Can household income explain township consumer behaviour?

A study of the Roots Health and Wellness Centre (Spa)

A Research Report

The Graduate School of Business
University of Cape Town

in partial fulfillment of the requirements for the
Masters of Business Administration Degree

by
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11 December 2009

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Plagiarism Declaration

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Date
Acknowledgements

I would like to record my sincerest gratitude to the following people who have been made my load light and bearable throughout the research period:

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Abstract

The objective of the research was to determine if the level of household income influenced consumer behaviour in the townships in South Africa. The research focused on the clients of Roots Health and Wellness Centre Spas located in Soweto and Spruitview. A quantitative research methodology was used and questionnaires were used to collect data from the Roots clients. Data on the following variable was collected: client income; client age and gender; frequency of use and money spent at the Spa. The data was analyzed using the Chi-Squared Association method. The research results showed that the low income clients used the Spa more frequently and spent less money per visit and the high income clients used the Spa less frequently and spent more money per visit. Thus it would appear that there is correlation between household income and consumer behaviour in the townships of South Africa.

Key words:

Consumer behaviour, income groups, social class, spending.
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1 Introduction

1.1 Research area and problem

Consumer spending (household expenditure) in South African black households has grown dramatically since the advent of democracy in 1994. In Black households the average growth in household expenditure was reported to be 239% between 1994 and 2004, which is three times the growth reported in the white population (Ligthelm, 2008). The Black household expenditure growth (as reflected in Table 1) covered all four spending areas, with personal care, housing and electricity recording over 400% growth. Ligthelm (2008) attributes this growth in black household expenditure to the emergence of a black middle class in the South African townships such as Soweto. Ligthelm (2008) also noted that this increase in black household expenditure has attracted the attention of many retail companies and other big businesses and prompted the development of shopping malls in the townships. However, as the development of shopping malls in the townships is a recent phenomenon there has not been much research done on consumer behaviour in the townships.

Table 1: Percentage (%) growth in household expenditure from 1994 to 2004

<table>
<thead>
<tr>
<th>Item</th>
<th>Black households</th>
<th>White households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>196</td>
<td>79</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>98</td>
<td>15</td>
</tr>
<tr>
<td>Housing and electricity</td>
<td>490</td>
<td>133</td>
</tr>
<tr>
<td>Personal care</td>
<td>401</td>
<td>140</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>239</td>
<td>110</td>
</tr>
</tbody>
</table>

Source: (Ligthelm, 2008)

As noted by Schulaka (2009) information about consumer behaviour is important for identifying target market trends and for streamlining marketing strategy in order to ensure that initially the business is successful and also that the success is sustainable. The little that is known about township consumer behaviour comes from the work of Maliwichi, Bourne & Mokoena (2003). Their research explored expenditure patterns on food and non food items of Khayelitsha households, a predominately black township in the Western Cape Province.
Having identified the research area as being the lack of information about consumer behaviour in townships the researcher decided to investigate the consumer behaviour related to the Roots Health and Wellness Centre which is a Spa located in Soweto and Spruitview. Dr Thabang Molefi is the founder of the Roots Spa and she had previously conducted research when planning to set up her business – however this research had been inappropriate for her needs. Part of the research was financially taxing as she pursued wrong marketing channels for her services after establishing her business such as advertising on radio stations like Metro FM, a station with a listenership predominantly black young up and coming professionals (Macanda, 2007).

Thus the focus of this research was to provide consumer behaviour information to entrepreneurs like Dr. Thabang Molefi and businesses wanting to expand to the township market to help identify the viability of their businesses. This information will hopefully help them to establish their businesses without having to conduct their own primary research, which can be time consuming and costly.

1.2 Research questions and corresponding hypotheses

The main question that this research sought to answer is: Does the level of household income influence consumer behaviour for spa services in the townships? To understand whether the level of household income influences consumer spending behaviour or not, the research questions below were formulated using the main research question. These questions were used to develop the questionnaire that was used to collect consumer data and to test the relationship between the two variables.

Question 1

Is there a difference in the number of people visiting the spas between income groups? (Is it lower among low income group, moderate among middle income group and higher among high income group?)
Hypothesis 1

Ho : The number of clients using the spa is equal among income groups
Ha : The number of clients using the spa is different among income groups

Question 2

Is there a difference in the amount of money spent during a visit to the spa between different income groups? (Is it lower among low income group, moderate among middle income group and higher among high income group?)

Hypothesis 2

Ho : The amount of money spent during a spa visit is similar among income groups
Ha : The amount of money spent during a spa visit differs among income groups

Question 3

Is there a difference among income groups as to who pays for the spa visits? (Is it own, gift or family who pays for the spa visit?)

Hypothesis 3

Ho : The person paying for services used at the spa is similar among income groups
Ha : The person paying for services used at the spa is different among income groups

Question 4

Is there a difference in the total number of monthly visits to the spa between income groups? (Is it lower among low income group, moderate among middle income group and higher among high income group?)
Hypothesis 4

Ho : The combined number of visits to the spa is the same among income groups
Ha : The combined number of visits to the spa is different among income groups

1.3 Research scope

The research was conducted among customers of the Roots spa. This was chosen due to the huge and diverse nature of the township market and the constraints of the time allocated to this research. Hence application of the research results is likely to be confined to the market sector and type of business Roots operates in. It would be possible to replicate the study to other markets and business types.

1.4 Research assumption

The following assumptions have been made to facilitate both collection and analysis of data:

- The proportion of income groups is the same in all townships. If Soweto, for instance, has a household income group distribution of say 5% high income families, 35% middle income families and 60% low income family and the research results reflect that 5% of people using Roots are from high income families, 35% are from middle income families and 60% are from low income families. This will simply be a reflection of the demographics in the township. Since that information could not be access during the time of the research, this assumption has to be made to enable analysis of data.

- Consumer dynamics are similar across South African townships. This was made to enable data collected from the two townships to be collated and analysed as one. However there may be geographically, economic and cultural aspects that can possibly influence how consumers behave from different townships.
1.5 Research ethics

Although there was no tangible risk of harm to research respondents, it was noted that lack of informed consent and data protection could have presented some challenges (Bryman & Bell, 2008). Respondents may have chosen not to participate if they did not have full understanding of what the research was about. To address this possible lack of informed consent, a letter of introduction was attached to each survey questionnaire, explaining the purpose of the research in details (see appendix 2 for copy of the letter). This assisted respondents to decide if they wanted to participate or not in the survey. Respondents’ responses were also kept anonymous by not gathering personal data such as names, ID numbers, street addresses, and other information that may later make it possible to identify respondents. The University of Cape Town’s Research Ethical Clearance on-line form was also completed and submitted. This clearance was done to assess and address possible ethical implications of the research before soliciting responses from the research participants.

2 Literature review

2.1 Factors that influence consumer behaviour

Understanding consumer behaviour is vital for crafting an effective marketing strategy (Wiese, 2008). According to Silk (2006) understanding consumer behaviour gives businesses a competitive advantage over their competitors. Wiese (2008) explains consumer behaviour as how consumers make decisions on how they will spend their resources (money, time and skills) and Peter and Donnelly (2006) describe it as understanding why consumers behave the way they do. Numerous models of consumer behaviour have been developed such as the Engel, Blackwell and Miniard Model (Wiese, 2008) as shown in Figure 1 below. The Engel, Blackwell and Miniard model group variables that influence consumer behaviour into major categories that influence consumers such as socio-cultural, marketing and psychological variables. The model also shows the causal relationships that develop between these variable and consumer behaviour (consuming decision making process).
The Engel, Blackwell and Miniard Model has consumer purchasing Decision Making Process on the far right as the dependant attribute which is influenced by the group Consumer Lifestyle. But Consumer Lifestyle group is itself influenced or shaped by External Influences groups of Socio-cultural and Organizations’ market efforts. In effect industry marketing messages together with the social environments where consumers come from shape consumers’ lifestyles and these lifestyles inform the way consumers decide to spend their money. Another way that the External Influences group influences the final purchase Decision Making Process is the through the Internal Influences link. Experiences and acquisition from the Decision Making Process also contribute in shaping both External and Internal Influences. This reverse influence comes from the experience gained in previous spending trip which the consumers bring to the next spending trip.

2.2 Social class influence

Social class, a sub-category of socio-cultural influence, is the tendency of people to differentiate themselves from one another and to group themselves on the basis of important similarities (Silk, 2006). Social class can be measured using a combination of variables such as occupation, education, income, ownership, affiliation and power (Peter & Donnelly, 2006; Wiese, 2008). For example the Lloyd Warner’s Index of Social Class uses source of income, occupation, dwelling area and house type as proxy variables for social class (Foxall, 1975; Martineau, 1958). According to Wiese (2008), income plays a major role in consumer spending decision making. Income availability influences the entire consumer decision
process. The consumer decision making process as illustrated below in Figure 2 has five stages; starting with need recognition and ending with post consumption evaluation. According to Peter and Donnelly (2006) different social classes of consumers in the Americas behave differently. Their spending patterns are different. High class consumers with high incomes prefer quality merchandise and prestige brands while the middle class prefers what is popular, and the lower class spends on basic needs. In addition to this, high class consumers spend a lot on entertainment, leisure, recreation, travel and education relative to their middle and lower income classes.

![Diagram of the consumer decision-making process]

Source: Peter & Donnelly (2006)

Figure 2: The consumer decision-making process

2.3 Income as a predictor of consumer behaviour

Although income is among the many variables that are used to measure social class, it has been found that there is a weak correlation between the two variables. Myers and Mount (1973) found a correlation of 0.52 between the two variables. Coleman (1983) drawing from the work of Warner (1941) also noted that although it is common for Americans (from the USA) to assume that class is a product of income, the two are not really well correlated. A great deal of research between the 1950s and the 1970s has been conducted to determine if social class is really able to explain consumer behaviour (Coleman, 1983; Curtis, 1972; Foxall, 1975; Martineau, 1958). At the same time research was also underway to establish whether income was also a good predictor of consumer behaviour (Myers & Mount, 1973). This led to the vigorous debate as to which of the two variables between social class and income is better at predicting consumer behaviour. Comparative studies were as a result conducted to provide answers for this debate (Martineau, 1958; Myers & Mount, 1973). Different studies came to different conclusions. For instance Martineau (1958) found that social class was superior at predicting consumer behaviour in the home appliances market but Myers and Mount (1973) found that income was superior at predicting consumer behaviour.
for certain packaged consumer goods and some services. It was Schaninger in Coleman (1983) who eventually provided guidance and direction through the following generalization:

- Social class is superior for areas of consumer behaviour that do not involve high value expenditures, but do reflect underlying life-style value
- Income is superior for products which require substantial expenditure and reflect ability to pay yet are not perceived to be class-linked status symbols
- Both must be used in combination for product classes that are highly visible, serve as symbols of status within class, and require either moderate or substantial expenditure

Further research on the influence of income on consumer behaviour continued to yield different results in line with these generalizations. Gundgaard’s (2006) study of the health services utilization between income groups in Denmark’s Funen County is one such example. Gundgaard surveyed 2,915 respondents who used hospital services and used the index of horizontal inequity (HI) to determine the role of income in predicting consumer behaviour. Although his study revealed that lower income groups consumed a bigger share of the health systems with exception of dental services, no significant inequity use of health services was found to exist. Hence the study concluded that the use of health care services in Funen County was in general equitable across all income groups. In this case social class may be the alternative to explaining consumer behaviour.

However, Bowman (1997) and Giskes, Turrell, Patterson, and Newman (2002) in unrelated separate studies concluded that income was a predictor of consumer behaviour. Bowman (1997) explored the influence of income on snacking habits of American households using data from USDA’s 1994 Continuing Survey of Food Intakes by Individuals (CSFII). Mean intakes of foods, nutrients, Food Guide Pyramid servings, and frequency of snacking were computed for the 5400 respondents surveyed. The study used linear models and logistics regressions with the aid of the SPSS-X (Release 6.1) software package to analyze the collected data. The research results concluded that the percentage of individuals who snacked or had a beverage break increased with an increase in income. The number of people from the surveyed sample who had a snack break was 69 percent in (lower income), 74 percent in middle income and 79 percent in higher incomes. The lowest income group were also found to have more snack breaks than the other income groups during the conventional lunch and
dinner hours, which Bowman (1997) argued could reflect an inability to afford a nutritionally adequate meal.

Giskes et al. (2002) also arrived at a similar conclusion during their research which explored the influence of socioeconomic factors on consumption of fruit and vegetable high in vitamins A, C and folate. Household income was used as the measure of socioeconomic position (SEP). Giskes et al. (2002), like Bowman (1997), employed the multiple-pass 24-hour recall procedure from the US CSFII to collect data from 13 858 participants representing their households and the SPSS Version 10.0 to analyze it. This software uses linear models to examine the associations between nutrient intakes, the amount of fruit and vegetables consumed and income. A summary of the analysis results on table 2 below revealed that participants from low-income households consumed a smaller quantity of fruit and vegetables. Like in the Bowman (1997) study, the average consumption of vegetables increased steadily from low income households to high income households. Participants from low income household were also less likely to consume fruit and vegetables high in vitamin C, folate and vitamin A than their richer counterparts, albeit the differences were small to moderate in magnitude. Vitamin A intakes were not significantly related to income.

Table 2: Fruit and vegetables consumed by participants in the past 24-hours

<table>
<thead>
<tr>
<th>Household Income (Quintiles)</th>
<th>Grams of fruit consumed (SD)</th>
<th>Grams of vegetables consumed (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>1 (Low)</td>
<td>69 (9)</td>
<td>87(9)</td>
</tr>
<tr>
<td>2</td>
<td>72 (10)</td>
<td>97(9)</td>
</tr>
<tr>
<td>3</td>
<td>96 (10)</td>
<td>117(9)</td>
</tr>
<tr>
<td>4</td>
<td>101(11)</td>
<td>110(10)</td>
</tr>
<tr>
<td>5(High)</td>
<td>146 (11)</td>
<td>160(9)</td>
</tr>
<tr>
<td>P-value</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

Source: Giskes et al. (2002)

Local and other international research also suggests that household income exert significant influence on consumer behaviour. A study of South African households, which made use of descriptive rather than inferential statistical methods revealed that household income affect consumption of goods and services among different LSM groups. According to Martins (2005) 12.4 million households in South Africa spent a total of R870 billion in 2005
collectively. The spending was on approximately 500 products and services. The distribution of this spending among families per LSM categories is shown on figure 3 below. LSM 10 households which account for 6.5% of all households were responsible for 30.5% of this total cash spending. One remarkable feature of the LSM 10 spending is its contribution on what one may call luxury spending. This LSM was responsible for 61% of the R11 billion of all holidays spending by South African, 53% of the R10.9 billion sport, recreation, entertainment and sport spending and 53% of R10.9 billion paid to domestic servants.

Source: Martins (2005)

Figure 3: Share of LSMs in total household cash expenditure and households

Another peculiar feature of the households spending is the nature of food items purchased by LSM 6’s compared to LSM 1’s. Whereas LSM 1’s spent 71% of their total budget on basic food items such poultry, bread, maize meal and rice, LSM 6’s spent only 24% of their total budget but much higher in rand value term, on varied food items such as white bread, beef, mutton, lamb, poultry and fresh milk (Martins, 2005). High income families also seem to indulge in a big way since they spend a small percentage of their income on foods but account for a big portion of overall cash spending in the entire country. This may be as a result of frequent spending and consumption of high value items and services.

Du and Kamakura’s (2008) analysis of 66 386 USA households consumer expenditure data for a period of 22 years, from 1982 to 2003, also arrived at a similar conclusion as Martins (2005). Like South Africans, richer USA families were spending more of their income on
recreation, lodging away from home and education as shown on figure 4 below. Poor USA families were also spending a higher percentage of their income on food at home and a low percentage on apparel, food outside home and motor vehicle maintenance.

Source: Du & Kamakura (2008)

Figure 4: Engel curves for some of the consumption categories

Du and Kamakura (2008) also sought to understand and explain how different households, with different incomes at different life stages were prioritization their income in general in order to maximize their utility. Their motivation to explore this was based on the fact that all types of consumer expenditure are vying for the same pool of consumer’s disposable income and perhaps this finding may help explain cross-industry competition based on how consumers were making their trade-offs between competing needs. For example, in the same
study they observed that health spending among families was declining and that this could have been due to increasing health insurance (medical aid). Using the Structural demand model which estimates consumer utility, they were able to show that richer families were in general deriving high utility than their poorer counterparts from prioritizing spending on non-essential items such as holidays, personal and miscellaneous care services, alcoholic beverages away from home, food takeaways, jewelries and watches regardless of their life stage.

2.4 Conclusion

The foregoing discussion clearly suggests that the level of income can influence consumer behaviour. However, there are times when income is not a good predictor of consumer behaviour. In those instances social class becomes a better predictor of consumer behaviour. Where income was found to be better predictor of consumer behaviour, the following were particularly noted:

The level of household or personal income was found to be able to predict the prevalence of spending among different income groups. For instance in the USA, the number of people engaging in snacking habits was found to increase as one moves up the income scale, that is it was low among low income earners, moderate among middle income earners and high among high increase earners. In order words there is a positive correlation between the level of income and the number of consumers within income groups. This is the basis for hypothesis 1, which sought to test if there was a difference in the number of clients using Roots spa among income groups and if this difference will follow these earlier findings.

Again the findings from the USA households’ snacking habits research shed some light on whether the level of income had an influence on spending frequency or not. The finding was that although there were fewer people engaging in snacking habits in the lower income group, these people were having snacks at a frequency that was higher than that observed in the middle and high income groups. Contrary to the snacking prevalence among incomes, the snacking frequency was found to be inversely related to the level of income. This is the basis for hypothesis 4, which was used to test whether the level of income was able to explain the frequency of spa visits among clients of Roots.
Research findings regarding general spending patterns in South Africa, Australia and the USA also suggest that the level of income can determine where and how consumers spend their money and how much they spend when they do. In South Africa and the USA, low income earners were spending a higher percentage of their income on basic items such as food and accommodation whereas higher income earners were spending a higher percentage of their income on non-essential items such as holidays and recreation. In addition to this the South African high income earners were responsible for more than 50% of all these non-essential spending and yet they accounted for 9% of the entire population of consumers. A study in Australia also found that there was a positive correlation between the level of income and the intake of the certain vegetables and income. This means higher income earners were spending more money than the low income earners on vegetables and fruits. This supports Hypothesis 2, which was formulated to check if this is the case for the township consumers by testing if high income earners were spending more money at Roots relative to low income earners.

There was no evidence from consumer behaviour literature that was found to support hypothesis 3, except from the industry market research that Roots operates in. This industry research, which was conducted in the USA, found that it was common for a family, a company or friends to offer a client an all-expense-paid gift for spa services (Monteson & Singer, 2002). This unfortunately could not form part of the literature survey as it is somewhat unrelated to subject matter under consideration however, in the South African context where the culture is different and family members like husbands are known for take pride in taking good care of their wives, this kind of practice can be expect to exist.

Hence the questionnaire that was design and used to collect information about the consumers that was required to test these hypotheses included level; of personal and household income, number of time the consumer used Roots services, the amount of money spend during every visit to Roots, and person who was paying for the services used at Roots. This core fields were supplemented by demographics data such place of residence, age, size of households, services most used and profession of the respondent among others. Demographic data played two roles namely filtering who was from the township and who was not and attributes like profession of respondents was used to verify income. Table 3 below summarizes the relationship between the literature above and the research questions and questionnaire design.
### Table 3: Summary of relationship between theory and research questions and questionnaire

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Theory</th>
<th>Corresponding variables (fields in the questionnaire)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Is there a difference in the number of people visiting the spa (Roots) between income groups?</td>
<td>Snacking habit was found to more common among high income earners but less common among low income earner (Bowman, 1997).</td>
<td>2. What is your job title? 4. What is your marital status? 8. How much do you earn? a) Alone b) As a family 10. How many members of your family are employed</td>
</tr>
<tr>
<td><strong>2.</strong> Is there a difference in the amount of money spend during spa visits between different income groups?</td>
<td>High income families were spending less of their money on basic items when compared to low income families. High income families were spending more on education, recreation, and holidays in comparison (Du &amp; Kamakura, 2008). In South Africa they were responsible for 55% of spending for these items (Martins, 2008). In Australia High income families had a high income of certain fruits and vegetables when compared to their low income counterparts (Giskes et al., 2002)</td>
<td>13. How much do you spend every time you visit the spa?</td>
</tr>
<tr>
<td><strong>3.</strong> Is there a difference among income groups as to who pays for their spa visits?</td>
<td>Users of spas in the USA were paying for their services using one of the following: own pocket, family, or gift (Monteson &amp; Singer, 2002)</td>
<td>12. Who pays for your spa visit?</td>
</tr>
<tr>
<td><strong>4.</strong> Is there a difference on the number of spa visits between income groups?</td>
<td>High snacking frequency low income earners and low snacking frequency among high income earners (Bowman, 1997)</td>
<td>7. How many times do you visit the spa in a month??</td>
</tr>
</tbody>
</table>


3 Research methodology

3.1 Research approach and strategy

Approach and strategy

A deductive approach as shown on Figure 5 below and quantitative research strategy were used to conduct the research. Existing theory was tested and informed and guided the collection and analysis of data (Bryman & Bell, 2007; Saunders, Lewis & Thornhill, 2007). The research questions dealt with quantitative variables and there was a need to infer causality i.e. does the level of income influence consumer behaviour. According to Saunders, Lewis and Thornhill (2007), a deductive approach is suitable for answering these kinds of questions. Other considerations included the need to generalize the findings and to present valid and reliable results.

![Figure 5: The process of deduction](source: Bryman & Bell (2007))
Epistemological plan

A positivism philosophy was adopted so as to ensure that the research became acceptable knowledge in the field of research (Bryman & Bell, 2007, Saunders, Lewis & Thornhill, 2007). A ‘resource’ researcher’s method was employed as opposed to a ‘feeling’ researcher’s method (Saunders, Lewis & Thornhill, 2007). i.e. research questions were developed from existing theory and observable, quantifiable and measurable data was collected to test this question. Although the research deals with human behaviour, this research philosophy was deemed suitable as it looked into the measurable variables (influence) of the behaviour e.g. level of income, which can be measured by looking at the salary slip.

Ontological plan

The research attempted to determine the influence of one variable, income, on consumer behaviour and did not consider the simultaneous influence that other variables may have on the consumer behaviour. During the research consumers may have been shaping their behaviour based on the influences of other variables other than income. This objectivist approach allowed the research to take a snapshot of the ‘then moment’ but its failure to recognize the constructionist approach (meaning construction by consumers) meant that the changing reality may have been miss-captured (Bryman & Bell, 2007). However, research such as conducted by Du and Kamakura 2008 entitled “Where did all that money go? Understanding how consumers allocate their consumption budget” (Du & Kamakura, 2008) and research by Bowman on “Snacking habits of different income groups” (Bowman, 1997) seem to suggest that the variable, income, exerts a major and a consistent influence relative to other variables on the consumer behaviour over time. Thus there was no concern about this seemingly ‘simplification’ of the research and the tendency of other variables, outside observation, to negatively influence the results.
Research design, data collection methods and instruments

A social survey research design was used to collect and analyze data. As there are four research sub-questions that needed to be answered in order to answer the main question. This method allowed for simultaneous collection of data from respondents (Bryman & Bell, 2007) and answered these specific questions in their ‘who’, ‘what’, ‘how much’ and ‘many’ formats (Saunders, Lewis & Thornhill, 2007). Data collected using this method made it possible to perform descriptive and inferential statistical analysis. It also made it easier to infer causality between variables (Saunders, Lewis & Thornhill, 2007).

A self-completion questionnaire was used to survey respondents (the Questionnaire is attached in Appendix 2) The self-completion method provided benefits such as standardization of questions, ease of results explanation and comparison and selecting a representative sample, which ensured generalizability of findings (Saunders, Lewis & Thornhill, 2007). The self-completion questionnaire also made it possible to collect data from participants simultaneously and it also economical and relatively easier to administer (Bryman & Bell, 2007; Saunders, Lewis & Thornhill, 2007).

The questionnaire consists of three parts namely research background, instructions and the actual research questions. The purpose of the background was to give respondents a brief introduction to the research and the instructions was to explain how they should complete the questionnaire. There were a total of 19 questions in the questionnaire. Although not indicated on the questionnaire, these questions fall into three broad categories i.e. demographic data, consumer behaviour (core research questions) and the marketing related questions. Demographic data collected from respondents included variables and attributes like age, gender, marital status, profession, family size and area of residence and most of these questions were in the beginning of the questionnaire. The main purpose for including these questions was to gather knowledge regarding the type of consumers Roots was serving and to aid analysis and interpretation of the core research questions. Core research questions included variables such as respondents’ household and personal income, the number of times they used Roots in a month, the amount of money they spend per service at Roots and person who was paying for the services used at Roots. These questions are directly related to the four research hypotheses that were tested. Marketing related questions, which formed the last part
of questionnaire, were primarily used to understand Roots’ marketing channels and the gather
information was also used to aid the analysis of the core research questions.

Data was collected at the Roots’ two branches in both Diepkloof (Soweto) and Spruitview
between October and November 2009. Respondents at Spruitview completed questionnaires
on their own, whenever they went to use the services at the branch. However, the rate at
which those responses were received was very slow. Data collection at the Soweto branch
started late due to issues of access which was needed to be addressed. The issues of access
prompted the research to change the data collection format from self-completion
questionnaires survey to assisted questionnaire completion. Roots allocated private office
space for this process at their branches, where respondents were helped to complete the
survey. The questionnaire completion process followed this sequence: the researcher
introduced himself, explained the purpose of the research, asked for permission to continue
conducting the survey, asked respondent to provide the information while completing
questionnaire and at the end thanked the respondent for participating. This method allowed
data to be collected at a fast rate.

3.2 Sampling, research setting and participants

The research population comprised of consumers who live in the townships of South Africa
and have disposal income, whether from their own personal income or family (household)
income. Consumers from Roots Health and Wellness Centre (Spa) were surveyed. This
represents a form of convenient sampling as only responses from consumers using this
particular spa were solicited (Bryman & Bell, 2007). According to Bryman and Bell (2007),
there is no guideline for response rate for samples selected using non-random sampling.
Although other authorities recommend that an acceptable response rate is anything above
50% as a low response rate may raise questions regarding the representativity of the sample
(Bryman & Bell, 2007). Therefore no specific response rate was required for this research.
However efforts were made to ensure a high rate so as to improve the generalizability and
credibility of the findings.

The survey was conducted at the two Roots branches, where respondents were asked to take
part in the survey shortly after finishing their using their service, generally included
consultation and/or treatment. Roots branches have generally waiting areas at the reception, consulting rooms and treatment rooms. The management saw it fit to provide a private survey room so as to enable people to participate freely. This was necessary in dealing with the issues regarding disclosure of personal and confidential information like income. This arrangement also made it possible to get as many responses as possible from respondents who were referred to the survey room immediately after completing their consultation and/or treatment. Without a referral system it could have been difficult to get people to participate in the survey.

A total of 80 clients participated in the survey. These participants were never selected but took part as they happened to be using Roots services during the time of the survey. Clients who were not willing to participate in surveyed, after all efforts were made to convince them to, were allowed to leave immediately. Participants included women and middle age adults and these were from the two townships. There were few people who were from places outside the two townships; some were coming from as far as Lesotho and New Castle in Kwazulu-Natal and some from other townships in Gauteng.

3.3 Research criteria

Reliability, according to Bryman and Bell (2007) deals with whether the research is repeatable or not, and whether the measurement is consistent and stable over time. The research design followed as described above makes it possible to reproduce the research. The use of a standardized questionnaire, with fewer open-ended questions where possible ensured consistency and stability of the measure. Other measures that were taken to improve stability and consistency are the use of non-ambiguous or quantifiable measures such as income scale, age, gender, etc. Opinions from experts and peers regarding whether the measure really measured the concept were solicited to ensure measurement validity. Bryman and Bell (2007) refers to this approach as face validity. Internal validity was also ensured by using proven and tested statistical analytical methods to test for relationships. Since the sample is not a random one but a convenient sample, a high response rate was solicited. According to Bryman and Bell (2007), a larger sample reduces both sampling error and sampling-related error thereby increasing the accuracy and the generalizability of the findings. By default, the research deals
with practical issues of everyday issues regarding consumption and how people choose to consume depending on their wealth. Hence its ecological validity is automatically ensured.

3.4 Data analysis methods

A combination of descriptive and inferential statistics was used to analyze the collected data. Descriptive statistics was used to summarize and explain the surveyed sample demographic data whereas inferential statistical analysis was used to answer research questions by searching for relationships between variables (Saunders, Lewis & Thornhill, 2007). The Chi-Squared of association method was used to determine relationships between different variables and draw conclusions. According to Bryman and Bell (2007), this method is suitable for determining patterns of association between two variables. Apart from being flexible, the method also allows for a test of statistical significance to be performed on the results. This was necessary for generalization of the findings beyond the surveyed sample to the general population.

MS Excel was used to summarize and process collected data. Contingency tables were created by means of the pivot table. These tables were both used for graphical representation of demographic and marketing findings and for testing the hypotheses using the Chi-Squared of association method. Contingency tables were first examined to check if they met conditions for performing a Chi-Squared test. Thereafter Chi-values were manually calculated in Excel following the steps and formulae below, from Utts and Heckard (2007):

Step 1: Calculate the expected values of each cell on the table

\[
\text{Expected Value} = \frac{\text{Observed Cell Value} \times \text{Observed Row Total}}{\text{Observed Column Total}}
\]

Step 2: Calculate the Chi-value for each cell

\[
\text{Cell Chi-value} = \frac{(\text{Expected Cell Value} - \text{Observed Cell Value})^2}{\text{Expected Cell Value}}
\]
Step 3: Calculate the Chi value for the entire table

\[ \text{Chi-value for the table} = \sum \text{Cell Chi Values} \]

Table Chi values were then used to calculate p-values, which were used to determine if a relationship between the row and column variable existed or not. The MS Excel function below was used to calculate the p-values:

\[ p \text{-value} = \text{CHIDIST}(\text{table Chi-value}, \text{degrees of freedom}) \]

Where the degrees of freedom were determined using the formulae below:

For a 1 row by n columns

\[ \text{Degrees of freedom} = \text{number of columns} - 1 \]

For n rows x n columns

\[ \text{Degrees of freedom} = (\text{numbers of rows} - 1) \times (\text{number of columns} - 1) \]

P-values results were interpreted as follows:

A p-value of less than 0.05 meant that the null hypothesis should be rejected and the alternative hypothesis should be accepted. This means that there is a relationship exist between the two variables represented on contingency table.

A p-value of greater than 0.05 meant that the null hypothesis should be accepted and the alternative hypothesis should be rejected. This means that no relationship exists between the two variables represented on contingency table.
4 Research findings and analysis

4.1 Surveyed sample information

4.1.1 Research response rate and respondents’ area of residence

80 responses were obtained from the 200 survey questionnaires placed to two Roots branches located at Spruitview in the East Rand and Diepkloof in Soweto. This represents a response rate of 40%. However only 69 (35%) responses were usable and 11 were not due to incompleteness. As shown on Figure 6 below, 64% of the respondents are current or previous residents of the two townships, 22% are from other townships and 14% come from areas other than townships. The number of respondents who use Roots for health as shown Figure 7 below make up 90% and fertility treatment, other and leisure account for 4%, 4% and 1% respectively.

Figure 6: Breakdown of respondents’ residential status

Figure 7: Breakdown of respondents’ purpose of using Roots
4.1.2 Respondents’ age and gender distribution

The survey revealed that 64% of the respondents were female and 36% were males (see Figure 8). This is consistent with Monteson and Singer (2002)’s findings in the USA market. The age profile of respondents as reflected on Figure 9 below shows that 29% of these respondent falls within the 31-40 age bracket, 22% in the above 60 bracket, 17% in the 51-60 bracket and balance is shared by the under 30’s and the 41-50 age group.

Figure 7: Main use of the wellness centre

Figure 8: Gender distribution of respondents

Figure 9: Respondents’ age distribution
4.1.3 Respondents’ personal and household income distribution

The respondents surveyed who earn less than R5 000 per month make up 77% of the total responses. The other monthly personal income brackets make up the balance as shown on Figure 10, with the R5 001 - R10 000 income bracket trailing in second place. The number of employed family members per respondent as indicated on Figure 11 below significantly shifts the income distribution from the extreme dominance of the below R5 000 bracket in family income distribution pie on Figure 12 to two income groups dominance, which include the below R5 000 and the R5 001 – R10 000 income groups. This is due to the fact that 48% of the families have one breadwinner, 32% have two, 11% have three and 9% have four.

![Figure 10: Respondents’ personal income](image)

![Figure 11: Employed family members per respondent](image)
According to Figure 12 below 36% of the respondents’ families earn a monthly income of less than R5 000, followed by 28% who earn between R5 001 and R10 000. The balance comes from the other categories above the R10 000 income brackets.

Both respondents’ personal and family incomes go into the sustenance of the financial dependents and own (personal care). According to Figure 13 below 28% of the respondents have two financial dependents, 22% have three, 19% have 2, 20% have 4 and 16% have 1 while 10% have none.
4.1.4 Marketing medium that introduced respondents to Roots

There are three ways that respondents found out about Roots as shown on Figure 14 below. 61% of the respondents claim to have introduced themselves to the Roots while 26% and 13% indicated that they were introduced to Roots by family and friends respectively. Of those who have introduced themselves to the Roots, 98% learned about Roots on Radio and 2% through a newspaper. See Figure 15 below for further details. All respondents who claimed to have heard about Roots on Radio mentioned that it was either on Lesedi FM or Ukhozi FM.

Figure 14: How respondents came to know about Roots

Figure 15: Marketing channels that attracted respondents to Roots
4.1.5 Person responsible for paying respondents’ bill at Roots

The survey also indicated that 67% of the respondents pay for their own services at Roots while 33% had their families paying for the services they use (refer to Figure 16 below). Furthermore, Figure 17 below reflects that only 12% of the respondents are long term users of Roots services, spanning a period of over year and longer. A staggering 71% have been using Roots for less than a year. Another remarkable observation is that 94% Roots clients have never used services of other wellness centers before.

Figure 16: Person paying for the wellness services at Roots

Figure 17: Length of time the respondents have been using Roots services
4.2 Analysis

The research questions in section 3 above were answered by performing the Chi-Squared test of a relationship between two variables method. Chi-values and p-values were calculated to determine if the result were of statistically significance or not, using the formulae described under section 3.4 above (data analysis methods). Each research question was analyzed as a separate section. The research questions were applied to both personal and family income categories.

4.2.1 Number of clients using Roots among different income groups

**Research Question 1**

Is there a difference in the number of clients visiting the spa between income groups? (Is it lower among low income group, moderate among middle income group and higher among high income group?)

**Hypothesis 1**

\[ H_0 : \text{The number of clients using the spa is the same among income groups} \]

\[ H_a : \text{The number of clients using the spa is different among income groups} \]

\[ a) \text{ Personal Income} \]

<table>
<thead>
<tr>
<th>Number of Clients</th>
<th>Observed</th>
<th>Expected</th>
<th>Chi-Squared</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>46</td>
<td>15</td>
<td>90</td>
<td>0.00</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>8</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>3</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>2</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degrees of freedom 3

Significance level 5%
Since the p-value is less than 0.05, the null hypothesis was rejected and the alternative hypothesis was accepted. This means that the number of clients using the spa is significantly different among income groups. The number of clients using the spa was found to be high among low income earners and decrease drastically as one move up the income scale.

b) Family Income

<table>
<thead>
<tr>
<th>Number of Clients</th>
<th>Observed</th>
<th>Expected</th>
<th>Chi-Squared</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>20</td>
<td>12</td>
<td>12</td>
<td>0.02</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>16</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>7</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>10</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above R20 000</td>
<td>6</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degrees of freedom 4
Significance level 5%

Again the null hypothesis was rejected as the p-value is less than 0.05 and the alternative hypothesis was accepted. This implies that the number of clients using the spa is significantly different among different family income groups. Although the number of clients using the spa was found to be high among low income families, it did not decrease drastically as one move up the income scale. Instead it decreases gradually with a break in the sequence in the R10 001 – R15 000 income bracket.

4.2.2 Amount of money spent per visit per income group

Research Question 2

Is there a difference in the amount of money spent during a visit to the spa between different income groups? (Is it lower among low income group, moderate among middle income group and higher among high income group?)
Hypothesis 2

Ho : The amount of money spent during a spa visit is similar among income groups
Ha : The amount of money spent during a spa visit differs among income groups

a) Personal Income

Since the conditions for performing the Chi-Squared analysis for a 4 by 4 table were not met due to insufficient data as shown on the box below, the weighted average amount spent per income group was calculated using the table below. The conditions state that 80% of the cells should have at least 5 observations and that each cell should have at least 1 observation (Utts & Heckard, 2007). Estimated averages i.e. values in brackets were used for each spent bracket e.g. the >R 600 used an average of R800.

<table>
<thead>
<tr>
<th>Amount Spend per visit to Roots</th>
<th>&gt;R600 (R 800)</th>
<th>R0 - R200 (R 100)</th>
<th>R201 - R400 (R 300)</th>
<th>R401 - R600 (R 500)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>33</td>
<td>0</td>
<td>9</td>
<td>4</td>
<td>46</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

The results of the analysis for the estimated average amount spent per visit to the spa are reported below:

<table>
<thead>
<tr>
<th>Amount spent per visit</th>
<th>Observed</th>
<th>Expected</th>
<th>Chi-Squared</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>R 676</td>
<td>R 636</td>
<td>81</td>
<td>0.00</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>R 500</td>
<td>R 636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>R 567</td>
<td>R 636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>R 800</td>
<td>R 636</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>R636</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degrees of freedom 3
Significance level 5%
Since the p-value is less than 0.05, the null hypothesis was rejected and the alternative hypothesis was accepted. This means that the average amount of money spent during a spa visit is significantly different among income groups. However there is no clear direction on the relationship between income brackets and amount spend as the observed spending in the lowest income bracket is high than the next two high income brackets. But the direction is clear when the low income bracket excluded. In that case one can conclude that the amount of money spend per visit to the spa is low among low income groups and high among the high income brackets.

b) Family income

Since the conditions for performing the Chi-Squared methods analysis were not met due to insufficient data as shown on the box below, the weighted average amount spent per income group was computed using the table below. Estimated averages i.e. values in brackets were used for each spent bracket.

<table>
<thead>
<tr>
<th>Amount Spend per visit to Roots</th>
<th>&gt;R600 (R 800)</th>
<th>R0 - R200 (R 100)</th>
<th>R201 - R400 (R 300)</th>
<th>R401 - R600 (R 500)</th>
<th>Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>14</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>8</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>10</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Above R20 000</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Analysis results for the estimated average amount spent per visit to the spa are reported below:
### Amount spent per visit

<table>
<thead>
<tr>
<th></th>
<th>Observed</th>
<th>Expected</th>
<th>Chi-Squared</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>R 595</td>
<td>R 673</td>
<td>40</td>
<td>0.00</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>R 667</td>
<td>R 673</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>R 563</td>
<td>R 673</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>R 740</td>
<td>R 673</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above R20 000</td>
<td>R 800</td>
<td>R 673</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>R 673</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degrees of freedom: 4
Significance level: 5%

Since the p-value is less than 0.05, the null hypothesis was rejected and the alternative hypothesis was accepted. This means that the average amount of money spent during a spa visit is significantly different among income groups. Unlike in the personal income analysis above, the direction of the relationship was discernable i.e. the amount of money spent during a spa visit was less in the low income bracket and increased as one move up the income scale.

### 4.2.3 Person paying for services used per income group

**Research Question 3**

Is there a difference among income groups as to who pays for their spa visits? (Is it own, gift, family who pays for the spa visit?)

**Hypothesis 3**

Ho : The person paying for services used at the spa is similar among income groups
Ha : The person paying for services used at the spa is different among income groups
Since the p-value was found to greater 0.05, the null hypothesis was accepted and the alternative hypothesis was rejected. This means that the person paying for the services at the spa is not significantly different among income groups.

4.2.4 Number of spa visits per income group

**Research Question 4**

Is there a difference in the total number of monthly visits to the spa between income groups? (Is it lower among low income group, moderate among middle income group and higher among high income group?)

**Hypothesis 4**

$H_0$ : The combined number of visits to the spa is the same among income groups  
$H_a$ : The combined number of visits to the spa is different among income groups
a) Personal

The conditions for performing the Chi-Squared analysis using the original 3 by 4 table reflected on the box below were not met. Hence the sum of visits to the spa in each income group was used to determine Chi-Squared and p-value.

<table>
<thead>
<tr>
<th>Frequency of Roots visits per month</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1x</td>
</tr>
<tr>
<td>Less than R5 000</td>
<td>36</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>7</td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>1</td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>1</td>
</tr>
<tr>
<td>Grand Total</td>
<td>46</td>
</tr>
</tbody>
</table>

Analysis results for the estimated total number of visits to the spa are reported below:

<table>
<thead>
<tr>
<th>Sum of visits</th>
<th>Observed</th>
<th>Expected</th>
<th>Chi-Squared</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>59</td>
<td>15</td>
<td>114</td>
<td>0.00</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>10</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>5</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>2</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance level</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The null hypothesis was rejected since the p-value is less than 0.05 and the alternative hypothesis was accepted. Therefore the sum of visits to the spa is significantly different among income groups. The results also indicate that the sum of visits to the spa is high in the low income bracket and drastically decrease as one move up the income scale.
b) Family

The conditions for performing the Chi-Squared analysis using the original 3x5 table reflected on the box below were not met. Hence the sum of visits to the spa in each income group was used to compute Chi-Squared and p-value.

<table>
<thead>
<tr>
<th>Frequency of Roots visits per month</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1x</td>
</tr>
<tr>
<td>Less than R5 000</td>
<td>16</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>12</td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>5</td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>8</td>
</tr>
<tr>
<td>Above R20 000</td>
<td>5</td>
</tr>
<tr>
<td>Grand Total</td>
<td>46</td>
</tr>
</tbody>
</table>

Analysis results for the estimated total number of visits to the spa are reported below:

<table>
<thead>
<tr>
<th>Sum of visits</th>
<th>Observed</th>
<th>Expected</th>
<th>Chi</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than R5 000</td>
<td>25</td>
<td>15</td>
<td>17</td>
<td>0.00</td>
</tr>
<tr>
<td>R5 001 - R10 000</td>
<td>22</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R10 001 - R15 000</td>
<td>9</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R15 001 - R20 000</td>
<td>13</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above R20 000</td>
<td>7</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance level</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The null hypothesis was rejected since the p-value is less than 0.05 and the alternative hypothesis was accepted. This means that the sum of visits to the spa is significantly different among income groups. The sum of visits to the spa was found to be high in the low income bracket and gradually decreases as one move up the income scale.
5 Discussion

The number of clients visiting the spa was found to be significantly different among income groups, both at a personal level (with $P < 0.00$) and at a family level (with $P=0.02$). Generally the number of clients decreased with an increase in the level of income. The decrease was faster in the personal income category starting from 46 (lower income group) falling to 8, 2 and 2 (higher income group) but it was gradual in the family income category starting at 20 (lower income group) going down to 16, 7, 10, and 6 (higher income group). This is in contrast with Bowman (1997) and Giskes et al (2002)’s findings which suggest that the consumption of certain food items increased with an increase in income level. The finding also disproves Gundgaard (2006)’s results which advocate that the use of health services in Denmark’s Funen County was generally equitable among income groups. The difference in the outcomes of the study could be due to societal differences between South African townships and residential areas Denmark, Australia and USA when the earlier studies were conducted.

The amount of money spent per visit to the spa was also found to be significantly different among income groups, both in the personal income category (with $P<0.00$) and family income category (with $P<0.00$). The amount of money spent per visit to the spas seem to generally increase in both income categories from the lower income to the higher income groups, even though it starts slightly higher, then dips in the subsequent income group before picking up in the medium to higher income groups. This is in line with Martins (2005) and Du & Kamakura (2008)’s findings, who in their analysis of households spending allocation in both South Africa and the USA respectively, found that richer families were generally spending more money on everything including services than their poorer counterparts who spend a higher percentage of their money on basic needs such as food and transport.

The person paying for services at the spa was found not to be significantly different among family income groups (with $P=0.13$). It was also found that the paying “person” was split between family and own. According Monteson and Singer (2002), the person paying should have been split between family, gift and own. Perhaps differences in cultural practices between the American and the South Africa societies may be help explain this inconsistency in the findings.
The total number of client monthly visits to the spa was found to be significantly different among income groups, both in the personal income category (with $P<0.00$) and the family income category (with a $P<0.00$). These client visits seem to decrease with the increase in the level of both personal and family income. Just like in the case of number of visitors, the decrease was faster in the personal income category falling from 59 (lower income group) to 10, 5 and 2 (higher income group) but gradual in the family income category starting at 25 (lower income group) going down to 22, 9, 13 and 7 (higher income group). Bowman (1997) had a similar finding regarding the snacking frequency of consumers in the United States of America, where consumers from poorer families were snacking more frequently than their counterparts from richer families. He associated this behaviour of poor families to the inability to afford a proper and a filling or adequate meal, which is generally not the case with richer families. It could also be that clients from poor families using the spa also faces similar financial constraints and would therefore come frequently as they cannot afford to spend high amount of money for a single compressive service that address all their needs every time they visit the spa.

6 Research limitations

The following research limitations were identified based on the type of business, population sample and other unique business operations:

- The nature and industry of Roots business, which is health and wellness services, may render it a challenge to directly generalize the results to other businesses operating in other industries. Personal health and wellness is seldom a choice issue when it comes to consumption. In life threatening situations clients may pull all the stops to get the medical attention, including raising finances using loan instruments, which they may not always do when it is just for mere indulging purposes.

- The use of radio stations that command a higher listenership from certain LSM segments may mean that the results cannot be generalized as this possibly introduces a natural bias.
• The fact that 64% of clients are women also introduces a gender bias, which means that results cannot just be generalized to other populations which may have an equal or over representation of men.

7 Research conclusions

The main purpose or aim of the research was to investigate whether the level of income influences consumer behaviour in the townships. Four research questions and their corresponding hypotheses were formulated and tested using the data collected from Roots to answer this main question. Research conclusions were drawn for each of the research questions and are discussed in the next paragraphs.

Does the level of income influence number of clients or consumers using service?

The level of personal and family income influences the number of clients who use spa services at Roots. However there is an inverse relationship between the two variables (income and number of clients using the services). This is contrary to Bowman (1997)’s findings, which is the basis for hypothesis 1. According to Bowman (1997), the number of clients using Roots was expected to be directly proportional to the level of income i.e. lower amongst low income earners and higher among high income earners. Two factors may have contributed to this relationship are 1) Roots’ marketing channels, 2) class polarization that prevails in the township. Roots runs marketing campaigns on native languages radio stations such as Ukhozi and Lesedi. This may not reach certain sections of the township market like the black high income earners who listen to English radio stations for various reasons. It may also be that high income earners also like spending their money outside the township, at up market shopping malls where they feel they get value for their money. In addition upper class income earners may also regard shopping in up market areas as a way of differentiating themselves from the rest of the society and thereby maintaining their hard earned status. Beside the two factors above, it may also be that the township income profile is reflected in the number of client using services at Roots. Businesses wanting to venture into the township market may have to select their niche carefully as the bulk of the business comes from low income earners. This means choosing the right marketing mix i.e. place, price, product and
promotion for intended market. Further work needs to be done to verify if the finding is not a reflection of the society’s income profile.

Does the level of income influence the amount of money spend each time a service is used?

The amount of money spent for each service at Roots was found to be low among low income earners and increased as one moves the earning scale. This is line with what expected (in Hypothesis 2). It also confirms earlier findings by Du & Kamakura (2008), Martins (2008) and Giskes et al. (2002), which concluded that high income families were spending more money on certain non-basic items than their low income counterparts. Affordability, which is generally a function of income level, seems to play a major role in this case. One would have normally expected high income earner to spend more and low income earner to spend less. What this means for businesses is that the right pricing strategy coupled with innovative product packaging strategy would have to be employed to service this market. If this is not done, there is a risk of excluding the low income earners who are willing to spend but their economic conditions constrain them to spend. These clients currently account for bigger share of the market.

Does the level of income influence the person paying for services that the client of consumer uses?

The level of family income has no influence on the person paying for services used at Roots. Two paying ‘persons’ were reported namely own and family. This different from what was expected (as in hypothesis 3) and reported in the USA where spa clients were paying for their services using one of the following: own pocket, family, or gift (Monteson & Singer, 2002). Societal evolution may perhaps explain why the level of income has no influence on who pays for services used at the spa. One of the factors is the shift from family emphasis to individual emphasis. People may be increasingly making their own decisions without involving family. In the same vein, self-centeredness may be taking Roots in society such that purchase or spending decisions lies within the individual. Nevertheless, families still play a role in terms of looking for the sick and elderly. Business operating in the townships should
perhaps focus their message on individual as he or she seem to be replacing family (the historically Decision Making Unit).

**Does the level of income influence the frequency of client or consumer spending?**

The frequency of service use was found to be influenced by the level of income. But there was an inverse relationship between the use of services and level of income. Collectively low income earners use services more frequently than high income earners. This is in line with what was expected (as in hypothesis 4) and confirms earlier findings by Bowman (1997), which concluded that the level of income was inversely related to the snacking frequency. This may be influenced by their economic status and the ability to afford all-in-one services that cater for all aspects in one visit. Hence clients may be dividing their needs into small and affordable services. This implies that servicing this market will again require innovative ways of packaging the services offering so as to make it affordable to the market.

In conclusion, three of the four research questions suggest that the level of income in the township influences consumer behaviour in the following ways: it determines the number of consumers or clients using a service, it determines the amount of money consumers spend when using those services and it determines the frequency at which consumers spend. The findings were however not able to differentiate who the key financier or key decision maker is when it comes to that spending or consumption of services.
8 Future research directions

The following work is recommended in order to enhance the generalizability of the research findings:

- The proportion of income groups in the township population should be determined and used to formulate and test revised hypotheses, which will further determine if the number of clients visiting the spa is genuinely related to income and not just a reflection of the socio-economic situation of the township population. This will also eliminate the equal proportion of income groups in the township assumption that was made to enable the analysis of the data.

- Replicate the study to other industries operating in the township. Findings from other industries will help confirm the validity of the current findings.

- Increase both the survey sample size and sites to include more clients and other branches of Roots operating across the countries. The bigger the sample, the better will be the chance of eliminating errors associated with both sample and sampling.
References


Appendix

Appendix 1: Research theory

Table 4: International Spas Association definitions of spas

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Club Spa</td>
<td>A facility, the primary purpose of which is fitness, which offers a variety of professionally administered spa services on a day-use basis.</td>
</tr>
<tr>
<td>2. Cruise Ship Spa</td>
<td>A spa onboard a cruise ship providing spa services, fitness, and often spa-cuisine menu choices.</td>
</tr>
<tr>
<td>3. Day Spa</td>
<td>A spa offering a variety of spa services on a day-use basis. The emphasis is on pampering services such as facials and body scrubs, not fitness.</td>
</tr>
<tr>
<td>4. Mineral Springs</td>
<td>A spa with an onsite source of natural mineral springs or seawater, used in hydrotherapy treatments.</td>
</tr>
<tr>
<td>Mineral Springs Spa</td>
<td></td>
</tr>
<tr>
<td>5. Resort/Hotel Spa</td>
<td>A spa located within a resort or hotel environment that provides spa services, fitness activities, spa-cuisine menu choices, and perhaps some wellness components.</td>
</tr>
<tr>
<td>6. Medi-Spa</td>
<td>A center where medical and spa professionals offer some wellness care in addition to spa services, most often in the area of cosmetic procedures.</td>
</tr>
<tr>
<td>7. Destination Spa</td>
<td>A facility, the sole purpose and mission of which is to provide guests with opportunities for lifestyle improvement and health enhancement through professionally administered spa services, fitness and educational programming, onsite accommodations, and a variety of health and healing services. Healthy cuisine is served exclusively.</td>
</tr>
</tbody>
</table>

Source: (Thorsteinsdottir, 2005)
Table 5: Adults by race, income group, and sex, 2008 (proportions)

<table>
<thead>
<tr>
<th>Race</th>
<th>R0–R50 000</th>
<th>R50 000–R100 000</th>
<th>R100 000–R300 000</th>
<th>R300 000–R500 000</th>
<th>R500 000–R750 000</th>
<th>R750 000+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>35.6%</td>
<td>39.4%</td>
<td>30.6%</td>
<td>18.5%</td>
<td>13.4%</td>
<td>11.9%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Female</td>
<td>47.4%</td>
<td>26.5%</td>
<td>16.5%</td>
<td>11.4%</td>
<td>6.9%</td>
<td>4.4%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Africans</td>
<td>83.0%</td>
<td>65.9%</td>
<td>47.1%</td>
<td>29.9%</td>
<td>20.3%</td>
<td>16.3%</td>
<td>75.3%</td>
</tr>
<tr>
<td>Male</td>
<td>3.4%</td>
<td>7.8%</td>
<td>5.6%</td>
<td>4.0%</td>
<td>2.4%</td>
<td>2.0%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Female</td>
<td>4.9%</td>
<td>6.6%</td>
<td>3.4%</td>
<td>1.5%</td>
<td>0.5%</td>
<td>0.1%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Coloured</td>
<td>8.3%</td>
<td>14.3%</td>
<td>9.0%</td>
<td>5.6%</td>
<td>3.0%</td>
<td>2.1%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Male</td>
<td>0.8%</td>
<td>2.2%</td>
<td>3.6%</td>
<td>3.8%</td>
<td>6.6%</td>
<td>3.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Female</td>
<td>1.3%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.3%</td>
<td>1.8%</td>
<td>0.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Indian/Asians</td>
<td>2.2%</td>
<td>4.0%</td>
<td>5.4%</td>
<td>5.1%</td>
<td>8.4%</td>
<td>4.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Male</td>
<td>2.2%</td>
<td>6.9%</td>
<td>20.7%</td>
<td>42.7%</td>
<td>55.6%</td>
<td>65.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Female</td>
<td>4.3%</td>
<td>8.8%</td>
<td>17.7%</td>
<td>16.8%</td>
<td>12.8%</td>
<td>12.0%</td>
<td>6.6%</td>
</tr>
<tr>
<td>White</td>
<td>6.5%</td>
<td>15.7%</td>
<td>38.5%</td>
<td>59.5%</td>
<td>68.4%</td>
<td>77.4%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Male</td>
<td>42.0%</td>
<td>56.3%</td>
<td>60.6%</td>
<td>69.0%</td>
<td>78.0%</td>
<td>82.7%</td>
<td>46.6%</td>
</tr>
<tr>
<td>Female</td>
<td>58.0%</td>
<td>43.7%</td>
<td>39.4%</td>
<td>31.0%</td>
<td>22.0%</td>
<td>17.3%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Totalb</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Dimant & Roodt (2009)
Appendix 2: Research instrument

Letter of introduction

Graduate School of Business  
University of Cape Town  
Private Bag X3  
Rondebosch  
7701  
22 September 2009

Hi,

My name is Rodgers Ndobe. I am a Master of Business Administration (MBA) student at the UCT Graduate School of Business and currently doing my final year. Part of my MBA requirements is conducting a research (survey) on a topic of my choice. I have chosen consumer behaviour in the townships as I believe that the township market is an important contributor in the South African economy.

The purpose of this research (survey) is to gather information, using a questionnaire, which will help me to understand consumer behaviour in the township. The information that you will supply by completing the questionnaire will be used for academic purposes only. Your confidentiality is guaranteed as no personal information is required. The survey also follows strict university research guidelines which ensure that respondents’ personal privacy is not invaded.

Your participation in this survey will be highly appreciated

Sincerely
Rodgers Ndobe
Student Number: NBDROD001
Contact: 084 669 4985

Research Supervisor: Mr. Mlenga Jere (Senior Lecturer: Marketing)  
Tel: 021 406 1414
CONSUMER BEHAVIOUR SURVEY QUESTIONNAIRE

BACKGROUND
The purpose of the survey is to gather information that will be used to determine the influence of income level on consumer spending on spa services in the townships. This survey is an academic exercise and it is undertaken as part of the MBA programme at the University of Cape Town’s Graduate School of Business.

SPECIAL INSTRUCTIONS
The survey has 19 questions and will take approximately 5 minutes to complete.
Mark/Select the answer that applies to you with a cross (X)
Explain or describe where required in CAPITAL LETTERS

1. Gender
   Male   Female

2. What is your Job Title? (e.g. Nurse, Teacher, DJ, etc)

3. What is your age?
   Below 21
   21 -30
   31 – 40
   41 – 50
   51 – 60
   Above 60

4. What is your marital status?
   Single   Married   Divorced   Windowed

5. Do you currently live in Soweto?
   Yes   No
6. If not living in Soweto, were you living in Soweto before?
   Yes ☐ No ☐

7. How many times do you visit the spa in a month?
   1 ☐ 2 ☐ 3 ☐ 4 ☐ Other (Specify) ☐

8. How much do you earn per month? (Give estimates)
   (a) Alone
      Less than R5 000 ☐
      R5 001 – R10 000 ☐
      R10 001 – R15 000 ☐
      R15 001 – R20 000 ☐
      Above R20 000 ☐

   (b) As a family
      Less than R5 000 ☐
      R5 001 – R10 000 ☐
      R10 001 – R15 000 ☐
      R15 001 – R20 000 ☐
      Above R20 000 ☐

9. How many financially dependent people do you have?
   1 ☐ 2 ☐ 3 ☐ More than 3 ☐ None ☐

10. How many members of your family are employed?
    1 ☐ 2 ☐ 3 ☐ More than 3 ☐ None ☐

11. For what purpose do you use the spa services? (Select most used)
    Health ☐ Beauty ☐ Leisure ☐ Other (specify) ☐

12. Who pays for your spa services? (Select one answer only – most used form of payment)
    I (myself) ☐ My family ☐ Gift (From non-family members) ☐ Other (specify) ☐

13. How much do you spend every time you visit the spa?
    R0 - R200 ☐ R201 - R400 ☐ R401 - R600 ☐ More than R600 ☐

14. Which spa services do YOU use most of times? (Select one answer only)
    Grooming (e.g. facial, manicure) ☐
    Body services (e.g. massages) ☐
    Slimming ☐
    Health (e.g. stroke, epilepsy, shingles) ☐
    Other (Specify) ☐

15. For how long have you been using spa services? (Not just The Roots)
16. Do you have family or friends who are using the spa?
   Yes ☐  No ☐

17. Have you been to other spas besides Roots?
   Yes ☐  No ☐

18. Who introduced you to spa services? (Select one answer only)
   I (Myself) ☐  Family ☐  Friends ☐

19. If you introduce yourself, where did you first hear about this spa? (Roots in particular)
   On Radio ☐  Newspaper ☐  Shopping Trip ☐  Word of Mouth ☐

THANK YOU
For taking time to complete this survey
Appendix 3: Radio Listenership among LSM groups

Percentage of listenership in the SU- LSM 1-5 categories

Source: Chipp (2009)

Figure 18: % of radio listenership among LSM 1-5

Percentage of radio listenership in the SU- LSM 6-10 categories

Source: Chipp (2009)
Figure 19: % of radio listenership among LSM 6-10