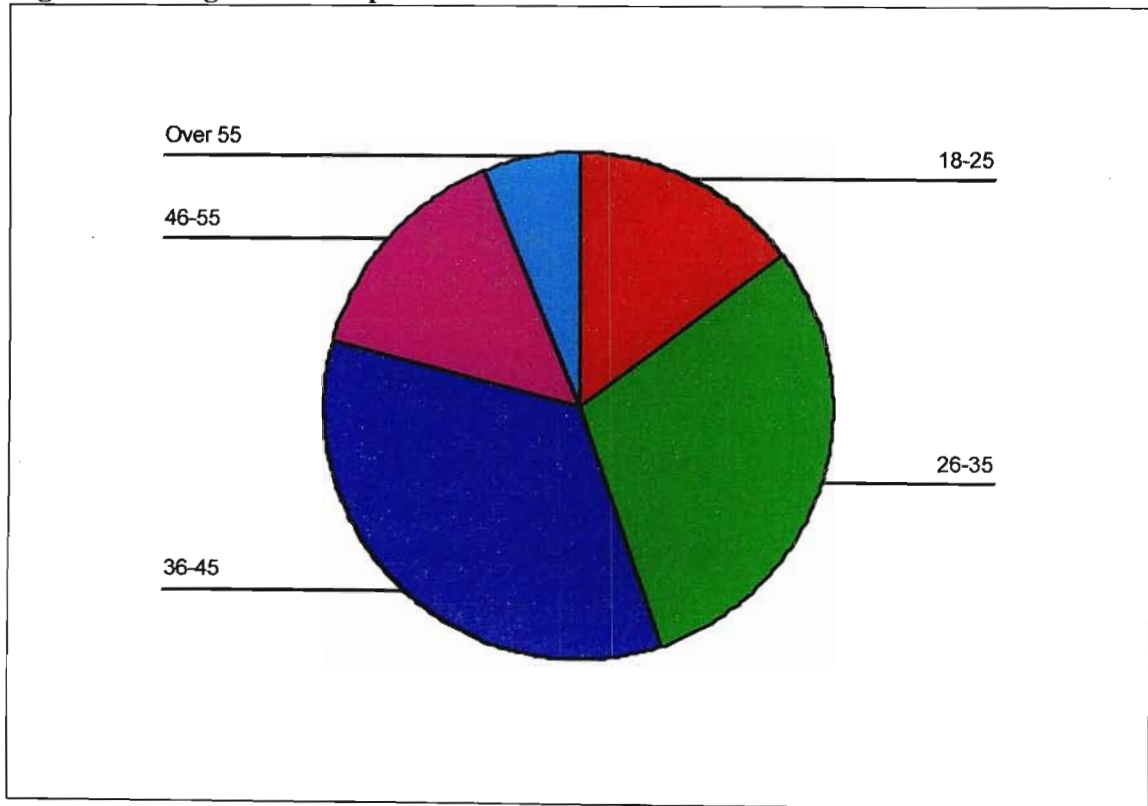


Table 4.5 - Most common used alternative therapy (n=96)

Alternative treatment	Frequency	Percent	Valid Percent	Cumulative Percent
Chiropractor	15	15.6	15.8	15.8
Homeopath	33	34.4	34.7	50.5
Herbalist	1	1.0	1.1	51.6
Aromatherapist	10	10.4	10.5	62.1
Ayurveda	22	22.9	23.2	85.3
Other	14	14.6	14.7	100.0
Total	95	99.0	100.0	
System	1	1.0		

Table 4.5 shows that most of the respondents (34.4%) used homeopathy followed by 22.9% of the respondents using ayurveda, 15.6% used chiropractors and 10.4% used aromatherapy and 14.6% of the respondents used other forms of alternative therapy.

This can also be illustrated on the pie chart **Figure 4.3** below.

Figure 4.3 – Most common used alternative therapy

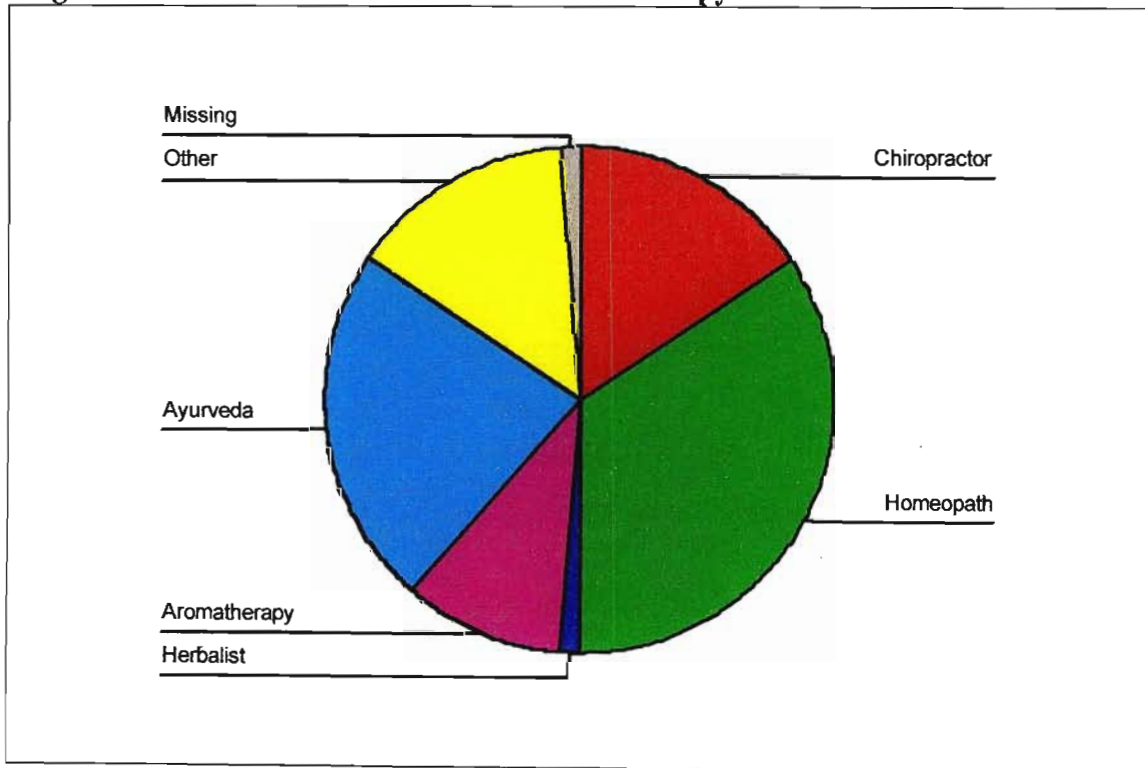
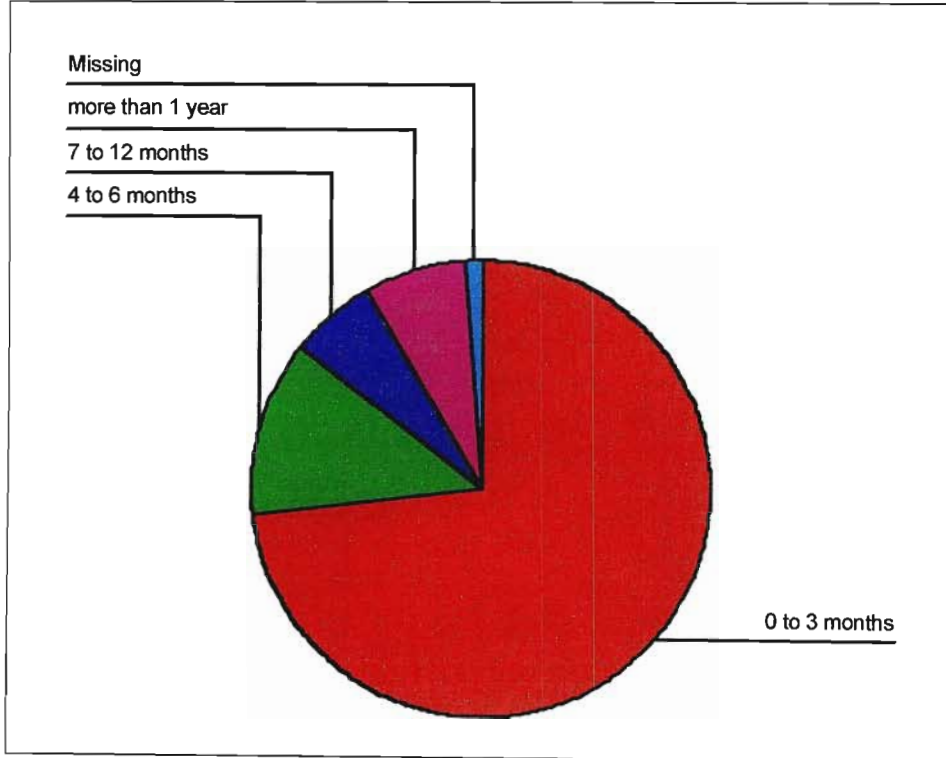


Table 4.6 - Last consulted alternative treatment (n=96)

Time period	Frequency	Percent	Valid Percent	Cumulative Percent
0 to 3 months	70	72.9	73.7	73.7
4 to 6 months	12	12.5	12.6	86.3
7 to 12 months	6	6.3	6.3	92.6
more than 1 year	7	7.3	7.4	100.0
Total	95	99.0	100.0	
Missing	1	1.0		
Total	96	100.0		

Table 4.6 shows that (73.7%) of the respondents last consulted an alternative therapist ‘0-3 months ago’. 12.6% of the respondents consulted alternative therapist ‘4-6 months ago’. 6.3% of the respondents consulted ‘7 to 12 months’ ago and 7.3% of the respondents consulted ‘more than a year ago’. This can also be seen in **Figure 4.4** below.

Figure 4.4 – Last consulted alternative treatment



4.3 CROSS TABULATIONS

The cross tabulation depicted below in **Table 4.7** analyses the racegroup of the respondents who participated in the study against the most common used treatment.

Table 4.7 - The most common form of therapy against race group (n=96)

Alternative Therapy	Percentage within Race Group	RACE GROUP				Total
		Black	White	Indian	Coloured	
Chiropractor	Count	1	4	10		15
	% within RACEGROUP	100.0%	9.8%	20.0%		16.0%
Homeopath	Count		20	13		33
	% within RACEGROUP		48.8%	26.0%		35.1%
Herbalist	Count				1	1
	% within RACEGROUP				50.0%	1.1%
Aromatherapy	Count		4	5	1	10
	% within RACEGROUP		9.8%	10.0%	50.0%	10.6%
Ayurveda	Count		6	15		21
	% within RACEGROUP		14.6%	30.0%		22.3%
Other	Count		7	7		14
	% within RACEGROUP		17.1%	14.0%		14.9%
	Count	1	41	50	2	94
	% within RACEGROUP	100.0%	100.0%	100.0%	100.0%	100.0%

Since the study was a convenience sample this cross tabulation was done for information purposes only. 48.8% of the white respondents consulted homeopaths and (30.0%) of the Indian respondents consulted ayurvedic doctors for treatment. This is what one would expect. White respondents utilise homeopathic treatment and Indian respondents tend to utilise ayurvedic treatment.

4.4 FACTOR ANALYSIS

Factor analysis looks for the patterns amongst a set of variables to discover if an underlying combination of the original variable (a factor) can summarise the original set (Cooper and Schindler, 1998).

For the purposes of this study, the perception, preferences, attitudes and motivation of the respondents using alternative medicine were examined to:

1. Conceptualise and understand if these perceptions, preferences, attitudes and motivations can be 'grouped'
2. reduce the variables to a smaller number

The grouping of variables allows the researcher to understand and perceive the behaviour of consumers of alternative medicine. This type of grouping allows for the researcher to have a 'big picture' of the study at a glance.

All the variables under investigation are metric and comprise of a homogeneous set of perceptions, preferences, attitudes and motivations applicable to factor analysis.

The Kaiser Meyer Olkin Measure of sampling adequacy was utilised to assess the appropriateness of factor analysis. **Table 4.8** illustrates the statistics produced by the variables.

Table 4.8 - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.773
Bartlett's Test of Sphericity	Approx. Chi-Square	2780.328
	df	990
	Sig.	.000

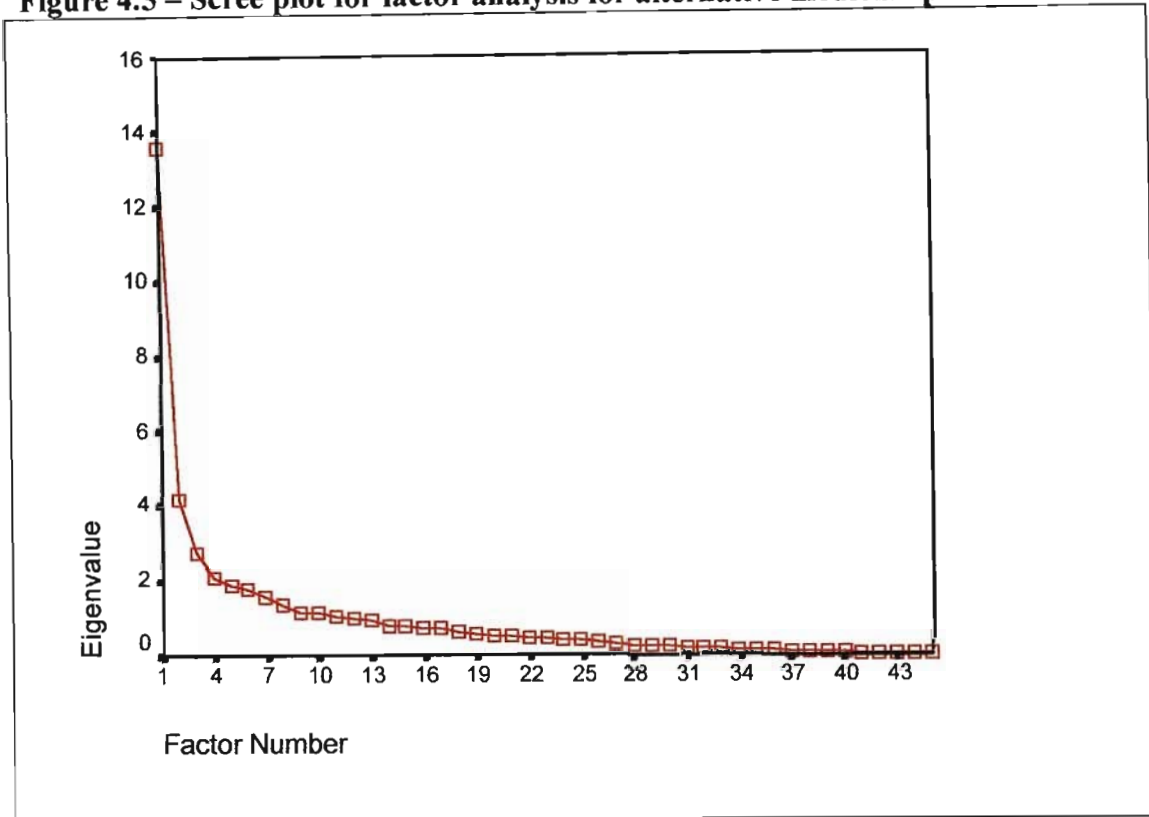
The KMO value is 0.773 and this is considered to be adequate to proceed with factor analysis of the data. This indicates that there is a high presence of correlation amongst the variable. The Bartlett's test of Sphericity is 2780.328, which is considered high, and it is significant ($p=0.000$), so factor analysis would provide statistically reliable information. The Principle Components and Alpha Factoring methods of factor analysis was utilised.

Eigenvalues measured the amount of variation in the data accounted for by a factor. Only eigenvalues greater than 1 are considered significant (Hair *et al.*1998). Those factors with eigenvalues less than one are insignificant and therefore were disregarded from the study.

A scree plot was used to identify the optimum number of factors that can be extracted before the amount of unique variance begins to dominate the common variance structure. The scree test, plots the eigenvalues against the number of factors in their order of extraction . Thus the shape of the resulting curve is used to evaluate the cut-off point (Hair *et al.* 1998).

The scree plots associated with the analysis is shown below:

Figure 4.5 – Scree plot for factor analysis for alternative medicine patients



The above figure plots the factors extracted in the study of patients using alternative medicine. Starting off with the first factor, the plot slopes steeply downward initially, then elbows at the third factor and eventually becomes a horizontal line. The point at which the curve first begins to straighten out is considered to indicate the maximum number of factors to extract. In this study the first 11 factors would qualify. Beyond the eleventh factor the remaining factors do not yield any substantial information because the eigen values are less than 1.

In **Table 4.9** below, the information containing all 11 possible factors and their relative explanatory power as expressed by their eigen values greater than 1 are featured. The eleven factors represent 72.664% of the variance of the 11 variables. Factor 1 accounts for 30.306% of the variance. Factor 2 accounts for 9.314 of the variance. Majority of the variance is explained by Factor 1 (30.306%) and after Factor 1 the following 10 factors increases only by a small percentage.

Table 4.9 - Total Variance Explained

FACTOR	Initial Eigenvalues	% of Variance	Cumulative %	Rotation Sums of Squared Loadings	% of Variance	Cumulative %
	Total			Total		
1	13.638	30.306	30.306	8.403	18.673	18.673
2	4.191	9.314	39.620	5.180	11.511	30.184
3	2.731	6.070	45.690	3.320	7.377	37.561
4	2.117	4.704	50.393	2.975	6.612	44.173
5	1.932	4.293	54.686	2.546	5.658	49.831
6	1.795	3.990	58.675	2.417	5.372	55.203
7	1.567	3.481	62.157	2.104	4.676	59.879
8	1.372	3.050	65.206	1.624	3.608	63.487
9	1.169	2.599	67.805	1.536	3.414	66.901
10	1.150	2.555	70.360	1.344	2.987	69.888
11	1.037	2.304	72.664	1.250	2.777	72.664

Extraction Method: Principal Component Analysis.

4.4.1 Interpretation of the factors

Interpretation of the factors are based on factor loadings, which are the correlations between the factors and the original variable (Aaker *et al.*2002). The factor loadings provide the researcher with an indication of which variables are correlated with each other, and the extent of that correlation. Kinnear and Taylor (1991), advocate that the initial factor requires rotation to facilitate easier interpretation of the factors and also to eliminate any difficulties of having factors with all variables having mid-range correlation. Thus, in **Table 11** below the initial factors were rotated to facilitate all the variables having mid range correlation.

There were 2 kinds of analysis that were utilised namely:

- a). Principle Components and
- b). Alpha Factoring

Table 4.10 – Factor Analysis

VARIABLE ATTRIBUTE	PRINCIPAL COMPONENT	PRINCIPAL COMPONENT	ALPHA FACTORING	ALPHA FACTORING
	VARIMAX	QUARTIMAX	VARIMAX	QUARTIMAX
FACTOR 1 – MOTIVATION				
B50. It is likely that I will positively recommend alternative methods of treatment to my friends	0.850	0.888	0.863	0.776
B49. I will consider using alternative medication when I contract an illness again	0.844	0.873	0.842	0.756
B48. It is likely that I would continue with the use of alternative medicine	0.842	0.894	0.887	0.750
B51. Alternative medicine is reliable	0.829	0.883	0.890	0.716
B53. Alternative medicine promotes a healthy lifestyle	0.723	0.760	0.716	0.656
B52a. There is a growing importance of alternative medicine	0.823	0.569	0.734	0.565
B47. I like using alternative medication as it is gentle to the body	0.550	0.627	0.653	0.554
B52b. Alternative medicine is globally accepted	0.543	0.566	0.640	0.454

Table 4.10 continued

	PRINCIPLE COMPONENT	PRINCIPLE COMPONENT	ALPHA FACTORING	ALPHA FACTORING
FACTOR 2 – FAMILY INFLUENCE	VARIMAX	QUARTIMAX	VARIMAX	QUARTIMAX
B40. My family has been always using alternative medicine	0.901	0.887	0.878	0.887
B39. My family recommended alternative medicine	0.868	0.859	0.818	0.854
B25. I utilise alternative medicine because my family has always used it	0.757	0.793	0.784	0.826
B31. The front office assistant of the alternative healer is available to provide help	0.672	0.708	0.679	0.695
B8. Alternative healer prescribes medicine that makes me feel better immediately	0.630	0.667	0.637	0.652
B33. An alternative healer has convenient business hours	0.520	0.505	0.455	0.583
B18. Alternative medicine combined with allopathic medicine is more effective than allopathic medicine alone	0.488	0.525	0.501	0.541
B36. An alternative healer heals me the first time	0.461	0.491	0.456	0.464

Table 4.10 continued

FACTOR 3- VALUE FOR MONEY	PRINCIPLE COMPONENT	PRINCIPLE COMPONENT	ALPHA FACTORING	ALPHA FACTORING
	VARIMAX	QUARTIMAX	VARIMAX	QUARTIMAX
B27. Alternative medicine is less expensive, compared to allopathic medicine	0.767	0.745	0.625	0.682
B22. Alternative medicine provides more cost-effective treatment compared to allopathic medicine	0.737	0.725	0.538	0.637
B29.I think alternative medicine provides value for money	0.658	0.611	0.418	0.464
B20. Treating a condition using alternative medicine is safer than allopathic medicine	0.537	0.489	0.499	0.359
B38. I am willing to reveal intimate details to the alternative healer	0.476	0.452	0.383	0.205
B45.I believe that alternative medicine has the tendency to heal diseases that are thought to be incurable	0.449	0.419	0.282	0.178
FACTOR 4 –SERVICE AND SAFETY				
B34.I am pleased in the manner in which the alternative healer performs his/her service	0.779	0.736	0.345	0.205
B35. The behaviour of the alternative healer instills confidence in me that I will be healed	0.678	0.604	0.206	0.178

Table 4.10 continued

	PRINCIPLE COMPONENT	PRINCIPLE COMPONENT	ALPHA FACTORING	ALPHA FACTORING
	VARIMAX	QUARTIMAX	VARIMAX	QUARTMAX
B32. An alternative healer understands my ailments	0.567	0.570	0.576	0.455
B37. I feel safe using alternative medicine	0.565	0.478	0.553	0.412
B42. My alternative healer treats me as an individual	0.449	0.394	0.407	0.379
B13. Alternative healers are not properly Trained to treat patients	0.434	0.413	0.386	0.346
FACTOR 5 – EFFECTIVENESS OF ALTERNATIVE TREATMENT				
B12. Alternative medicine has a better effect than allopathic medicine	0.772	0.762	0.772	0.412
B10. based on my experience, I feel that the alternative healer can be relied upon	0.622	0.588	0.656	0.309
B11. Alternative medicine has no side effects as allopathic medicine does	0.611	0.541	0.521	0.276
B9. Alternative healers listens to all that I have to say about my illness or indisposition	0.519	0.473	0.435	0.138
B14. Alternative healers are properly trained to treat their patients	0.328	0.359	0.345	0.175

Table 4.10 continued

FACTOR 6 – BELIEFS	PRINCIPLE COMPONENT	PRINCIPLE COMPONENT	ALPHA FACTORING	ALPHA FACTORING
	VARIMAX	QUARTIMAX	VARIMAX	QUARTMAX
B21. Alternative medicine is only effective if treating minor complaints and ailments	0.733	0.725	0.178	0.120
B19. Alternative medicine works only on patients who believe in it	0.675	0.697	0.197	0.112
B23. Alternative medicine is for middle to Upper income users	0.660	0.642	0.182	0.106
B16. All patients undergoing alternative treatment should be seen by an allopathic Doctor first	0.560	0.489	0.328	0.103
FACTOR 7 –CAUSES OF ILLNESS EXPLAINED				
B46. I believe that illness have both spiritual as well as physical causes	0.787	0.789	0.639	0.127
B41. My alternative healer gives me reasonable explanation as to why the sickness occurred	0.623	0.584	0.454	0.176
FACTOR 8 - CULTURE				
B26. According to my beliefs and culture Using alternative medicine is not forbidden	0.779	0.772	0.664	0.220
B24. by consuming alternative medication I am not abandoning my cultural heritage	0.622	0.590	0.445	0.119

Table 4.10 continued

FACTOR 9 - PRICING	PRINCIPAL COMPONENT	PRINCIPAL COMPONENT	ALPHA FACTORING	ALPHA FACTORING
	VARIMAX	QUARTIMAX	VARIMAX	QUARTIMAX
B28. The price of alternative medicine ranges from cheap to expensive	0.768	0.752	0.610	0.424
FACTOR 10 – HOLISTIC TREATMENT				
B15. Alternative healers tend to treat the whole person, not just the physical illness	0.873	0.865	0.747	0.717
FACTOR 11- ALLOPATHIC FAILURE				
B17 . People choose alternative healers because they do not receive satisfaction from allopathic practitioners	0.710	0.676	0.364	0.315

Factor 1 - MOTIVATION

Factor 1 accounts for 18.673% of the variance. This factor is made up of 9 variables as indicated in **Table 4.10**. These questions relate to motivation of the respondents towards the use of alternative medicine. All nine variables are of the same sign, indicating that the perceptions of the respondents, with regards to motivation in the use of alternative medicine are quite similar.

Factor 2 – FAMILY INFLUENCE

Factor 2 accounts for 11.511% of the variance. This factor is made up of 8 variables as indicated in **Table 4.10**. These variables relate to family influence.

Factor 3 – VALUE FOR MONEY

Factor 3 accounts for 7.377% of the variance. This factor is made up of six variables as indicated in **Table 4.10**. These variables pertain to the value for money of alternative medicine.

Factor 4 – EXCELLENT SERVICE AND SAFETY

Factor 4 accounts for 6.612% of the variance. These variables pertain to excellent service and safety. Factor 4 has a large factor loading of 0.779 for the variables (see **Table 4.10**).

Factor 5 – RELIABILITY AND EFFECTIVENESS OF ALTERNATIVE MEDICINE

Factor 5 accounts for 5.658% of the variance. It is comprised of 5 variables. These variables pertain to reliability and effectiveness of alternative medicine. Factor 5 has a large factor loading of 0.772 (see **Table 4.10**).

Factor 6 – BELIEFS

Factor 6 has 4 variables and accounts for 5.372% of the variance. These variables pertain to explanation of the beliefs and effectiveness. Factor 6 has a large factor loading of 0.733% (see Table 4.10).

Factor 7 – CAUSES OF ILLNESS EXPLAINED

Factor 7 consists of 2 variables that account for 4.676% (see Table 4.10) of the variance.

Factor 8 - CULTURE

Factor 8 consists of 2 variables that account for 3.608% of the variance. These variables pertain to the role of culture and its influence on alternative medicine.

Factor 9 - PRICING

Factor 9 consists of 2 variables that account for 3.414% of the variance. These variables pertain to the pricing of alternative medicine.

Factor 10 - HOLISTIC TREATMENT

Factor 10 consists of one variable that accounts for 2.987% of the variance. This variable pertains to the holistic treatment of alternative medicine.

Factor 11 – ALLOPATHIC FAILURE

Factor 11 consists of one variable that accounts for 2.777% of the variance. This variable pertains to allopathic failure, people choose alternative healers because they do not receive satisfaction from allopathic practitioners.

OVERALL COMMENTS

Factor analysis enabled the researcher to conceptualise that the perceptions, preferences, attitudes and motivation of the users of alternative medicine can be grouped and this provided the researcher information to continue with further data analysis. The 11 factors that were identified in factor analysis illustrated the ‘big picture’ of the study of alternative medicine users at a glance.

4.5 CLUSTER ANALYSIS

Cluster analysis is a set of techniques for grouping similar objects or people. Cluster analysis starts with an undifferentiated group of people, events or objects and attempts to reorganise them into homogeneous subgroups.

The researchers utilised this to classify the 96 cases into homogeneous subgroups. It was also utilised by the researcher as an attempt to segment the market for alternative medicine users into distinct segments.

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Table 4.11 –Cluster Formation using the Ward’s Linkage method.

	CLUSTER 1	CLUSTER 2	CLUSTER 3
CASE	1	4	27
	3	8	39
	5	12	40
	9	13	42
	10	17	44
	14	19	47
	15	20	
	16	21	
	24	22	
	30	23	
	31	25	
	33	26	
	35	29	
	38	36	
	41	37	
	43	58	
	45	60	
	46	62	
	48	63	
	49	76	
	50	80	
	51	81	
	52	83	
	53	85	
	54	86	
	55	93	
	56		
	57		
	64		
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	68		
	69		
	70		
	71		
	72		
	73		
	74		
	77		
	78		
	79		
	84		
	88		
	89		
	90		
	91		
	94		
	96		

It can be illustrated from **Table 4.11** above that there are 3 distinct market segments.

Using the Ward’s Linkage Method, 3 clusters emerged from the 96 cases in the study.

The analysis of this cluster formation will be discussed under section 4.6.1 further on in the study.

Table 4.12 – Mean values of cluster variables

Variables	Cluster	Cluster	Cluster
	1	2	3
B8 - Alternative healers prescribe medicine that makes me feel better immediately	2.41	1.13	3.00
B 9 - Alternative healers listens to all that I have to say about my illness or indisposition	1.82	1.20	1.00
B10 - based on my experience, I feel that the alternative healer can be relied upon	2.00	1.23	1.40
B11 - Alternative medicine has no side effects as allopathic* medicine does	1.96	1.34	1.80
B12 - Alternative medicine has a better effect than allopathic medication	1.93	1.45	1.90
B13 - Alternative healers are not properly trained to treat patients	2.04	1.39	1.20
B14 - Alternative healers are properly trained and have an excellent knowledge of their field of expertise	1.79	1.32	1.20
B15 - Alternative healers tend to treat the whole person, not just the physical illness	1.48	1.44	1.50
B16 - All patients undergoing alternative treatment should be seen by an allopathic doctor first	2.57	1.71	1.20
B17 - People choose alternative healers because they do not receive satisfaction from allopathic practitioners	2.32	1.46	1.80
B18 - Alternative treatment combined with allopathic medicine is more effective than allopathic medicine alone	3.46	2.25	3.20
B19 - Alternative medicine works only on patients who believe in it	2.79	1.86	1.80
B20 - Treating a condition using alternative medicine is safer than allopathic medicine	2.29	1.20	2.20
B21 - Alternative medicine is only effective if treating minor complaints and ailments	2.46	1.41	1.20
B22 - Alternative medicine provides more cost-effective treatment compared to allopathic medicine	2.64	1.50	1.90
B23 - Alternative medication is for the middle to upper income users	2.71	1.93	1.10
B24 - by consuming alternative medication I am not abandoning my cultural heritage	2.46	1.39	1.20
B25 - I utilise alternative medicine because my family has always used it	3.50	1.82	4.67
B26 - According to my beliefs and culture, using alternative medication is not forbidden	2.36	1.59	1.30
B27 - Alternative medication is less expensive, compared to allopathic medicine	2.93	1.76	2.30
B28 - The price of alternative medication ranges from cheap to expensive	2.36	1.94	2.22
B29 - I think alternative medicine provides value for money	2.50	1.66	2.20
B30 – Some alternative healers over charge	2.14	2.30	2.90

Scale: 1= Strongly agree; 2= Agree; 3= Unsure; 4= Disagree;5= Strongly disagree.

* Refers to general medical practitioner

Table 4.12 - continued

	Cluster	Cluster	Cluster
	1	2	3
B31 - The front office assistant of the alternative healer is available to provide help	2.85	1.91	3.60
B32 - The front office assistant of the alternative healer is available to provide help	2.14	1.50	1.90
B33 - An alternative healer has convenient business hours	2.50	1.57	3.10
B34 - I am pleased in the manner in which the alternative healer performs his/her service	2.14	1.34	1.30
B35 - The behaviour of the alternative healer instills confidence in me that I will be healed	2.07	1.41	1.40
B36 - An alternative healer heals me the first time	3.21	1.62	3.10
B37 - I feel safe using alternative medicine	2.07	1.40	1.50
B38 - I am willing to reveal intimate details to the alternative healer	2.36	1.53	2.00
B39 - My family recommended alternative medicine	2.93	1.83	4.00
B40 - My family has been using alternative medicine	2.71	1.77	3.70
B41 - My alternative healer gives me reasonable explanation as to why the sickness occurred	2.21	1.41	1.40
B42 - My alternative healer treats me as an individual	2.15	1.29	1.30
B45 - I believe that alternative medicine has the tendency to heal diseases that are thought to be incurable	3.00	1.23	2.10
B46 - I believe that illnesses have both spiritual as well as physical causes	2.00	1.31	1.50
B47 - I like using alternative medication, as it is gentle to the body	2.00	1.19	1.50
B48 - It is likely that I would continue with the use of alternative medicine	2.00	1.23	1.20
Bb49 - I will consider using alternative medication when I contract an illness again	2.08	1.31	1.30
B50 - It is likely that I will positively recommend alternative methods of treatment to my friends	2.00	1.24	1.30
B51 - Alternative medicine is reliable	2.29	1.33	1.60
B52a.-There is a growing importance of alternative medicine	1.77	1.29	1.10
B52b - Alternative medicine is globally accepted	2.46	1.49	1.90
B53 - Alternative medicine promotes a healthy lifestyle	1.93	1.31	1.20

Scale: 1= Strongly agree; 2= Agree; 3= Unsure; 4= Disagree;5= Strongly disagree.

Table 4.12 illustrates the variables that were processed into 3 clusters. These variables were analysed and 6 variables were extracted for further analysis see 4.6 Discriminant Analysis.

Table 4.13 – Extracted variables and their mean values

	Cluster	Cluster	Cluster
Extracted Variables from table 4.12	1	2	3
B8- Alternative healer prescribes medicine that makes me feel better immediately	2.41	1.13	3.00
B16- All patients undergoing alternative treatment should be seen by an allopathic doctor first	2.57	1.71	1.20
B25- I utilise alternative medicine because my family has always used it	3.50	1.82	4.67
B31- The front office assistant of the alternative healer is available to provide help	2.85	1.71	3.40
B39- My family recommended alternative medicine	2.68	1.57	4.60
B40- My family has been always using alternative medicine	2.43	1.55	4.40

Scale: 1= Strongly agree; 2= Agree; 3= Unsure; 4= Disagree;5= Strongly disagree.

In **Table 4.13** above 6 variables were selected by the researcher due to their distinct differences in the mean values for each variable.

Table 4.14 – Cluster Means

CLUSTER	VARIABLES	Mean	Std. Deviation	Valid N (listwise)	
				Unweighted	Weighted
1.00	B8- Alternative healers prescribe medicine that makes me feel better immediately	1.1200	.3854	50	50.000
	B16- All patients undergoing alternative treatment should be seen by allopathic doctor first	1.7400	.9858	50	50.000
	B25 - I utilise alternative medicine because my family has always used it	1.7200	.9267	50	50.000
	B31- The front office assistant of the alternative healer is available to provide help	1.7000	.7354	50	50.000
	B39- My family recommended alternative medicine	1.5400	.5789	50	50.000
	B40- My family has been using alternative medicine	1.5400	.5789	50	50.000
2.00	B8- Alternative healers prescribe medicine that makes me feel better immediately	2.4400	1.1576	25	25.000
	B16- All patients undergoing alternative treatment should be seen by allopathic doctor first	2.4400	.8206	25	25.000
	B25 - I utilise alternative medicine because my family has always used it	3.6800	1.0296	25	25.000
	B31- The front office assistant of the alternative healer is available to provide help	2.9200	.8622	25	25.000
	B39- My family recommended alternative medicine	2.8000	1.1902	25	25.000
	B40- My family has been using alternative medicine	2.6000	1.0801	25	25.000
3.00	B8- Alternative healers prescribe medicine that makes me feel better immediately	2.8333	1.3292	6	6.000
	B16- All patients undergoing alternative treatment should be seen by allopathic doctor first	1.0000	.0000	6	6.000
	B25 - I utilise alternative medicine because my family has always used it	4.8333	.4082	6	6.000
	B31- The front office assistant of the alternative healer is available to provide help	3.1667	1.1690	6	6.000
	B39- My family recommended alternative medicine	4.8333	.4082	6	6.000
	B40- My family has been using alternative medicine	4.8333	.4082	6	6.000
Total	B8- Alternative healers prescribe medicine that makes me feel better immediately	1.6543	1.0388	81	81.000
	B16- All patients undergoing alternative treatment should be seen by allopathic doctor first	1.9012	.9824	81	81.000
	B25 - I utilise alternative medicine because my family has always used it	2.5556	1.4405	81	81.000
	B31- The front office assistant of the alternative healer is available to provide help	2.1852	1.0138	81	81.000
	B39- My family recommended alternative medicine	2.1728	1.2429	81	81.000
	B40- My family has been using alternative medicine	2.1111	1.1832	81	81.000

Scale: 1= Strongly agree; 2= Agree; 3= Unsure; 4= Disagree;5= Strongly disagree.

Table 4.14 indicates the means and standard deviation of the extracted variables in Cluster 1, 2 and 3.

Table 4.15 - Classification Results

		Predicted Group Membership			Total
Actual Group Membership	CLUSTER	1.00	2.00	3.00	
	1.00	47	3	0	50
	2.00	5	18	2	25
	3.00	0	0	6	6
	Ungrouped cases	5	4	0	9
%	1.00	94.0	6.0	.0	100.0
	2.00	20.0	72.0	8.0	100.0
	3.00	.0	.0	100.0	100.0
	Ungrouped cases	55.6	44.4	.0	100.0

87.7% of original grouped cases correctly classified.

4.5.1 Interpreting and profiling the clusters

Interpreting and profiling clusters involves examining the cluster centroid. The centroids represent the mean values of the objects contained in the cluster on each of the variables. The researcher subjectively extracted the following variables which, contained sharp differences in clusters 1, 2 and 3. 87.7% of original grouped cases were correctly classified see **Table 4.15**.

Cluster 1 (48 cases) has strong agreement (1.74) on variable B16 “All patients undergoing alternative treatment should be seen by an allopathic doctor first” and B25, “I utilise alternative medicine because my family has used it” and B8, “Alternative healers prescribes medicine that makes me feel better immediately”.

Hence Cluster 1 could be labeled as “**Family Tradition**”

Cluster 2 (24 cases) has strong disagreement on variable B25 with a high value of (3.68), “I utilise alternative medicine because my family utilises it” and B31 (2.98), “

the front shop assistant of the alternative healer is available to help me” and B8 (2.44), has a low value in this cluster that “alternative healers prescribe medicine that makes me feel better immediately”. Hence cluster 2 can be labeled as “**Alternative medicine seeker**”.

Cluster 3 (6 cases) presents a high value (4.83) on B39, “My family has always been using alternative medicine” and a low value (1.00) on B16, “All patients undergoing alternative treatment should be seen by an allopathic doctor first”. Hence cluster 3 can be labeled as “**Allopathic preference**”.

4.6 DISCRIMINANT ANALYSIS

The most common use for discriminant analysis is to classify persons or objects into various groups. In this study the researcher subjectively selected 6 variables from the final cluster namely B8, B16, B25, B31, B39 and B40 see **Table 4.14**.

Table 4.16 - Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.195	123.617	12	.000
2	.663	31.029	5	.000

The value of the Wilks Landa is 0.195. This transforms to a chi-square of 123.617, with 12 degrees of freedom, which is significant beyond the 0.05 level. Thus, the two functions together significantly discriminates among the 3 groups.

Table 4.17 – Percentage of Variance

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	2.409	82.6	82.6	.841
2	.508	17.4	100.0	.581

The first 2 canonical discriminant functions were used in the analysis. The eignvalues for Function 1 is 2.409 and for Function 2 is 0.508. Function 1 explains 82.6% of the variance, which explains majority of the variables and Function 2 accounts for 17.4% of the variance.

Figure 4.6 - Canonical Discriminant Functions

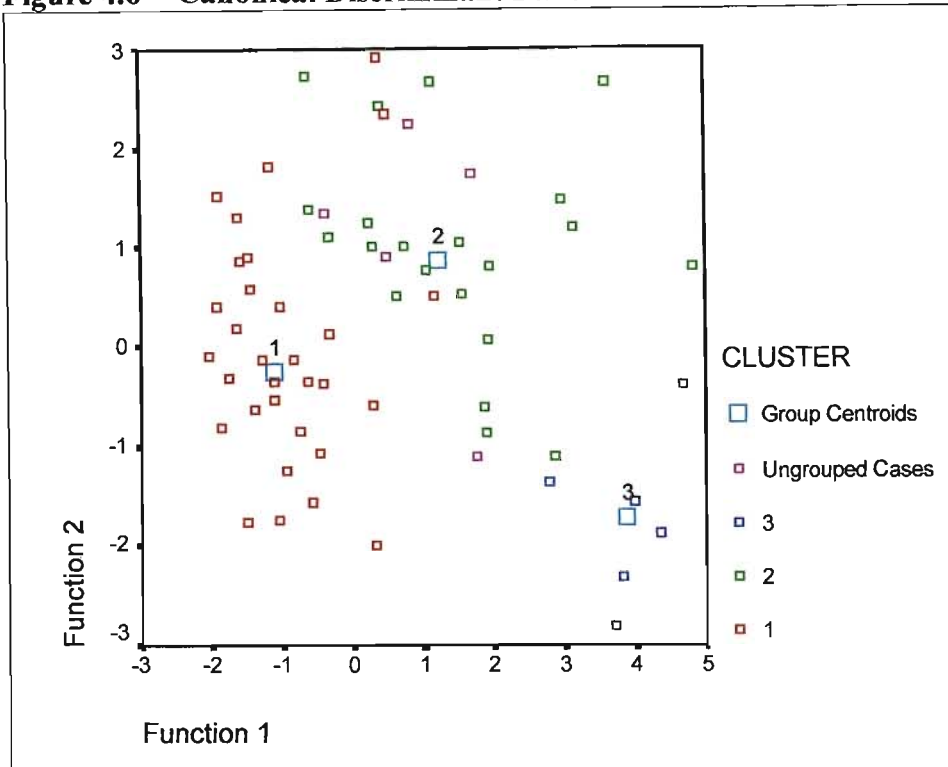


Table 4.18 - Standardised Canonical Discriminant Function Coefficients

FACTORS	FUNCTION 1	FUNCTION 2
B8	.259	.371
B16	-.156	.649
B25	.446	.177
B31	.086	.403
B39	.368	.004
B40	.266	-.714

$$Y_1 = 0.259x_1 - 0.156x_2 + 0.446x_3 + 0.086x_4 + 0.368x_5 + 0.266x_6$$

$$Y_2 = 0.371x_1 + 0.649x_2 + 0.177x_3 + 0.403x_4 + 0.004x_5 - 0.714x_6$$

The interpretation of the results here is aided by an examination of the standardised canonical matrix. The standardised co-efficients indicate a relatively large coefficient for B25 (I utilise alternative medicine because my family has always used it) on

Function 1 whereas Function 2 has a relatively large co-efficient for variable B16 (All patients undergoing alternative treatment should be seen by an allopathic doctor first) and on Function 1 has a negative value because those respondents who believe that not all patients undergoing alternative treatment should be seen by an allopathic doctor first and in (B31) “The front office assistant of the alternative healer available to provide help”.

A similar conclusion can be reached by an examination of the structure matrix see **Table 4.19** below.

Table 4.19 - Structure Matrix

VARIABLES	FUNCTION 1	FUNCTION 2
B40	.766	-.346
B39	.760	-.189
B25	.758	.301
B8	.547	.368
B31	.473	.367
B16	.026	.641

To help interpret the functions, variables with large co-efficient for a particular function, are grouped together. These grouping are shown with a box see Figure 4.6. Thus B8 Alternative healers prescribe medicine that makes me feel better immediately have boxes for Function 1 because these variables have coefficients which, are larger for Function 1 than for 2. On the other hand variable B16 (All patients undergoing alternative treatment should be seen by an allopathic doctor first) and B31 (The front office assistant of the alternative healer available to provide help) are predominantly associated with Function 2 as indicated.

In **Table 4.19** given the positive correlations of these variables with the structure matrix, we expect to find group one to be higher than group 2. Group 2 is more likely to seek the help of an allopathic doctor first then an alternative healer whilst Group 1 attaches more importance to family advice and influence.

Overall comments

Discriminant analysis aided the researcher to classify persons or objects into various groups. Cluster analysis aided the researcher to identify three homogeneous subgroups or clusters which were:

- Family Tradition
- Alternative medicine seeker
- Allopathic preference

CHAPTER 5

RESEARCH CONCLUSION AND RECOMMENDATIONS

5.1 RESEARCH CONCLUSIONS

This research explored five objectives:

5.1.1 The first aim was to investigate how patients perceive alternative medicine.

Factor analysis was utilised to reduce the variables. This factor accounted for 4.2939% of the variance. The variables for this factor pertained to the reliability and effectiveness of alternative medicine. According to the respondents, they believe that alternative medicine has a better effect than allopathic medicine. They believe that it is reliable and effective.

5.1.2 The second aim was to understand what makes the patients prefer alternative

medicine to allopathic medicine. This factor consisted of 2 variables that accounted for 6.07% of the variance. These variables pertain to the pricing of alternative medicine. According to the findings, the respondents believe that the price of alternative medicine ranges from cheap to expensive and the respondents also consider alternative medicine to deliver value for money.

5.1.3 The third aim was to understand what motivates the users of alternative medicine. In other words, what is the driving force behind the use of alternative medicine? Most respondents are highly motivated by the safety, gentleness and holistic form of treatment of alternative medicine.

5.1.4 The fourth objective was to determine the attitudes of the patients towards alternative medicine. According to the findings, the respondents have a favourable outlook towards alternative medicine. According to the respondents, they will positively recommend alternative medicine to other people as well as continue with the use of alternative medicine.

5.1.5 The last objective was to determine the market segments of alternative medicine users. 3 market segments were established through cluster analysis. The market segments that were identified from the study were the following:

- Family Tradition
- Alternative medicine seeker
- Allopathic preference

5.2 RECOMMENDATIONS

An evolution is occurring in health care as more alternative medicines gain acceptance. The world of the new millennium is a world of the individual. People expect to get more out of life and improve their quality of life.

It is therefore important for allopathic doctors to embrace the alternative approach and incorporate alternative health care as part of their system of health care. This is crucial to satisfy the growing needs of the consumers in their health matters. Thus, according to Rossouw (2001) the emerging philosophy, of alternative medicine (both alternative and allopathic) should be based on:

- The healing power of nature. The body has considerable power to heal itself.
- Viewing the person as a whole. An individual must be viewed as a whole composed of a complex interaction of mind, body and spirit.
- Identifying and treating the cause rather than simply suppressing the symptoms.
- The physician being a teacher – in educating empowering and motivating the patient to assume more personal responsibility for his/her health by adopting a healthy attitude, lifestyle and diet.
- Prevention is the best cure. Prevention is best accomplished through dietary and lifestyle habits that support health and prevention of disease.

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APPENDIX A
UNIVERSITY OF NATAL

ALTERNATIVE MEDICINE PATIENTS SURVEY

Dear Sir/Madam

I require your assistance in the data collection for my Masters research. I am undertaking research on how patients of alternative healers using alternative medicine perceive alternative medicine as apposed to allopathic* medicine. If you have any experiences of consuming alternative medicine and receiving treatment of alternative medicine, I would like to know how you perceived it. Thank you for your assistance. Remember all your answers are confidential.

SECTION A

In this first part of the questionnaire, for purposes of classification, It would be grateful if you could answer the following questions about yourself. Please put in a cross in the appropriate box.

1. What gender are you? Female ¹ Male ²
2. How old are you?
- 18-25 ¹
- 26-35 ²
- 36-45 ³
- 46-55 ⁴
- Over 55 ⁵

* Refers to general medical practitioner

3. What is your approximate gross income each month?

Less than R2000 1

R2000- R4000 2

R4000-R6000 3

R6000-R8000 4

R8000-R10000 5

R10 000+ 6

4. What is your highest level of education?

School leaving certificate 1

Degree 2

Technical Diploma 3

Postgraduate qualification 4

Other⁵ (specify) _____

5. What is your employment status?

Full time employed 1

Part-time employed 2

Self employed 3

Scholar 4

Retired 5

Unemployed 6

Other ⁷(specify) _____

6. Which race group do you belong to?

Black 1

White 2

Indian 3

Coloured 4

Other⁵ (specify) _____

7. Which of the following alternative healers have you consulted/utilised. Please tick the appropriate table. You may choose more than one

Chiropractor ¹	Homeopath ²	Herbalist ³	Aroma therapist ⁴	Auyverdic practitioner ⁵	Other ⁶ Please specify

8. For the purposes of this questionnaire please specify which one of the above-mentioned you used the most. You will be required to complete the rest of the questionnaire pertaining the use of this particular one. Please tick **ONE** only.

Chiropractor ¹	Homeopath ²	Herbalist ³	Aroma therapist ⁴	Auyverdic practitioner ⁵	Other ⁶ Please specify (As per Question 7)

9. When last did you consult with the above-mentioned practitioner?

0-3 months ago ¹

4-6 months ago ²

7-12 months ago ³

More than a year ago ⁴

Cannot remember ⁵

SECTION B

The following statements refer to your perceptions about your alternative medicine (**i.e the answer you specified in Question 8**). Please rate how you feel i.e. the degree to agree or disagree with each statement by circling the appropriate number.

1=strongly agree, 2=agree, 3=unsure, 4=disagree, 5=strongly disagree

- | | | | | | |
|---|---|---|---|---|---|
| 8. Alternative healers prescribe medicine that makes me feel better immediately..... | 1 | 2 | 3 | 4 | 5 |
| 9. Alternative healers listens to all that I have to say about my illness or indisposition... | 1 | 2 | 3 | 4 | 5 |
| 10. Based on my experience, I feel that the alternative healer can be relied upon..... | 1 | 2 | 3 | 4 | 5 |
| 11. Alternative medicine has no side effects as allopathic* medicine does..... | 1 | 2 | 3 | 4 | 5 |
| 12. Alternative medicine has a better effect than allopathic medication..... | 1 | 2 | 3 | 4 | 5 |
| 13. Alternative healers are not properly trained to treat patients..... | 1 | 2 | 3 | 4 | 5 |
| 14. Alternative healers are properly trained and have an excellent knowledge of their field of expertise..... | 1 | 2 | 3 | 4 | 5 |
| 15. Alternative healers tend to treat the whole person, not just the physical illness..... | 1 | 2 | 3 | 4 | 5 |
| 16. All patients undergoing alternative treatment should be seen by an allopathic doctor first..... | 1 | 2 | 3 | 4 | 5 |

* Refers to general medical practitioner

17. People choose alternative healers because they do not receive satisfaction from allopathic practitioners	1	2	3	4	5
18. Alternative treatment combined with allopathic medicine is more effective than allopathic medicine alone.....	1	2	3	4	5
19. Alternative medicine works only on patients who believe in it	1	2	3	4	5
20. Treating a condition using alternative medicine is safer than allopathic medicine.....	1	2	3	4	5
21. Alternative medicine is only effective if treating minor complaints and ailments.....	1	2	3	4	5
22. Alternative medicine provides more cost-effective treatment compared to allopathic medicine.....	1	2	3	4	5
23. Alternative medication is for the middle to upper income users	1	2	3	4	5
24. By consuming alternative medication I am not abandoning my cultural heritage.....	1	2	3	4	5
25. I utilise alternative medicine because my family has always used it.....	1	2	3	4	5
26. According to my beliefs and culture, using alternative medication is not forbidden.....	1	2	3	4	5
27. Alternative medication is less expensive, compared to allopathic medicine.....	1	2	3	4	5
28. The price of alternative medication ranges from cheap to expensive.....	1	2	3	4	5
29. I think alternative medicine provides value for money.....	1	2	3	4	5
30. Some alternative healers over charge	1	2	3	4	5

31. The front office assistant of the alternative healer is available to provide help..... 1 2 3 4 5
32. An alternative healer understands my ailments..... 1 2 3 4 5
33. An alternative healer has convenient business hours..... 1 2 3 4 5
34. I am pleased in the manner in which the alternative healer performs his/her service..... 1 2 3 4 5
35. The behaviour of the alternative healer instills confidence in me that I will be healed..... 1 2 3 4 5
36. An alternative healer heals me the first time 1 2 3 4 5
37. I feel safe using alternative medicine..... 1 2 3 4 5
38. I am willing to reveal intimate details to the alternative healer..... 1 2 3 4 5
39. My family recommended alternative medicine.... 1 2 3 4 5
40. My family has been using alternative medicine.... 1 2 3 4 5
41. My alternative healer gives me reasonable explanation as to why the sickness occurred..... 1 2 3 4 5
42. My alternative healer treats me as an individual... 1 2 3 4 5

43. Please arrange the following cards in order of preference.

Aroma Therapy ¹	Chiro Practor ²	Herbal ist ³	Acupun ture ⁴	Allopat hic ⁵	Auyver da ⁶
-------------------------------	-------------------------------	----------------------------	-----------------------------	-----------------------------	---------------------------

Your preference is.... Write down the number in the appropriate box

--	--	--	--	--	--

1st Choice 2nd choice 3rd choice 4th choice 5th choice 6th choice

44. Arrange the following cards to which treatment is most gentle to the body

Aroma Therapy ¹	Chiro Practor ²	Herbal ist ³	Acupunt ure ⁴	Auyver da ⁵	Allopat hic ⁶
-------------------------------	-------------------------------	----------------------------	-----------------------------	---------------------------	-----------------------------

The most gentle is.....

Extremely Gentle	Very Gentle	Moderately Gentle	Slightly Gentle	Gentle	Not Gentle

Please rank how strongly you agree or disagree with each statement by circling the appropriate number. **Please remember that these questions refer to you answer to Question 8.**

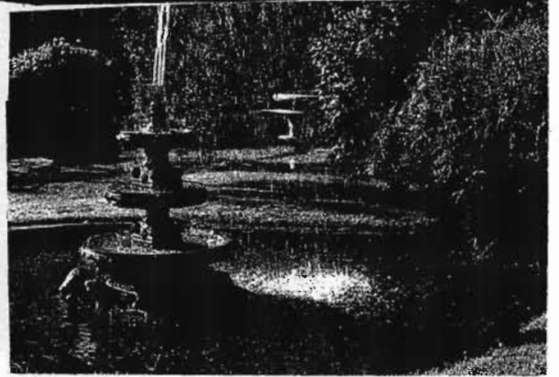
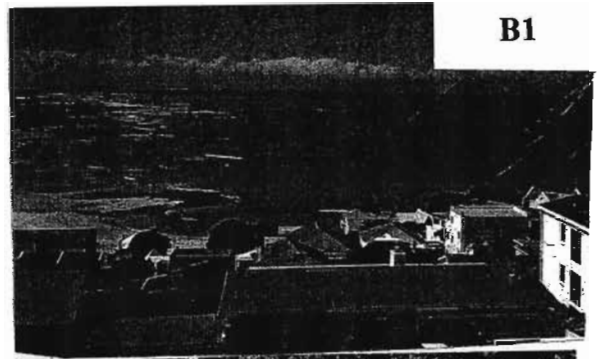
1=strongly agree, 2=agree, 3=unsure, 4=disagree, 5=strongly disagree

45. I believe that alternative medicine has the tendency to heal diseases that are thought to be incurable..... 1 2 3 4 5
46. I believe that illnesses have both spiritual as well as physical causes..... 1 2 3 4 5
47. I like using alternative medication, as it is gentle to the body..... 1 2 3 4 5

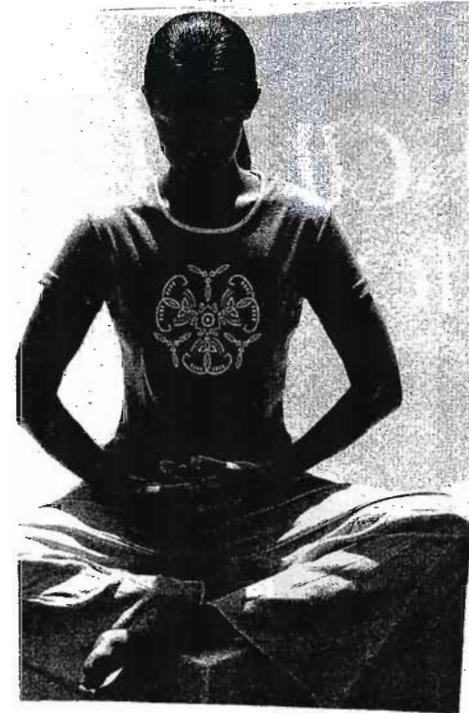
48. It is likely that I would continue with the use of alternative medicine.....	1	2	3	4	5
49. I will consider using alternative medication when I contract an illness again.....	1	2	3	4	5
50. It is likely that I will positively recommend alternative methods of treatment to my friends.....	1	2	3	4	5
51. Alternative medicine is reliable.....	1	2	3	4	5
52a. There is a growing importance of alternative medicine.....	1	2	3	4	5
52b. Alternative medicine is globally accepted.....	1	2	3	4	5
53. Alternative medicine promotes a healthy lifestyle...	1	2	3	4	5

Thank you for your input.

APPENDIX B



Calming waters, peaceful beach and the sound of falling waters, relaxes the mind and sets the tone for daily meditation, forcing one to slow down and take stock and realise that life is not a constant whirl of activity. One needs to focus on the present moment.



itation, pampering and
ng – inner bliss for mind,
and soul.

ise person should realise
good health is his/her
valuable possession and
not everything is about
y and work.



Healthy food for good health
and energy – makes one want
to indulge without feeling
guilty.

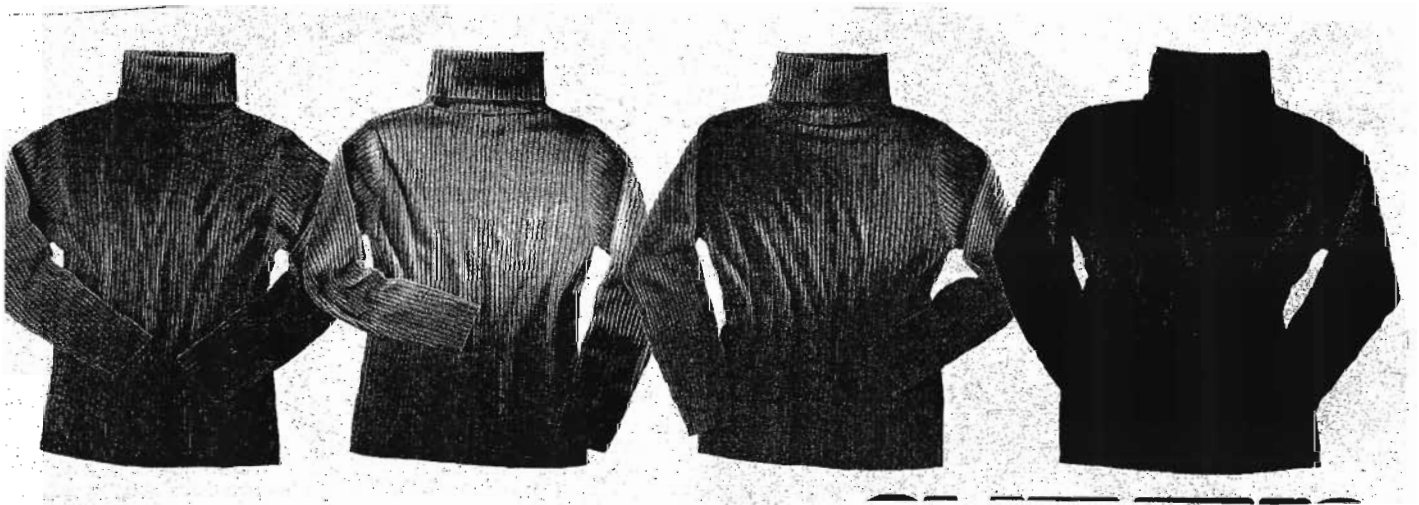
ALTERNATIVE MEDICINE



SAVING MONEY!



HEALTHY LIFESTYLE



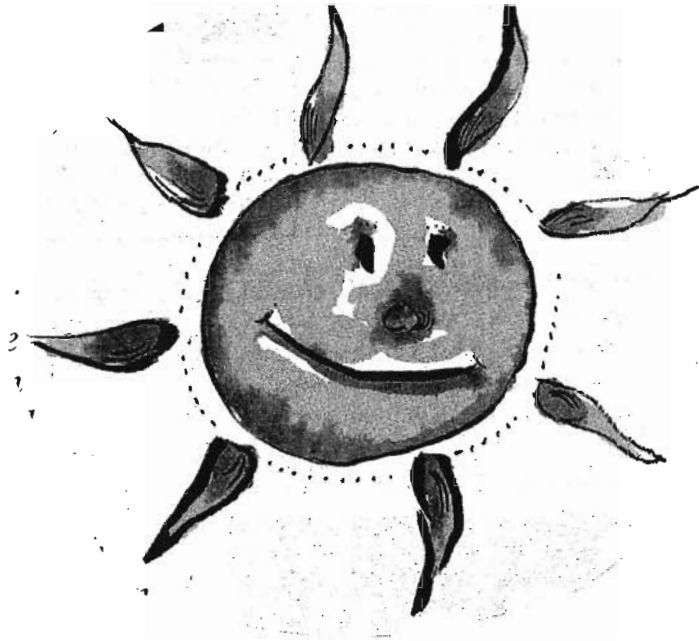
CHOICE



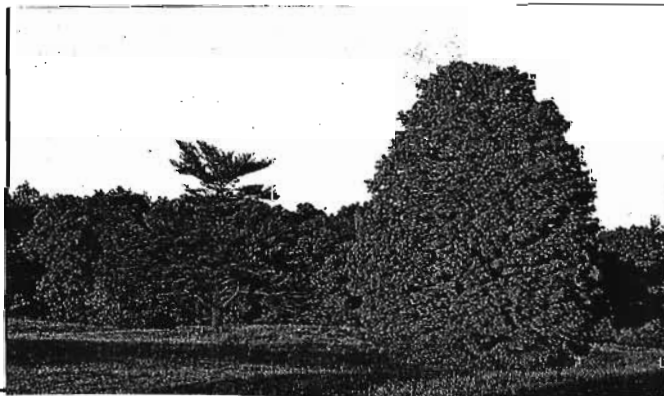
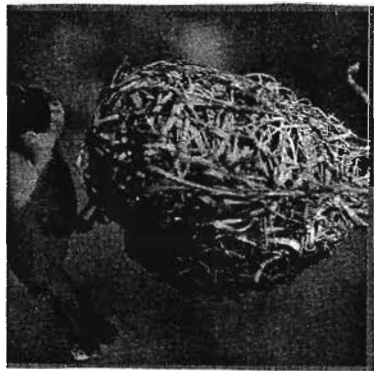
Flying to new heights in alternative healthcare



Growing Global acceptance of alternative medicine

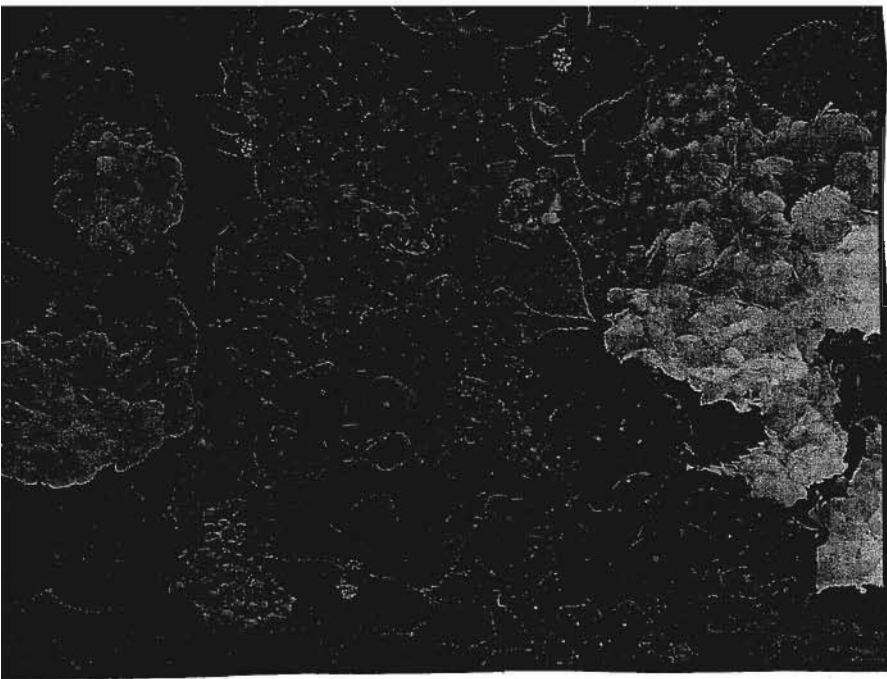


- Energy

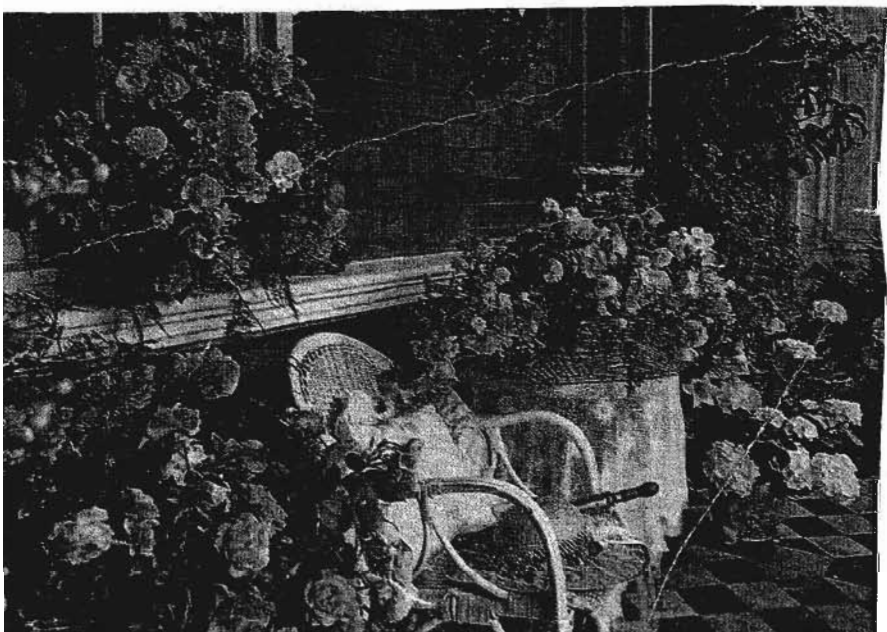


- natural

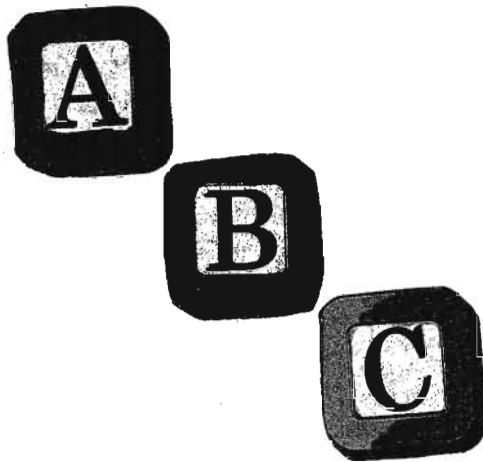




Nature at its best – Natural products



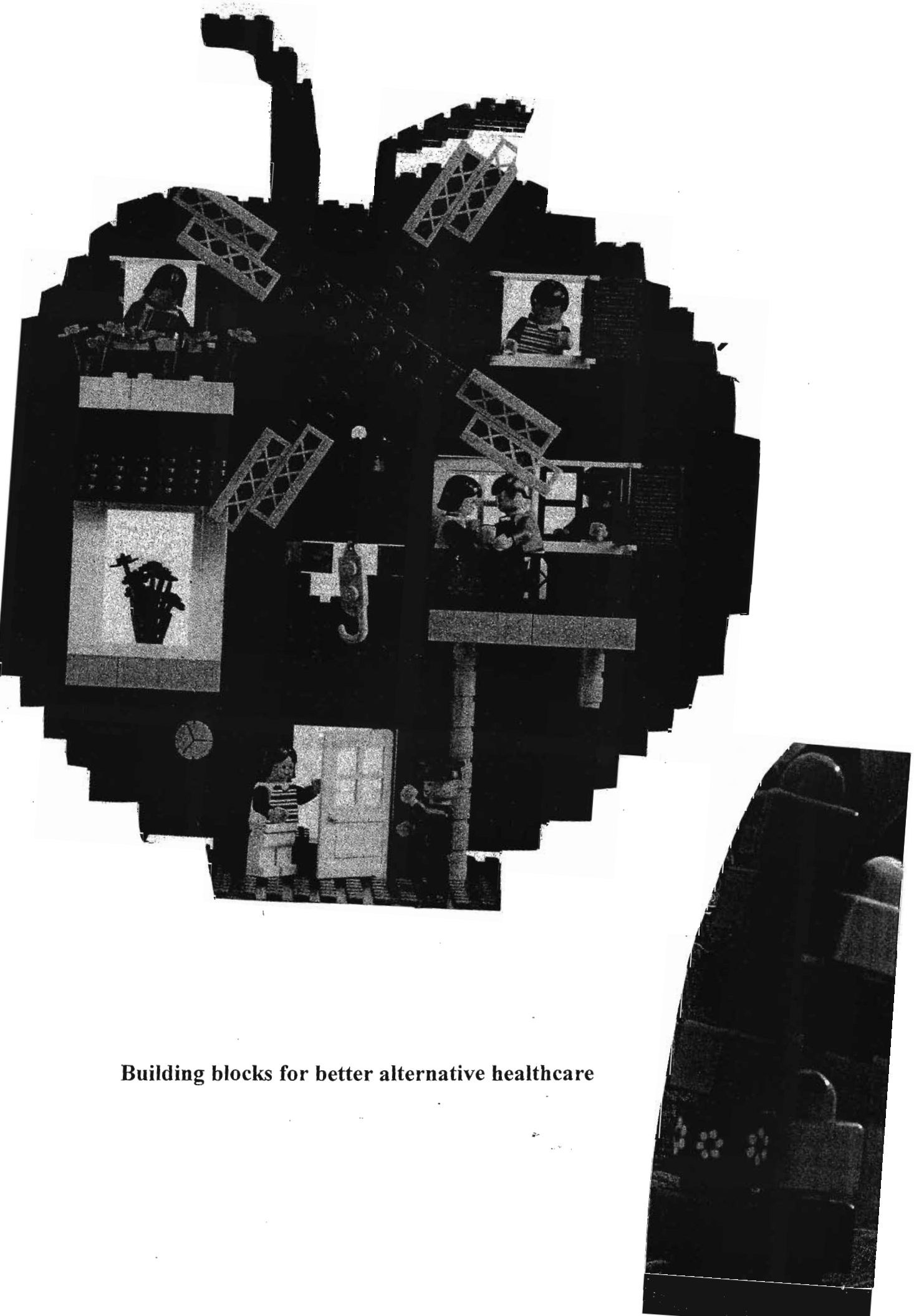
Alternative Medicine...



— Easy as
ABC

Friendly Advice and care for patients





Building blocks for better alternative healthcare

APPENDIX C

RELIABILITY ANALYSIS - SCALE (ALPHA) (PERCEPTIONS)

Reliability Coefficients

N of Cases = 89.0

N of Items = 16

VARIABLES B8 TO B23 (PERCEPTIONS)

Alpha = .8114

RELIABILITY ANALYSIS - SCALE (ALPHA) (PREFERENCES)

Reliability Coefficients

N of Cases = 87.0

N of Items = 31

VARIABLES B24 TO B44 (PREFERENCES)

Alpha = .8621

RELIABILITY ANALYSIS - SCALE (ALPHA) (MOTIVATION)

Reliability Coefficients

N of Cases = 91.0

N of Items = 11

VARIABLES B35 to B44 (MOTIVATION)

Alpha = .7509

RELIABILITY ANALYSIS - SCALE (ALPHA) (ATTITUDES)

Reliability Coefficients

N of Cases = 92.0

N of Items = 10

VARIABLES B45 to B53 (ATTITUDES)

Alpha = .8783