# Consumer Perceptions of a Generic drug in comparison to the Original Branded drug: An Exploratory Empirical Study

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Ву

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#### Declaration

I hereby declare that this dissertation is entirely my own work.

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#### **Table of Contents**

	Page
Chapter 1: Introduction	
1.1 Introduction	1
1.2 Problem Statement	2
1.2 Objectives of the study	3
1.4 Secondary Objectives	3
1.5 Significance of the proposed study	4
1.6 Delimitations	4
Chapter 2: Literature Survey	
2.1 Introduction	5
2.2 Generic Drugs: Background	5
2.3 Factors influencing consumer behavior	8
2.3.1 Cultural factors	8
2.3.2 Social Factors	9
2.3.2.1 Reference Groups	9
2.3.2.2 Family	10
2.3.2.3 Role and Status	10
2.3.3 Personal Characteristics	10
2.3.4 Psychological factors	11
2.3.4.1 Motivation	11
2.3.4.2 Perception	12
2.3.4.3 Learning and beliefs	13
2.3.3.4 Attitudes	13
2.4 The Effect of Branding	14
2.4.1 Brand and Quality	14
2.4.2 Brand Loyalty	15

2.5 Previous studies conducted	16
2.5.1 Elderly Consumers and generic drugs	16
2.5.2 Different health conditions versus purchase of generic drugs	17
Chapter 3: Methodology	
3.1 Research Design	19
3.2 Sampling	19
3.2.1 Population	19
3.2.2 Sample	19
3.2.3 Sampling method	20
3.2.4 Sample size	20
3.3 Data collection	20
3.4 Questionnaire design	21
3.5 Piloting the questionnaire	21
3.6 Analysis of the data	22
3.6.1 Descriptive statistics	22
3.6.2 Inferential Statistics	23
3.7 Validity and reliability	24
3.7.1 Sampling	24
3.7.2 Questionnaire	24
3.7.3 Internal consistency of instrument	25
Chapter 4: Analysis of results	
4.1 Sample Profile	26
4.2 Objective 1: To determine consumer awareness and perceived value	28
of using generic drugs	
4.2.1 Item 1: "I am well aware of generic drugs as an alternative"	30
4.2.2 Item 2: "Generic drugs often cost less than the drugs they are copied from"	31

4.2.3 Item 3: "Greater knowledge of generic drugs will lead to greater use"	32
4.2.4 Item 4: "Reducing the cost of healthcare in South Africa through the	33
use of generic drugs is a major priority"	
4.2.5 Tukey HSD Multiple comparisons of biographical data with consumer	34
awareness and perceived value of using generic drugs as the dependent variable	
4.2.5.1 Consumer awareness and perceived value of using generic drugs	34
- The Impact of Age	
4.2.5.2 Consumer awareness and perceived value of using generic drugs	34
- The Impact of Level of Education	
4.2.5.3 Consumer awareness and perceived value of using generic drugs	34
-The impact of Race	
4.3 Objective 2: To determine consumer attitudes towards quality,	36
effectiveness, cost and appearance of generic equivalents	
4.3.1 Item 5: "Generic drugs are of the same quality as that of the	38
original branded drug"	
4.3.2 Item 6: "Generic drugs are as effective in medical terms as the	39
original branded drug"	
4.3.3 Item 7: "Generally speaking, with regards to medicines, the cost	40
of a drug is a good indicator of its quality"	
4.3.4 Item 8: "The cost of a drug is generally a good indicator of its	41
effectiveness"	
4.3.5 Item 9: "The appearance of a generic drug as a substitute to the	42
original drug negatively affects my willingness to use it"	
4.3.6 Tukey HSD multiple comparisons of biographical data using	43
consumer attitudes towards quality, effectiveness, cost and	
appearance of generic equivalents as the dependent variable	
4.3.6.1 Consumer attitudes towards quality, effectiveness, cost and appearance	43
of generic equivalents – The Impact of Age	

4.3.6.2 Consumer attitudes towards quality, effectiveness, cost and appearance	43
of generic equivalents – The Impact of Level of education	
4.3.6.3 Consumer attitudes towards quality, effectiveness, cost and appearance	44
of generic equivalents – The Impact of Race	
4.4 Objective 3: To determine the effect of disease severity and medical	46
aid cover on consumer behaviour	
4.4.1 Item 10: " I would be more inclined to use a generic drug if I had flu"	47
4.4.2. Item 11: "I would be happy to use a generic drug if I had cancer"	48
4.4.3 Item 12: "I would still prefer the generic even if my medical aid paid	49
for the original"	
4.4.4 Item 13: "I would still prefer the original even if my medical aid	50
only paid for the generic"	
4.4.5 Tukey HSD multiple comparisons of biographical data using the	51
effect of disease severity and medical aid cover on consumer behaviour	
as the dependent variable	
4.4.5.1 The Effect of disease severity and medical aid cover on	51
consumer behaviour- The Impact of Age	
4.4.5.2 The Effect of disease severity and medical aid cover on	52
consumer behaviour - The impact of Level of Education	
4.4.5.3 The Effect of disease severity and medical aid cover on	53
consumer behaviour - The Impact of Race group	
4.5 Objective 4: To determine the influence of health-care providers,	54
family and friends and the media on consumer behaviour	
4.5.1 Item 14: "I would be happy to use a generic drug if my GP suggested it"	55
4.5.2 Item 15: "I would be happy to use a generic drug if my pharmacist	56
suggested it"	
4.5.3 Item 16: "I would be happy to use a generic drug if my friends or family	57
suggested it"	

4.5.4 Item 17: "Advertising plays a major role in my choice of drug therapy"	58
4.5.5 Tukey HSD multiple comparison of biographical data with the influence	59
of health-care providers, family and friends and the media on consumer	
behaviour as the dependent variable	
4.5.5.1 The Influence of health-care providers, family and friends and	59
the media on consumer behaviour- The Impact of Age	
4.5.5.2 The Influence of health-care providers, family and friends	60
and the media on consumer behaviour- The Impact of Level of Education	
4.5.5.3 The Influence of health-care providers, family and friends and	60
the media on consumer behaviour- The Impact of Race group	
Chapter 5	
5.1 Summary and Discussion of the Findings	62
Chapter 6	
6.1 Conclusion	68
6.2 Recommendations	69
7 Diblioments	
7. Bibliography	70
8. Appendices	72

# **Chapter 1**

#### 1.1 Introduction

Private health care expenditure, which amounts to roughly 24 billion Rands a year consumes well over half of all health care resources in South Africa (Tshabalala, 1996).

Over the last few years, the cost of healthcare has escalated beyond the growth of any economy.

This has been the cause of much concern and as a result healthcare providers in many countries are currently investigating ways of reducing healthcare costs. Although pharmaceuticals account for between 6-12 % of total healthcare costs in most economies, justifiably pharmaceuticals have become universal targets for cost containment, partly due to the perception of their excessive profitability, but also because they simply represent an easily quantifiable target (Warren, 1999).

The use of generic drugs offers a more cost effective therapeutic approach. A generic drug is identical, or bioequivalent to a brand name drug in dosage form, safety, strength, and route of administration, quality, performance, characteristics, and intended use. Generic drugs are up to 30-50% cheaper than the original branded drug (Folb,1999). The use of generic drugs has been steadily increasing internationally as a result on economic pressure on drug

budgets. In many countries throughout the world, the process of generic substitution is strongly supported and South Africa is no exception.

The pharmaceutical market has become increasingly competitive since the early 1980s, in part because of the dramatic growth of the generic drug industry. In 1996, 43 percent of the prescription drugs sold in the United States (as measured in total countable units, such as tablets and capsules) were generic. Twelve years earlier, the figure was just 19 percent. Thus in the United States they have played an important role in holding down national spending from what it would have otherwise been. It is estimated that by substituting generic for brand- name drugs, purchasers saved roughly \$8 to \$10 million dollars in 1994.

#### 1.2 Problem Statement

Several studies in the past have examined the relationship between product perceptions and market acceptance of generic drugs. However these studies are lacking in that they were not conducted from the perspective of the ultimate user of these drugs.

By undertaking this study it is hoped that we can gain a greater insight as to why the generic and no doubt the cheaper alternative is not always preferred.

The question that we need to ask is whether consumers really know what a generic drug is. We have all been disappointed with bargain-brand products. Store brands of processed foods, orange juice, coffee and other commodities are

sometimes not equal to their brand name counterparts. Do consumers view generic drugs in the same light?

#### 1.3 Objectives of the study

The main objective of this study is to get greater insight into consumer perceptions of generic drugs and to determine whether 3 important consumer variables i.e. Age, Level of Education and Race group affect consumer perceptions. In order to achieve the objective above the following secondary objectives are proposed.

#### 1.4 Secondary Objectives

These objectives can be defined as follows:

- To determine consumer awareness and perceived value of using generic drugs
- To determine consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents
- The effect of disease severity and medical aid cover on consumer behaviour
- To determine the influence of health-care providers, family and friends and the media on consumer perceptions

### 1.5 Significance of the proposed study

It is hoped that the results obtained from the study will provide a greater understanding of consumer perceptions. By understanding consumer perceptions we can try to identify the possible reasons for why the cheaper generic drug is not always preferred. The findings of this study could be the basis for further studies in this area.

#### 1.6 Delimitations

For the purposes of this study all research will be limited the pharmacy being surveyed.

Only repeat consumers of prescription medication will be surveyed.

The term 'consumers' in the analysis of results section will refer to the survey population.

# Chapter 2

# **Literature Survey**

#### 2.1 Introduction

The concept of generic drugs is extensively covered in the first part of the literature survey. In order for us to understand consumer perceptions it first necessary for us to understand the major factors that influence consumer behaviour. This comprises the second part of the literature survey. The third part touches on the concept of the brand with relation to prescription drugs. Lastly, in the fourth part, previous studies done on consumer perceptions of generic drugs are discussed.

# 2.2 Generic Drugs: Background

In order for us to understand the concept of generic drugs we need to know how they differ from their brand counterparts. Generic drugs are as safe and effective as brand-name products, and they are subject to the same quality guidelines set by the relevant health authorities to ensure therapeutic equivalence. Generic drugs must contain the identical amount of active ingredients as their brand-name counterparts and in the identical dosage. The generic drug must deliver the same amount of those active ingredients into the patient's bloodstream and within the same time frame as the original drug. It must also fall in "acceptable

parameters" established by the health authorities for bioavailability, which is the extent and rate at which the body absorbs the drug (DeMonaco, 2001).

So besides price, the only real difference between brand name and generic drugs tends to be the inactive ingredients used, which have no medicinal value. These include fillers, binders, colourings and flavouring, which may explain why generic drugs may differ in the size or shape of tablets or capsules.

So why do brand-name drugs cost so much more? The simple answer is that drug companies are trying to profit as much from their new product as they can in the time that they have exclusive rights to sell it. Developing a new drug can cost hundreds of millions of rands, and not all of the efforts lead to a successful product. Drug companies actually fail more often than they succeed in the development of new drugs, and they spend a lot of money on these failures.

The patent life for a product is 17 years under usual circumstances. Unfortunately the clock starts ticking at different times in a drug's life cycle. It can take anywhere from 2 years to more than a decade to bring a product to the market. During this time a drug company may use up more than half the patent life for that product. As a result, drug companies have to make up their costs in a short period of time. Once the patent ends and the product can be developed as a generic, other companies are free to manufacture and market the drug under another name (Mihalic, 2000).

As the patent on a brand name product is about to expire, generic manufacturers begin the process of applying to health authorities for approval. Unlike the original manufacturer of the drug, the generic manufacturers have to show only, that the body, at an acceptable rate, will absorb the drug. They don't have to show it is effective or safe because the original manufacturer already demonstrated that to get approval for the brand name product. Unlike the original process, which may take up to 10 years, an application for a generic drug usually takes only 1 to 2 years. The regulations are very strict and require the generic manufacturer to show that their product is the same as the brand name product.

Research costs are not the only reason a new drug costs so much. A look at any of the large drug company's annual reports will show that most, spend more money on marketing and advertising than on research. Billions are spent each year on advertising to ensure that the brand remains popular. A survey conducted by the Kaiser Family Foundation in America in 2001, cited pharmaceutical advertising expenditures at nearly \$2.5 billion in the past year. The foundation reported that one in three adults has asked their doctor about a drug they saw advertised, and they estimated that one in eight Americans receives a prescription as a result of seeing an advertisement (Tillotson,2002) However with generic drugs this is not the case. Generic drug companies spend very little on advertising. This is mainly because they are a low cost option and do not generate the same revenues as a brand equivalent.

#### 2.3 Factors influencing consumer behavior

In order to understand what influences consumers to make the choices they do it is necessary to discuss the major factors that influence buying behaviour. This comprises of cultural, social, personal and psychological factors (Block and Roering, 1990).

#### 2.3.1 Cultural factors

Cultural factors are further divided into culture, subculture and social class.

Culture is the most fundamental determinant of an individual's behaviour. The consumer in his or her early years acquires a set of values, perceptions, preferences, and behaviours through his or her family and other key institutions.

Each culture consists of smaller subcultures that provide more specific identification and socialization for their members. Subcultures include nationalities, religions, racial groups, and geographic regions.

Social classes are relatively homogeneous and enduring divisions in society, which are hierarchically ordered and whose members share similar values, interests, and behaviour. Social classes have several characteristics. First, those within each social class tend to behave more alike than persons from two different social classes. Second, individuals are perceived as occupying inferior or superior positions according to social class. Thirdly, social class is indicated by

a cluster of variables e.g. occupation, income, wealth, education and value orientation rather than any single variable. Social classes show distinct product and brand preferences in many areas.

#### 2.3.2 Social Factors

In addition to cultural factors, a consumer's behaviour is influenced by social factors such as reference groups, family and social roles and statuses.

#### 2.3.2.1 Reference Groups

A persons reference group consists of all the groups that have a direct or indirect influence on a person's attitudes or behaviour. Groups having a direct influence on a person are called membership groups. Some membership groups are primary groups, such as family, friends, neighbors, and co-workers, with whom the person interacts fairly continuously and informally. People also belong to secondary groups, such as religious, professional, and trade-union groups, which tend to be more formal and require less continuous interaction. People are significantly influenced by their reference groups. Referent groups expose an individual to new behaviours and lifestyles. They influence attitudes and self-concept. They also create pressures for conformity that may affect actual product and brand choices (Kotler, 1999)

#### 2.3.2.2 Family

Family is the most important consumer-buying organisation in society. Family members constitute the most influential primary reference group. Two families can be distinguished in a consumer's life. The family of orientation consists of one's parents and siblings. From parents a person acquires an orientation towards religion, politics and economics etc. Even if the buyer no longer interacts very much with his or parents, their influence on the buyer's behaviour can be significant. A more direct influence on everyday buying behaviour is one's family of procreation i.e. one's spouse and children.

#### 2.3.2.3 Role and Status

A person participates in many groups i.e. family, clubs, organisations. The person's position in each group can be defined in terms of role and status. People choose products that communicate their role and status.

#### 2.3.3 Personal Characteristics

Personal characteristics influence a buyer's decisions. These include the buyer's age and stage in the life cycle, occupation, economic circumstances, lifestyle, and personality and self-concept (Kotler, 1999).

People buy different goods and services over a lifetime. Taste in things such as clothes, furniture, and recreation are also age related. Occupation and economic circumstances also influence a person's consumption pattern. Product choice is

greatly affected by economic circumstances i.e. spendable income, saving and assets, debt and attitude toward spending versus saving.

People from the same subculture, social class, and occupation may lead quite different lifestyles, which may affect consumer behaviour.

Each person has a distinct personality that influences buying behaviour. Personality is usually described in terms of such traits as self-confidence, dominance, autonomy, deference, sociability, defensiveness, and adaptability.

#### 2.3.4 Psychological factors

Four major psychological factors i.e. motivation, perception, learning and beliefs and attitudes influences a person's buying choices (Blythe, 1997).

#### 2.3.4.1 Motivation

Motives are the reasons why people take action. A motive can have both strength and direction, and can be positive or negative: in other words, a person can be motivated to do something, or motivated to avoid doing something. Motivation may be internally generated (from within the person), or externally generated (from the environment) (Foxall and Goldsmith, 1994).

#### 2.3.4.2 Perception

Perception is the process by which an individual selects, organises, and interprets information inputs to create a meaningful picture of the world. Perception depends not only on the physical stimuli but also on the stimuli's relation to the surrounding field and on conditions within the individual. Human beings have considerably more than 5 senses. Each sense is feeding information to the brain constantly, and the amount of information being collected would seriously overload the system if one took it all in. The brain therefore selects from the environment around the individual and cuts out the extraneous noise (Blythe, 1997).

In effect the brain makes automatic decisions to what is relevant and what is not. Therefore the information entering the brain does not provide a complete view of the world around us. When an individual constructs a world-view, he or she assembles the remaining information to map what is happening in the outside world. Any gaps will be filled in with imagination and experience. The cognitive map is therefore not a 'photograph': it is a construct of the imagination. This mapping will be affected by the following factors:

Subjectivity: This is the existing world-view within the individual, and is unique to that individual.

Categorization: This is the 'pigeonholing' of information, and the prejudging of events and products.

Selectivity: This is the degree to which the brain is selecting from the environment.

Expectations: These lead individuals to interpret later information in a specific way.

Past experience: This leads us to interpret later experience in the light of what we already know.

#### 2.3.4.3 Learning and beliefs

Learning involves changes in an individual's behaviour arising from experience.

Most human behaviour is learned. Learning is produced through the interplay of drives, stimuli, cues, responses, and reinforcement.

Through doing and learning, people acquire beliefs and attitudes. These in turn influence buying behaviour. Beliefs may be based on knowledge, opinion, or faith. They may or may not carry an emotional charge. Manufactures as in the case of generic companies are very interested in the beliefs people carry in their heads and their products. These beliefs make up product and brand images that people may act on.

#### 2.3.3.4. Attitudes

At attitude is a person's enduring favourable or unfavourable evaluation, emotional feelings, and action tendencies toward some object or idea. People have attitudes to everything. Attitudes put them into a frame of mind of liking or disliking an object, moving toward or away from it. Attitudes lead people to

behave in a fairly consistent way toward similar objects. People do not have to interpret and react to every object in a fresh way. Because attitudes economise on energy and thought, they are very difficult to change. A person's attitudes settle into a consistent pattern. To change a single attitude may require major adjustments in other attitudes (Foxall and Goldsmith, 1994).

#### 2.4 The Effect of Branding

In essence, a brand identifies the seller or maker. A brand is essentially a sellers promise to deliver a specific set of features, benefits, and services consistently to the buyers (Kotler, 1999).

#### 2.4.1 Brand and Quality

Signals' are important to consumers when judging product quality. A signal is usually a brand name. It is very common for consumers to equate quality with a high price. The use of price as a quality signal is somewhat reduced when other signals are present. For example, if a consumer is able to judge the quality by inspecting the product, the relationship may not apply. With drugs this is not possible. Therefore price and sometimes, even appearance seems to be an indicator of quality. The value of a brand name in this instance can be of vital importance (Solomon and Stuart, 1997).

#### 2.4.2 Brand Loyalty

Brand loyalty refers to the tendency of consumers to consistently purchase a particular brand over time (Block and Roering, 1990). Brand loyalty can be divided into four categories:

Undivided loyalty: consumers are consistently purchasing the same brands all the time.

Divided loyalty: consumers are regular purchasers of two brands.

Unstable loyalty: consumers who purchase a product several times and then switch to another brand for several purchases.

*No loyalty:* consumers who consistently purchase different brands.

The concept of brand loyalty is important in the case of generic drugs. Consumers who regularly purchase branded products will be difficult to persuade to do otherwise. On the other hand consumers who show little loyalty to brand name products will be easier to persuade.

#### 2.5 Previous studies conducted

#### 2.5.1 Elderly Consumers and generic drugs

Though prescription drugs are used by all segments of the population, the elderly consume by far the largest amount of drugs per capita. With many elderly consigned to fixed incomes, the switch from branded to generic drugs may be a primary means of health care cost reduction. A study was conducted by students at Mississippi University on the attitudes of elderly consumers (over 65years) to generic drugs (Yelkur and Capella, 1995).

The specific objects of this study were to investigate if there are relationships among:

- elderly consumers awareness of generic drugs and their intentions to purchase generic drugs and demographic variables.
- elderly consumers attitudes towards generic drugs and their past usage of generic drugs.
- elderly consumers intentions to purchase generic drugs and their past usage of generic drugs.

The study indicated that attitude toward generic drugs were extremely favourable among elderly consumers. The results indicated greater awareness, more positive attitude and greater intentions to purchase generic drugs are related to younger age groups of elderly consumers with higher incomes and education. Elderly female consumers were found to be more aware of generic drugs.

The results of this study indicated that past usage of generic drugs was significantly related to intentions to use generic drugs in the future. This indicates that elderly consumers positive experience with generic drugs is the basis for their repeat purchase decisions.

#### 2.5.2 Different health conditions versus purchase of generic drugs

A study was conducted by the American Pharmaceutical Association on consumers willingness to buy generic drugs for various different health conditions (Ganther and Kreling, 2000). 500 randomly selected households were surveyed. Consumers were asked to indicate their intention to use a generic drugs for 5 medical conditions i.e. heart problems, high-blood pressure, throat infection, pain and cough.

For all of the medical conditions other than heart problems, the majority of respondents said using the generic drug was no more risky than using the brand name product. However the study found that consumers risk perceptions differed based on the medical condition to be treated. According to the study, the percentage of respondents who believed that the generic version of the drug was riskier than the brand-name version ranged from 14.2 percent for a drug to treat a cough to 53.8 percent for a drug to treat a heart problem.

For higher levels of perceived risk, higher cost savings were required regardless of the respondents income level or medical insurance coverage. As risk perceptions increased, so did the percentage of respondents who said they would not buy the generic at any cost. For example, for low-risk conditions such as cough, all but 2.6 percent of respondents said they would purchase the generic drug if offered some cost savings, while 27.2 percent of respondents said they would not purchase generic drugs for heart problems.

# **Chapter 3**

## Methodology

#### 3.1 Research Design

The aim of this research was to analyse consumer perceptions of generic drugs. For this it was decided that a quantitative study would be most appropriate. The data was collected in the form of a cross-sectional survey.

#### 3.2 Sampling

#### 3.2.1 Population

This study will focus mainly on consumers who patronise the pharmacy being surveyed. The pharmacy has many of the variables that are deemed necessary for the study. It is patronised by consumers of all different ages, levels of education, race groups, income disparities and gender.

#### **3.2.2 Sample**

Although many consumers frequent pharmacies it is quite logical that not all purchase prescription drugs. The researcher deemed it necessary to focus only on the repeat consumers of prescription drugs. It was felt that their response would be most beneficial to the study.

#### 3.2.3 Sampling method

Considering the nature of the study it was decided that probability sampling would be the best approach. A complex probability sampling method i.e. systematic sampling was chosen because it would be statistically more efficient than a simple random sample. Every sixth consumer of prescription or OTC medication was surveyed.

#### 3.2.4 Sample size

Since this is an exploratory study, the proper size of a good sample is difficult to estimate. This survey was therefore conducted over a period of 1 month and a total of 180 respondents were surveyed.

#### 3.3 Data collection

The collection of the data was done quantitatively through questionnaires. The respondent was handed the questionnaire after certain requirements were met. The first prerequisite was that the respondent had to be a repeat consumer of prescription drugs. The second prerequisite was that the respondent had to have a basic understanding of a generic drug. In the event that the prospective respondent did not meet the requirements or did want participate the researcher implemented a rule of thumb, whereby the next consumer would be surveyed and thereafter every sixth consumer. The researcher waited for the respondent to fill in the questionaire and helped clarify any misunderstandings with regards to the questions being careful not to influence the respondent's answer.

#### 3.4 Questionnaire design

A questionnaire was drawn up taking into consideration the objectives of the study. The first section of the questionnaire sought to ascertain respondent's details such as Age, Level of Education etc. The second part of the questionnaire progressed through to Likert Scale ratings. The questionnaire had structured questions with structured responses. A Likert scale rating with 5 levels of agreement i.e. strongly agree, agree, neutral, disagree and strongly disagree was used. Values were assigned to each possible answer so that a favourable response to generic drugs would be indicated by a greater value.

The questions was divided into 4 categories:

- 1) Those that determined consumer awareness and perceived value of using generic drugs
- 2) Those that determined consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents
- 3) Those that determined the effect of disease severity and medical aid on consumer behaviour
- 4) Those that determined the influence of health-care providers, family and friends and the media on consumer perceptions

# 3.5 Piloting the questionnaire

The initial questionnaire was administered to 8 respondents. The respondents were known to the researcher, and the good relationship that existed ensured

constructive feedback. The respondents were requested to complete the questionnaire and provide comments on the length of time taken to complete the questionnaire, clarity and understanding of the questions and to make recommendations. Their comments were noted and the questionnaire amended.

#### 3.6 Analysis of the data

The raw data produced from the questionnaire was to be processed in order to extract meaning. After the survey was completed the responses were coded. The data was then edited and captured onto the S.P.S.S. statistical package. The questionnaire was split into questions pertaining to each objective. Statistical analysis involves the summation of data in order to describe and interpret the data. This therefore equipped the researcher to generalise and make inferences. The analysis was done through descriptive and inferential statistics.

#### 3.6.1 Descriptive statistics

Descriptive statistics use a single number to summarise the data. Due to the design of the questionnaire, this was done through one basic tendency i.e. the central tendency. Central tendency provides information about elevation, how high or low the scores on a question tend to be. The mean is the measure of central tendency for interval or ratio scaled data. The mean is simply the average of a set of scores.

#### 3.6.2 Inferential Statistics

Descriptive statistics although informative, are usually not sufficient for full understanding of the relationship among a set of variables.

#### a) Frequency Distribution

Fréquency distribution is the spread of data over the various categories. The distribution pattern of data was represented graphically to provide a clearer understanding and interpretation of the data.

#### b) One-way ANOVA using the Tukey HSD post-hoc test

To investigate the relationships between variables such as Age, Level of Education and Race group with respondents ratings, several One-way ANOVA's using the Tukey HSD post-hoc tests were performed. There were four categories for the Age variable i.e. 18-25, 25-35, 35-50 and 50 +. For the category Level of Education there were three categories i.e. Incomplete schooling, Matric and Tertiary education. Finally for the category, Race group there were four groups i.e. White, Coloured, Black and Indian. The critical value for significance is set at 0.05. Only significant relationships are discussed in the analysis of results section.

#### 3.7 Validity and reliability

The reliability of the research depends upon the accuracy with which it was performed (Leedy, 1997). It is difficult to assess the quality of the research data gathered. It is easier to assess the accuracy of the survey instrument and the process undertaken to collect the data. For this reason, it is critical to evaluate the validity and reliability of any piece of research.

#### 3.7.1 Sampling

The survey population, repeat consumers of prescription drugs, is large. Due to various resource constraints the sample size had to be limited to 180 respondents. Therefore a certain random error will be evident in the research. Every endeavour was taken in order to ensure that the sample was representative of the total population. A major problem concerning the sampling method is that the reliability of the research is low as a totally different sample is likely to be selected in the event of further research being conducted.

#### 3.7.2 Questionnaire

To comply with the reliability factor, as stated in Cooper and Schindler, 2001, certain principles were used to guide research to increase reliability of measures. The questions were constructed in a very short and concise manner to prevent misinterpretation and any ambiguousness. The language was simple and easy to comprehend.

Due to the nature of the research there is less subjectivity of the method used, numbers and frequencies largely influence the research.

The validity of the research was supported by the refinement of the questionnaire and by pilot testing the questionnaire to a small number of respondents.

#### 3.7.3 Internal Consistency of Instrument

Cronbach's alpha was used to measure the degree to which instrument items were homogenous and reflected the same underlying constructs. A value greater than 0.5 usually indicates good internal consistency. For the instrument as a whole, Cronbach's alpha was 0.866 (Appendix 14E). For the different research objectives Cronbach's alpha is listed in the table below.

Table: 1

	Cronbach's
Objective	alpha
1. To determine consumer awareness and perceived value of using generic	0.685
drugs (Appendix 14A)	
2. To determine consumer attitudes towards quality, effectiveness, cost and	0.745
appearance of generic equivalents (Appendix 14B)	
3. To determine the effect of disease severity and medical aid cover on	0.697
consumer behaviour (Appendix 14C)	
4. To determine the influence of health-care providers, family and friends and	0.576
the media on consumer behaviour (Appendix 14D)	

# **Chapter 4**

# **Analysis of results**

# 4.1 Sample Profile

The sample consisted of 180 people who were repeat consumers of prescription medication.

#### Sample Profiles

Figure 1: Gender

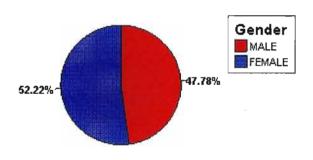


Figure 2: Age

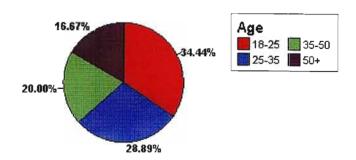


Figure 3: Level of Education

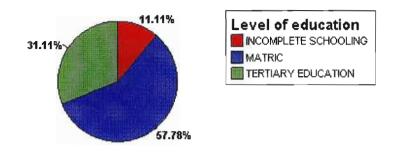


Figure 4: Medical Aid

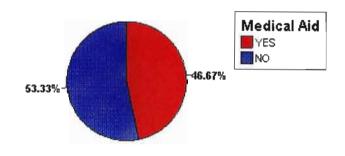
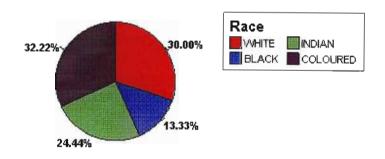


Figure 5: Race groups



# 4.2 Objective 1: To determine consumer awareness and perceived value of using generic drugs

Table 2: Descriptive Statistics indicating consumer awareness and perceived value of using generic drugs

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
I am well aware of generic drugs as an alternative	180	1.00	5.00	4.1222	.8565
Generic drugs often cost less than the original drugs they are copied from	180	2.00	5.00	4.1444	.7408
Greater knowledge of generic drugs will lead to greater use	180	2.00	5.00	4.2000	.7043
Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority	180	2.00	5.00	4.2111	.9031
Valid N (listwise)	180				

It is apparent that the majority of the people surveyed felt that they were significantly aware of the existence of generic drugs. This is indicated by an overall mean of 4.12.

Most of the respondents were well aware that generic drugs cost less than the original branded drugs, this being indicated by a mean of 4.14.

The majority of respondents felt that if they knew more about generic drugs they would use them more (Mean of 4.2).

A mean of 4.21 was achieved for question on reducing the cost of health-care through the use of generic drugs indicating that most respondents surveyed were aware of the benefits of using generic drugs to reduce the cost of healthcare.

### 4.2.1 Item 1: "I am well aware of generic drugs as an alternative"

Figure 6: Frequency distribution of responses to item 1

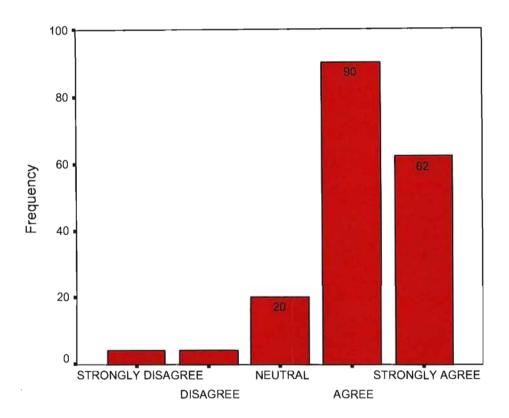


Figure 6 indicates that 152 or 84 per cent of the sample agreed or strongly agreed with this item. About 11 per cent of respondents neither agreed nor disagreed with this statement. Only 8 or 4 per cent of respondents disagreed or strongly disagreed with this item.

# 4.2.2 Item 2: "Generic drugs often cost less than the drugs they are copied from"

Figure 7: Frequency distribution of responses to item 2

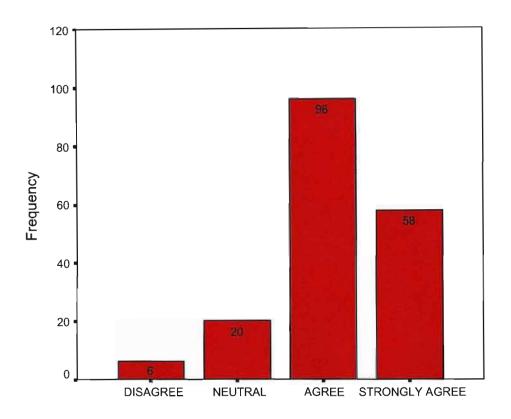


Figure 7 indicates that 154 or 85.6 per cent of the sample agreed or strongly agreed with this item. A small proportion of respondents neither agreed nor disagreed with this item (Approximately 11.1 per cent). Only 3.3 percent disagreed with this item.

### 4.2.3 Item 3: "Greater knowledge of generic drugs will lead to greater use"

Figure 8: Frequency distribution of responses to item 3

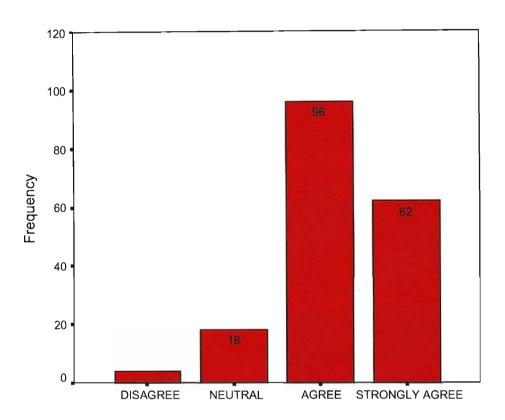


Figure 8 indicates that 158 or 87.7 percent of the sample agreed or strongly agreed with this item. 10 per cent of respondents neither agreed nor disagreed with this item. Only 4 or 2.2 percent of respondents disagreed with this item.

# 4.2.4 Item 4: "Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority"

Figure 9: Frequency distribution of responses to item 4

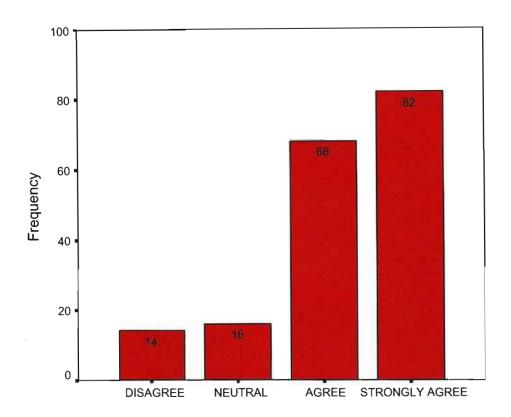


Figure 9 indicates that 150 or 83.3 per cent of the sample agreed or strongly agreed with this item. A small proportion of respondents neither agreed nor disagreed with this item (Approximately 8,8 per cent). 7.7 percent of respondents disagreed with this item.

4.2.5 Tukey HSD Multiple comparisons of biographical data with consumer awareness and perceived value of using generic drugs as the dependent variable

## 4.2.5.1 Consumer awareness and perceived value of using generic drugs – The Impact of Age

There were no significant differences between any of the Age groups and their response to the statements concerning consumer awareness and perceived value of using generic drugs. (Appendix 2)

## 4.2.5.2 Consumer awareness and perceived value of using generic drugs – The Impact of Level of Education

I. "I am well aware of generic drugs as an alternative" (Appendix 3A)

There is obviously a difference in awareness of generic drugs with regards to the different levels of education, with respondents with incomplete schooling (Mean of 3.6) feeling that they are less aware of generic drugs than those respondents with Matric (Mean of 4.11) and Tertiary education (Mean of 4.32).

## 4.2.5.3 Consumer awareness and perceived value of using generic drugs – The impact of Race

I. "I am well aware of generic drugs as an alternative" (Appendix 4A)

There is a significant difference with regards to the level of awareness of generic drugs between the White (Mean of 4.37) and Black Race group (Mean of 3.66).

This difference is also evident between the Coloured (Mean of 4.20) and the Black Race group (mean of 3.67).

II. "Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority" (Appendix 4D)

There is a significant difference in the response to the above with regards to the White and Indian Race group. (Mean of 4.37 and 3.86 respectively).

## 4.3 Objective 2: To determine consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents

Table 3: Descriptive Statistics indicating consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Generic drugs are of the same quality as that of the original branded drug	180	1.00	5.00	3.1667	1.1889
Generic drugs are as effective in medical terms as the original branded drug	180	1.00	5.00	3.7333	1.0443
Generally speaking, with regards to medicines, the cost of a drug is a good indicator of it's quality	180	1.00	5.00	2.7889	1.1817
The cost of a drug is generally a good indicator of it's effectiveness	180	1.00	5.00	2.9889	1.1912
The appearance of a generic drug as a substitute to the original drug negatively affects my willingness to use it	180	1.00	5.00	2.9889	1.0517
Valid N (listwise)	180				

A mean of 3.16 was achieved for the question regarding the quality of a generic drug. This does not indicate an overwhelming good perception of the quality of a generic drug.

Although quality seems to be underrated effectiveness is perceived to be slightly higher with a mean of 3.73.

It is obvious from the results above that many consumers correlate the cost of a drug with its quality (Mean of 2.78).

Cost of a drug as an indicator of effectiveness (2.98) rated higher than cost of a drug as an indicator of quality (2.78).

It is also obvious that the cost of a generic drug could also affect its perception of effectiveness.

The appearance of a generic drug does affect its use among many of the respondents (Mean of 2.98).

## 4.3.1 Item 5: "Generic drugs are of the same quality as that of the original branded drug"

Figure 10: Frequency distribution of responses to item 5

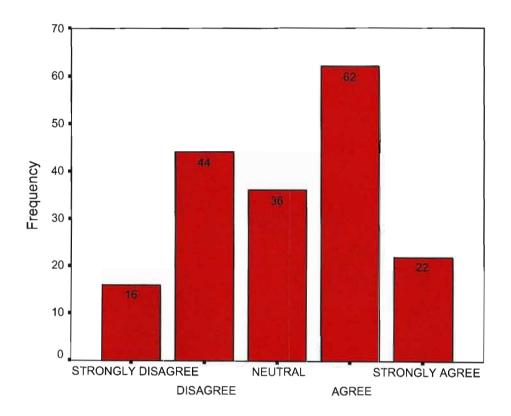


Figure 10 indicates that 84 or 46.6 percent of respondents agreed or strongly agreed with this item. 33.3 percent of the sample disagreed or strongly disagreed with this item. 36 or 20 percent of respondents neither agreed nor disagreed with this item.

## 4.3.2 Item 6: "Generic drugs are as effective in medical terms as the original branded drug"

Figure 11: Frequency distribution of responses to item 6

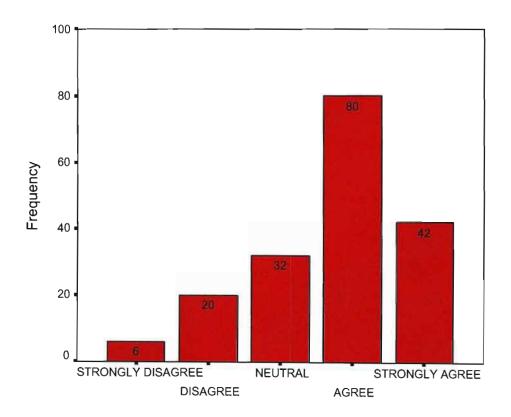


Figure 11 indicates that 122 or 67.7 per cent of the sample agreed or strongly agreed with this item. 17.7 percent of the population neither agree nor disagree with this item. Only 14.4 percent of the sample disagree or strongly disagree with this item.

4.3.3 Item 7: "Generally speaking, with regards to medicines, the cost of a drug is a good indicator of its quality"

Figure 12: Frequency distribution of responses to item 7

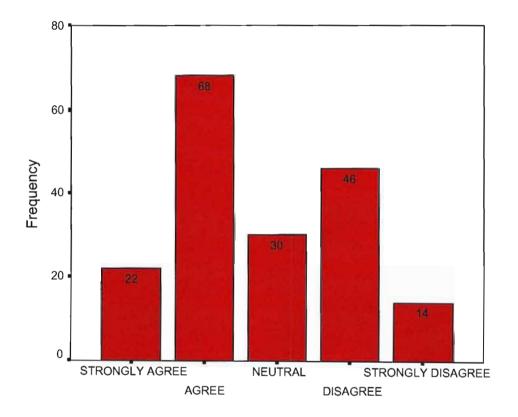


Figure 12 indicates that exactly half of the sample agreed or strongly agreed with this item. 16.6 percent of respondents neither agreed nor disagreed with this item. 33.3 percent of the sample disagreed or strongly disagreed with this item.

# 4.3.4 Item 8: "The cost of a drug is generally a good indicator of its effectiveness"

Figure 13: Frequency distribution of responses to item 8

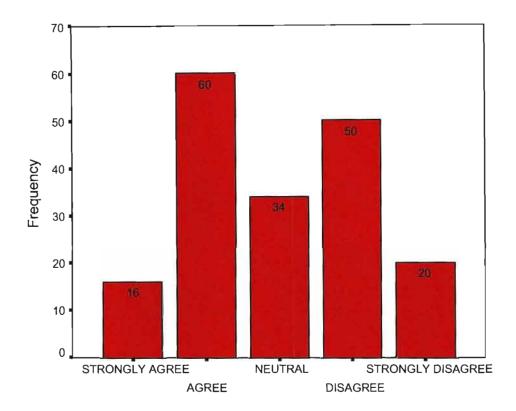


Figure 13 indicates that 76 or 42.2 percent of respondents agreed or strongly agreed with this item. 38.8 percent of the sample disagreed or strongly disagreed with this item. 36 or 20 percent of respondents neither agreed nor disagreed with this item.

## 4.3.5 Item 9: "The appearance of a generic drug as a substitute to the original drug negatively affects my willingness to use it"

Figure 14: Frequency distribution of responses to item 9

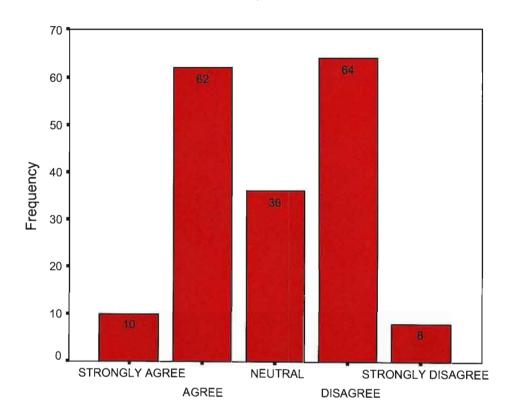


Figure 13 indicates that 72 or 40 percent of respondents agreed or strongly agreed with this item. Coincidently 40 percent of respondents disagreed as well as strongly disagreed with this item. 36 or 20 percent of respondents neither agreed nor disagreed with this item.

- 4.3.6 Tukey HSD multiple comparisons of biographical data using consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents as the dependent variable
- 4.3.6.1 Consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents The Impact of Age
- I. "Generic drugs are of the same quality as that of the original branded drug" (Appendix 5A)

There is a significant difference with regards to the concept of quality of generic drugs and the different age groups surveyed. The 18-25 year age group felt the least positive towards the quality of generic drugs (Mean of 2.67) as compared to the other age groups.

- 4.3.6.2 Consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents The Impact of Level of education
- I. "Generally speaking, with regards to medicines, the cost of a drug is a good indicator of its quality" (Appendix 6C)

It is quite apparent that cost as a measure of quality is highly rated in those with minimal education (Mean of 1.90). The perception of cost as a good measure of quality diminishes as we progress through to the respondents with higher educational qualifications. (Mean of 2.78 for Matric and 3.10 for Tertiary Education)

## II. "The cost of a drug is generally a good indicator of its effectiveness" (Appendix6D)

The perception of effectiveness being linked to cost is also evident and again cost as a measure of effectiveness is highly rated among the respondents with a minimal education (Mean of 2.20). The perception of cost as a measure of effectiveness also decreases as respondents educational background increases (Mean of 2.98 for Matric and 3.28 for Tertiary Education).

## III. "The appearance of a generic drug as a substitute to the original negatively affects my willingness to use it" (Appendix 6E)

Respondents with a matric level of education do feel that appearance of a generic drug does affect their willingness to use it to a greater degree than those respondents with a tertiary education (Means of 2.80 and 3.35 respectively).

## 4.3.6.3 Consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents – The Impact of Race

## I. " Generic drugs are of the same quality as that of the original branded drug" (Appendix 7A)

It seems that the Indian Race group are not very convinced of the quality of generic drugs as compared to the White Race group (Mean of 2.63 and 3.55 respectively).

II. " Generic drugs are as effective in medical terms as the original branded drug" (Appendix 7B)

The White Race group (Mean of 4.03) rated the effectiveness of generic drugs much higher than both, the Indian (Mean of 3.45) and Black Race group (Mean of 3.33).

III. "Generally speaking, with regards to medicines, the cost of a drug is a good indicator of its quality" (Appendix 7C)

Cost as an indicator of quality seems to be more highly rated among the Black, Indian and Coloured Race groups (Means of 2.33, 2.50 and 2.72 respectively) as compared to the White Race group (3.29).

IV. "The cost of a drug is generally a good indicator of its effectiveness" (Appendix 7D)

Cost as an indicator of effectiveness also seems to be more highly rated among the Black, Indian and Coloured Race groups (Means of 2.41, 2.81 and 2.89) as compared to the White Race group (3.48).

# 4.4 Objective 3: To determine the effect of disease severity and medical aid cover on consumer behaviour

Table 4: Descriptive Statistics indicating the effect of disease severity and medical aid cover on consumer behaviour

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
I would be more inclined to use a generic drug if i had flu	180	1.00	5.00	3.4222	1.1863
I would be happy to use a generic drug if I had cancer	180	1.00	5.00	2.9111	1.2653
I would still prefer the generic even if my medical aid paid for the original drug	180	1.00	5.00	2.7444	1.1918
I would still prefer the original even if my medical aid paid for the generic	180	1.00	5.00	2.8111	1.0769
Valid N (listwise)	180				

Even for a minor illness such as a cold some respondents still had reservations about using a generic drug. This is evident with a mean of 3.42.

For an illness considered more severe, several respondents were even less enthusiastic about using a generic drug and a mean of only 2.91 was achieved.

Few respondents were in favour of taking a generic drug even if the medical aid paid for the original (Mean of 2.74).

Even when faced with the added cost a large number of respondents would still rather purchase the original instead of the generic (Mean of 2.81).

#### 4.4.1 Item 10: "I would be more inclined to use a generic drug if I had flu"



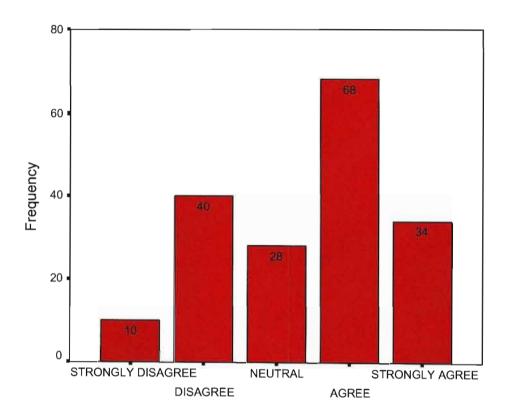


Figure 15 indicates that 102 or 56.6 per cent of the sample agreed or strongly agreed with this item. 15.5 percent of the population neither agreed nor disagreed with this item. 50 or 27.7 percent of respondents disagreed or strongly disagreed with this item.

### 4.4.2. Item 11: "I would be happy to use a generic drug if I had cancer"

Figure 16: Frequency distribution of responses to item 11

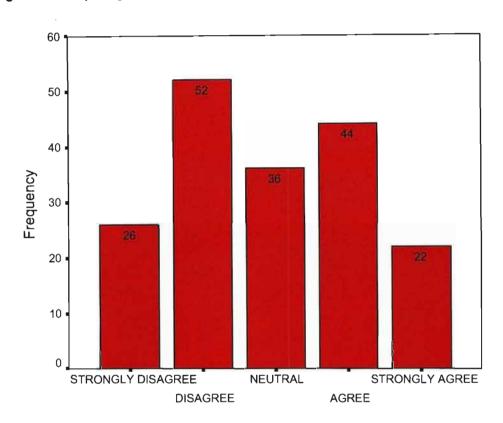
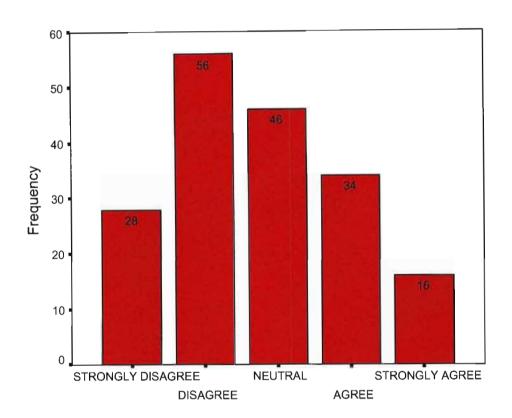


Figure 16 indicates that 66 or 36.6 percent of respondents agreed or strongly agreed with this item. A greater percentage of respondents were in disagreement of this item with 78 or 43.3 percent of the sample disagreeing or strongly disagreeing with the item. 36 or 20 percent of respondents neither agreed nor disagreed with this item.

# 4.4.3 Item 12: "I would still prefer the generic even if my medical aid paid for the original"

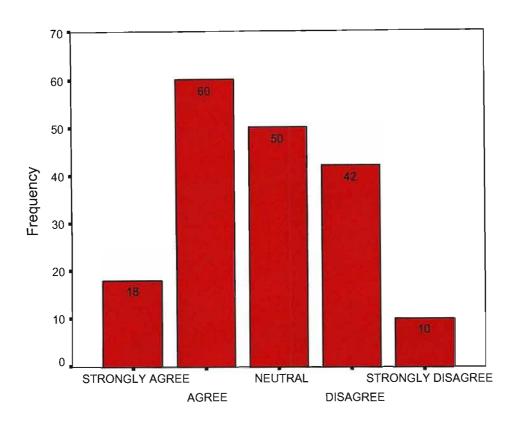
Figure 17: Frequency distribution of responses to item 12



The total number of respondents that agreed and strongly agreed was only 50 (27.7 percent) in contrast to number of respondents that disagreed and strongly disagreed, which were 84 (46.6 percent). There were also a large number of respondents who were not sure what to do in this instance indicated by the number of respondents that neither agreed nor disagreed with this item (25.5 percent).

# 4.4.4 Item 13: "I would still prefer the original even if my medical aid only paid for the generic"

Figure 18: Frequency distribution of responses to item 13



The total number of respondents that agreed as well as strongly agreed with this statement was 78 (43.3 percent). In contrast the total number of respondents that disagreed and strongly disagreed was 52 (28.8 percent). Again, there were also a large number of respondents who were not sure what to do in this instance indicated by the number of respondents that neither agreed nor disagreed with this item (27.7 percent).

4.4.5 Tukey HSD multiple comparisons of biographical data using the effect of disease severity and medical aid cover on consumer behaviour as the dependent variable

4.4.5.1 The Effect of disease severity and medical aid cover on consumer behaviour- The Impact of Age

I. "I would be more inclined to use a generic drug if I had Flu" (Appendix 8A)

It seems that the younger age group (18-25) are less inclined to use a generic drug for a minor illnesses such as the flu (Mean of 2.93) as compared to the other age groups (Mean of 3.69 for 25-35, 3.61 for 35-50 and 3.73 for 50+).

II. "I would still prefer the original even if my medical aid only paid for the generic"
(Appendix 8D)

Cost seems to be a minor issue for the younger age groups as compared to the older age groups (Mean of 2.29 for 18-25, 2.96 for 25-35, 3.16 for 35-50 and 3.26 for 50+).

## 4.4.5.2 The Effect of disease severity and medical aid cover on consumer behaviour - The impact of Level of Education

#### I. "I would be more inclined to use a generic drug if I had Flu" (Appendix 9A)

It seems that respondents with incomplete schooling are the most keen to use generic drugs for the flu (Mean of 4.00) compared to consumers with a matric (3.42) and consumers with a tertiary education (3.21).

#### II. "I would be happy to use a generic drug if I had cancer" (Appendix 9B)

It seems that respondents with incomplete schooling are more inclined to use a generic drug for severe illnesses such as cancer (Mean of 3.60) as compared with respondents with a matric education (2.67) and tertiary education (2.57).

## III. "I would still prefer the generic even if my medical aid paid for the original drug" (Appendix 9C)

The respondents with the incomplete education seemed most keen to purchase the generic even if the medical aid paid for the original (Mean of 3.60) as compared with respondents with matric education (2.67) and tertiary education (2.57).

4.4.5.3 The Effect of disease severity and medical aid cover on consumer behaviour - The Impact of Race group

I. " I would still prefer the generic even if my medical aid paid for the original" (Appendix 10C)

There seems to be significant difference in opinions between the Coloured Race group (Mean of 3.06) and the Indian Race Group (2.27) with regards to the preference of the generic even if the medical aid paid for the original.

II. "I would still prefer the original even if my medical aid paid for the generic" (Appendix 10D)

The Indian and Black Race groups seem to be less enthusiastic about using a generic drug even if the medical aid only paid for the original (Mean of 2.27 and 2.50 respectively) as compared to White Race group (3.14).

# 4.5 Objective 4: To determine the influence of health-care providers, family and friends and the media on consumer behaviour

Table 5: Descriptive Statistics indicating the influence of health-care providers and the media on consumer behaviour

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
I would be happy to use a generic drug if my GP suggested it	180	2.00	5.00	3.9222	.7358
I would be happy to use a generic drug if my pharmacist suggested it	180	2.00	5.00	3.8222	.8266
I would be happy to use a generic drug if my friends or family suggested it	180	1.00	5.00	3.3778	1.1244
Advertising plays a major role in my choice of drug therapy	180	1.00	5.00	2.2000	1.0485
Valid N (listwise)	180				

Most respondents were reasonably happy to use a generic drug if a doctor suggested it (Mean of 3.92).

A large number of respondents were also reasonably happy to use a generic drug if a pharmacist suggested it (Mean of 3.82).

Family and friends did not influence the respondent's choice of using a generic drug to the same extent that a doctor or pharmacist did (Mean of 3.37).

Advertising was shown to play a major role in respondents buying behaviour (Mean of 2.20)

# 4.5.1 Item 14: "I would be happy to use a generic drug if my GP suggested it"

Graph 19: Frequency distribution of responses to item 14

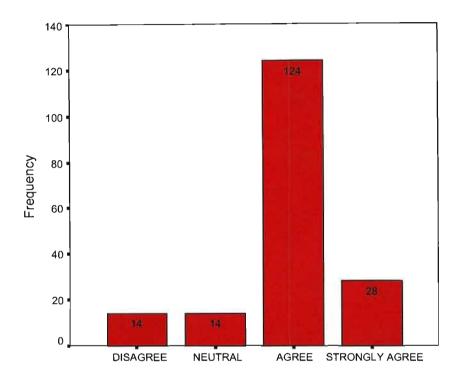


Figure 19 indicates that 152 or 84.4 percent of respondents agreed or strongly agreed with this item. 14 or 7.7 percent of respondents neither agreed nor disagreed with this item. Only 7.7 percent of respondents disagreed with this item.

# 4.5.2 Item 15: "I would be happy to use a generic drug if my pharmacist suggested it"

Figure 20: Frequency distribution of responses to item 15

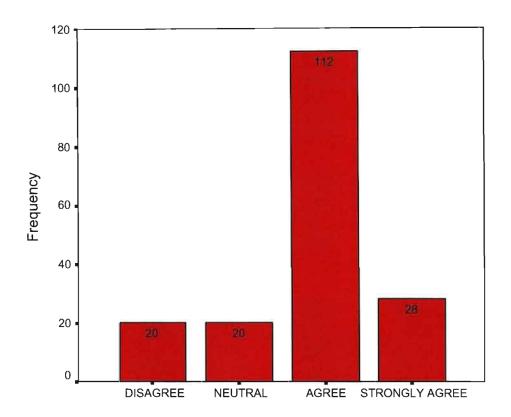
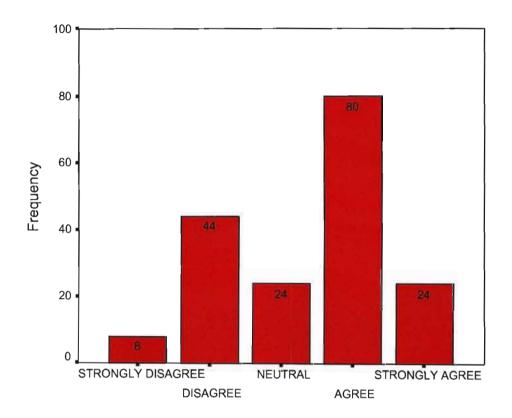


Figure 15 indicates that 140 or 77.7 per cent of the sample agreed or strongly agreed with this item. 11.1 percent of the population neither agree nor disagree with this item. 11.1 percent of the sample also disagreed with this item.

## 4.5.3 Item 16: "I would be happy to use a generic drug if my friends or family suggested it"

Figure 21: Frequency distribution of responses to item 16



In total the number of respondents that agreed as well as strongly agreed with the item was 104 (57.7 percent). In contrast the total number of respondents that strongly disagreed as well as disagreed was 52 (28.8 percent). 13.3 percent of the population neither agreed nor disagreed with this item.

### 4.5.4 Item 17: "Advertising plays a major role in my choice of drug therapy"

Figure 22: Frequency distribution of responses to item 17

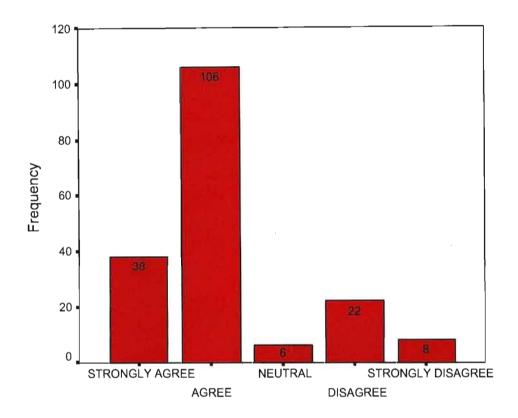


Figure 22 indicates that 144 or 80 percent of respondents agreed or strongly agreed with this item. A small percentage of respondents were in disagreement of this item with 30 or 16.6 percent of the sample disagreeing or strongly disagreeing with the item. A very small percentage (3.3 percent) of respondents neither agreed nor disagreed with this item.

58

4.5.5 Tukey HSD multiple comparison of biographical data with the influence of health-care providers, family and friends and the media on consumer behaviour as the dependent variable

4.5.5.1 The Influence of health-care providers, family and friends and the media on consumer behaviour- The Impact of Age

I. "I would be happy to use a generic drug if my pharmacist suggested it"

(Appendix 11B)

Although all the age groups felt reasonably comfortable with a doctor suggesting the use of a generic drug, this was not the case with the pharmacist. It seems that the youngest age group was the least receptive (Mean of 3.54) while the oldest age group was the most receptive (4.13) towards a pharmacist suggesting the use of a generic drug.

II. "Advertising plays a major role in my choice of drug therapy" (Appendix 11D)

The younger age groups (18-25 an 25-35) are the most affected by the influence of advertising (Means of 1.83 and 2.00 respectively). The effect of advertising seems to diminish with age. (Mean of 2.50 for 35-50 and 2.93 for 50+).

- 4.5.5.2 The Influence of health-care providers, family and friends and the media on consumer behaviour- The Impact of Level of Education
- I. " I would be happy to use a generic drug if my friends or family suggested it"

  (Appendix 12C)

It seems that family and friends have the greatest influence in those respondents with incomplete schooling (Mean of 3.70) and tertiary qualifications (3.71) as compared with those with matric (3.13).

- 4.5.5.3 The Influence of health-care providers, family and friends and the media on consumer behaviour- The Impact of Race group
- I. "I would be happy to use a generic drug if my GP suggested it" (Appendix 13A)

  It seems that the White Race group is more easily influenced by the GP (Mean of 4.22) as compared to the other race groups (Mean of 3.66 for the Black race group, 3.81 for the Indian race group and 3.82 for the Coloured race group.)
- II. "I would be happy to use a generic drug if my pharmacist suggested it"
  (Appendix 13B)

There is a significant difference between the White and Indian Race group with regards to the influence of the pharmacist (Means of 4.14 and 3.40 respectively). This difference is also evident with the Coloured and Indian groups (Means of 3.89 and 3.40 respectively).

## III. " I would be happy to use a generic drug if my family or friends suggested it" (Appendix 13C)

There is a significant difference between the influences of family and friends on the choice of a generic drug with regards to the Indian and White Race groups, (Means of 2.86 and 3.62 respectively) with the White group being more easily influenced by family and friends than the Indian group. This difference is also evident with the Coloured (3.48) and Indian group (2.86).

### IV. "Advertising plays a major role in my choice of drug therapy" (Appendix 13D)

The White Race group seemed to be the least affected by the advertising of drugs (Mean of 2.74) as compared to the other race groups (Means of 2.00 for the Black group, 1.86 for the Indian group and 2.03 for the Coloured group).

### **Chapter 5**

### 5.1 Summary and Discussion of the Findings

This study was undertaken to determine consumer perceptions of generic drugs and whether variables such as Age and Level of Education and Race impacted on these perceptions. Four objectives were identified.

The first objective was:

To determine consumer awareness and perceived value of using generic drugs

#### Findings:

- The results show that most consumers surveyed are aware of generic drugs and do understand the value of using them.
- It was found that age has no bearing on consumer awareness and perceived value of using generic drugs.
- It was also found that Level of Education did play a role in the awareness of generic drugs.
- Awareness of generic drugs differed among the different race groups.
- Reducing the cost of healthcare through the use of generic drugs was not regarded as a major priority among all race groups.

Overall there is a good indication that most of the respondents surveyed were well aware of generic drugs and did understand the value of using them.

The second objective was:

To determine consumer attitudes towards quality, effectiveness, cost and appearance of generic equivalents

#### Findings:

- It was found that quality and effectiveness of generic drugs were not very highly rated by most respondents.
- Effectiveness was more highly rated than quality.
- It was found that many of the respondents equated both the quality and effectiveness of a generic drug with its cost.
- The appearance of the generic drug to the original does affect some consumers willingness to purchase it.
- It was found that age affected consumer perceptions of quality of generic drugs.
- It was also found that the perception of cost as an indicator of quality of a generic drug also varied with age.
- Respondents with different Levels of Education have differing views of cost as an indicator of quality and effectiveness of a generic drug.
- It was found that race had an impact on perceptions of effectiveness,
   quality and cost of as a measure of quality and effectiveness of generic
   drugs.

Overall it seems that consumers do not have an overwhelming favourable attitude towards the quality, effectiveness, and appearance of generic equivalents. A large number of respondents equated the cost of a drug with both

its quality and effectiveness. The implication of this is that the cost of the generic drug could actually be affecting both its perception of quality and effectiveness.

The third objective was to determine:

The effect of disease severity and medical aid cover on consumer behaviour

#### Findings:

- It was found that many respondents had reservations about using generic drugs for even minor illnesses and many were even less enthusiastic about using a generic drug for a more serious illness such as cancer.
- Even when faced with added cost a large number of respondents were still
  hesitant to use the generic and even more were hesitant to use a generic
  drug if the medical aid paid for the original.
- It was discovered that age did affect a respondent's decision to use a generic drug for a minor illness such as flu.
- Also age and medical aid coverage did affect consumers' willingness to buy a generic drug.
- Level of Education had an impact on whether a consumer would use a
  generic drug for certain indications and whether a consumer would use a
  generic drug if they were covered by medical aid.
- It was found different race groups had differing views on whether they would purchase a generic drug if they medical aid paid for it or not.

Overall it is quite apparent that the choice of using a generic drug is dependent on disease severity. It is also apparent that medical aid regulations with regards to the drugs that they cover do not have a great influence on respondent's willingness to purchase a generic drug.

The fourth objective was:

To determine the influence of health-care providers, family and friends and the media on consumer perceptions

- It was found that respondents were reasonably influenced by health care providers to purchase a generic drug.
- Family and friends were able to influence respondents to a certain degree but not to the same degree as health care providers.
- Advertising plays a very important role in a respondent's choice of drug therapy.
- A pharmacist suggesting a generic drug influences different age groups to a different degree.
- Advertising influences different age groups to a different extent.
- Respondents with minimal educational qualifications are more easily influenced to purchase a generic drug if family or friends suggested it.
- Health-care providers, family and friends and the media influenced the different race groups to different extents.

Overall it was found that health care providers i.e. doctor or pharmacist as well as the media had a great influence on respondents choice of drug therapy in comparison to the influence of family and friends.

### **Chapter 6**

#### 6.1 Conclusion

Health-care costs continue to soar every year. One sure way of combating this predicament is through the use of generic drugs. The reasons as to why generic drugs are not used as much as they could be are not clearly known. This study tried to uncover some of those reasons by investigating consumer perceptions.

The findings of this study do indicate that as much as people are aware of generic drugs and do understand the need for using them they are not entirely convinced about the attributes of the generic drug such as the appearance, quality, and effectiveness. One important finding though, is that health-care providers and the media can influence consumer perceptions to a large degree. It is possible that these authorities may hold the answer to increasing the use of generic drugs.

It is clear though that a lot can be gained from studying consumer perceptions of generic drugs and future research is definitely required.

### **6.2 Recommendations**

Another survey could be carried out at several different pharmacies to determine whether consumer perceptions are consistent.

Other factors that impact on consumer perceptions such as gender could be included in another study.

A bigger sample size could be used in a follow-up study.

The perceptions of health-care providers need to be investigated.

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# 8. Appendices

# Appendix 1

## Questionnaire

<u>Sex</u>	: Male $\square$	Female				
Age	: 18-25 🛚	25-35 🛘	35-50		50+ 🗆	
Highe	st education lev	vel obtained:		_		_
Medic	eal Aid: Yes		No			
The fo	ollowing items	are concerned v	with you	r feelin	gs regarding br	anded and generic
drugs.	This is not a te	est and there is	no right	or wro	ng answer. For	each item please put
tick in	the box that m	ost accurately	indicates	s what y	ou feel.	
	1) I am well a	nware of the exi	stence o	of gener	ic drugs as an a	lternative
	Strongly Agree	Agree	Neither nor disa		Disagree	Strongly Disagree
				.6		
	2) Generic dr	ugs are as effec	tive in r	nedical	terms as the or	iginal branded drug
	Strongly Agree	Agree	Neither nor disa		Disagree	Strongly Disagree
				.6		
	3) Generic dr	ugs are of the s	ame qua	lity as t	hat of the origin	nal branded drug
	Strongly Agree	Agree	Neither nor disa		Disagree	Strongly Disagree
				.6.00		

4) Generally s	peaking, with i	regards to medi	cines, the cost of	of a drug is a good
indicator of it	s quality			
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
5) The cost of	a drug is gene	rally a good ind	licator of its eff	ectiveness
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
6) Generic dri	ugs often cost l	ess than the ori	ginal drugs they	are copied from
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
7) I would be	more inclined	to use a generic	drug if I had fl	u
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
8) I would be	happy to use a	generic drug if	I had cancer	
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
9) I would stil	ll prefer the ger	neric even if my	medical-aid pa	aid for the
original drug				
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
10) I would st	ill prefer the or	iginal drug eve	n if my medical	l-aid only paid
for the generic				
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree

11) I would	be happy to u	ise a generic drug	if my GP sug	gested it	
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	
12) I would	be happy to ı	use a generic drug	if my pharma	acist suggested it	
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	
13) I would	be happy to t	ise a generic drug	if my friends	or family suggest	ted it
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	
14) The app	earance of a	generic drug as a s	ubstitute to t	he original drug	
negatively a	ffects my wil	lingness to use it			
Strongly	Agree	Neither agree	Disagree	Strongly	
Agree		nor disagree		Disagree	
15) Drugs n	nanufactured	by large well-knov	wn drug com	panies are of a bet	ter
standard tha	ın drugs manı	ufactured by other	less-known	drug companies	
Strongly	Agree	Neither agree	Disagree	Strongly	
Agree		nor disagree		Disagree	
16) Adverti	sing plays a n	najor role in my ch	oice of drug	therapy	
Strongly	Agree	Neither agree	Disagree	Strongly	
Agree		nor disagree		Disagree	

17) Greater	knowledge o	i generic drugs wii	i lead to grea	itel use	
Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	
18) Reduci	ng the cost of	healthcare in Sout	h Africa thro	ough the use of generi	С
drugs is a n	najor priority				
Strongly Agree	Agree	Neither agree	Disagree	Strongly Disagree	
			$\Box$	$\sqcup$	

### A)

### **Multiple Comparisons**

Dependent Variable: I am well aware of generic drugs as an alternative

Tukey HSD

<u> </u>				i i		
		Mean Difference			95% Confide	ence Interval _
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	2184	.1601	.522	6297	.1930
	35-50	3423	.1784	.220	8007	.1161
	50+	3312	.1894	.298	8177	.1553
25-35	18-25	.2184	.1601	.522	1930	.6297
	35-50	1239	.1846	.908	5982	.3503
	50+	1128	.1952	.939	6143	.3887
35-50	18-25	.3423	.1784	.220	1161	.8007
	25-35	.1239	.1846	.908	3503	.5982
	50+	1.111E-02	.2105	1.000	5296	.5519
50+	18-25	.3312	.1894	.298	1553	.8177
	25-35	.1128	.1952	.939	3887	.6143
	35-50	-1.1111E-02	.2105	1.000	5519	.5296

### B)

### **Multiple Comparisons**

Dependent Variable: Generic drugs often cost less than the original drugs they are copied from

1 UKCY I						
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	-3.7221E-02	.1383	.993	3926	.3182
	35-50	.3047	.1542	.197	-9.1384E-02	.7007
	50+	-6.4516E-03	.1636	1.000	4268	.4139
25-35	18-25	3.722E-02	.1383	.993	3182	.3926
	35-50	.3419	.1595	.140	-6.7914E-02	.7517
	50+	3.077E-02	.1687	.998	4026	.4641
35-50	18-25	3047	.1542	.197	7007	9.138E-02
	25-35	3419	.1595	.140	7517	6.791E-02:
	50+	3111	.1819	.318	7783	.1561
50+	18-25	6.452E-03	.1636	1.000	4139	.4268
	25-35	-3.0769E-02	.1687	.998	4641	.4026
	35-50	.3111	.1819	.318	1561	.7783

### C)

#### **Multiple Comparisons**

Dependent Variable: Greater knowledge of generic drugs will lead to greater use

Tukey HSD

		Mean				
		Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bounc
18-25	25-35	-4.9628E-02	.1318	.982	3881	.2889
	35-50	.2581	.1468	.294	1191	.6353
	50+	.1247	.1558	.854	2756	.5251
25-35	18-25	4.963E-02	.1318	.982	2889	.3881
	35-50	.3077	.1519	.179	-8.2605E-02	.6980
	50+	.1744	.1607	.699	2384	.5871
35-50	18-25	2581	.1468	.294	6353	.1191
	25-35	3077	.1519	.179	6980	8.260E-02
	50+	1333	.1732	.868	5783	.3117
50+	18-25	1247	.1558	.854	5251	.2756
	25-35	1744	.1607	.699	5871	.2384
	35-50	.1333	.1732	.868	3117	.5783

### D)

#### **Multiple Comparisons**

Dependent Variable: Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority

		Mean				
1		Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	2047	.1700	.624	6415	.2320
	35-50	2133	.1894	.674	7000	.2734
	50+	2688	.2011	.539	7854	.2477
25-35	18-25	.2047	.1700	.624	2320	.6415
ł	35-50	-8.5470E-03	.1960	1.000	5121	.4950
	50+	-6.4103E-02	.2073	.990	5966	.4684
35-50	18-25	.2133	.1894	.674	2734	.7000
	25-35	8.547E-03	.1960	1.000	4950	.5121
	50+	-5.5556E-02	.2235	.995	6297	.5186
50+	18-25	.2688	.2011	.539	2477	.7854
	25-35	6.410E-02	.2073	.990	4684	.5966
	35-50	5.556E-02	.2235	.995	5186	.6297

### A)

#### **Multiple Comparisons**

Dependent Variable: I am well aware of generic drugs as an alternative

Tukey HSD

		Mean Difference			95% Confide	
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	5154*	.2041	.031	9936	-3.7134E-02
SCHOOLING	TERTIARY EDUCATION	7214*	.2177	.003	-1.2317	2112
MATRIC	INCOMPLETE SCHOOLING	.5154*	.2041	.031	3.713E-02	.9936
	TERTIARY EDUCATION	2060	.1385	.297	5307	.1186
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	.7214*	.2177	.003	.2112	1.2317
	MATRIC	.2060	.1385	.297	1186	.5307

 $<sup>\</sup>ensuremath{^{*}}\xspace$  The mean difference is significant at the .05 level.

### Report

I am well aware of generic drugs as an alternative

Level of education	Mean	N	Std. Deviation
INCOMPLETE SCHOOLING	3.6000	20	1.5355
MATRIC	4.1154	104	.7010
TERTIARY EDUCATION	4.3214	56	.7162
Total	4.1222	180	.8565

### B)

#### **Multiple Comparisons**

Dependent Variable: Generic drugs often cost less than the original drugs they are copied from Tukey HSD

		Mean Difference		_	95% Confide	ence Interval
(I) Level of education	(J) Level of education	(L-I)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	-7.6923E-02	.1794	.904	4975	.3436
SCHOOLING	TERTIARY EDUCATION	3214	.1914	.213	7701	.1273
MATRIC	INCOMPLETE SCHOOLING	7.692E-02	.1794	.904	3436	.4975
	TERTIARY EDUCATION	2445	.1218	.110	5300	4.098E-02
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	.3214	.1914	.213	1273	.7701
	MATRIC	.2445	.1218	.110	-4.0985E-02	.5300

### C)

#### **Multiple Comparisons**

Dependent Variable: Greater knowledge of generic drugs will lead to greater use

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	4.615E-02	.1723	.961	3577	.4500
SCHOOLING	TERTIARY EDUCATION	-8.5714E-02	.1839	.887	5166	.3452
MATRIC	INCOMPLETE SCHOOLING	-4.6154E-02	.1723	.961	4500	.3577
	TERTIARY EDUCATION	1319	.1170	.497	4060	.1423
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	8.571E-02	.1839	.887	3452	.5166
	MATRIC	.1319	.1170	.497	1423	.40€0

## D)

### **Multiple Comparisons**

Dependent Variable: Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority Tukey HSD

		Mean			95% Confide	ongo Intonial
(I) I aval of advention	(I) I availat advention	Difference	0.4 5	0:-		
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	1500	.2214	.777	6689	.368.9
SCHOOLING	TERTIARY EDUCATION	-7.8571E-02	.2362	.941	6321	.4750
MATRIC	INCOMPLETE SCHOOLING	.1500	.2214	.777	3689	.668.9
	TERTIARY EDUCATION	7.143E-02	.1503	.883	2808	.4237
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	7.857E-02	.2362	.941	4750	.6321
	MATRIC	-7.1429E-02	.1503	.883	4237	.2808

### A)

#### **Multiple Comparisons**

Dependent Variable: I am well aware of generic drugs as an alternative

Tukey HSD

Tukey Hob						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.7037*	.2037	.003	.1804	1.2270
	INDIAN	.4158	.1686	.065	-1.7414E-02	.8491
	COLOURED	.1635	.1570	.725	2399	.5669
BLACK	WHITE	7037*	.2037	.003	-1.2270	1804
	INDIAN	2879	.2107	.521	8292	.2534
	COLOURED	5402*	.2015	.037	-1.0580	-2.2474E-02
INDIAN	WHITE	4158	.1686	.065	8491	1.741E-02
	BLACK	.2879	.2107	.521	2534	.8292
	COLOURED	2524	.1660	.425	6788	.1741
COLOURED	WHITE	1635	.1570	.725	5669	.2399
1	BLACK	.5402*	.2015	.037	2.247E-02	1.0580
	INDIAN	.2524	.1660	.425	1741	.6788

<sup>\*</sup> The mean difference is significant at the .05 level.

Report

I am well aware of generic drugs as an alternative

Race	Mean	N	Std. Deviation
WHITE	4.3704	54	.7345
BLACK	3.6667	24	.9631
INDIAN	3.9545	44	.7138
COLOURED	4.2069	58	.9321
Total	4.1222	180	.8565

### B)

### **Multiple Comparisons**

Dependent Variable: Generic drugs often cost less than the original drugs they are copied from Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(l-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.1759	.1822	.769	2922	.6441
	INDIAN	.1229	.1509	.848	2647	.5105
	COLOURED	.1903	.1405	.528	1706	.5512
BLACK	WHITE	1759	.1822	.769	6441	.292?
	INDIAN	-5.3030E-02	.1885	.992	5373	.4312
	COLOURED	1.437E-02	.1803	1.000	4488	.4775
INDIAN	WHITE	1229	.1509	.848	5105	.264.7
	BLACK	5.303E-02	.1885	.992	4312	.5373
	COLOURED	6.740E-02	.1485	.969	3141	.4489
COLOURED	WHITE	1903	.1405	.528	5512	.1706
	BLACK	-1.4368E-02	.1803	1.000	4775	.4488
	INDIAN	-6.7398E-02	.1485	.969	4489	.3141

### C)

#### **Multiple Comparisons**

Dependent Variable: Greater knowledge of generic drugs will lead to greater use

		Mean			05% Confide	ence Interval
(I) D	/ I) D	Difference	0.15	٥.		
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	-6.4815E-02	.1725	.982	5079	.3782
1	INDIAN	.1397	.1428	.762	2270	.5065
	COLOURED	1252	.1329	.782	4667	.2163
BLACK	WHITE	6.481E-02	.1725	.982	3782	.5079
1	INDIAN	.2045	.1784	.661	2537	.6628
	COLOURED	-6.0345E-02	.1706	.985	4987	.3780
INDIAN	WHITE	1397	.1428	.762	5065	.2270
	BLACK	2045	.1784	.661	6628	.2537
	COLOURED	2649	.1405	.235	6259	9.615E-02
COLOURED	WHITE	.1252	.1329	.782	2163	.4667
	BLACK	6.034E-02	.1706	.985	3780	.4987
	INDIAN	.2649	.1405	.235	-9.6154E-02	.6259

Dependent Variable: Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority

Tukey HSD

1 4110 / 1102						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.1204	.2178	.946	4391	.6798
	INDIAN	.5067*	.1803	.025	4.358E-02	.9699
	COLOURED	6.003E-02	.1679	.984	3712	.4913
BLACK	WHITE	1204	.2178	.946	6798	.4391
	INDIAN	.3864	.2253	.316	1923	.9651
	COLOURED	-6.0345E-02	.2155	.992	6138	.4932
INDIAN	WHITE	5067*	.1803	.025	9699	-4.3582E-02
	BLACK	3864	.2253	.316	9651	.1923
	COLOURED	4467	.1775	.057	9026	9.216E-03
COLOURED	WHITE	-6.0026E-02	.1679	.984	4913	.3712
	BLACK	6.034E-02	.2155	.992	4932	.6138
	INDIAN	.4467	.1775	.057	-9.2161E-03	.9026

<sup>\*.</sup> The mean difference is significant at the .05 level.

Report

Reducing the cost of healthcare in South Africa through the use of generic drugs is a major priority

Race	Mean	N	Std. Deviation
WHITE	4.3704	54	.8752
BLACK	4.2500	24	.6079
INDIAN	3.8636	44	.8784
COLOURED	4.3103	58	.9948
Total	4.2111	180	.9031

### A)

#### **Multiple Comparisons**

Dependent Variable: Generic drugs are of the same quality as that of the original branded drug

Tukey HSD

		Mean			95% Confide	onco Intorval
		Difference			33 /6 COIIIIGE	ince interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	5149	.2128	.073	-1.0616	3.178E-02:
	35-50	9337*	.2371	.000	-1.5429	3245
	50+	9226*	.2517	.001	-1.5691	2760
25-35	18-25	.5149	.2128	.073	-3.1784E-02	1.061€
	35-50	-,4188	.2454	.320	-1.0491	.2115
	50+	4077	.2594	.395	-1.0742	.2588
35-50	18-25	.9337*	.2371	.000	.3245	1.5429
	25-35	.4188	.2454	.320	2115	1.0491
	50+	1.111E-02	.2797	1.000	7076	.7298
50+	18-25	.9226*	.2517	.001	.2760	1.5691
	25-35	.4077	.2594	.395	2588	1.0742
	35-50	-1.1111E-02	.2797	1.000	7298	.707€

<sup>\*</sup> The mean difference is significant at the .05 level.

### Report

Generic drugs are of the same quality as that of the original branded drug

Age Mean N Std. Deviation 18-25 2.6774 62 1.1275 25-35 3.1923 52 1.3142 35-50 3.6111 36 1.0764 50+ 3.6000 30 .8137 Total 3.1667 180 1.1889

### B)

### **Multiple Comparisons**

Dependent Variable: Generic drugs are as effective in medical terms as the original branded drug

Tukey HSD

· and						
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	2593	.1964	.550	7637	.2451
i	35-50	2849	.2188	.561	8470	.2772
	50+	3183	.2322	.518	9149	.2783
25-35	18-25	.2593	.1964	.550	2451	.7637
	35-50	-2.5641E-02	.2264	.999	6073	.556C
	50+	-5.8974E-02	.2394	.995	6740	.5561
35-50	18-25	.2849	.2188	.561	2772	.8470
ļ	25-35	2.564E-02	.2264	.999	5560	.6073
	50+	-3.3333E-02	.2581	.999	6965	.6298
50+	18-25	.3183	.2322	.518	2783	.9149
	25-35	5.897E-02	.2394	.995	5561	.6740
	35-50	3.333E-02	.2581	.999	6298	.6965

### C)

#### **Multiple Comparisons**

Dependent Variable: Generally speaking, with regards to medicines, the cost of a drug is a good indicator of it's quality

7 41110 7 1						
,		Mean			250/ 0 / 51	
1		Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	3.722E-03	.2179	1.000	5560	.5634
	35-50	5860	.2428	.074	-1.2097	3.767E-02
	50+	5527	.2577	.139	-1.2147	.1093
25-35	18-25	-3.7221E-03	.2179	1.000	5634	.556C
	35-50	5897	.2512	.088	-1.2351	5.560E-02
	50+	5564	.2656	.155	-1.2388	.1260
35-50	18-25	.5860	.2428	.074	-3.7671E-02	1.2097
	25-35	.5897	.2512	.088	-5.5603E-02	1.2351
	50+	3.333E-02	.2864	.999	7025	.7691
50+	18-25	.5527	.2577	.139	1093	1.2147
	25-35	.5564	.2656	.155	1260	1.2388
	35-50	-3.3333E-02	.2864	.999	7691	.7025

### D)

#### **Multiple Comparisons**

Dependent Variable: The cost of a drug is generally a good indicator of it's effectiveness

Tukey HSD

· unto j ·		_				
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	1228	.2241	.947	6987	.4530
	35-50	2168	.2498	.821	8585	.4248
	50+	4280	.2651	.370	-1.1090	.2531
25-35	18-25	.1228	.2241	.947	4530	.6987
	35-50	-9.4017E-02	.2584	.984	7580	.5699
	50+	3051	.2733	.679	-1.0072	.3969
35-50	18-25	.2168	.2498	.821	4248	.8585
	25-35	9.402E-02	.2584	.984	5699	.7580
	50+	2111	.2947	.891	9681	.5459
50+	18-25	.4280	.2651	.370	2531	1.109C
	25-35	.3051	.2733	.679	3969	1.0072
	35-50	.2111	.2947	.891	5459	.9681

### E)

#### **Multiple Comparisons**

Dependent Variable: The appearance of a generic drug as a substitute to the original drug negatively affects my willingness to use it

		Mean			95% Confide	anno Intonvol
(I) Age	(J) Age	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	3412	.1964	.304	8456	.1632:
	35-50	1703	.2188	.864	7324	.3919
	50+	4925	.2322	.146		
			.=	.140	-1.0891	.1041
25-35	18-25	.3412	.1964	.304	1632	.8456
	35-50	.1709	.2264	.875	4107	.7526
	50+	1513	.2394	.922	7663	.4638
35-50	18-25	.1703	.2188	.864	3919	.7324
	25-35	1709	.2264	.875	7526	.4107
	50+	3222	.2581	.596	9854	.3409
50+	18-25	.4925	.2322	.146	1041	1.0891
	25-35	.1513	.2394	.922	4638	.7663
	35-50	.3222	.2581	.596	3409	.9854

### A)

### **Multiple Comparisons**

Dependent Variable: Generic drugs are of the same quality as that of the original branded drug

Tukey HSD

		Mana				
		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bourd
INCOMPLETE	MATRIC	.1462	.2917	.871	5375	.8298
SCHOOLING	TERTIARY EDUCATION	.1571	.3112	.869	5722	.8865
MATRIC	INCOMPLETE SCHOOLING	1462	.2917	.871	8298	.5375
	TERTIARY EDUCATION	1.099E-02	.1980	.998	4531	.4751
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	1571	.3112	.869	8865	.5722
	MATRIC	-1.0989E-02	.1980	.998	4751	.4531

### B)

### **Multiple Comparisons**

Dependent Variable: Generic drugs are as effective in medical terms as the original branded drug

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(l-J)	Std. Error	Sig.	Lower Bound	Upper Bourid
INCOMPLETE	MATRIC	2500	.2556	.591	8490	.3490
SCHOOLING	TERTIARY EDUCATION	2857	.2727	.547	9248	.3533
MATRIC	INCOMPLETE SCHOOLING	.2500	.2556	.591	3490	.8490
	TERTIARY EDUCATION	-3.5714E-02	.1735	.977	4423	.3709
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	.2857	.2727	.547	3533	.9248
	MATRIC	3.571E-02	.1735	.977	3709	.4423

### C)

#### **Multiple Comparisons**

Dependent Variable: Generally speaking, with regards to medicines, the cost of a drug is a good indicator of it's quality Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	8885*	.2774	.004	-1.5387	2383
SCHOOLING	TERTIARY EDUCATION	-1.2071*	.2960	.000	-1.9008	5135
MATRIC	INCOMPLETE SCHOOLING	.8885*	.2774	.004	.2383	1.5387
	TERTIARY EDUCATION	3187	.1883	.208	7601	.1227
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	1.2071*	.2960	.000	.5135	1.9008
	MATRIC	.3187	.1883	.208	1227	.7601

<sup>\*-</sup> The mean difference is significant at the .05 level.

#### Report

Generally speaking, with regards to medicines, the cost of a drug is a good indicator of it's quality

Level of education Mean Ν Std. Deviation INCOMPLETE 1.9000 20 .7182 **SCHOOLING MATRIC** 2.7885 104 1.1879 TERTIARY EDUCATION 3.1071 56 1.1549 Total 2.7889 180 1.1817

### D)

#### **Multiple Comparisons**

Dependent Variable: The cost of a drug is generally a good indicator of it's effectiveness

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(۱-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	7808*	.2823	.016	-1.4424	1192
SCHOOLING	TERTIARY EDUCATION	-1.0857*	.3012	.001	-1.7916	3799
MATRIC	INCOMPLETE SCHOOLING	.7808*	.2823	.016	.1192	1.4424
	TERTIARY EDUCATION	3049	.1916	.249	7541	.1442
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	1.0857*	.3012	.001	.3799	1.7916
	MATRIC	.3049	.1916	.249	1442	<u>.</u> 7541

 $<sup>^{*}\</sup>cdot$  The mean difference is significant at the .05 level.

### D) contd

Report

The cost of a drug is generally a good indicator of it's effectiveness

The cost of a drug is generally a good indicator of its officentials						
Level of education	Mean	Ν	Std. Deviation			
INCOMPLETE SCHOOLING	2.2000	20	.7678			
MATRIC	2.9808	104	1.2226			
TERTIARY EDUCATION	3.2857	56	1.1396			
Total	2.9889	180	1.1912			

E)

#### **Multiple Comparisons**

Dependent Variable: The appearance of a generic drug as a substitute to the original drug negatively affects my willingness to use it

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	-2.6923E-02	.2509	.994	6150	.5612
SCHOOLING	TERTIARY EDUCATION	5571	.2677	.094	-1.1846	7.029E-02
MATRIC	INCOMPLETE SCHOOLING	2.692E-02	.2509	.994	5612	.6150
	TERTIARY EDUCATION	5302*	.1703	.005	9294	1310
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	.5571	.2677	.094	-7.0289E-02	1.1846
	MATRIC	.5302*	.1703	.005	.1310	.9294

 $<sup>^{\</sup>star}\cdot$  The mean difference is significant at the .05 level.

#### Report

The appearance of a generic drug as a substitute to the original drug negatively affects my willingness to use it

Level of education	Mean	N	Std. Deviation
INCOMPLETE SCHOOLING	2.8000	20	1.0052
MATRIC	2.8269	104	1.0187
TERTIARY EDUCATION	3.3571	56	1.0519
Total	2.9889	180	1.0517

### A)

### **Multiple Comparisons**

Dependent Variable: Generic drugs are of the same quality as that of the original branded drug Tukev HSD

Tukey nob						
		Mean Difference			95% Confide	
(I) Race	(J) Race	(l-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.3889	.2819	.512	3353	1.1131
	INDIAN	.9192*	.2334	.000	.3197	1.5187
	COLOURED	.3487	.2173	.376	-,2096	.9069
BLACK	WHITE	3889	.2819	.512	-1.1131	.3353
	INDIAN	.5303	.2916	.264	2188	1.2794
	COLOURED	-4.0230E-02	.2789	.999	7567	.6762
INDIAN	WHITE	9192*	.2334	.000	-1.5187	3197
ļ	BLACK	5303	.2916	.264	-1.2794	.2188
	COLOURED	5705	.2297	.062	-1.1607	1.961E-0:2
COLOURED	WHITE	3487	.2173	.376	9069	.2096
	BLACK	4.023E-02	.2789	.999	6762	.7567
	INDIAN	.5705	.2297	.062	-1.9613E-02	1.1607

<sup>\*-</sup> The mean difference is significant at the .05 level.

### Report

Generic drugs are of the same quality as that of the original branded drug

Race	Mean	N	Std. Deviation
WHITE	3.5556	54	.9648
BLACK	3.1667	24	1.2394
INDIAN	2.6364	44	1.2406
COLOURED	3.2069	58	1.1959
Total	3.1667	180	1.1889

Dependent Variable: Generic drugs are as effective in medical terms as the original branded drug

Tukey HSD						
(I) Race	(J) Race	Mean Difference (I-J)	Std. Error	Sig.	95% Confide	ence Interval
WHITE	BLACK	.7037*	.2498	.025	6.202E-02	1.3454
""""	INDIAN	.5825*	.2068	.025	5.128E-02	1.1137
	COLOURED	.2095	.1925	.697	2852	.7041
BLACK	WHITE	7037*	.2498	.025	-1.3454	-6.2017E-02
	INDIAN	1212	.2584	.966	7850	.5425
	COLOURED	4943	.2471	.188	-1.1291	.1406
INDIAN	WHITE	5825*	.2068	.025	-1.1137	-5.1279E-02
	BLACK	.1212	.2584	.966	5425	.7850
	COLOURED	3730	.2035	.258	8960	.1499
COLOURED	WHITE	2095	.1925	.697	7041	.2852
	BLACK	.4943	.2471	.188	1406	1.1291
	INDIAN	.3730	.2035	.258	1499	.8960

<sup>\*-</sup> The mean difference is significant at the .05 level.

Report

Generic drugs are as effective in medical terms as the original branded drug

Race	Mean	N	Std. Deviation
WHITE	4.0370	54	.8894
BLACK	3.3333	24	1.3406
INDIAN	3.4545	44	.9010
COLOURED	3.8276	58	1.0619
Total	3.7333	180	1.0443

Dependent Variable: Generally speaking, with regards to medicines, the cost of a drug is a good indicator of it's quality

Tukey HSD

Tukey HSD						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.9630*	.2787	.003	.2469	1.6790
	INDIAN	.7963*	.2307	.003	.2035	1.3891
	COLOURED	.5722*	.2148	.039	2.021E-02	1.1241
BLACK	WHITE	9630*	.2787	.003	-1.6790	2469
	INDIAN	1667	.2883	.939	9073	.574()
	COLOURED	3908	.2757	.488	-1.0992	.3176
INDIAN	WHITE	7963*	.2307	.003	-1.3891	2035
	BLACK	.1667	.2883	.939	5740	.9073
	COLOURED	2241	.2271	.757	8077	.3594
COLOURED	WHITE	5722*	.2148	.039	-1.1241	-2.0214E-02
	BLACK	.3908	.2757	.488	3176	1.0992
	INDIAN	.2241	.2271	.757	3594	.807?

<sup>\*</sup> The mean difference is significant at the .05 level.

Report

Generally speaking, with regards to medicines, the cost of a drug is a good indicator of it's quality

Race	Mean	N	Std. Deviation
WHITE	3.2963	54	1.0925
BLACK	2.3333	24	1.2740
INDIAN	2.5000	44	1.0000
COLOURED	2.7241	58	1.2110
Total	2.7889	180	1.1817

Dependent Variable: The cost of a drug is generally a good indicator of it's effectiveness

Tukey HSD

Tukey HOD						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	1.0648*	.2812	.001	.3424	1.7872
	INDIAN	.6633*	.2328	.023	6.525E-02	1.2613
	COLOURED	.5849*	.2168	.035	2.807E-02	1.1418
BLACK	WHITE	-1.0648*	.2812	.001	-1.7872	3424
	INDIAN	4015	.2909	.512	-1.1488	.3457
	COLOURED	4799	.2782	.311	-1.1946	.2348
INDIAN	WHITE	6633*	.2328	.023	-1.2613	-6.5254E-02
	BLACK	.4015	.2909	.512	3457	1.1488
	COLOURED	-7.8370E-02	.2292	.986	6671	.5103
COLOURED	WHITE	5849*	.2168	.035	-1.1418	-2.8074E-02
	BLACK	.4799	.2782	.311	2348	1.1946
	INDIAN	7.837E-02	.2292	.986	5103	.6671

<sup>\*-</sup> The mean difference is significant at the .05 level.

Report

The cost of a drug is generally a good indicator of it's effectiveness

Race	Mean	N	Std. Deviation
WHITE	3.4815	54	1.0045
BLACK	2.4167	24	1.2129
INDIAN	2.8182	44	1.2440
COLOURED	2.8966	58	1.1651
Total_	2.9889	180	1,1912

## E)

### **Multiple Comparisons**

Dependent Variable: The appearance of a generic drug as a substitute to the original drug negatively affects my willingness to use it

Tukey HSD						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(L-I)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.4722	.2551	249	1831	1.1276
	INDIAN	.4949	.2112	.088	-4.7557E-02	1.0375
	COLOURED	.1533	.1966	.864	3519	.6584
BLACK	WHITE	4722	.2551	.249	-1.1276	.1831
	INDIAN	2.273E-02	.2639	1.000	6551	.7006
	COLOURED	3190	.2524	.586	9673	.3294
INDIAN	WHITE	4949	.2112	.088	-1.0375	4.756E-0:2
	BLACK	-2.2727E-02	.2639	1.000	7006	.655 <sup>-</sup> l
	COLOURED	3417	.2079	.354	8757	.1923
COLOURED	WHITE	1533	.1966	.864	6584	.3519
	BLACK	.3190	.2524	.586	3294	.9673
	INDIAN	.3417	.2079	.354	1923	.8757

### A)

#### **Multiple Comparisons**

Dependent Variable: I would be more inclined to use a generic drug if I had flu Tukey HSD

Tuncy					1	
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	7568*	.2146	.002	-1.3082	2055
	35-50	6756*	.2391	.024	-1.2900	-6.1263E-02
	50+	7978*	.2538	.009	-1.4499	1458
25-35	18-25	.7568*	.2146	.002	.2055	1.3082
	35-50	8.120E-02	.2474	.988	5545	.7169
	50+	-4.1026E-02	.2617	.999	7132	.6312
35-50	18-25	.6756*	.2391	.024	6.126E-02	1.2900
	25-35	-8.1197E-02	.2474	.988	7169	.5545
	50+	1222	.2821	.973	8470	.602€
50+	18-25	.7978*	.2538	.009	.1458	1.4499
	25-35	4.103E-02	.2617	.999	6312	.7132:
	35-50	.1222	.2821	.973	6026	.8470

<sup>\*-</sup> The mean difference is significant at the .05 level.

### Report

I would be more inclined to use a generic drug if i had flu

Age	Mean	N	Std. Deviation
18-25	2.9355	62	1.2787
25-35	3.6923	52	1.0763
35-50	3.6111	36	1.0764
50+	3.7333	30	1.0148
Total	3.4222	180	1.1863

### B)

### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if I had cancer

Tukev HSD

Tukcyi						
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	-7.1960E-02	.2382	.990	6839	.5400
	35-50	2258	.2654	.830	9077	.4561
	50+	4258	.2817	.431	-1.1496	.2979
25-35	18-25	7.196E-02	.2382	.990	5400	.6839
l	35-50	1538	.2746	.944	8594	.5517
l	50+	3538	.2904	.615	-1.0999	.3923
35-50	18-25	.2258	.2654	.830	4561	.9077
l	25-35	.1538	.2746	.944	5517	.8594
1	50+	2000	.3131	.919	-1.0045	.6045
50+	18-25	.4258	.2817	.431	2979	1.149€
]	25-35	.3538	.2904	.615	3923	1.0999
	35-50	.2000	.3131	.919	6045	1.0045

## C)

### **Multiple Comparisons**

Dependent Variable: I would still prefer the generic even if my medical aid paid for the original drug

		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	6266*	.2150	.019	-1.1788	-7.4331E-02
	35-50	7419*	.2395	.011	-1.3573	1266
	50+	9419*	.2542	.001	-1.5951	2888
25-35	18-25	.6266*	.2150	.019	7.433E-02	1.1788
	35-50	1154	.2478	.967	7521	.5213
	50+	3154	.2621	.625	9887	.3579
35-50	18-25	.7419*	.2395	.011	.1266	1.3573
	25-35	.1154	.2478	.967	5213	.7521
	50+	2000	.2826	.894	9260	.5260
50+	18-25	.9419*	.2542	.001	.2888	1.5951
	25-35	.3154	.2621	.625	3579	.9887
	35-50	.2000	.2826	.894	5260	.9260

<sup>\*.</sup> The mean difference is significant at the .05 level.

### D)

#### **Multiple Comparisons**

Dependent Variable: I would still prefer the original even if my medical aid paid for the generic

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	6712*	.1904	.002	-1.1604	1820
	35-50	8763*	.2122	.000	-1.4215	3312
	50+	9097*	.2252	.000	-1.4883	3311
25-35	18-25	.6712*	.1904	.002	.1820	1.1604
	35-50	2051	.2196	.786	7692	.3589
	50+	2385	.2322	.734	8349	.3580
35-50	18-25	.8763*	.2122	.000	.3312	1.4215
	25-35	.2051	.2196	.786	3589	.7692
	50+	-3.3333E-02	.2503	.999	6765	.6098
50+	18-25	.9097*	.2252	.000	.3311	1.4883
	25-35	.2385	.2322	.734	3580	.8349
	35-50	3.333E-02	.2503	.999	6098	.6765

<sup>\*-</sup> The mean difference is significant at the .05 level.

Report

I would still prefer the original even if my medical aid paid for the generic

Age	Mean	N	Std. Deviation
18-25	2.2903	62	.9981
25-35	2.9615	52	.9067
35-50	3.1667	36	1.0823
50+	3.2000	30	1.1265
Total	2.8111	180	1.0769

## A)

### **Multiple Comparisons**

Dependent Variable: I would be more inclined to use a generic drug if I had flu

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	.5769	.2860	.108	-9.3318E-02	1.2472
SCHOOLING	TERTIARY EDUCATION	.7857*	.3051	.027	7.064E-02	1.5008
MATRIC	INCOMPLETE SCHOOLING	5769	.2860	.108	-1.2472	9.332E-()2
	TERTIARY EDUCATION	.2088	.1941	.529	2462	.6638
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	7857*	.3051	.027	-1.5008	-7.0643E-()2
	MATRIC	2088	.1941	.529	6638	.2462

 $<sup>\</sup>ensuremath{^\star}\xspace$  The mean difference is significant at the .05 level.

### Report

I would be more inclined to use a generic drug if i had flu

Level of education	Mean	Ν	Std. Deviation
INCOMPLETE	4.0000	20	1.1239
SCHOOLING			
MATRIC	3.4231	104	1.1716
TERTIARY EDUCATION	3.2143	56	1.1865
Total	3.4222	180	1.1863

Dependent Variable: I would be happy to use a generic drug if I had cancer

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	1.1692*	.2980	.000	.4709	1.8676
SCHOOLING	TERTIARY EDUCATION	1.0071*	.3179	.004	.2621	1.7522
MATRIC	INCOMPLETE SCHOOLING	-1.1692*	.2980	.000	-1.8676	4709
	TERTIARY EDUCATION	1621	.2023	.702	6362	.312:0
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	-1.0071*	.3179	.004	-1.7522	262:1
	MATRIC	.1621	.2023	.702	3120	.6362

<sup>\*.</sup> The mean difference is significant at the .05 level.

#### Report

I would be happy to use a generic drug if I had cancer

Level of education	Mean	N	Std. Deviation
INCOMPLETE SCHOOLING	3.9000	20	.9679
MATRIC	2.7308	104	1.1678
TERTIARY EDUCATION	2.8929	56	1.3840
Total	2.9111	180	1.2653

### C)

### **Multiple Comparisons**

Dependent Variable: I would still prefer the generic even if my medical aid paid for the original drug

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bourid
INCOMPLETE	MATRIC	.9269*	.2828	.003	.2642	1.5896
SCHOOLING	TERTIARY EDUCATION	1.0286*	.3017	.002	.3215	1.7356
MATRIC	INCOMPLETE SCHOOLING	9269*	.2828	.003	-1.5896	2642
	TERTIARY EDUCATION	.1016	.1920	.857	3482	.5515
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	-1.0286*	.3017	.002	-1.7356	3215
	MATRIC	1016	.1920	.857	5515	.3482

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  The mean difference is significant at the .05 level.

## C) contd

#### Report

I would still prefer the generic even if my medical aid paid for the

original arag			
Level of education	Mean	N	Std. Deviation
INCOMPLETE SCHOOLING	3.6000	20	.9403
MATRIC	2.6731	104	1.1099
TERTIARY EDUCATION	2.5714	56	1.3053
Total	2.7444	180	1.1918

D)

#### **Multiple Comparisons**

Dependent Variable: I would still prefer the original even if my medical aid paid for the generic

		Mean				
		Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(L-J)	Std. Error	Sig.	Lower Bound	Upper Bour d
INCOMPLETE	MATRIC	.3308	.2632	.420	2861	.9477
SCHOOLING	TERTIARY EDUCATION	.3143	.2808	.502	3439	.9724
MATRIC	INCOMPLETE SCHOOLING	3308	.2632	.420	9477	.2861
	TERTIARY EDUCATION	-1.6484E-02	.1787	.995	4352	.402:3
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	3143	.2808	.502	9724	.3439
	MATRIC	1.648E-02	.1787	.995	4023	.4352

### A)

### **Multiple Comparisons**

Dependent Variable: I would be more inclined to use a generic drug if i had flu

Tukev	HSD

raney riez						
		Mean Difference			95% Confidence Interval	
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	1.852E-02	.2915	1.000	7304	.7674
	INDIAN	.3367	.2413	.502	2833	.9567
	COLOURED	3.576E-02	.2247	.999	5415	.6130
BLACK	WHITE	-1.8519E-02	.2915	1.000	7674	.7304
	INDIAN	.3182	.3015	.717	4565	1.0928
	COLOURED	1.724E-02	.2884	1.000	7237	.7582
INDIAN	WHITE	3367	.2413	.502	9567	.2833
1	BLACK	3182	.3015	.717	-1.0928	.4565
	COLOURED	3009	.2376	.584	9112	.3094
COLOURED	WHITE	-3.5760E-02	.2247	.999	6130	.5415
	BLACK	-1.7241E-02	.2884 ՝	1.000	7582	.7237
	INDIAN	.3009	.2376	.584	3094	.9112

### B)

### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if I had cancer Tukey HSD

Taney riez	_					
		Mean Difference			95% Confidence Interval	
(I) Race	(J) Race	(I-I)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	2222	.3032	.884	-1.0010	.5566
	INDIAN	.2778	.2510	.685	3669	.9225
	COLOURED	5326	.2337	.103	-1.1329	6.775E-02
BLACK	WHITE	.2222	.3032	.884	5566	1.0010
	INDIAN	.5000	.3136	.382	3056	1.3056
	COLOURED	3103	.2999	.729	-1.0808	.4602
INDIAN	WHITE	2778	.2510	.685	9225	.3669
	BLACK	5000	.3136	.382	-1.3056	.3056
	COLOURED	8103*	.2470	.006	-1.4450	1757
COLOURED	WHITE	.5326	.2337	.103	-6.7754E-02	1.1329
	BLACK	.3103	.2999	.729	4602	1.0808
	INDIAN	.8103*	.2470	.006	.1757	1.4450

 $<sup>\</sup>ensuremath{^\star}.$  The mean difference is significant at the .05 level.

### **Multiple Comparisons**

Dependent Variable: I would still prefer the generic even if my medical aid paid for the original drug Tukey HSD

Tukey HSD						
(I) Race	(J) Race	Mean Difference (I-J)	Std. Error	Sig.	95% Confide	ence Interval Upper Bound
WHITE	BLACK	.2685	.2847	.782	4630	1.0000
	INDIAN	.5791	.2357	.067	-2.6451E-02	1.1847
	COLOURED	2171	.2195	.756	7810	.3468
BLACK	WHITE	2685	.2847	.782	-1.0000	.4630
	INDIAN	.3106	.2945	.717	4461	1.0673
	COLOURED	4856	.2817	.311	-1.2093	.2381
INDIAN	WHITE	5791	.2357	.067	-1.1847	2.645E-02
	BLACK	3106	.2945	.717	-1.0673	.4461
	COLOURED	7962*	.2320	.003	-1.3924	2001
COLOURED	WHITE	.2171	.2195	.756	3468	.7810
	BLACK	.4856	.2817	.311	2381	1.2093
	INDIAN	.7962*	.2320	.003	.2001	1.3924

<sup>\*</sup> The mean difference is significant at the .05 level.

Report

I would still prefer the generic even if my medical aid paid for the original drug

Race	Mean	N	Std. Deviation
WHITE	2.8519	54	1.2500
BLACK	2.5833	24	1.0598
INDIAN	2.2727	44	1.1884
COLOURED	3.0690	58	1.0900
Total	2.7444	180	1.1918

#### **Multiple Comparisons**

Dependent Variable: I would still prefer the original even if my medical aid paid for the generic Tukev HSD

Tukey nob						
(I) Race	(J) Race	Mean Difference (I-J)	Std. Error	Sig.	95% Confide	ence Interval Upper Bound
WHITE	BLACK	.6481*	.2505	.048	4.654E-03	1.2916
	INDIAN	.8754*	.2074	.000	.3427	1.4081
	COLOURED	.1137	.1931	.936	3824	.6097
BLACK	WHITE	6481*	.2505	.048	-1.2916	-4.6541E-03
1	INDIAN	.2273	.2591	.817	4383	.8929
	COLOURED	5345	.2478	.135	-1.1711	.1021
INDIAN	WHITE	8754*	.2074	.000	-1.4081	3427
	BLACK	2273	.2591	.817	8929	.4383
	COLOURED	7618*	.2041	.001	-1.2862	2374
COLOURED	WHITE	1137	.1931	.936	6097	.3824
	BLACK	.5345	.2478	.135	1021	1.1711
	INDIAN	.7618*	.2041	.001	.2374	1.2862

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  The mean difference is significant at the .05 level.

Report

I would still prefer the original even if my medical aid paid for the generic

paid for the ge	Heric		
Race	Mean	N	Std. Deviation
WHITE	3.1481	54	1.0887
BLACK	2.5000	24	.9780
INDIAN	2.2727	44	.9732
COLOURED	3.0345	58	1.0081
Total	2.8111	180	1.0769

# A)

#### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my GP suggested it

Tukey HSD

, and , ,						
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	1489	.1374	.700	5019	.2042
	35-50	2258	.1531	.453	6192	.1676
	50+	3591	.1625	.121	7767	5.841E-02
25-35	18-25	.1489	.1374	.700	2042	.5019
	35-50	-7.6923E-02	.1584	.962	4840	.3301
	50+	2103	.1676	.592	6407	.2202
35-50	18-25	.2258	.1531	.453	1676	.6192
	25-35	7.692E-02	.1584	.962	3301	.4840
	50+	1333	.1807	.882	5975	.3308
50+	18-25	.3591	.1625	.121	-5.8411E-02	.7767
	25-35	.2103	.1676	.592	2202	.6407
	35-50	.1333	.1807	.882	3308	.5975

B)

#### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my pharmacist suggested it

Tukey HSD

		Mean				
1		Difference			95% Confide	ence Interval
(I) Age	(J) Age	(レー)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	3362	.1514	.117	7251	5.260E-02
l	35-50	3961	.1687	.087	8293	3.722E-02
	50+	5849*	.1790	.006	-1.0448	1251
25-35	18-25	.3362	.1514	.117	-5.2598E-02	.7251
1	35-50	-5.9829E-02	.1745	.986	5081	.3885
	50+	2487	.1845	.532	7228	.2254
35-50	18-25	.3961	.1687	.087	-3.7220E-02	.8293
	25-35	5.983E-02	.1745	.986	3885	.5081
	50+	1889	.1990	.778	7001	.3223
50+	18-25	.5849*	.1790	.006	.1251	1.0448
1	25-35	.2487	.1845	.532	2254	.7228
	35-50	.1889	.1990	.778	3223	.7001

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  The mean difference is significant at the .05 level.

# B) contd

Report

I would be happy to use a generic drug if my pharmacist suggested it

Age	Mean	N	Std. Deviation
18-25	3.5484	62	.9526
25-35	3.8846	52	.7044
35-50	3.9444	36	.8600
50+	4.1333	30	.5074
Total	3.8222	180	.8266

C)

### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my friends or family suggested it

Tukey HSD

Tukey F	IOD					
		Mean Difference			95% Confide	
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	2878	.2088	.513	8242	.2485
	35-50	5143	.2326	.120	-1.1120	8.333E-02
	50+	5699	.2469	.096	-1.2042	6.446E-02
25-35	18-25	.2878	.2088	.513	2485	.8242
	35-50	2265	.2407	.783	8449	.3919
	50+	2821	.2545	.685	9360	.3719
35-50	18-25	.5143	.2326	.120	-8.3329E-02	1.112C
	25-35	.2265	.2407	.783	3919	.8449
	50+	-5.5556E-02	.2745	.997	7607	.6495
50+	18-25	.5699	.2469	.096	-6.4459E-02	1.2042
	25-35	.2821	.2545	.685	3719	.9360
	35-50	5.556E-02	.2745	.997	6495	.7607

D)

**Multiple Comparisons** 

Dependent Variable: Advertising plays a major role in my choice of drug therapy

Tukey HSD

rancy					_	
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
18-25	25-35	1613	.1833	.815	6322	.3096
	35-50	6613*	.2043	.007	-1.1861	1365
	50+	-1.0946*	.2168	.000	-1.6516	5376
25-35	18-25	.1613	.1833	.815	3096	.6322
	35-50	5000	.2114	.084	-1.0430	4.299E-02
	50+	9333*	.2235	.000	-1.5075	3592
35-50	18-25	.6613*	.2043	.007	.1365	1.1861
	25-35	.5000	.2114	.084	-4.2988E-02	1.0430
	50+	4333	.2410	.274	-1.0524	.1858
50+	18-25	1.0946*	.2168	.000	.5376	1.6516
	25-35	.9333*	.2235	.000	.3592	1.5075
	35-50	.4333	.2410	.274	1858	1.0524

 $<sup>\</sup>ensuremath{^\star}\xspace$  The mean difference is significant at the .05 level.

Report

Advertising plays a major role in my choice of drug therapy

3 p - 2						
Age	Mean	N	Std. Deviation			
18-25	1.8387	62	.7723			
25-35	2.0000	52	.7410			
35-50	2.5000	36	1.1832			
50+	2.9333	30	1.3629			
Total	2.2000	180	1.0485			

# A)

#### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my GP suggested it

Tukey HSD

Tukey Hob						
(1) 1 1 - 1 - 1 - 1 - 1 - 1	(I) Level of advention	Mean Difference	Std. Error	Cia	95% Confide	ence Interval Upper Bound
(I) Level of education	(J) Level of education	(I-J)		Sig.		
INCOMPLETE	MATRIC	.2154	.1799	.455	2063	.6371
SCHOOLING	TERTIARY EDUCATION	.1714	.1920	.645	2785	.6214
MATRIC	INCOMPLETE SCHOOLING	2154	.1799	.455	6371	.2063
	TERTIARY EDUCATION	-4.3956E-02	.1221	.931	3302	.2423
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	1714	.1920	.645	6214	.2785
	MATRIC	4.396E-02	.1221	.931	2423	.3302

# B)

### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my pharmacist suggested it

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bour d
INCOMPLETE	MATRIC	.3308	.2014	.228	1413	.8029
SCHOOLING	TERTIARY EDUCATION	.2786	.2149	.397	2251	.7823
MATRIC	INCOMPLETE SCHOOLING	3308	.2014	.228	8029	.1413
	TERTIARY EDUCATION	-5.2198E-02	.1367	.923	3727	.2683
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	2786	.2149	.397	7823	.2251
	MATRIC	5.220E-02	.1367	.923	2683	.3727

## C)

#### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my friends or family suggested it

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	.5654	.2671	.086	-6.0508E-02	1.1913
SCHOOLING	TERTIARY EDUCATION	-1.4286E-02	.2849	.999	6820	.6535
MATRIC	INCOMPLETE SCHOOLING	5654	.2671	.086	-1.1913	6.051E-02
	TERTIARY EDUCATION	5797*	.1813	.004	-1.0046	1548
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	1.429E-02	.2849	.999	6535	.682:0
	MATRIC	.5797*	.1813	.004	.1548	1.0046

<sup>\*·</sup> The mean difference is significant at the .05 level.

#### Report

I would be happy to use a generic drug if my friends or family suggested it

Level of education	Mean	N	Std. Deviation
INCOMPLETE SCHOOLING	3.7000	20	1.0311
MATRIC	3.1346	104	1.1663
TERTIARY EDUCATION		56	.9670
Total	3.3778	180	1.1244

# D)

#### **Multiple Comparisons**

Dependent Variable: Advertising plays a major role in my choice of drug therapy Tukey HSD

		Mean			050/ 0 6-1	
M. I		Difference			95% Confide	ence Interval
(I) Level of education	(J) Level of education	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
INCOMPLETE	MATRIC	-9.2308E-02	.2572	.931	6952	.5106
SCHOOLING	TERTIARY EDUCATION	1500	.2744	.848	7932	.4932
MATRIC	INCOMPLETE SCHOOLING	9.231E-02	.2572	.931	5106	.6952
	TERTIARY EDUCATION	-5.7692E-02	.1746	.942	4669	.3516
TERTIARY EDUCATION	INCOMPLETE SCHOOLING	.1500	.2744	.848	4932	.7932
	MATRIC	5.769E-02	.1746	.942	<u>-</u> .3516	.4669

## A)

#### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my GP suggested it Tukey HSD

Tukey 113D_						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.5556*	.1749	.008	.1061	1.0050
	INDIAN	.4040*	.1448	.027	3.200E-02	.7761
	COLOURED	.3946*	.1348	.018	4.822E-02	.7410
BLACK	WHITE	5556*	.1749	.008	-1.0050	106 <sup>-</sup> l
	INDIAN	1515	.1809	.837	6164	.3133
	COLOURED	1609	.1731	.789	6055	.2837
INDIAN	WHITE	4040*	.1448	.027	7761	-3.2004E-02
	BLACK	.1515	.1809	.837	3133	.6164
	COLOURED	-9.4044E-03	.1426	1.000	3756	.3568
COLOURED	WHITE	3946*	.1348	.018	7410	-4.8223E-02
	BLACK	.1609	.1731	.789	2837	.6055
	INDIAN	9.404E-03	.1426	1.000	3568	.3756

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  The mean difference is significant at the .05 level.

Report

I would be happy to use a generic drug if my GP suggested it

	Raçe	Mean	N	Std. Deviation	
١	WHITE	4.2222	54	.4196	
	BLACK	3.6667	24	.8681	
	INDIAN	3.8182	44	.7241	
	COLOURED	3.8276	58	.8406	
	Total	3.9222	180	.7358	

## B)

### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my pharmacist suggested it Tukev HSD

Tukey Hob						
		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.4815	.1923	.059	-1.2601E-02	.9756
	INDIAN	.7391*	.1592	.000	.3300	1.1481
	COLOURED	.2516	.1482	.325	1293	.6324
BLACK	WHITE	4815	.1923	.059	9756	1.260E-02
	INDIAN	.2576	.1989	.566	2535	.7686
	COLOURED	2299	.1903	.622	7187	.2589
INDIAN	WHITE	7391*	.1592	.000	-1.1481	3300
	BLACK	2576	.1989	.566	7686	.2535
	COLOURED	4875*	.1567	.010	8901	-8.4823E-02
COLOURED	WHITE	2516	.1482	.325	6324	.1293
	BLACK	.2299	.1903	.622	2589	.7187
	INDIAN	.4875*	.1567	.010	8.482E-02	.8901

<sup>\*-</sup> The mean difference is significant at the .05 level.

Report

I would be happy to use a generic drug if my pharmacist suggested it

- caggootoa n			
Race	Mean	N	Std. Deviation
WHITE	4.1481	54	.5287
BLACK	3.6667	24	.7614
INDIAN	3.4091	44	.8975
COLOURED	3.8966	58	.8923
Total	3.8222	180	.8266

#### **Multiple Comparisons**

Dependent Variable: I would be happy to use a generic drug if my friends or family suggested it Tukey HSD

Tukey HSD						<u> </u>
		Mean Difference	_		95% Confide	
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.1296	.2681	.963	5592	.8185
	INDIAN	.7660*	.2220	.003	.1957	1.3363
	COLOURED	.1469	.2067	.893	3841	.6779
BLACK	WHITE	1296	.2681	.963	8185	.5592
1	INDIAN	.6364	.2774	.099	-7.6180E-02	1.3489
	COLOURED	1.724E-02	.2653	1.000	6643	.6988
INDIAN	WHITE	7660*	.2220	.003	-1.3363	1957
	BLACK	6364	.2774	.099	-1.3489	7.618E-02
	COLOURED	6191*	.2185	.024	-1.1805	-5.7753E-02
COLOURED	WHITE	1469	.2067	.893	6779	.3841
	BLACK	-1.7241E-02	.2653	1.000	6988	.6643
	INDIAN	.6191*	.2185	.024	5.775E-02	1.1805

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  The mean difference is significant at the .05 level.

Report

I would be happy to use a generic drug if my friends or family suggested it

army enggetten it							
Race	Mean	N	Std. Deviation				
WHITE	3.6296	54	1.0333				
BLACK	3.5000	24	.9780				
INDIAN	2.8636	44	1.3046				
COLOURED	3.4828	58	1.0129				
Total	3.3778	180	1.1244				

# D)

#### **Multiple Comparisons**

Dependent Variable: Advertising plays a major role in my choice of drug therapy Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
WHITE	BLACK	.7407*	.2436	013	.1150	1.3665
	INDIAN	.8771*	.2016	.000	.3591	1.3951
	COLOURED	.7063*	.1877	.001	.2239	1.1886
BLACK	WHITE	7407*	.2436	.013	-1.3665	1150
	INDIAN	.1364	.2519	.949	5109	.7836
	COLOURED	-3.4483E-02	.2410	.999	6535	.5846
INDIAN	WHITE	8771*	.2016	.000	-1.3951	3591
	BLACK	1364	.2519	.949	7836	.5109
	COLOURED	1708	.1985	.825	6808	.3391
COLOURED	WHITE	7063*	.1877	.001	-1.1886	2239
	BLACK	3.448E-02	.2410	.999	5846	.6535
	INDIAN	.1708	.1985	.825	3391	.6808

<sup>\*.</sup> The mean difference is significant at the .05 level.

Report

Advertising plays a major role in my choice of drug therapy

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Race	Mean	N	Std. Deviation
WHITE	2.7407	54	1.2766
BLACK	2.0000	24	.7223
INDIAN	1.8636	44	.5537
COLOURED	2.0345	58	1.0424
Total	2.2000	180	1.0485

## A)

## RELIABILITY ANALYSIS - SCALE (ALPHA)

Statistics for Mean Variance Std Dev Variables SCALE 16.6778 5.3369 2.3102 4

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
EXISDRUG	12.5556	3.1757	.4677	.6212
COSTLESS	12.5333	3.9151	.2978	.7164
GENEKNOW	12.4778	3.3570	.5749	.5626
REDUHEAL	12.4667	2.8201	.5609	.5540

Reliability Coefficients

N of Cases = 180.0 N of Items = 4

## B)

#### RELIABILITY ANALYSIS - SCALE (ALPHA)

N of Statistics for Mean Variance Std Dev Variables SCALE 15.6667 15.9106 3.9888 5

#### Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
QUALGENE	12.5000	10.9553	.4500	.7233
<b>EFFGENER</b>	11.9333	11.1911	.5194	.6977
COSTQUAL	12.8778	9.8509	.6286	.6527
COSTEFFE	12.6778	10.2978	.5486	.6851
GENEAPPE	12.6778	11.8621	.4062	.7354

Reliability Coefficients

N of Cases = 180.0 N of Items = 5

# C)

## RELIABILITY ANALYSIS - SCALE (ALPHA)

N of Std Dev Variables Statistics for Mean Variance 11.8889 11.7194 3.4234 SCALE

#### Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
GENERFLU	8.4667	7.4235	.4469	.6552
GENERCAN	8.9778	6.3459	.5918	.5575
GENEPREF	9.1444	6.7835	.5663	.5784
ORIGPREF	9.0778	8.4744	.3326	.7161

Reliability Coefficients

N of Cases = 180.0

Alpha = .6975

N of Items = 4

115

D)

## RELIABILITY ANALYSIS - SCALE (ALPHA)

Statistics for Mean Variance Std Dev Variables SCALE 13.3222 6.3202 2.5140 4

#### Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
GENERGP	9.4000	4.2637	.4986	.4280
GENEPHAR	9.5000	3.9609	.5094	.3998
GENEFAMI	9.9444	3.4047	.3979	.4761
GENEADVE	11.1222	4.5995	.1381	.6883

Reliability Coefficients

N of Cases = 180.0

N of Items = 4

· E)

## RELIABILITY ANALYSIS - SCALE (ALPHA)

N of Statistics for Mean Variance Std Dev Variables SCALE 57.5556 98.5053 9.9250 17

#### Item-total Statistics

	Scale	Scale	Corrected	
	Mean	Variance	Item-	Alpha
	if Item	if Item	Total	if Item
	Deleted	Deleted	Correlation	Deleted
EXISDRUG	53.4333	88.4704	.5773	.8561
COSTLESS	53.4111	94.6792	.2273	.8679
GENEKNOW	53.3556	92.2751	.4238	.8621
REDUHEAL	53.3444	89.4785	.4806	.8595
QUALGENE	54.3889	82.2948	.6860	.8491
EFFGENER	53.8222	83.6777	.7190	.8486
COSTQUAL	54.7667	87.4648	.4363	.8618
COSTEFFE	54.5667	88.2469	.3950	.8639
GENEAPPE	54.5667	88.1128	.4703	.8598
GENERFLU	54.1333	85.7251	.5177	.8578
GENERCAN	54.6444	85.8394	.4719	.8605
GENEPREF	54.8111	85.0256	.5487	.8562
ORIGPREF	54.7444	88.4148	.4410	.8611
GENERGP	53.6333	89.7307	.5906	.8568
GENEPHAR	53.7333	88.5542	.5957	.8557
GENEFAMI	54.1778	84.2587	.6289	.8523
GENEADVE	55.3556	93.5265	.1913	.8717

Reliability Coefficients

N of Cases = 180.0 N of Items = 17