

An analysis of consumer preferences of meat in a typical South African township

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Abstract

This study aims to uniquely understand consumer buying behaviour of meat consumers in townships in South Africa. The township, Ikageng, in Potchefstroom in the North West Province of South Africa served as geographical area where convenience sampling was used to select 300 participants from a total population of 87 701 consumers. Statistically, the sample was adequate (0.795 as per the Kaiser Meyer Olkin test) and sphericity was below the required minimum; consequently, the data were suitable for multivariate analysis.

Questionnaires were completed during interviews with the respondents by the field agent fluent in the home language and good business acumen in the meat industry. A total of 299 completed and usable questionnaires were collected by the cut-off date. The study developed a measuring tool from the literature, tested the reliability of the data and identified ten latent variables of buyer behaviour using exploratory factor analysis. The quality of the meat and presentation of the meat are main latent choice criteria, while correlations show that income levels also play a significant role in the buying behaviour of Ikageng consumers.

Key phrases

consumer; culture and religion; fat content; meat quality; meat presentation

Jel code: M31; M39

1. INTRODUCTION

The consumer research company AC Nielsen (2016:Internet) has concluded over a decade ago that South African consumers, in general, are meat lovers and that they frequently eat meat as a protein source in their daily diet (Countrymeat 2016:Internet). In her report, Holmes (2016) indicated that this habit has not changed, and that, in fact, South Africans increased their meat consumption by indulging in fast-foods and especially chicken outlets. Chicken consumption via fast-food has increased by approximately 3% per annum since 2014 and a projected 42% of the population will eat chicken take-out by 2018 once a month (compared to 29% in 2014) (Gillmore as cited by Holmes 2016:Internet).

South Africans have even implemented a national 'barbecue day' to add to the festivities of South Africa's National Heritage day on 24 September. The barbecue day is hosted by the celebrity 'Jan Braai'. South Africans and expats all over the world are encouraged to gather with friends and family around a fire and to enjoy a piece of South African meat roasted over coals, each with his or her unique barbecue recipe (Jan Braai 2016:Internet). "The National Braai Day initiative aims to position National Heritage Day as South Africa's annual day of celebration. We call on all South Africans to unite around fires, share our heritage and wave our flag on 24 September every year" (Jan Braai 2016:Internet).

Twenty-two years of post-apartheid have seen the South African market transformed from where the low-income black market segment was largely ignored or serviced by cheap meat cuts and often off-cuts, to a market where businesses are actively targeting the upcoming black middle-class; realising the market and business opportunities this market offers. The consumption of red meat increased moderately, while white meat has been growing strongly.

According to the Department of Agriculture, Forestry and Fisheries of South Africa (South Africa 2015:Internet), South Africans were consuming 22.4kg of red meat per capita in 2000, while 14 years later, they had increased consumption to 26.6kg per capita (representing a 19% growth). The consumption of poultry (broiler meat mostly) increased from 21.5kg per capita in 2000 to 38.5kg per capita per year (signifying approximately 80% growth) in 2014. Resultantly, the relative affordability of poultry meat (among other factors) led to poultry becoming a major protein source in the diet of the majority of South Africans (South Africa 2015:Internet).

Studies among black consumers indicate a preference for white meat (which constitutes poultry in South Africa). Regarding game meat, Hoffman, Muller, Schutte, Calitz and Crafford (2005:38) indicated no willingness to pay a price premium for game, nor a specific demand for game meat products among black middle-class consumers because they “do not consider game meat as a ‘regular’ type of meat, but rather as an exotic, seasonal product”.

Burger, Van der Berg and Nieftagodien (2004:6), using Engel’s curves, have indicated that consumption variation exists in black consumers’ behaviour; further behavioural studies are needed. Most studies, such as Malindi (2010:ii) and Uys and Bisschoff (2016:126), do not isolate their target market as black consumers, but rather use the Living Standards Measure or the type of meat (such as red, white or game) as classifying variable. Given the historical political environment in South Africa, an oversensitivity to race as differential variable developed; this explains the limited studies focusing on specific race groups after the first democratic election in South Africa in 1994 (Iqani 2012:22; Zalka, Downes & Paul 1997:29).

However, business sanity prevailed and the cultural, behavioural and other dissimilarities influencing buying behaviour between different race groups are once again recognisable and specific target markets are serviced according to customer preferences and needs. More recently, Dicey (2016) indicates that black consumers are also falling prey to obesity and that they are strongly influenced by international trends in their consumer behaviour trends.

The economy has grown by 65% since 1991 to 1998 and strong black upper-, middle- and lower-class economies are developing. Although relatively small at 10%, the middle class has seen considerable growth in the black middle class (Businesstech 2015:Internet). Sustained acceleration in private sector investment realised and grew from 8% of GDP in 1992 to 14% in 2008, after which it levelled off at 13% of GDP in response to the recession (Laubscher 2013). Unfortunately, 2015/16 had no economic growth, while South Africa still dwindles on the edge of being downgraded to junk status due to poor economic forecasts and weak political leadership (Gumede 2016:Internet).

In addition to the increased size of the economy, electricity also became available to the middle class, opening up new markets for fresh produce. Fresh meat consumption also increased, with white meats leading the trend. However, although numerous studies target the middle- and upper-class black consumer markets, limited research has been conducted

on the lower Living Standards Measure market (LSM 3-4), partially because of its lower economic impact and less attractive market expenditure. Although various sources indicate large growth in black markets, most research projects focus on the middle- and higher-income groups (Living Standards Measure 6 and higher).

Limited focused research (for example, on meat consumption and its respective consumer behavioural attributes) has been conducted as of yet. This point has been made by Mahanjana in 2005; however, it still seems that apart from the low level of attention that lower-end markets receive (Chummun & Bisschoff 2016:68), limited information is available. This is due to poor research and documentation; the informal market contribution remains invisible in the national economic data. There seems to be very little research conducted on the informal market in general and therefore its contribution remains silent and, as a result, the behaviour of the emerging sector remains unclear.

This article aims to fill a small part of this 'gap' by conducting an analysis on consumer preferences of meat in townships. The study was done in Ikageng, a black low-income township, which is part of Potchefstroom in the North West Province of South Africa. Factors that were taken into consideration in the survey were demographic factors, marketing factors (product, quality, price, service, location and presentation) as well as personal factors (health, culture and religion).

2. PROBLEM STATEMENT

In South Africa, high growth levels of meat as a protein source in diets among black consumers are prevalent. Future projections support this growth trend and indicate that white meat is gaining popularity faster than red meat (South Africa 2015:Internet). Importantly, these statistics also indicate that lower LSM groups *pro rata* prefer more white meat than red meat as a protein source in their diets, making this developing market more elusive to target scientifically. However, little is known about the specific consumer preferences and buying behaviour of consumers in townships across South Africa, even though the majority of most cities' populations live in these areas.

This study focuses on learning more about the consumer preferences of meat in Ikageng, a township of Potchefstroom in the North West Province of South Africa. According to

Statistics South Africa's 2011 census, the total population of Potchefstroom was 148 87, which comprises Ikageng 87 701, Potchefstroom central 43 448, Promosa 16 125 and Mohadin 1 601. This shows that 59% of the population of the city of Potchefstroom lives in Ikageng, and yet very little is known about these consumers and their preferences (South Africa 2015:Internet). Although most of the population in Ikageng earns at a lower income level, they are evolving and becoming an important contributor to the economy. It is, therefore, important to study these consumers and to find out what their preferences are so that the right products can be marketed to them.

3. OBJECTIVES

The primary objective of the study is to determine the most important factors affecting consumer preferences of meat in townships. In order to achieve the primary objective, a number of secondary objectives have been formulated. These secondary objectives are to:

- identify consumer preferences from the literature study;
- compile a questionnaire to measure buying behaviour of meat customers;
- measure the buying behaviour of meat customers in the informal market;
- determine the latent buying behaviour drivers; and
- draw conclusions and present recommendations.

4. CONSUMER PREFERENCES

Verbeke, Viaene and Guiot (1999:8) state that the behaviour of consumers is increasingly driven by product quality and health consciousness, with a new consumption pattern called 'healthy eating'. This includes characteristics such as taste, health, marbling and fat content. This explains why many organisations, producers and government have been involved in debates regarding fat and cholesterol, growth hormones and price, to name a few.

Consumer buying behaviour is directly linked to what the consumers' preferences are. Consumer behaviour refers to the selection, purchase and consumption of goods for the

satisfaction of their wants (Widmar, Mckendree & Ortega 2014:143). Botes-Marais (2014:6) states that the Google generation is very critical of what is on offer on our retail shelves. This generation does not care about large-scale savings on bulk buying, but rather focuses on specific cuts and have a no wastage policy.

What is concerning is that although consumers incorporate a multitude of criteria into their food purchasing decisions, they generally (7%) never read the labels on the foodstuffs, 19% rarely do and 26% seldom read the label information on food products. Higher income consumers are more educated consumers and are more aware of issues such as meat tenderness, safety, ethical issues, colour, packaging and labelling, while lower income consumers are more aware of price (Du Pisane 2014:10).

In South Africa (South Africa 2015:Internet), marginalised consumers spend 38% of their income on grain-based staple foods, followed by 22% on meat products, 11% on vegetables and 8% on dairy and eggs. Despite consuming all meat types, these consumers have a clear preference for chicken, followed by beef (Vermeulen, Schönfeldt & Pretorius 2015:342).

Aaslyng (2012:14) claims that, irrespective of purchasing ability, each consumer wants to have the best eating experience for his/her money; a view supported by Uys and Bisschoff (2016:128). The lower-income consumers eat meat for nutritional value, while the higher-income consumers consume meat for the eating experience itself. He also states that, as consumers become wealthier, their meat consumption increases.

However, the type and amount of meat consumed are influenced by demographic factors such as gender, age and marital status. Veblen (1988:129) (as cited by Uys & Bisschoff 2016:129) established six components that are important to the consumer when purchasing meat, namely *convenience, price, nutrition, variety, quality* and *good taste*; these variables are still considered as important buying decision-making factors. Perceived factors that influence consumer preferences and their buying behaviour are discussed next.

4.1 Factors influencing consumer preferences of meat

According to a survey by Statistics South Africa (2012:Internet) on income and expenditures, the top 20 factors influencing marginalised consumers' preferences of meat were *price*,

appearance, cleanliness, meat colour, quality guarantee, convenience, tenderness, expiry date, bone-to-meat-ratio, eaten by all, easy to prepare, fat-to-meat-ratio, packaging size, fat colour, preparation time, freshness, taste, juiciness, packaging type and flavour.

Hoffman *et al.* (2005:40) researched consumer purchasing behaviour and perceptions of game meat. From this research by Hoffman *et al.* (2005:40-42), the variables *quality, price, service, location, health, presentation and culture, and religion* were identified as buying behavioural drivers. These researchers also state that *culture* and *religion* play a more significant role in consumer preferences in the informal market than they do in the formal markets.

Based on the findings of the researchers above, in addition to informal discussions with consumers and merchants in Ikageng, the following consumer behavioural drivers were selected and used to draft the questionnaire to collect the data on consumer buying preferences of meat in Ikageng.

4.1.1 Product

Ehmke, Fulton and Lusk (2016:Internet) refer to products as the goods and services you offer to your customers. In this study, the product refers to meat, which includes beef, chicken, mutton, pork and fish. The products include attributes such as quality, features, options, services, warranties and brand names. The products' appearance, function and support make up the package the customer is buying. Noteworthy is the fact that meat is an important protein source in a South Africans' diet (South Africa 2015:Internet).

4.1.2 Quality

Malindi (2010:ii), in pursuit of Menkhaus, Colin, Whipple and Field (1993:61), investigated which factors affect a consumer's quality perception of beef. The results from Menkhaus *et al.* (1993:60-62) showed that concerns towards cholesterol, calorie content, artificial ingredients, convenience characteristics, price and how it is displayed in the store adversely affected the quality perception of beef. Shongwe Jooste, Hugo, Alemu and Pelsler (2007:477) state that the quality of meat is an important measure of traits that are sought and valued by customers.

Malindi (2010:57), however, indicated that quality issues such as freshness, colour, marbling and display of the meat products are more important quality indicators. Quality is believed to be high when meat is attractive in appearance, appetising, nutritious, wholesome and palatable in its final prepared state. Noteworthy is the observation of the Food and Agriculture Organisation of the United Nations (2014:Internet) that the “nutritional quality of meat is objective yet "eating" quality, as perceived by the consumer, is highly subjective”.

Vermeulen *et al.* (2015:348) found, in a study of lower-income respondents, that there were seven dominant consumer associations with the quality of red meat, namely *freshness* (40.0%), *meat colour bright red* (21.2%), *clean meat* (12.1%), *appearance* (4.8%), *grading* (4.2%), *price* (3.0%), *nutritional value* (1.8%), *shelf life* (1.8%), *smell* (1.8%), and *tenderness and taste* (1.8%).

The quality of the meat is ensured at the source of origin. In South Africa, a carcass classification system is strictly applied to ensure more consistent meat quality, composition and consumer satisfaction (Webb 2015:229).

Carcass properties recorded in the system include (Du Pisane 2015:44):

- The age of the animal.
 - **AAA:** This code means that the colour of the roller mark on the carcass is **PURPLE** and is an indication that the meat is from a young animal (no permanent incisors) and therefore the more tender meat.
 - **ABAB:** This code means that the colour of the roller mark on the carcass is **GREEN** and is an indication that the meat is from a young animal in transition to an adult animal (1-2 permanent incisors) and therefore tender meat.
 - **BBB:** This code means that the colour of the roller mark on the carcass is **BROWN** and is an indication that the meat is from an adult animal (1-6 permanent incisors) and therefore less tender, but with a great deal of flavour.
 - **CCC:** This code means that the colour of the roller mark on the carcass is **RED** and is an indication that the meat is from an adult animal (>6 permanent incisors) and therefore less tender, but perfect for stews.
- The fat content of the carcass (Malindi 2010:20-21).

- It is the right of the consumer to choose how much visible fat they prefer. Fat classes are indicated in the following manner:
 - 000 means no visible fat on carcass;
 - 111 means a very lean carcass;
 - 222 means a lean carcass;
 - 333 means a medium-fat carcass;
 - 444 means a fatty carcass;
 - 555 means an overly fatty carcass; and
 - 666 means an excessively fatty carcass.
- Carcass information determined by the shape of the carcass – from completely flat to medium to very round.
- Any damage to the carcass from a little to a great deal.
- The gender of the animals – Only bull and ram carcasses as well as that of a wether, a billy¹ or an ox showing signs of late castration in the AB- B- en C-age classes are marked with a **BLACK** “MD” stamp in order to inform prospective buyers that these carcasses are from male animals, since the taste and colour of the meat might differ from other carcasses.
- A calf is an animal with a carcass weight of no more than 100 kg, of which no or only the first molar tooth in the upper jaw has cut. These carcasses are marked with a **BROWN** roller mark. Veal forms a very small percentage of the market.

¹ *Wether* (castrated sheep ram); *Billy* (castrated goat ram). Done at young age for improved meat quality

4.1.3 Price

Lamb, Hair, McDaniel, Boshoff, Terreblanche, Elliot and Klopper (2016:17) state that price refers to how much you charge for your product or service. In this study, the price revolves around meat, which includes beef, chicken, mutton, pork and fish. They further explain that price is all about finding the right balance that reflects the appropriate positioning of your product in the market, giving the consumer value for money on the one side and including a profit for future growth on the other.

To ensure sustainability, the entire value chain of the meat industry must ensure that the price structures are spread fairly from the producer to the end user. Price in the lower-income market segments is set either per weight or per 'piece' of meat (especially when pre-prepared). Malindi (2010:42) also indicates that price is a crucial buyer behaviour attribute and that especially texture plays a role in the selection of meat types (for example, poultry versus beef) in providing a meal.

4.1.4 Promotion

Promotion refers to all internal services to promote the products as well as external activities to do so (Ehmke *et al.* 2016). Advertising and promotional efforts to sell meat rely heavily on the display of the meat and a hygienic environment. Consumers (even in townships) are well educated regarding the basic meat products; however, the lower-income markets (such as in the townships) display limited education (and consequently consumer preferences) when it comes to specific beef cuts.

To a large extent, meat is meat, preferably boned meat to prepare stews or cooked meat dishes. Top meat cuts are not a favourite choice because of its higher price. Stewing beef or chicken serves the stewing family meal better and satisfies the specific need of providing a protein-filled meal to each family member; this is preferable to steak cuts where each member gets a small piece of meat (Du Plessis, Bisschoff & Lotriet 2015:43).

In presenting the product professionally, Uys and Bisschoff (2016:130) found that displaying and clearly indicating the content of packaged meat play a positive role, even in the lower-

end markets. Here, Malindi (2010:38) has already indicated the value of attractive visual inspection in the selection of meat products.

4.1.5 Location

Ehmke *et al.* (2016) claim that location is the physical place where a product is sold or the distribution channels used to get your product to the customers. The position in the distribution chain determines whether wholesale, retail or sell directly to the end users comes into play. In townships, location is positively related to sales figures because of the transport limitation of the lower-end market. This means that buyers must be able to purchase the meat conveniently and close enough to home to preserve the meat because of its ability to spoil.

Here, Uys and Bisschoff (2016:129) have indicated that convenience as part of location (thus easily accessible) is an important driver of buying behaviour; this is especially true since transportation to shopping areas in the lower-income market requires taking a taxi or making use of public transport services.

4.1.6 Health

Health has become a very important factor to many consumers and many studies show that health is as important as taste. Consumers form preferences based on this health factor motivated by expectations of a longer life and one of higher quality (Roininen, Lähteenmäki & Tuorila 1999:74).

Sañudo, Enser, Campo, Nute, Maria, Sierra and Wood (2000:341-342) explain that consumers are concerned about the amount of fat and cholesterol that foods contain as well as the long-term effect it will have on their well-being. Too much visible fat on the meat will discourage consumers from buying it, especially the younger consumers. Coronary heart diseases are considered to be caused by too much fat in the diet and its saturated fatty acid content.

As indicated by the Department of Agriculture, Forestry and Fisheries (South Africa 2015), the meat consumption increased dramatically as part of increased income and the

affordability of animal proteins in the diet. However, Mungall-Singh (2014:Internet) indicates that obesity and other dietary-related illnesses (and deaths) have dramatically increased in the black population of South Africa after 1994; this is indicative of a better lifestyle and more expensive eating habits.

Interestingly, Mungall-Singh (2014:Internet) indicates that it has recently been discovered that the black South African population has a genetic variation that makes them more sensitive to salt, leading to a condition called salt-sensitive hypertension that, in turn, leads to a greater risk of bleeds in the brain, cardiovascular disease, stroke and high blood pressure.

It is noteworthy that the researchers Malindi (2010:71) and Uys and Bisschoff (2016:129) have also identified health as buying behavioural driver of meat. Health is also in both these studies related to the information displayed via labelling and packaging practices.

4.1.7 Culture and religion

According to Gajjar (2013:11), culture forms part of every society and are an important cause of wants and behaviour of people. Marketers must be very thorough in analysing the culture of different groups, regions or countries as the reality can be very different from what is perceived and the influence of culture on buying behaviour varies from country to country.

Religion was seminally defined by Durkeim (1912:39) as a “unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden – beliefs and practices which unite into one single moral community called a Church, all those who adhere to them”, or defined as “the state of being grasped by an ultimate concern, a concern which qualifies all other concerns as preliminary, and a concern that in itself provides the answer to the question of the meaning of our existence” (Tillich 1951:Internet). In South Africa, religion does play a huge part in meat consumption; for example, some religions avoid eating pork or specific rules dictate the handling of the slaughtering and meat-processing processes.

4.1.8 Presentation of meat

Presentation of the product represented three categories in the questionnaire:

- Bulk or small packaging – would the respondent buy bulk if it was cheaper per kg?
- Specific cuts – does the respondent buy a specific cut or do they select from what is available?
- Packaging – how neat, bright, eye-catching or functional is the packaging of the meat?
- Labelling – displaying important issues such as fat content, grading, and best-before or sell-by dates.

In this regard, Bisschoff (2016:Interview) mentions that, interestingly, the lower-end black market in the Karoo region prefers to select their specific meat chunks and then have it packaged. Pre-packed chunks of stewing beef are perceived to be of lower quality, even if it is identical. Substantially higher sales are recorded if the customers are able to make their own selection.

4.2 Demographic factors

Demographic factors do influence buying behaviour of meat. In this regard, Malindi (2010:19) indicated that a person's meat consumption starts to decline after the age of 50; this corresponds with the lower calorie requirements of the body after 50 years of age (US Department of Health and Human Sciences 2016:Internet).

Demographic variables in addition to the age that play a role in meat consumption and buying behaviour are, for example, gender, income per household, cultural groups (within the black community), transportation mode, education, marital status, and occupation. In addition, buying behavioural variables also come into play and frequency, quantity, quality, value/cost, and buyer decision-making role-players all influence actual procurement of animal protein for the family diet.

4.3 Research methodology

The research methodology consists of an extensive literature study on specific topics related to the article as well as an empirical study in which different quantitative statistical analyses were employed to analyse the data.

4.3.1 Literature study

An extensive literature study was undertaken in the article of the study. Overall, the literature study focuses on consumer preferences of meat in townships as well as the factors that influence these preferences. The literature was drawn from scientific journals, textbooks, the internet and dissertations. A wide array of literature databases was consulted via the North-West University's library access system. The professional library personnel at the North-West University assisted greatly to locate the relevant literature.

4.3.2 Empirical study

The empirical study was employed in an article to determine the factors that mostly affect consumer preferences of meat in townships. The research design employed quantitative research, collecting data from a sample within the target population of Ikageng, a township on the outskirts of Potchefstroom in the North West Province of South Africa.

Data was collected by means of a structured questionnaire that was distributed to the sample population in Ikageng.

The purpose of the questionnaire was to gather data and through statistical analysis empirically substantiate the findings of the literature study. A field agent was used to distribute the questionnaires by means of convenient sampling throughout Ikageng. The field agent collected all the questionnaires and returned them to the researcher for data capturing and analysis.

A structured questionnaire was compiled by the researcher, based on the literature study and previously used questionnaires, to address the study objectives. The questionnaire focused on three sections:

- demographic information of the respondents;
- buying behaviour of the respondents; and
- factors affecting consumer preferences.

The setting of the variables was done according to the five-point Likert scale (1 = Strongly disagree, 2 = Somewhat disagree, 3 = Neither agree or disagree, 4 = Somewhat agree, 5 = Strongly agree). The population of Ikageng is 87 701, according to the most recent census in 2011 (Statistics South Africa 2011:Internet). Stratified convenience sampling was used to target the different suburbs of Ikageng. A total response of 300 participants was envisaged. In practice, the field agent continued to collect data until a total of 299 usable questionnaires were completed and returned. The good response to the request for participation was largely due to the field agent who patiently waited, explained and collected the questionnaires.

4.3.3 Statistical analysis

Qualitative data analysis employed the statistical software program SPSS 23.0 for Windows (SPSS 2016:Statistical software). (See Figure 1).

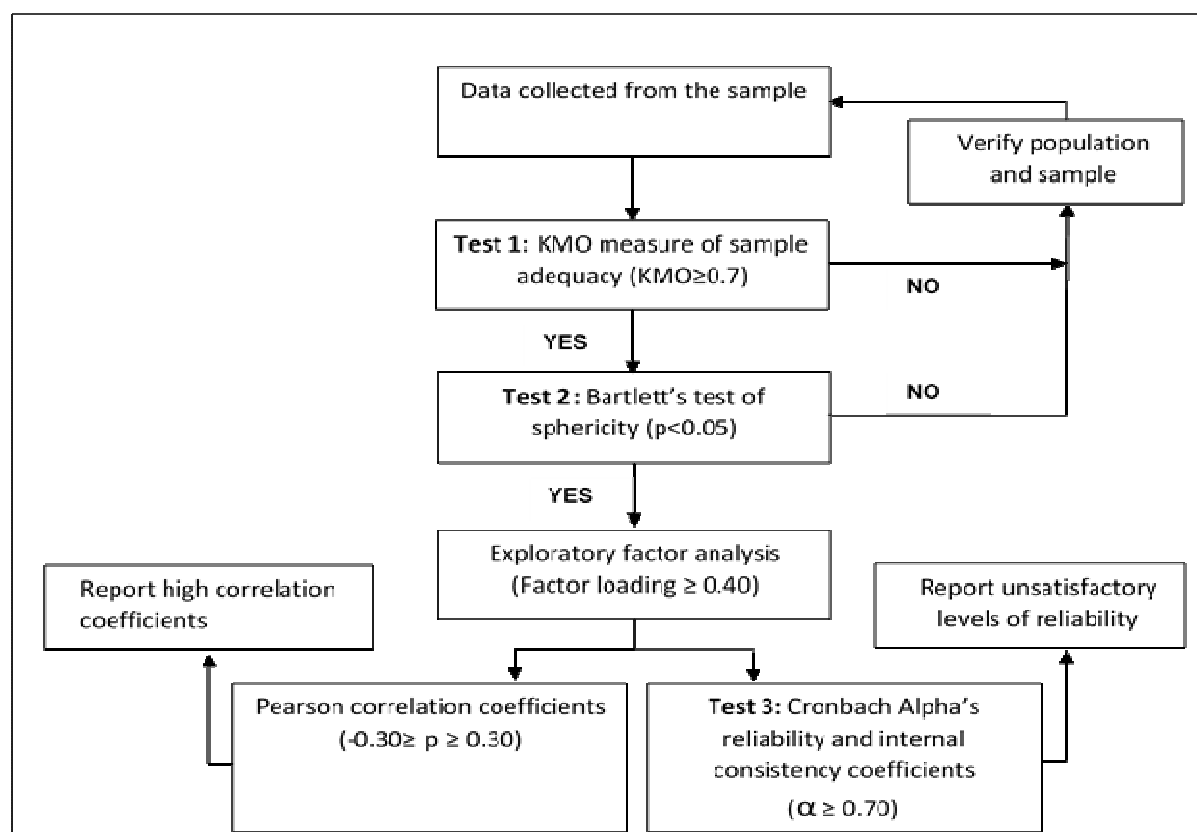


FIGURE 1: Data analysis decision-tree

Source: Naidoo 2011:12

The techniques employed, as suggested by Naidoo (2011:12), were the Kaiser-Meyer-Olkin measure of sampling adequacy, Cronbach alpha's reliability coefficient, Bartlett's test of sphericity, Pearson correlation coefficients and exploratory factor analysis.

As indicated in Figure 1, the decision criteria for these techniques are a KMO value and a reliability coefficient of 0.70 and higher, Bartlett's test to be below 0.005, and factor loadings in excess of 0.40. A satisfactory variance explained exceeds 60% (Field 2009:661)

5. RESULTS

The results obtained from the empirical study consist of demographic information, additional general observations and the buying behaviour of the Ikageng consumers pertaining to meat.

5.1 Demographic information

The analysis of the demographic profile of the respondents in the study covered age, gender, monthly income per household, language, citizenship, mode of transport, highest education level, marital status, and occupation.

Table 1 provides a summary of the respondents' demographic information. In the age, gender and language sections, the respondents were evenly spread between the different classes.

The biggest age group was the 41 to 45-year group at 16%. Male respondents were slightly more at 51% and the four most spoken languages were Setswana at 26%, Sesotho at 19%, isiZulu at 18% and isiXhosa at 16%. All respondents were South Africans and 55% of them use taxis as a transport mode.

The largest group under education level was respondents who achieved matric at 25%. Under marital status, 49.2% of the respondents were married and the rest single, divorced or widowed.

The monthly household income section showed interesting results, with the largest group earning R2 501 to R5 000 at 30%. It furthermore shows that 73% of the respondents come

from households where the total monthly income is less than R5 000. The average monthly household income of these respondents was calculated at R4 168.73².

TABLE 1: Demographic profile of respondents

		Number of respondents	% respondents
Age category	18-25	39	13.0%
	26-30	29	9.7%
	31-35	31	10.4%
	36-40	42	14.0%
	41-45	47	15.7%
	46-50	37	12.4%
	51-55	32	10.7%
	56-60	19	6.4%
	>60	23	7.7%
Gender	Male	151	51.5%
	Female	147	48.2%
	Did not indicate gender	1	0.3%
Income segment Monthly income per household (ZAR)	R0-R900	30	10.0%
	R901-R1500	56	18.8%
	R1501-2500	41	13.7%
	R2501-R5000	91	30.4%
	R5001-R10000	59	19.7%
	R10001-15000	17	5.7%
	R15001-R20000	5	1.7%
	>R20000	0	0%

2 US\$1 = ZAR13.39 (2 Feb. 2017; 08:00)

		Number of respondents	% respondents
Home language	Afrikaans	5	1.7%
	isiZulu	54	18.1%
	Siswati	17	5.7%
	Xitsonga	5	1.7%
	English	4	1.3%
	Sesotho	56	18.7%
	isiNdebele	15	5.0%
	isiXhosa	47	15.7%
	Setswana	79	26.5%
	Tshivenda	7	2.3%
	Other	10	3.3%
Citizenship	RSA	299	100%
Mode of transport	Own car	93	31.1%
	Taxi	165	55.2%
	Train	2	0.7%
	Walk	38	12.7%
	Did not indicate transport	1	0.3%
Highest education level	Primary school	28	9.4%
	High school	42	14.0%
	Matric	76	25.5%
	Diploma	49	16.4%
	Technical college	56	18.7%
	University degree	38	12.7%
	None	10	3.3%
Marital status	Single	109	36.4%
	Married	147	49.2%
	Divorced	25	8.4%

		Number of respondents	% respondents
	Widower	17	5.7%
	Did not indicate status	1	0.3%
Occupation	Housewife/-man	60	20.1%
	Chief	1	0.3%
	Student	36	12.0%
	Manual labour	113	37.8%
	White collar	45	15.1%
	Pensioner	42	14.0%
	Did not indicate occupation	2	0.7%

n=299

Source: Calculated from survey results

5.2 Other general information

The following section discusses other general information that was gathered to better understand the buying behaviour of the respondents. Table 2 provides a summary of the questions asked as well as the results. It was very interesting to see that the average household spends approximately R251.59 per week on meat, which amounts to approximately R1 093.22 per month.

Under the demographic information in the previous section, it was found that the average monthly household income was approximately R4 168.73. This means that 26.22% of an average household's monthly income is spent on meat, thereby concluding that meat purchases make up one of the largest portions of each household's budget.

The results also indicate that some respondents buy the cheaper cuts of meat. This, in general, maybe also includes offal. The average household buys 7.28 kg of meat weekly at R251.59, which means the average price of meat purchased is R34.56 per kg.

The results also indicate that although 66.10% of meat purchases were done by males, the decision of which meat cuts to buy was dominated by females at 52.80%. The average household size of the respondents was 3.93 and on average 4.97 meals, a week included meat. Their favourite distribution channel of meat was butcheries, which indicated that 63.40% of meat sales were done through butcheries. Chicken was purchased the most at 31.73%, followed by pork at 25.98%, beef 18.54%, mutton 17.03%, and fish 6.72%.

TABLE 2: Additional respondent information

How much does your household spend on meat each week? (ZAR)	Average per week	R251.59	
Who buys the meat in your household?	Males	66.10%	
Who decides what meat cuts to buy?	Females	52.80%	
How many people in your household?	Average per week	3.93	
In your household, how many meals per week include meat?	Average per week	4.97	
I prefer to buy my meat from the:	Butchery	63.40%	
	Grocery store	17.80%	
	Supermarket	9.10%	
	Spazza shop	5.70%	
	Farmer	4.00%	
What quantity (kg) of each meat do you buy each week?	Chicken	2.31kg	31.73%
	Beef	1.35kg	18.54%
	Mutton	1.24kg	17.03%
	Pork	1.89kg	25.98%
	Fish	0.49kg	6.72%

n=299

Source: Calculated from survey results

5.3 Buying behaviour

The empirical results are presented thematically in accordance with the questionnaire (see Appendix A). Firstly, the data was subjected to the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to ensure that the sample of the article was adequate and that the data is suitable for factor analysis (Field 2009:671). KMO values of at least 0.6 should be present for factor analysis to be considered, although Du Plessis (2010:Interview) advises that values between 0.5 and 0.7 are too low. Field (2009:660) also explains that values above 0.7 are regarded as good.

Secondly, Bartlett's test of sphericity was used to test the null hypothesis that the variables in the population correlation matrix are uncorrelated. The acceptable significance level is equal to or below 0.05 (Field 2009:661). If the value is below 0.05, the data is suitable to proceed with factor analysis (Du Plessis 2010:Interview).

Thirdly, the Cronbach alpha was calculated to determine the reliability and the internal consistency of the data (Wuensch 2009:58). An acceptable alpha coefficient is above 0.70, but in certain cases, 0.57 and above is also accepted. Lastly, exploratory factor analysis was used as a statistical tool to measure factors affecting consumer preferences.

5.3.1 KMO and Bartlett tests

The sampling adequacy and the suitability of employing factor analysis were determined by the KMO measure of sampling adequacy and the Bartlett test of sphericity.

Table 3 presents the results.

After the first round of analysis, the KMO value was 0.815 and the Bartlett's test of sphericity had a value of 0.000. This was acceptable, but the total variance explained by the factors was regarded to be too low at 57.25%. Closer inspection revealed low-loading and dual-loading questions in the rotated matrix. These questions (Q13, H31 & H35) were subsequently removed.

After removal of these questions, the statistical procedure was repeated to determine whether an improved matrix could be generated. This process was repeated four times,

where after no variables loading unsatisfactorily remained. The variance explained also improved handsomely from the initial 57.25% to 67.71%.

TABLE 3: Summary of the four rounds of KMO and Bartlett tests

Elimination round	Sample adequacy (KMO)	Sphericity (Bartlett)	Variance explained	Questions eliminated after each round
1	0.815	0.000	57.250	Q13, H31, H35
2	0.815	0.000	60.369	S21, P18, P14, Q5
3	0.798	0.000	66.566	H30, P17, H34
4	0.795	0.000	67.711	***

Source: Calculated from survey results

Bartlett's test remained acceptable, while the KMO values measuring sample adequacy declined marginally from 0.815 to 0.795; this is satisfactory, because it exceeds the margin of 0.70 comfortably. Conclusively, the data was suitable for factor analysis and a total of ten factors were extracted. Table 4 shows the individual factors' variance explained as well as the variance explained by each of the ten factors (67.71%).

5.3.2 Exploratory factor analysis

Exploratory factor analysis identified ten factors by means of Varimax rotation. Varimax is suitable for exploratory analysis because its orthogonal rotation favours maximising variance explained by and to maximise the dispersion of factor loadings by loading a smaller number of variables highly onto each factor. This results in more interpretable factors (Field 2009:664). In this analysis, factors loadings below 0.40 are considered to be insignificant and discarded from the analysis.

Table 4 shows that, after the elimination process, 35 statements loaded onto ten factors. The factor loadings, variance explained and Cronbach alpha coefficients are also shown in the table. The ten factors explain a favourable cumulative variance of 67.71%.

TABLE 4: Exploratory factor analysis

	Component									
	1	2	3	4	5	6	7	8	9	10
S26	0.815									
S28	0.773									
S23	0.799									
S25	-0.734									
S27	-0.683									
S21	-0.656									
S24	0.647									
P16	-0.638									
Q3	0.570									
P43		0.821								
P44		0.810								
P41		0.728								
P42		0.726								
S19			0.790							
S20			0.778							
S22			0.683							
P15			0.626							
Q12			0.572							
C36				0.697						
C39				0.695						
C40				0.666						

	Component									
	1	2	3	4	5	6	7	8	9	10
C38				0.657						
H32					0.656					
P45					-0.631					
C37					0.593					
Q4						0.735				
Q1						0.644				
Q7						0.593				
Q2							0.898			
H29							0.883			
Q10								0.781		
Q9								0.780		
Q6									-0.817	
Q8									0.708	
H33										0.779
H11										0.621
Alpha	0.839	0.870	0.774	0.676	0.583	0.686	0.848	0.626	0.499	0.401
Var. %	12.86%	8.43%	7.43%	6.62%	6.28%	5.85%	5.72%	4.88%	4.67%	4.32%

Rotation converged in 14 iterations

Source: Calculated from survey results

The 10 factors are discussed and labelled as:

▪ **Factor 1: Quality**

A total of nine statements loaded onto Factor 1. At first glance, these statements seem to relate to location; however, closer inspection reveals that five have positive factor loadings and the other four are negatively loaded. (Negative loadings signify the inverse of the statement.)

The positively loaded statements deal with a specific butchery, the roller stamp of carcass classification, placing orders beforehand, and dealing with a butcher who knows the specific consumer's preferences; consequently, consumers prefer to deal with a butchery where quality and service are known.

Negatively loaded statements deal with issues such as travel distance, mode of transport or buying at an outlet closest to the consumer, signifying that Ikageng consumers are not willing to buy at the closest or most convenient outlet, nor avoid travelling to the butcher of choice. They will travel further to acquire the quality of meat and service they desire from their butchery of choice. Noteworthy is that quality of meat and service have the most significant effect on consumer preferences (explaining a variance of 12.86%).

▪ **Factor 2: Presentation**

The statements that loaded onto factor 2 are related to the presentation of meat. Bulk buys, specific cuts of meat and packaging are all important issues when buying meat. This factor clearly points towards the presentation of the meat products and explains the second most variance at 8.43%.

▪ **Factor 3: Customer orientation**

All five statements loaded positively onto the factor. These statements deal with good service, excellent advertising, a variety of offerings, value for money, and trust in the brand. All these statements point towards customer orientation, and consequently the factor is labelled as such. This factor explains a variance of 8.27%.

▪ **Factor 4: Culture and religion**

All four the statements loading onto this factor are clear in its designation, namely culture and religion and events surrounding it. It is clear that the Ikageng consumers are influenced by cultural and religious influences. Also noteworthy is their behaviour of consuming more meat when attending, for example, funerals or cultural and religious gatherings. This factor explains a variance of 6.62%.

▪ **Factor 5: Specific choice criteria**

The statements that loaded onto this factor deal with specific choices regarding meat. Such specific needs are organic meat, preferring freshly slaughtered meat, or preferring specific packaging of the meat. The factor is therefore labelled *Specific choice criteria* and explains a variance of 6.28%.

▪ **Factor 6: Visual inspection**

All three statements loading onto this factor deal with visually assimilated information. Both the expiry date and nutritional values are printed on the label while consumers inspect the meat visually by looking at the colour of the meat. Although closely related to Factor 2 (Presentation), this factor provides a more detailed view of consumer buying behaviour in their meat selection process. It does, however, show that the packaging or presentation of the meat should facilitate a clear view of the meat. This factor explains a variance of 5.85%.

▪ **Factor 7: Fat content**

The preference for a high fat content meat is clearly indicated by the two statements loading onto Factor 7. This shows that there is a specific consumer need for fattier meats; consequently “fat” and “over fat” carcasses are popular in the township market.

This view is supported by Bisschoff (2016) who experienced similar consumer needs in the Eastern Cape low-income black market. This factor is noteworthy as it confirms the existence of a specific niche in the market, where a demand for less desirable meat carcasses could be disposed of. This factor explains a variance of 5.72%.

▪ **Factor 8: Experience**

The two statements loading onto this factor deal with experience; experience in consumption where consumers buy meat that tasted well previously, and experience in visual inspection where they buy meat that looks 'good'. This factor explains a variance of 4.88%.

▪ **Factor 9: Post-purchase evaluation**

Consumers trust their butchery not only in service and quality, but also in the quantity of meat as per label. The negative factor loading indicates that they do not check the weight specified on the label. However, a high factor loading indicates that they do inspect the meat by smelling the freshness thereof, although they have visually assimilated the expiry date (see Factor 6) during the purchase process. Both these behaviours point towards honesty and subsequent post-purchase behaviour. This factor explains a variance of 4.67%.

▪ **Factor 10: Specific preferences**

Both statements that loaded onto Factor 10 deal with specific consumer preferences. These preferences point to the gender of the animal slaughtered and use of hormones or growth stimulants during its lifetime. This factor explains a variance of 4.32%.

Noteworthy is the fact that the factors decline in their importance (as indicated by their variance explained). Consequently, Factor 1 (Quality) is deemed more important than the next factor (Factor 2: Presentation of meat). Factor 10 (Special preferences) is the least important factor.

In practice, this means that best return on managerial effort would be gained from addressing the quality of the meat, then to present the meat products well, and so on. Attending to specific preferences, some customers may have yielded the least return on time invested. This is so because the first factor explains 12.87% of the variance, while the last factor explains only 4.47% of the variance, signifying the level of importance in the consumer behaviour of meat products.

5.3.3 Reliability

Factors 1, 5 and 9 show negative loadings in the component matrix, and therefore inversion of these variables is required before the reliability of these factors can be calculated (Field 2009:672, 678-9). After inversion of the negative criteria loadings, the analysis shows that Factors 1, 2, 3, and 7 have high reliability coefficients above 0.7. Factors 4, 5, 6 and 8 have acceptable reliability levels of between the lower level of 0.57 and 0.7 (Cortina 1993:99; Field 2009:675). Lastly, Factors 9 and 10 show a low level of reliability with alpha coefficients of 0.449 and 0.401, respectively. The reliability of the ten factors is shown in Table 4 above.

5.3.4 Correlational analysis

In this study, correlations of 0.30 and higher ($p \leq 0.05$; $p \leq 0.10$) were considered noteworthy while correlations in excess of 0.50 are considered to be strong (Field 2009:111-112; Naidoo 2011:12-13). The Pearson correlations between the demographic variables and the factors are shown in Table 5.

Factor 1: Quality (of the meat) significantly correlated strongly with Income ($r=0.622$; $p \leq 0.10$), while it also correlated positively with the variables Education ($r=0.405$; $p \leq 0.10$), Occupation ($r=0.349$; $p \leq 0.10$), Weekly meat expenditure ($r=0.474$; $p \leq 0.10$), Number of meals with meat ($r=0.314$; $p \leq 0.10$) and mutton as choice of meat ($r=0.461$; $p \leq 0.10$).

The variable mode of transport showed a negative correlation with Quality of meat ($r= -0.435$; $p \leq 0.10$), signifying that the transport mode did not influence the quality of meat as consumer choice. Presentation of the meat (Factor 2) correlated with the number of meals containing meat per week ($r=0.381$; $p \leq 0.10$) showing that different presentations of meals do play a role in meat consumption in the township.

Factor 3, Customer orientation correlated positively with Mutton as the meat of choice, showing that customers purposefully select mutton for specific occasions. Interestingly, Culture and religion (Factor 4) show a negative correlation ($r= -0.315$; $p \leq 0.10$) with number of meals containing meat, showing that culture and religion do not influence the number of times people eat meat per week in the township of Ikageng.

TABLE 5: Correlations between factors and demographic variables

Demographic variable		F1 Quality	F2 Presentation	F3 Customer orientation	F4 Culture & religion
Income monthly household income(ZAR)	Pearson cor. Sig. (2-tailed) N	0.622** 0 299	0.298** 0 299	0.216** 0 299	-0.144* 0.013 299
What mode of transport do you mainly use?	Pearson cor. Sig. (2-tailed) N	-0.435** 0 298	-0.180** 0.002 298	-0.151** 0.009 298	0.123* 0.033 298
Highest education level	Pearson cor. Sig. (2-tailed) N	0.405** 0 299	0.169** 0.003 299	0.081 0.164 299	-0.140* 0.015 299
What is your occupation?	Pearson cor. Sig. (2-tailed) N	0.349** 0 297	0.147* 0.011 297	0.052 0.376 297	-0.130* 0.025 297
Weekly household meat expenditure	Pearson cor. Sig. (2-tailed) N	0.474** 0 299	0.381** 0 299	0.256** 0 299	0.258** 0 299
How many meals a week include meat?	Pearson cor. Sig. (2-tailed) N	0.314** 0 297	0.241** 0 297	0.137* 0.018 297	-0.315** 0 297
Mutton as choice of meat	Pearson cor. Sig. (2-tailed) N	0.461** 0 109	0.128 0.183 109	0.413** 0 109	-0.029 0.767 109

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Calculated from survey results

In Table 6, the inter-factor correlations are shown. The inter-factor correlations show that the quality of meat is positively correlated with the presentation of the meat ($r=0.405$; $p\leq 0.10$), indicating that well-presented meat is perceived to be of better quality. In addition, presentation of the meat correlated positively with customer orientation ($r=0.364$; $p\leq 0.10$), but is negatively correlated with culture and religion ($r= -0.328$; $p\leq 0.10$). This indicates that culture and religion do not prefer a different presentation of the meat.

TABLE 6: Inter-factor correlations

		F1 Quality	F2 Presentation	F3 Customer orientation	F4 Culture & religion	F5 Visual inspection	F6 Specific choice
F2	Pearson correlation	0.405**					
Presentation	Sig. (2-tailed)	0					
	N	299	299				
F3	Pearson correlation	0.194**	0.364**				
Customer	Sig. (2-tailed)	0.001	0				
orientation	N	299	299	299			
F4	Pearson correlation	-0.180**	-0.328**	-0.083			
Culture &	Sig. (2-tailed)	0.002	0	0.152			
religion	N	299	299	299	299		
F5	Pearson correlation	0.05	-0.026	0.225**	0.518**		
Visual	Sig. (2-tailed)	0.385	0.654	0	0		
inspection	N	299	299	299	299	299	
F7	Pearson correlation	-0.259**	-0.153**	0.049	-0.009	0.030	0.436**
Fat content	Sig. (2-tailed)	0	0.008	0.396	0.883	0.602	0
	N	299	299	299	299	299	299

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Source: Calculated from survey results

A customer-oriented presentation is preferred by all; this presentation should be visually appealing, irrespective of culture or religion ($r=0.518$; $p\leq 0.10$). Expectedly, the fact that content correlates positively with specific choice criteria ($r=0.436$; $p\leq 0.10$), shows that some customers deem the fattiness of the meat as important and a specific choice criterion when they select meat at the butchery.

A higher fat content is supported as choice criterion by Bisschoff (2016:Interview), especially when a typical meal such as a stew is planned to feed the family. Typically, this would include meat originating from 'fat' carcasses (roller mark 444) to 'over-fat' ones (roller mark 666).

6. DISCUSSION OF RESULTS

Although Ikageng mostly represents households with lower income levels than the rest of Potchefstroom, it has become an important contributor to the economy and makes up 59% of the population of Potchefstroom. Very little formal research has been conducted on these consumers and their buying behaviour; consequently posing a limitation to specific information on their buying behaviour.

The aim of the article was to identify latent variables (or factors) that affect consumer preferences of meat in townships. Based on the literature study on consumer preferences and the factors perceived to affect these preferences, a questionnaire was compiled to measure the buying behaviour of township consumers. The buying behaviour of meat in townships was then measured and, finally, the latent buying behaviour drivers were determined. The results show that quality, presentation, customer orientation, culture and religion, specific choice criteria, visual inspection, fat content, experience, post-purchase evaluation, and specific preferences are the main factors responsible for influencing consumer preferences. However, in practice, needs only realise in economic demand if behavioural needs are backed up by disposable income.

The results indicate that the disposable income that the Ikageng consumers allocated to meat purchases amounts to 26%. This presents a golden market opportunity for meat marketers, traders and outlets to tap into. Following the results of this study, the following factors are important to bear in mind when marketing meat to consumers in townships:

- *The quality of the meat* stood out as the largest contributor towards affecting consumer preferences. The following elements were important to the respondents: expiry dates, leaner cuts, nutritional values on the labels, the colour of the meat, fresh odour, good appearance, previous experience of the same meat, brand name and fresh rather than frozen meat. The following were not so important to the respondents: roller stamps for classification of carcasses, country of origin, weight accuracy and gender of the meat.
- *Presentation of the meat* was the second most important factor affecting consumer preferences. The respondents claimed that bulk presentation of meat, specific cuts, packaging of meat and the attractiveness of the packaging were important to them.
- *Customer orientation* was the third largest contributor towards affecting consumer preferences. This factor represents businesses being focused on the customer. The respondents stated the following as important to them: excellent service, excellent advertising, a large variety of meat, value for money with bulk purchases, and brand trust.
- *Culture and religion* were the fourth largest contributor towards affecting consumer preferences. Although culture and religion play an important role in the lives of the respondents, they do not affect the buying behaviour of the consumer as much as perceived. Events such as National Braai day will not necessarily increase the volumes of meat consumed, but rather affect which cuts of meat are bought.
- *Specific choice criteria* were the fifth largest contributor towards affecting consumer preferences. This indicates that consumers in townships are sometimes forced into a specific meat choice by health, religion and cultural ceremonies and events such as weddings and funerals.
- *Visual inspection* was the sixth most important factor affecting consumer preferences. This factor represents elements that visually stimulate the customer to buy certain meat. This includes colour, smell, packaging, branding, labels, expiry dates, fattiness, and bone content.
- *Fat content* was seventh on the list. This factor refers to how much fat there is in the meat. There is a global health movement taking place where people shy away from fatty

meat due to health issues. The same tendency is also taking place in townships. The vast majority of respondents said they prefer lean meat to fatty meat, although there is a distinct need among some consumers for the 'fat' to 'over fat' carcasses. Fat carcasses are also less expensive per kilogram than lean carcasses, making meat protein more affordable to the lower-end market.

- *Experience* was the eighth factor and refers to consumers repurchasing certain meat based on past experiences. The respondents strongly agreed that they would also repurchase meat if they were satisfied with the past consumption experience of that same meat or brand.
- *Post-purchase* evaluation was the ninth factor and refers to consumers evaluating meat once they get home. For example, to weigh the meat to see whether it corresponds with the weight on the label or to open the packet and smell the meat to check that it is fresh.
- *Specific preferences* are the last factor and refer to personalised preferences that a consumer might have. The Cronbach alpha value was very low on this factor at 0.401, indicating that this factor might not be reliable to use.

7. RECOMMENDATIONS

From the results, the following recommendations are made:

- Future researchers should seriously consider the use of a professional statistician being that at the Statistical Consultation Services of the North-West University or elsewhere if they are not well educated in data analysis and statistics.
- Use a quality statistical program to analyse the data.
- Employing a proper literature review to form a basis for the identification of variables and their measuring criteria before drafting the questionnaire.
- Ten factors were identified in declining order of importance. It is therefore recommended that these factors and their criteria be closely managed in the marketing of meat to Ikageng consumers. It is important to note the importance of each factor as indicated by

their respective variance explained. The more important factors should be addressed first by management to improve their marketing strategy and consequently their impact on the market. This means that if the more important factors are addressed first, the rewards on managerial time invested to improve marketing efforts should yield the best results.

8. SUGGESTIONS FOR FURTHER RESEARCH

Future research should focus on the following areas:

- An in-depth analysis of any one of the factors identified that affect consumer preferences to further analyse and study the sub-constructs.
- A study with specific national and further international comparative focus that aims to compare factors influencing consumer preferences of meat in townships.
- A study analysing factors affecting consumer preferences of other products and services to gain more insight into this evolving market segment.

This study serves as a springboard for future studies in the informal market so that these consumers can be understood regarding their needs and wants. This will enhance effective marketing by presenting the right marketing mix in this market.

9. CONCLUSION

In this article, the overall focus of the study was to analyse consumer preferences of meat in South African townships. A demographic profile of the Ikageng township shows that significant disposable income is allocated to meat. The demographics show that the buying behaviour of the lower-end black market in Ikageng is strongly influenced by the quality of meat for sale. Following quality, nine other preferences could be identified; presentation of the meat, cultural and religious influences and visual inspection are some of the more important buying behavioural drivers in declining order of importance.

It is important in a developing country, where needs and income constantly change, that the needs of consumers require constant review. This is valid for the total supply chain, ranging

from the farmers to the wholesalers, to the retail outlets that service these markets, whether in townships or in the cities. It is, however, comforting that everybody seems to be in the business of buying fresh, healthy and good meat (especially since meat is the main protein source for family meals).

APPENDIX A: MEASURING CRITERIA

	CRITERIA
QUALITY	1) I always check the expiry date of the meat
	2) I always buy meat with lots of fat
	3) I always check the roller stamp that indicates the age of the meat
	4) Nutritional values on the label are important to me
	5) I always check the country of origin of the meat
	6) I weigh the meat at home to make sure the outlet scale is correct
	7) The colour of the meat I purchase is important to me
	8) The meat I buy must not have a smell
	9) I buy meat that appears good
	10) I buy the same meat that tasted good on previous occasions
	11) I prefer to know the gender of the meat I buy
	12) I only buy meat of known brands because I trust their quality
	13) I prefer to buy fresh meat rather than frozen meat
PRICE	14) I am prepared to pay more for quality meat
	15) I buy bulk meat to get value for my money
	16) I always buy the cheapest meat I can find
	17) I always look out for a special offer on meat
	18) I tend to buy processed meat because it is cheaper
SERVICE	19) I buy meat where I get excellent service
	20) I buy meat at outlets because of their excellent advertising
	21) I continually search for outlets that run promotions on their meat
	22) I purchase my meat from outlets that have the biggest variety of meat

	23) The place where I buy meat knows me and knows what I buy
	24) I always phone and place my meat order before I go to the outlet
LOCATION	25) I buy my meat at the closest outlet
	26) I would rather travel further to buy at my preferred meat outlet
	27) Transport influences where I buy meat
	28) I do not shop around for meat but prefer to buy meat at the same place every time
HEALTH	29) I prefer fat meat rather than lean meat
	30) I usually check the nutritional value of the meat
	31) I do not buy meat with preservatives in
	32) I am prepared to pay more for organic meat
	33) I always try and find out if hormones/ growth stimulants were used
	34) I do not buy meat at a dirty outlet
	35) Shop and staff hygiene is not that important to me
CULTURE / RELIGION	36) My religion/culture influences what meat I buy
	37) At religious/cultural functions I prefer to eat freshly slaughtered meat
	38) I buy more meat during religious/cultural ceremonies than usual
	39) I do not eat pork due to my religious/cultural beliefs
	40) I do not buy more but consume more meat during religious/cultural events
PRESENTATION	41) I buy bulk meat because it saves money
	42) I prefer to buy a specific cut of meat
	43) The packaging of the meat I buy is important to me
	44) The more attractive the packaging of meat, the more I tend to buy that brand
	45) I do not consider the packaging when I buy meat

REFERENCES

- AASLYNG MD.** 2012. Trends in meat consumption and the need for fresh meat and meat products of improved quality. Jakarta, Indonesia: Bogor Agricultural University. (2nd International Seminar on *Animal Industry of Jakarta*; 5-6 July.)
- AC NIELSEN.** 2016. South African national meat consumption survey: business needs assessment for South African Association. [Internet: upetd.up.ac.za/thesis/available/etd-01282008/01chapter1.pdf; downloaded on 2016-6-10.]
- BISSCHOFF CA (JR).** 2016. Buying behaviour of the black low-end market in Steynsburg, Eastern Cape. (Interview: 15 June 2016, Steynsburg; unrecorded; Mr Chris Bisschoff is the owner of the butchery and partner in Toptjop – a meat distribution business.)
- BOTES-MARAIS S.** 2014. About meat, consumers and expectations. *Stockfarm* 10(4):6-7, October.
- BURGER R, VAN DER BERG S & NIEFTAGODIEN S.** 2004. Consumption patterns of South Africa's rising black middle-class: correcting for measurement errors. Stellenbosch: University of Stellenbosch. (Conference of the Economic Society of South Africa; 17-19 Sep.)
- BUSINESSTECH.** 2015. How big is South Africa's black middle class? [Internet: <http://businesstech.co.za/news/wealth/94987/how-big-is-south-africas-black-middle-class/>; downloaded on 2016-10-10.]
- CHUMMUN Z & BISSCHOFF CA.** 2016. Measuring the profitability component of the low-income cover households in South Africa. Langebaan: Nelson Mandela Metropolitan University. (10th International Business Conference: 26-28 Oct.)
- CORTINA JM.** 1993. What is an alpha coefficient? An explanation of theory and applications. *Journal of Applied Psychology* 78:98-104.
- COUNTRYMEAT.** 2016. For meat lovers, by meat lovers. [Internet: <http://www.countrymeat.co.za/>; downloaded on 2016-10-10.]
- DICEY T.** 2016. South Africa's top five consumer trends. Financial Mail. (March 1). [Internet: <http://www.financialmail.co.za/redzone/2016/03/01/south-africas-top-five-consumer-trends>; downloaded on 2016-10-10.]
- DU PISANE K.** 2014. Tender and tasty – the making of a good steak. *Stockfarm* 10(4):6-7, October.
- DU PISANE K.** 2015. Classification can make meat purchases easier. *Farmlink* 5:44.
- DU PLESSIS JL.** 2010. Statistical consultation services. Department of Statistics. North-West University. Potchefstroom. (Interview: 13 November 2010, Potchefstroom; unrecorded; Prof Jan Du Plessis acted as a statistical advisor at the North-West University.)

DU PLESSIS TE, BISSCHOFF CA & LOTRIET RA. 2016. Business plan for Henwill Chickens Pty (Ltd). Potchefstroom: Du Plessis and Associates. (Unpublished).

DURKEIM ES. 1912. The elementary forms of the religious life. New York, NY: Free Press.

EHMKE C, FULTON J & LUSK J. 2016. Marketing's four P's: first steps for new entrepreneurs. Lafayette, LA: Department of Agricultural Economics at Purdue University. [Internet: <https://www.extension.purdue.edu/extmedia/ec/ec-730.pdf>; downloaded on 2016-10-12.]

FIELD A. 2009. Discovering statistics using SPSS. 3rd ed. London, UK: Sage.

FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS. 2014. Animal production department: meat quality. [Internet: http://www.fao.org/ag/againfo/themes/en/meat/quality_meat.html; downloaded on 2016-10-16.]

GAJJAR NB. 2013. Factors affecting consumer behaviour. *International Journal of Research in Humanities and Social Sciences* 1(2):10-26.

GUMEDE A. 2016. Gordhan arrest reports increase South Africa downgrade risk. [Internet: <http://www.bloomberg.com/news/articles/2016-08-24/gordhan-arrest-reports-increase-south-africa-s-downgrade-risk>; downloaded on 2016-10-14.]

HOFFMAN LC, MULLER M, SCHUTTE DW, CALITZ FJ & CRAFFORD K. 2005. Consumer expectations, perceptions and purchasing of South African game meat. *South African Journal of Wildlife Research* 35(1):33-42.

HOLMES T. 2016. SA's ferocious fast food appetite. *Mail & Guardian*, April 8 2016. [Internet: <http://mg.co.za/article/2016-04-11-sa-has-an-appetite-for-fast-food>; downloaded on 2016-10-10.]

IQANI M. 2012. Spazas, hawkers and the status quo: black consumption at the margins of media discourse in post-apartheid South Africa. *Animus Revista Inter-Americana de Comunicação Midiática* 11(22):1-10.

JAN BRAAI. 2015. Unite around a fire. [Internet: <http://braai.com/national-braai-day-mission/>; downloaded on 2016-10-10.]

LAMB CW, HAIR JF, MCDANIEL C, BOSHOF C, TERREBLANCHE NS, ELLIOT R & KLOPPER HB. Marketing. 5th ed. Cape Town: Oxford.

LAUBSCHER J. 2013. Economic growth in South Africa: a 20 year review. [Internet: <http://www.moneyweb.co.za/archive/economic-growth-in-south-africa-a-20year-review/>; downloaded on 2016-10-10.]

MAHANJANA A. 2005. Red meat market beckons. *NAFU Farmer Trade* 2007(2):36-37.

MALINDI HE. 2010. A framework to measure customers' perceptions of the quality of red meat. Potchefstroom: North-West University. (Dissertation – MBA)

MENKHAUS D, COLIN D, WHIPPLE G & FIELD R. 1993. The effects of perceived product attributes on the perception of beef. *Agribusiness: An International Journal* 9:57-63.

MUNGALL-SINGH S. 2014. What's causing sudden deaths of black men in South Africa? [Internet: <http://www.timeslive.co.za/lifestyle/2014/06/25/what-s-causing-sudden-deaths-of-black-men-in-south-africa>; downloaded 2016-10-11.]

NAIDOO K. 2011. Stress management and its impact on work performance of educators in public schools in KwaZulu-Natal. Potchefstroom: NWU. (Thesis - PhD).

ROININEN K, LÄHTEENMÄKI L & TUORILA H. 1999. Qualification of consumer attitudes to health and demonic characteristics of foods. *Appetite* 33(1):71-88.

SAÑUDO C, ENSER ME, CAMPO MM, NUTE GR, MARIA G, SIERRA I & WOOD JD. 2000. Fatty acid composition and sensory characteristics of lamb carcasses from Britain and Spain. *Meat science* 54:339-346.

SHONGWE MA, JOOSTE A, HUGO A, ALEMU ZG & PELSER A. 2007. Will consumers pay for less fat on beef cuts? The case in Bloemfontein, South Africa. *Agrekon* 46(4):475-493.

SOUTH AFRICA. 2015. The South African meat report 2015. Pretoria: Department of Agriculture, Forestry and Fisheries. [Internet: http://gain.fas.usda.gov/Recent%20GAIN%20Publications/The%20South%20African%20meat%20market_Pretoria_South%20Africa%20-%20Republic%20of_9-15-2015.pdf; downloaded on 2016-10-11.]

SPSS. 2016. Statistical Software for Social Sciences. Version 23. [Internet: www.spss.com; installed on 2016-01-25.]

STATISTICS SOUTH AFRICA. 2011. National Census. 2011. Pretoria: Government printer. [Internet: <http://www.statssa.gov.za/publications/P03014/P030142011.pdf>; downloaded on 2016-09-11.]

STATISTICS SOUTH AFRICA. 2012. Income and expenditure survey 2010/2011. Pretoria: Government printer. [Internet: <http://www.statssa.gov.za/publications/P0100/P01002011.pdf>; downloaded on 2016-10-11.]

TILLICH P. 1951. The philosophy of religion. [Internet: <https://global.britannica.com/biography/Paul-Tillich>; downloaded on 2016-10-10.]

US DEPARTMENT OF HEALTH AND HUMAN SCIENCES. 2016. Healthy eating after 50. [Internet: <https://www.nia.nih.gov/health/publication/healthy-eating-after-50>; downloaded on 2016-10-16.]

UYS PS & BISSCHOFF CA. 2016. Identifying consumer preferences of beef. *Problems and Perspectives of Management* 14(4):126-133.

VERBEKE W, VIAENE J & GUIOT O. 1999. Health communication and consumer behaviour on meat in Belgium: from BSE until dioxin. *Journal of Health Communication* 4(4):345-357.

VERMEULEN H, SCHÖNFELDT HC & PRETORIUS B. 2015. A consumer perspective of the South African red meat classification system. *South African Journal of Animal Science* 45(3):341-352.

WEBB EC. 2015. Description of carcass classification goals and the current situation in South Africa. *South African Journal of Animal Science* 45(3):229-233.

WIDMAR NO, MCKENDREE M & ORTEGA D. 2014. Consumer behaviour insights. *The Dairy Mail* 2014(6):143, June.

WUENSCH KL. 2009. Factor analysis: SPSS help index manual. 17th version. [Internet: <http://spss.com/software/statistics>; downloaded on 2016-09-06.]

ZALKA L, DOWNES M & PAUL K. 1997. Measuring consumer sensitivity to corporate social performance across cultures: which consumers care most? *Journal of Global Marketing* 11(1):29-48.