



**An explanatory, quantitative study to understand the behaviour
of low-income household's online shopping behaviour**

Research Study

Supervisor's Name: Lise-Mari Maartens

Navigator: Dr. Franci Cronje

By

Michael Midgley 12021430

Abstract

The research study looks at understanding the behaviour of low-income household's online shopping behaviour and the impact of online retail in South Africa. This research shall deliver value to both businesses looking to compete within the lower income segment of the market and consumers in understanding the benefits of online shopping. There are exactly 75 percent of people who are what is considered below middle class within this country and thus there is clear value to be obtained (Visagie, 2013). The study will address the reasons why low income households act the way they do when it comes to online shopping.

The study further looks at the value that can be captured when targeting the lower income segment of the market. This study is worth investigating as e-commerce is on the rise in many countries yet in South Africa it has not reached its full potential.

The purpose of the study will educate consumers and retailers on the underlying problems with online shopping, the unrealised benefits that it contains and give a comparison between the low income consumer groups' and the higher income consumer groups' buying behaviour. The research proposal used a quantitative approach in order to conduct research. This approach enabled the study to utilise numerical and quantitative data in order to predict and tabulate the data obtained from the sample groups.

The research study made use of cross sectional surveys to obtain data from respondents of the study. The low income household's sample was further communicated to through an intermediary being a field worker. The survey was handed out to two sample groups, namely low income earning individuals (social class) and students between the ages of 18 and 26.

Online shopping is a very innovative technique and one which the researcher sees as the future of purchasing goods within South Africa. However for it to work in South Africa there needs to be structural changes within the country and security risks need to be fixed.

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1 INTRODUCTION/BACKGROUND

1.1 INTRODUCTION

The research study looks at understanding the behaviour of low-income household's online shopping behaviour and the impact of online retail in South Africa. This research shall deliver value to both businesses looking to compete within the lower income segment of the market and consumers in understanding the benefits of online shopping. From the years 2004 to 2010 there has been a 29 percent average annual increase in the online retail market however many low income consumers have been slow to adopt online shopping (Wire, 2015). In South Africa it is very difficult to define the middle class due to the unequal distribution of income within the country and thus results in various definitions of middleclass. However one indication of the average income of South Africans is supplied by BankserAfrica which shows that the average monthly take-home salary in SA in 2015 was R12 715 (Businessstech, 2016). There are exactly 75 percent of people who are what is considered below middle class within this country and thus there is clear value to be obtained (Visagie, 2013). The study will address the reasons why low income households act the way they do when it comes to online shopping. The study further looks at the value that can be captured when targeting the lower income segment of the market. The proposal will follow a quantitative nature whereby asking many low income consumers on the different aspects of online shopping.

1.2 RESEARCH AREA AND PROBLEM

1.2.1 Background and context of study

New technology and innovations have impacted the masses and the way consumers live their lives. These new developments have given give rise to new socio-economic conditions (Growth of Online Retail and Shopping, 2016). One such journey that has taken mankind by storm is moving from the usual shopping at a retail store to shopping online at retail websites (Growth of Online Retail and Shopping, 2016). This development is supported by the development of first generation mainframe computers to personal computers.

The South African online retail market was born in 1996 (Writer, 2015). In the South African market during the 2016 year, online retails sales only accounted for 1% of local retail sales (Writer, 2015). An indication of the growth of online shopping can be forecasted by the director of research company World Wide Worx, Arthur Goldstruck stating that the online retail market is expected to

grow 26% year on year in 2015 to reach a market size of R7.5 billion (Writer, 2015). Online shopping is increasing at an exponential rate within South Africa. From the years 2004 to 2010 online shopping has increased from R470 million to R2 billion which is calculated as a 29 percent average annual increase (Wire, 2015).

The development of mobile devices has given the incentive for consumers to go about using this as a platform to do purchasing of goods and checking for information about different areas of online shopping (Gross, Rock and Schmeiser, 2016) Within South Africa there are currently 79.1 million mobile connections and 24.9 million active internet users (Global Web Index Data, 2015). Cell phone penetration is a contributing factor to the influence over online shopping behaviour as mentioned by Global Web index data 11% of the South African population bought something online in December 2014 (Global Web Index Data, 2015).

There is a large assumption that the lower income segment of the market does not utilise online shopping as a method of purchasing products (Smith, 2016). The study seeks to identify the potential within the lower income market of South Africa in using online retail as a source of purchasing products. The findings of this study would be beneficial to online retail stores such as Takealot whom have shown interest in securing this segment of the market, due to their spending power and size in the South African market.

1.2.2 Problem statement and background

Based on evidence from the South African environment and other sources, this problem is worth investigating because the whole world is moving further towards online retail. South Africa however seems to still be within its infancy but is however showing much progress in online retail (Mahlaka, 2014).

Problem statement: Low income households behaviour towards online shopping

The use of online retailing to a consumer can be very advantageous and beneficial. However consumer's specifically lower income consumers are not utilising this form of shopping technique. This statement can be supported by the statistics addressed earlier whereby online retail sales only account for 1% of local retail sales (Writer, 2015). The benefits that are associated with purchasing products online can include aspects such as free delivery of merchandise, safety, accessibility and ease of use for consumers (Anamika, 2016).

There is a large population of the South African market that makes use of smart phones and other tablet devices, in fact there are exactly 79.1 million mobile connections within South Africa (Global Web Index Data, 2015). One would find that this would be a positive link to increase online shopping activity as there are now 24.9 million active internet users, however there seems to still be an unwillingness by low income consumers to utilise online shopping (Global Web Index Data, 2015).

The problem however arises when online retailing gets combated by various challenges within South Africa. The challenges that are faced within the country as mentioned by Head of marketing at Interactive Advertising Bureau South Africa (IAB), Sarah Rice; include the persistent lack of confidence of consumers in online payments, the country's large land mass, lack of broadband penetration and poor transport logistics (Mahlaka, 2014). Rice states that even though "online shopping is not a new concept the problem lies in educating consumers about the platform" (Mahlaka, 2014).

The lower income market in South Africa isn't very prominent within online retail shopping. This is very surprising as to the various benefits that are available in using online shopping.

1.2.3 Research questions

Primary question:

What are the reasons for lower income groups shopping online less frequently than higher income groups?

Secondary questions:

- What's the value of capitalising the lower income market within South Africa?
- What is hindering online retail stores from capturing the lower income segment in South Africa?
- What are the reasons that low income households haven't adopted online shopping as well as higher income households?

1.2.4 Objectives of the study

The study aims to explore the prominence in using online retail as a method of purchasing products within the lower income segment of South Africa. The study will determine the value for online retail stores in which can be ascertained in targeting the lower income segment of the South African market. The study will also look as to why lower income household's shoppers do not have the necessary confidence in using online shopping. The study will further look at reasons why

lower income households do not utilise online shopping even amidst the various benefits associated to this form of shopping.

The study further seeks to establish ways in which online retail stores can penetrate the lower income market and obtain the value and potential that comes with it.

1.2.5 Purpose statement

The researcher aims to give an accurate description of a certain population being the lower income market during this period of progress of online retailing. The study also is looking at drawing comparisons and investigating the difference between upper income households and lower income households and the frequency that each makes use of online shopping. The study will also seek explanations as to why the lower income household's act in the way they do in not adapting to online shopping.

1.2.6 Rationale and relevance

The researcher developed an interest in this specific topic because he himself makes use of the internet as a channel for purchasing products whether it is for sports equipment, electronics, clothing and similar. Online shopping seems to be the future in purchasing goods due to the various benefits and the ease that is associated to this system. The researcher's interest is further stipulated by the benefits that online shopping offers to that of shopping at local retail stores. This topic interests the researcher as it shows how eCommerce has progressed so much that we have used the digital world as a means of doing business and a useful new channel in distribution.

This research is worth doing because of the value both to online retail stores and to that of consumers. The value that this research generates to the customer is that it shows the safety and the ease that online shopping has. Consumers nowadays are challenged by the various dangers and misconceptions that are associated with online shopping and this research aims to clear these up. The research generates value to online retail stores through identifying ways and methods in targeting and successfully penetrating the lower income market of South Africa.

2 LITERATURE REVIEW

The next section will showcase and discuss literature in the field of e-commerce and in more specific the relativeness towards the South African market. The literature review below will discuss the value of the low income market of South Africa and the various misconceptions surrounding the low income segments buying behaviour. The literature review will also delve into the stats regarding the correlation between online shopping and household's income status. The literature review will further analyse the various assumptions to the lack of adoption towards online shopping of lower income consumers.

2.1 THEORETICAL APPROACH

Technology Acceptance Model

The Technology Acceptance Model is an information systems theory that shows how users come to accept and utilise a technology, in this case online shopping (What is Technology Acceptance Model (TAM), 2016). This model also looks at the acceptance of technology by an individual taking in account: perceived usefulness and ease of use of technology (What is Technology Acceptance Model (TAM), 2016). This model was initially proposed by Davis (1989) which uses the two fundamental belief being usefulness and ease of use as a way to determine attitudes towards technology (What is Technology Acceptance Model (TAM), 2016).

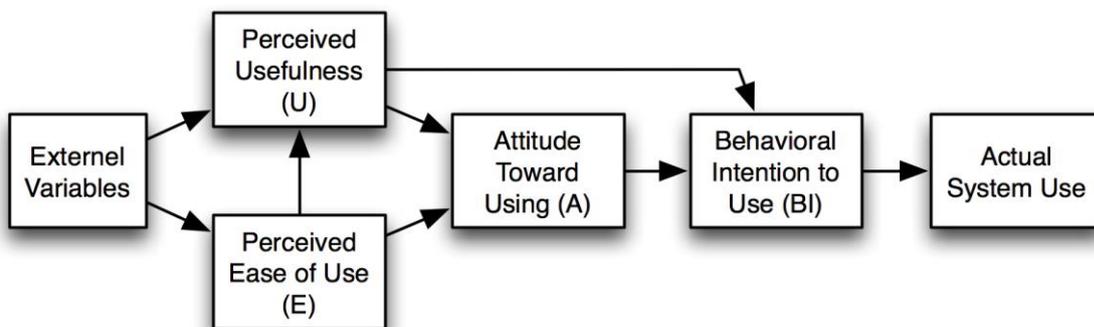


Figure 1: Technology Acceptance Model: (Morris and Dillion, 2016)

This model is one of the most frequently used models used for technology acceptance and it indicates the decision regarding new technologies is affected by various factor in this case being income (Morris and Dillion, 2016).

The Technology Acceptance Model's aim is to study how individual's perceptions affect the actual usage and intentions of use for information technology (Morris and Dillion, 2016).

This model is appropriate for the research proposal with regards to two dimensions. The first dimension is the evolution of technological systems in this case being online shopping. The second dimension deals with that of human perceptions where in this research proposal the researcher is analysing the behaviour of low income households.

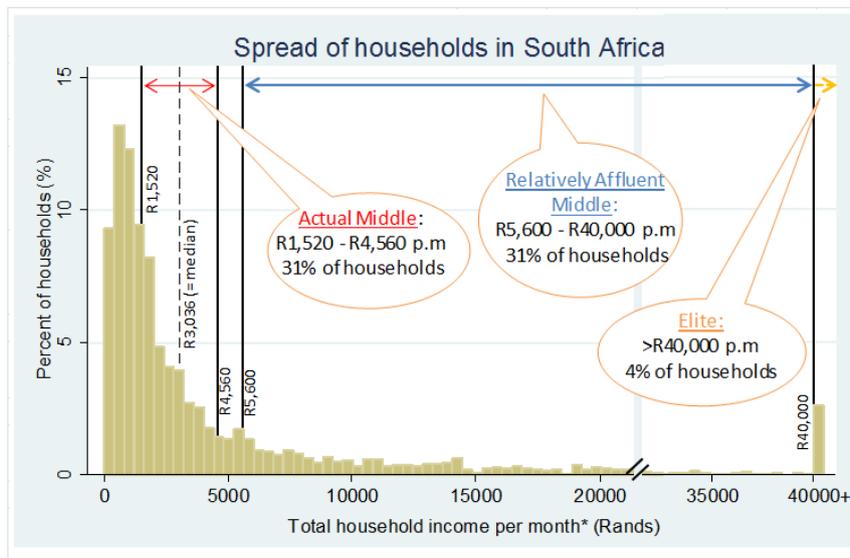
This model will provide a solid foundation for which research can be constructed in order to give an accurate description and comparison of the online behaviour of low income households.

2.2 INTRODUCTION

Lower income groups are of vital importance to retailers in large, whether these businesses believe the value is there or not. In recent times it comes under the impression that online retail stores target the higher of the income groups rather than the lower of the income groups (Ismail, 2012). As stated by Dr Tashmia Ismail in 2012 one of the biggest misconceptions by businesses for entering into low income markets is that these households buy cheap and inferior products. This assumption is however false as these households desire the best value as they cannot afford wastage (Ismail, 2012). As stated by Currie lower income groups represent at least half what is spent on Food within the South African market (Ismail, 2012). The online retail industry is growing within South Africa and has averaged 7% growth per year close to the global figure of 6% (Writer, 2015).

Low income households

Low income households are those households that yield an income which is below that of the middle and upper class (How are the income group thresholds determined, 2016). In South Africa the alarming fact of the country's income inequality is that the middle class is not actually the middle at all (Visagie, 2013). In South Africa the middle class is actually part of the upper group of households in the spread of incomes (Visagie, 2013). The actual middle is below this where there is a group of millions of households with much lower incomes (Visagie, 2013). The distribution of income and the classification of each income group can be seen below within figure 2.



Source: NIDS 2008, own estimates

Notes: The horizontal axis has been truncated between 20 000 and 35 000 to fit the affluent middle class interval onto one page width. Since the upper tail of the distribution is very long, incomes above R40 000, in the right-hand tail of the distribution, have been aggregated.

*Total household income is calculated from per capita household income multiplied by an average household size of four persons

Figure 2: The spread of households within the income distribution in South Africa (Visagie, 2008).

Figure 2 above shows the alarming distribution of income within South Africa. The median income within the figure is that of R3 036 per month and the actual middle range is around R20 000.

Consumers of lower income are often more disadvantaged in traditional retail settings because they tend to pay more for goods and services as there are fewer stores in the neighbourhood in which these people live (Punj, 2012). As addressed by Punj there was fear of a 'digital divide' which would magnify the differences between rich and poor due to access (Punj, 2012). But due to widespread access to the internet and broadband in libraries, schools, and offices and so on, this has narrowed this so called 'digital divide' significantly.

2.3 STATS REGARDING THE CORRELATION BETWEEN INCOME AND ONLINE SHOPPING

Jiafeng Li explains clearly in her article the behaviour shown by consumers on online shopping and the reasons for certain abonnements of using online shopping as a method of purchase for consumers (Li, 2013). The study looked at a pool of 4887 online shoppers in the United States of America. As can be seen in figure 3; age, gender and education play a role but when analysing

income one can assume that there is high percentage of online shoppers predominately lying within the higher of the income brackets. Actually in fact it's clear that 57.3 percent of online shoppers were earning an income of above \$50000. Hence only higher class citizens were prone to shop online.

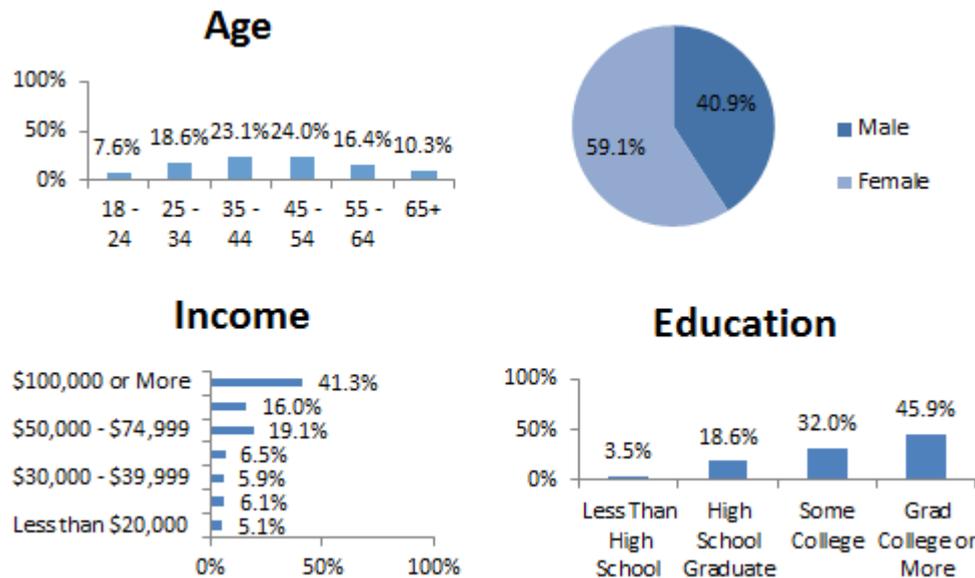


Figure 3: Demographic Factors in the USA (Li, 2013)

An Experian survey which further supports this statement of the behaviour of consumers in accordance to income found that 55 percent of e-commerce shoppers live in households with incomes of above \$75000 (Smith, 2016).

2.4 UNDERSTANDING THE BENEFITS OF ONLINE SHOPPING

Shopping online introduces various benefits to the consumer being convenience, better prices, variety, discreet shopping, delivery, ease of access and accessibility (Anamika, 2008). Education plays a crucial role in understanding the benefits as less educated consumers seem to avoid the use of the internet because of the “predominance of the content is being directed at their better educated counterparts” (Punj, 2012).

Humans are faced with two scarce resources being time and money when faced with online shopping (Punj, 2012). Looking at the results displayed in table 1 of Punj’s study a clear indication showed that higher income consumers were more attracted to the time saving features of online shopping rather to that of the money savings aspect which seemed to be attracted by lower income

consumers (Punj, 2012). But as can be seen within table one below can deduce that there is a positive correlation between a higher a income and the realisation of the benefits of web based shopping.

Table 1: Cross classification of income and online purchase goals: saving time and money. (Punj, 2012)

Table 5
Cross Classification of income and online purchase goals: saving time and money.

Income	<u>Saving time and money</u>	<u>Saving time only</u>	<u>Saving money only</u>	<u>Saving neither</u>
	Agree	Agree	Agree	Agree
Less than \$10,000	37.5	29.2	14.6	18.8
\$10,000 to \$20,000	60.0	16.9	7.7	15.4
\$20,000 to \$30,000	36.8	29.3	10.5	23.3
\$30,000 to \$40,000	44.3	27.4	4.7	23.6
\$40,000 to \$60,000	40.5	27.8	7.9	23.8
\$60,000 to \$100,000	51.9	25.0	6.7	16.3
More than \$100,000	55.0	32.5	0.8	11.6
	47.6	27.6	6.4	18.5

$\chi^2 = 56.2; df = 18; p < .01.$

2.5 ASSUMPTIONS AS TO WHY LOWER INCOME SHOPPERS ARE UNSUCCESSFUL IN ADOPTING ONLINE SHOPPING

Consumers who utilise a income lower than those of the upper class consumers it becomes quite a daunting task of using the internet as a means to do shopping. Shopping using online retail websites can be unsuccessful due to various reasons as addressed by Jiafeng Li; these reasons can vary from shipping costs, complex checkout process, need too much information, website to slow, pay extra for taxes and payment options (Li, 2013). Online stores must also take into account conversion rate as mentioned by Goldstruck as there are 5.2 million people that are ready to shop online, however 3.2 million people are actually shopping (Writer, 2015).

In accordance to MasterCard Division president in South Africa Philip Panaino, consumers within South Africa are still very nervous about shopping online with regards to security (Hedley, 2016). Reasons as explained by the study by Mastercard for the slow adoption in online shopping by South African households is the low internet penetration level within households (Hedley, 2016). Within this study of online shopping behaviour 42% of the respondents felt that concern about safety of online transactions was the reason for not shopping online (Hedley, 2016). This obviously gives a generalisation for the entire population but this is still a contributing factor in the under adoption for of online shopping for low income households.

In a study conducted by David Gefen and his associates, they analysed the cultural diversity and trust in IT adoption and compared potential e-voters between the United States of America to that of South Africa (Gefen et al., 2005). In this study a link is created between trust and the adoption of information technology such as online shopping. In order to create this trust for information technology systems one has to enhance the perceived usefulness of information technology (Gefen et al., 2005). The study boasts that trust is culture dependent so it is crucial that online retail stores address cultural diversity and differentiation when wanting to utilise the lower income segment of the market.

2.6 IN SUMMARY

It is crucial for online retail stores to address the under targeting of low income households within South Africa. This is supported by the fact that 75% of South Africa's population falls below the middle class in the income spectrum and this value can definitely not be ignored (Visagie, 2013). Online stores need to address various challenges in order to capitalise on this massive 75% of the population. In accordance to Mr Panaino who states that mandating 3D secure payment card authentication is a crucial measure to ensure sustainability within the e-commerce industry (Hedley, 2013).

Education for internet users on the platform is crucial for organisations to flourish within the low income segment of the market. This ever inexperienced base of internet users is due to due to improved access to smart mobile devices and improved prices of broadband services (Hedley, 2013). Crucial areas that need to be addressed by online stores include convenience, security, exchange policy, speed and overall online shopping experience in order to improve online shopping growth (Hedley, 2013). Online retail stores need to further consider the structural challenges as mentioned by Sarah Rice; include, the country's large land mass, lack of broadband penetration and poor transport logistics (Mahlaka, 2014). Consumer confidence is also of a crucial aspect to consider as there is a persistent lack of confidence of consumers in online payments due to the challenges that have been addressed (Mahlaka, 2014).

2.7 CONCLUSION

The online retail environment is ever growing within South Africa as mentioned earlier but however is faced with various challenges which need to be addressed in order to create a sustainable e-commerce environment. In order for online retail stores to take full advantage of the lower income segment of the market, they would have to address the various perceptions of consumer's behaviour in relation to the income. Further the various challenges facing education of online shopping, circumstances regarding the structure and consumer confidence needs to be addressed in order to spark growth. Thus online retail stores need to educate consumers on the benefits of online shopping to consumers and improve on systems in which they deliver goods to consumers. In full, the online shopping market within South Africa is very promising as can be backed up by the 29 percent average annual increase in the online retail market (Wire, 2015).

3 CONCEPTUALISATION

Online shopping is on the rise within South Africa but is however only accounting for 1 percent of local retail stores (Writer, 2016). Low income consumers as explained above are consumers that yield an income below that of middle class, however within South Africa the so called middle income group is actually categorised within the lower of the income group due to inequality (Visagie, 2013). These are the individuals earning between R1520-R4560 per month and in recent times are accounted for 75 percent of the population (Visagie, 2013).

The research proposal illustrates the behaviour of low income households towards online shopping and their reasons in the slow adoption of this new system. The main assumptions as to why consumers are not in favour of online shopping is because of structural reasons of the country as addressed by Sarah Rice whereby there is persistent lack in consumer confidence, challenges regarding logistics, country's large land mass and other areas (Mahlaka, 2014).

Benefits of online shopping are numerous as mentioned earlier these are: convenience, better prices, variety, discreet shopping, delivery, ease of access and accessibility (Anamika, 2008). Yet consumers are not educated into the appreciation of these benefits thus it's the company's challenge to address that.

In order to create a sustainable e-commerce environment, online retail stores need to address the various challenges and problems that are faced within the country and the lower income market. In doing this these companies will ascertain the value of the 75 percent of the population (Visagie, 2013).

4 RESEARCH METHODOLOGY

4.1 INTRODUCTION

The research study aimed to explain the behaviour of households towards online shopping and with a specific focus on the lower income segments of the population. The purpose of the study will educate consumers and retailers on the underlying problems with online shopping, the unrealised benefits that it contains and give a comparison between the low income consumer groups' and the higher income consumer groups' buying behaviour. The research proposal used a quantitative approach in order to conduct research. This approach enabled the study to utilise numerical and quantitative data in order to predict and tabulate the data obtained from the sample groups.

The research study used cross-sectional surveys to gather data from the sample groups. The research study investigated two sample groups one being: students and the other being low income households with a different social class. A field worker was used in order to gather data from the sample group of low income households and an online survey was used to gather data from the students.

4.2 RESEARCH PROBLEM

The researcher is studying the behaviour as well as the attitudes' of the consumers towards online shopping within South Africa, with a specific focus on the low income segment. The reason why the research topic is worth investigating is because online shopping and the use of internet is gaining momentum and is a globalising trend throughout the world. However it has come to the researcher's attention that there has been a slow adoption by the selected sample groups' towards the use of ecommerce as a means to do business and obtain goods and services.

The research problem to be investigated is therefore: the slow adoption shown by the selected sample groups' towards the use of online shopping.

4.3 RESEARCH QUESTIONS

Primary question: What are the reasons for lower income groups shopping online less frequently than higher income groups?

Secondary questions:

- What's the value of capitalising the lower income market within South Africa?
- What is hindering online retail stores from capturing the lower income segment in South Africa?
- What are the reasons that low income households haven't adopted online shopping as well as higher income households?
- What is the difference between the online shopping behaviour by low income households and students of a higher income

4.4 RESEARCH AIMS

The following research aims have been identified:

- The study aimed to explore the prominence in using online retail as a method of purchasing products within the lower income segment of South Africa.
- The study aimed to determine the behaviour of South African consumers towards online shopping
- The study aimed to draw a comparison between the lower income segment of the market and a sample of higher disposal income.
- The study aimed to look at the reasons as to why lower income households do not take advantage of online shopping as much as they could.

4.5 METHODOLOGY

Methodology can be defined as a body of methods, rules and postulates employed by a discipline: a particular procedure or set of procedures (du Plooy-Cillers, Davis and Bezuidenhout, 2016).

Research methodology is the method or way to find a certain problem on a specific matter. In methodology the researcher uses various criteria for solving and examining the given problem (du Plooy-Cillers, Davis and Bezuidenhout, 2016).

The research study aimed to evaluate the potential within the lower income segment of the market of online shopping. Within this aim the study also aimed to identify the reasons as to why low income consumers have not adopted internet shopping so successfully.

4.6 METHODOLOGICAL ORIENTATION

4.6.1 Quantitative research:

Quantitative research is utilised to quantify a problem or an issue by generating numerical data or data that can be transformed into useable statistics (Wyse, 2011). This form of research is used to quantify attitudes, opinions, behaviours and other variables and generate results from a larger sample population (Wyse, 2011). Quantitative research is used to uncover patterns and to formulate facts (Wyse, 2011). This form of research enables the researcher to manipulate as well as to estimate future events or quantities (quantitative research, 2016). The collection methods used in quantitative research are of a greater structure than that of qualitative research and include options such as, various forms of surveys(online or paper), face to face interviews, longitudinal studies, online polls and systematic observations (Wyse, 2011).

Quantitative research provides various advantages to the researcher such as the ability to measure and analyse data (Jones, 2016). The relationship between variables (independent vs dependent variable) is studied in detail (Jones, 2016). Quantitative research is advantageous as it enables the researcher to be more objective towards the findings of the study (Jones, 2016). Lastly it provides the ability to tests the hypotheses in experiments because of its ability to measure data using statistics (Jones, 2016).

Qualitative research:

Qualitative research is used to gain a deeper understanding on specific research topics, events and phenomena (qualitative research, 2016). Qualitative research aims to understand how participants derive meaning from their surroundings and how their meaning influences their behaviour (qualitative research, 2016). The results of qualitative research are descriptive rather than predictive (What is Qualitative Research?, 2016).

There are several advantages that qualitative research enables the researcher namely the ability to probe respondents enabling the researcher to gain insights further than initial responses. The opportunity to record nonverbal communication such as body languages will supply the respondent with greater detail on the response and lastly gives the group a more dynamic nature for an interview (What is Qualitative Research?, 2016).

4.6.2 The research used in the study

Quantitative research is the method of research that has been used within the study. As can be seen above from the various definitions and comparisons between quantitative and qualitative research, the most suited method would be quantitative research. As mentioned the study looks at addressing the issues surrounding online shopping however focusing specifically on certain consumer's behaviour towards online shopping. From looking at this description of the study, numerical data is analysed and tabulated in order to determine certain trends around the samples behaviour towards online shopping. Even though the study is using quantitative research the study also looked at a few open ended questions to obtain some further insights on people's behaviour and understanding towards ecommerce. The study further used data tabulation, chi squared test and Fisher's Exact Test to determine if there is a relationship between the two samples. Another reason why this study is using quantitative data is because this type of research enables the researcher to measure and analyse data in a more functional way.

4.7 POPULATION AND SAMPLE

Population can be defined as all elements, individuals or units that meet the selection criteria for a group to be examined (population, 2016). Thus from this examination a representative sample can be drawn from (population, 2016).

Characteristics of the population:

Target population and accessible population

The target population is everyone or everything that falls within the population parameters (du Plooy-Cillers, Davis and Bezuidenhout, 2016). In this case the target population is all low income consumers within South Africa. The study also has a target population of students within South Africa in order for a comparison to be drawn.

The major difference in income between the two sample groups is because students obtain additional revenue from their parents and as a result have more disposable income than that of low income households but for whom this is likely to be temporary.

The accessible population refers to the section of the population that the researcher can include within the research study (du Plooy-Cillers, Davis and Bezuidenhout, 2016). Due to the fact that the researcher cannot access all low income households and students throughout South Africa, the accessible population is narrowed down to low income shoppers and students within Cape Town. The reason for the specification is because the researcher himself lives within the area and has access to various clubs and gyms in which he can draw the sample from.

Population parameters:

- Low income online shoppers and students
- Live or work within Cape Town

Units of analysis:

The units of analysis for the research study would be *low income consumers within South Africa*.

The units of analysis is the 'who' or 'what' the researcher is analysing (du Plooy-Cillers, Davis and Bezuidenhout, 2016), thus as addressed the research study is focusing specifically on low income consumers, as well as students.

Quantitative research thus makes elements within the population known as respondents of the study. This would be compared to the qualitative research design using participants as elements within the population.

Sample:

A sample is a subset containing the characteristics of a larger population (du Plooy-Cillers, Davis and Bezuidenhout, 2016). A sample should represent and reflect the characteristics of the entire population and not lean towards bias attributes (du Plooy-Cillers, Davis and Bezuidenhout, 2016). Samples are used in statistical testing when the population size is too large to include and test, thus a smaller subset of the population known as the sample is chosen to be observed (du Plooy-Cillers, Davis and Bezuidenhout, 2016).

Non probability sampling

There is major difficulty to access the entire population and determine the identities of the entire population of low income consumers. Therefore the researcher used non-probability sampling in order to address the population and obtain the selected sample. This method of sampling will not give every unit of the population an equal chance of being selected as part of the sample (du Plooy-Cillers, Davis and Bezuidenhout, 2016). Non-probability sampling is used in qualitative research, in this case the researcher plans to use this form of sampling because he himself does not have access to the entire population of low income households.

Methods of non-probability sampling:

Purposive sampling

This method of sampling is used in this study because the research had a specific purpose and aim in which it needed to accomplish (Maree, 2015). In this case the researcher aimed to identify low income households and students.

Snowball sampling

Snowball sampling as stated by Maree (p198, 2015) is used through making contact with one or more people who belong to the population. They will be interviewed and asked for information about others who have the same characteristics and who can be contacted next. Here the researcher identified certain people utilising low income and requested if any of these people would have knowledge about members of the population who contain these characteristics.

Convenience sampling

Convenience sampling is used where the population elements are selected based on the fact that they are easily and conveniently available as stated by Maree (p197, 2015) Convenience sampling was used because it created convenience for the researcher whereby he was able to draw a sample from the population due to accessibility as its impossible to gain the entire population of low income households. Here the researcher made use of a fieldworker in order to draw a sample, whereby she went to different areas in order to obtain data which made it rather convenient.

The chosen sample that has been studied and assessed with regards to the study is 29 low income individuals along with 35 students. Therefore in total the study obtained data from 64 individuals in order to draw a comparison from the two different population groups.

4.8 RESEARCH DESIGN

Research design is the complete plan for the entire research study. It is a guideline for what you have to do, whether it is formulating questions or hypothesis to obtaining information and completing one's data analysis as stated by du Plooy-Cillers, Davis and Bezuidenhout (2016).

The nature of the research design of the research study follows that of quantitative research. The quantitative research design in the study is utilised because the study is of an explanatory nature and it makes uses of quantitative and numerical data (du Plooy-Cillers, Davis and Bezuidenhout, 2016).

The research study as stated is using a quantitative research design and therefore follows a positive research paradigm. As stated by du Plooy-Cillers, Davis and Bezuidenhout (p26, 2016) positivist research aims to find valid and reliable casual relationships and favour in recording facts in quantities that can be processed using statistical techniques.

4.9 DATA COLLECTION

Data collection is the systematic collection of data in order to achieve the research aims. Data collection can be done from various sources, including interviews, questionnaires, observation, existing records, and electronic devices (du Plooy-Cillers, Davis and Bezuidenhout, 2016). The procedure is generally preliminary to statistical analysis of the data.

The research study made use of cross sectional surveys in order to collect data from participants. This method as mentioned by du Plooy-Cillers, Davis and Bezuidenhout (2016) is a data collection tool that consists of a series of questions designed to gather information about a relatively large group of people which can be used to gather consumer's attitudes or opinions at one point in time. This tool was useful as it gave a quantitative description of the population of low income households on their attitudes towards online shopping (du Plooy-Cillers, Davis and Bezuidenhout, 2016). This form of data collection tool was also beneficial in obtaining data from a wide variety of students in order for the researcher to draw a comparison for the study. This form of technique is done by selecting a sample of respondents and asking a series of questions in order to generalise the findings to the population (du Plooy-Cillers, Davis and Bezuidenhout, 2016).

The research study also made use of mail surveys because income is quite a sensitive topic thus this form of survey will help to give the respondent extra confidence in answering. If the researcher was unable to gain a big enough sample using this form of survey then he shall make use of group administration surveys where he can go to a local bar or taxi rank and talk to various low income consumers and ask them to fill in questions. A survey was very beneficial as it enabled the researcher to collect large amounts of data which can be standardised as mentioned by du Plooy-Cillers, Davis and Bezuidenhout (2016).

The researcher employed a field worker to obtain data for the study. A field worker made it very easy for the researcher to obtain data which was honest and substantial. The researcher made use of a field worker because people would feel more comfortable when receiving a questionnaire from a person who was already aquatinted with them. The field worker for the study handed out

questionnaires to thirty individuals residing within a low income area. This was a very successful process as respondents felt comfortable when answering the survey and answered all questions that were required of them to a good extent. The fieldworker was offered remuneration in the form of gifts for her services.

The researcher then utilised online and mail surveys to gain responses from the second sampling frame namely students. Online surveys were utilised due the internet being a very attractive medium of communication. Online surveys gained a wide variety of responses. This form of communication also helped to obtain people from different areas and wide distribution between male and female.

The survey also encouraged respondents to answer as it anonymous and also is relatively less time consuming than most data collection techniques (du Plooy-Cillers, Davis and Bezuidenhout, 2016). The survey is very inexpensive to the researcher and also very versatile in that it can be conducted in any setting (du Plooy-Cillers, Davis and Bezuidenhout, 2016).

A survey is very beneficial for this study as it obtained large amounts of information at an inexpensive amount to both participants and researcher. This technique allowed the researcher to address various areas of the research study by asking different types of questions in order to gain opinions of respondents.

As mentioned earlier the research study made use of mail surveys and printed surveys. The reason for these two types of surveys is because as the research study has been developed the research now aims to draw a comparison as well between low income consumers (of a lower social class) and students between the ages of 18 and 25. The reason for this comparison is because these results will show further insights into the behaviour and reasoning behind the adoption to online shopping. The mail surveys were mainly used for the students because generally students have access to computers and internet connection. Printed surveys were used for the rest of the sample. The researcher then employed the fieldworker who conducted the various printed surveys and approached various members of this sample in order to get results. The reason for this is because the researcher feels that if he himself approaches the members of this sample they might feel not inclined to give true answers.

4.10 DATA ANALYSIS

Data analysis as defined by business dictionary is the procedure of evaluating data utilising analytical reasoning and tools to observe and inspect the different components of the data provided (business dictionary, 2016). Data from various sources is gathered then analysed in order to come up with certain findings and conclusions about the research. The research study used a variety of data analysis techniques however the main form of technique which was used was data mining. This technique is used to analyse data from different perspectives and summarizing it into useful information. This technique allows viewers of the research to analyse the data from different dimensions or angles then categorize it and summarize the relationships identified.

The research used a variety of quantitative analysis tools in order to derive an analysis which perfectly suited the study's aims. The researcher initially used data tabulation to measure and provide a brief overview of the results collected. The researcher then presented the study in graphical form to gain a picture or 3D image of the study in order for casual relationships to be identified between the two samples. The researcher then used a combination of the chi-squared test and Fisher's Exact Probability Test in order to determine if there was a significant relationship between the two samples various variables on online shopping behaviour.

These tools successfully measured the difference in the variables on the samples behaviour of online shopping. Through using these instruments and methods it enabled the researcher to draw conclusions from the findings and ones which were accurate and reliable. It enabled the researcher to analyse the relationships and opinions consumers had towards online shopping in detail (du Plooy-Cillers, Davis and Bezuidenhout, 2014).

CONCLUSION

The research study as mentioned utilised quantitative research with a positivist research paradigm. The research study targeted two different samples namely students and low income households and were identified through non-probability sampling. In order to obtain data from the two samples groups a cross-sectional survey was utilised through the use of a fieldworker. The data from the survey was analysed through the use of a variation of quantitative data analysis tools. The study was further made reliable and valid through the use of a pre-test and a fieldworker.

5 DATA ANALYSIS

The research study as mentioned made use of cross sectional surveys to obtain data from respondents of the study. The low income household's sample was further communicated to through an intermediary being a field worker. The survey was handed out to two sample groups, namely low income earning individuals (social class) and students between the ages of 18 and 26. Then data was collected from students through the use of an online survey, which managed to tabulate the data in the form of useful information. The analysis of data was done on two fronts namely the data obtained from the low income households and students. The demographics illustrated below will give an indication and validation of the samples characteristics. In simple it indicates the data obtained from people were actually operating at a low income which will give the information obtained credibility.

The data in the study was analysed through descriptive statistics along with data tabulation. The data was further analysed through using the chi squared test and Fisher's Exact Probability Test

5.1 DEMOGRAPHICS OF THE STUDY

The total sample size was 64 people with the sample group being further divided into two different groups being 29 people of low income households and 35 students.

The demographics of both sample groups

Demographics of low income households

The demographics of the population showed that 48.28% of the respondents of the survey were women. Then 41.38% of the respondents of the survey were male. Then 10.34% of the respondents did not want to indicate there gender.

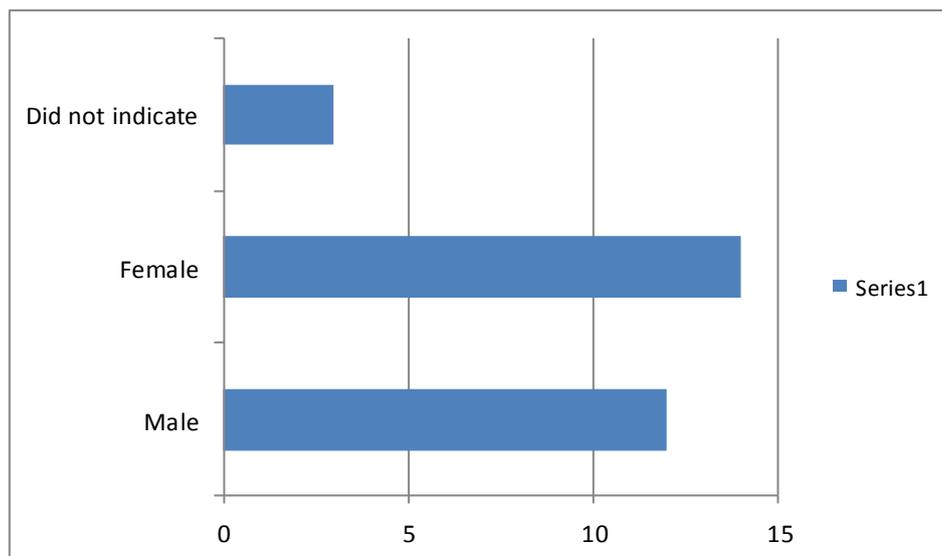


Figure 1: Gender of low income households

The ethnicity of the respondent varied between coloured, black and other. The most being that of coloured respondents with a percentage of 79.31%, then 13.79% were black and 6.90% for other. Another crucial question that was asked of the respondents was where they lived. Majority of the respondents lived within the areas of Strandfontein, Muzienberg, Mitchells Plain, Wynberg and Retreat. So this gave the research study a wide variety of people from different areas.

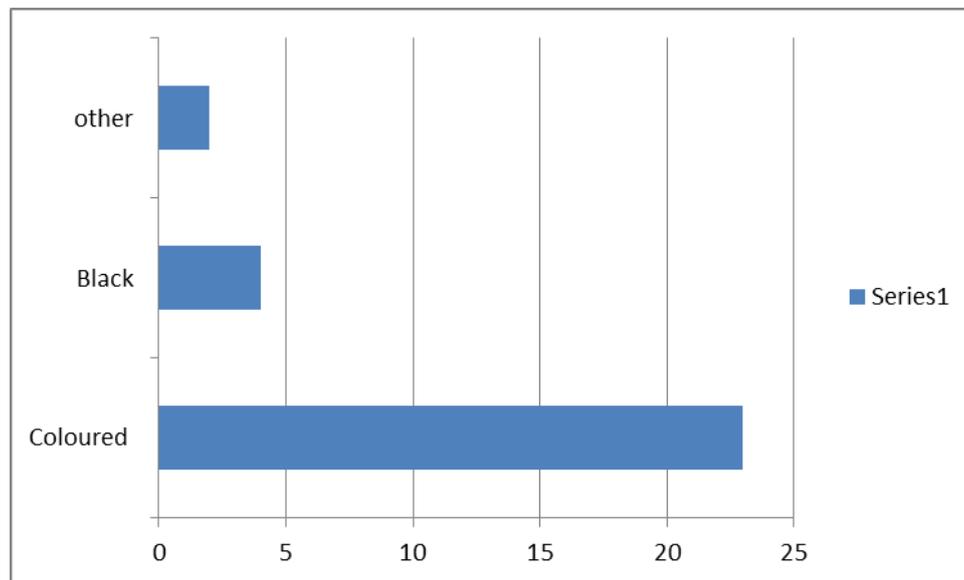


Figure 2: Ethnicity of low income households

The survey also analysed the level of education of respondents which is pointed out below:

- Graduated from university or college: 6.90%
- Some university studies: 20.69%
- Intermediate between secondary and university: 17.24%
- Secondary/high school/matric: 55.17%
- Primary school or less: 0%
- No schooling: 0%

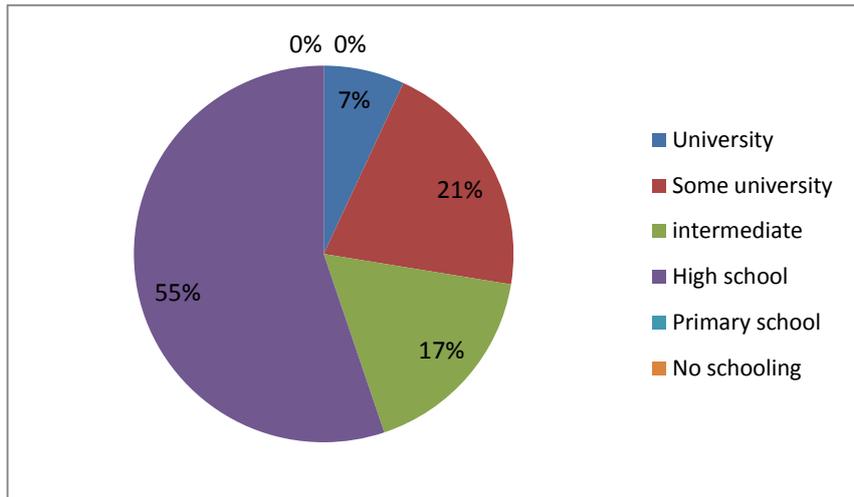


Figure 3: Level of education of low income households

The survey further analysed the employment status of the various participants in order to gain a further idea of their income and status which can be see below:

- Not working at the moment: 20.69%
- Part-time or hourly work (less than< 15 hours per week): 17.24%
- Part-time work (15 to 34 hours per week): 20.69%
- Full-time work: 34.48%
- On temporary leave (education leave, public service leave, maternity leave): 6.90%
- In training (apprentice): 0%
- Retired: 0%

From the demographics obtained its clear to see that the respondents from this sample operate at a low income and live within unprivileged communities.

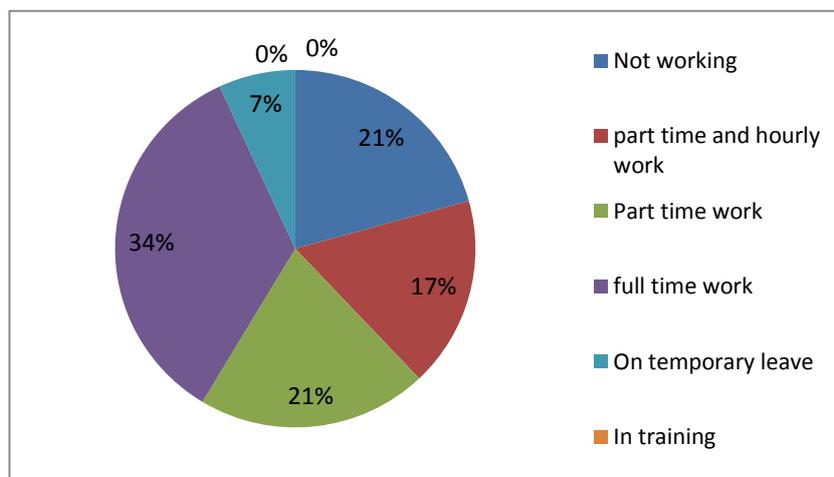


Figure 4: Employment status of low income households

Demographics of students

The gender of the students was between male having 57.14% and female being 42.86% of the sample. The race of the sample group was predominately white being 94.29% and coloured being 5.71%. The sample of students varied between the ages of 19 and 26. The students lived in areas all over Cape Town.

Please indicate your race

Answered: 35 Skipped: 0

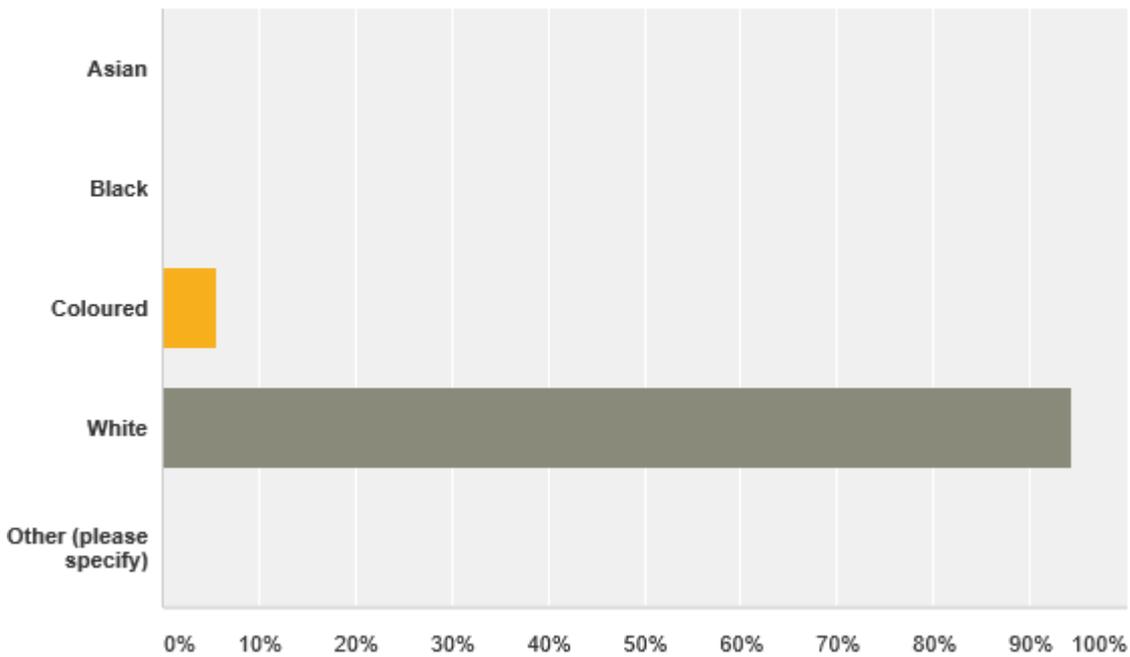


Figure 5: Ethnicity of the students

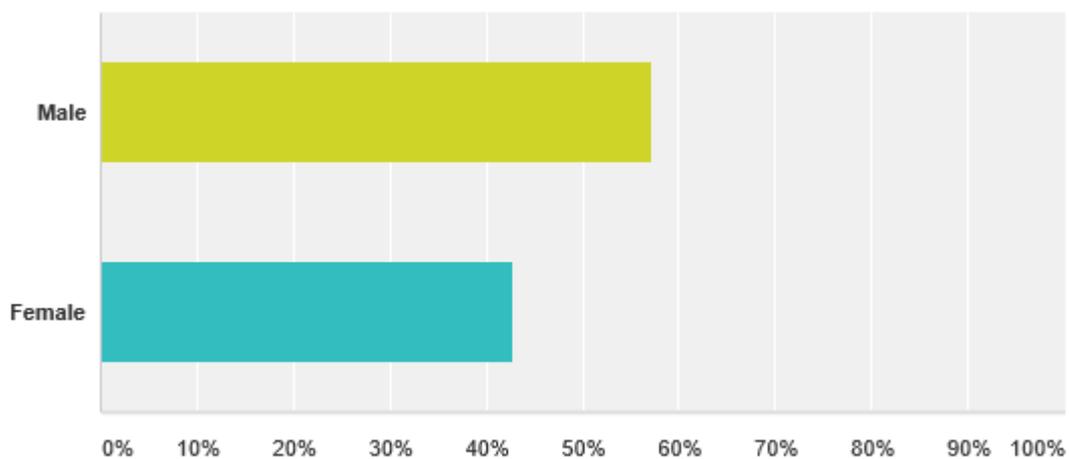


Figure 6: Gender of the students

5.2 ANALYSIS FOR THE QUESTIONS FROM SURVEY

Question 1 of the survey asked the respondents whether or not they utilised online shopping, and it was found that seven (24.14%) of the respondents said they made use of online shopping, and then twenty two (75.86%) of the respondents said they didn't make use of online shopping. This statistic already shows the lack of adoption towards online shopping by respondents. However when looking at the student sub group it was indicated that 21 (60.00%) of the sample made use of online shopping and 14 (40%) did not make use of it.

Question 2 was asking respondents on whether or not they have access to the internet. This question would give an indication on further probable reasons as to why there was not much adoption of online shopping and also to give an indication if they were able to access online shopping. It was found that the entire (100%) sample had access to the internet.

Question 3 of the survey asked respondents how they made access to the internet. This question was subdivided into various categories namely cell phone, laptop, tablet, public computer and other. The results are expressed below

Table 1: How the low income consumers made access to the internet

Cell phone	26
Laptop	20
Tablet	1
Public computer	19
Other	0

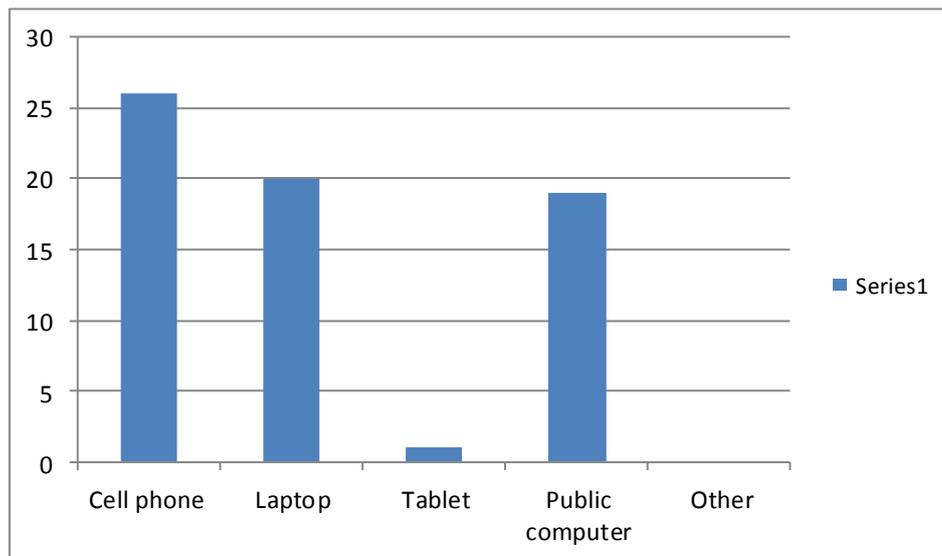


Figure 7: How the low income consumers made access to the internet

Question 4 asked the respondents how they felt about online shopping and gave the sample five different categories to express themselves. These categories included: if the sample were completely against online shopping, not in favour of online shopping, neutral, in favour of online shopping and completely for online shopping.

Low income households

From looking at the data it was clear to see that the sample group was leaning towards going against online shopping which can be seen below.

Table 2: Low income consumers opinion on online shopping

Completely against	Not in favour of it	Neutral	Favour of it	Completely for it
7	9	8	4	1

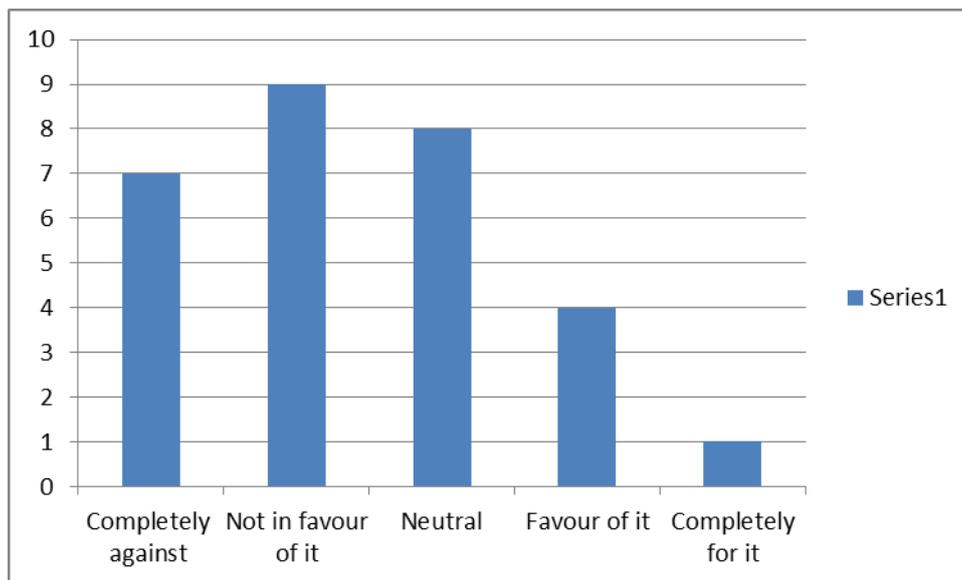


Figure 8: Low income consumers opinion on online shopping

Students

The graph below shows how the student sample group clearly leans towards in favour of online shopping. Whereby 45% of the sample group indicated that they are in favour of online shopping and 17.14% of the sample was completely for online shopping.

How do you feel about online shopping?

Answered: 35 Skipped: 0

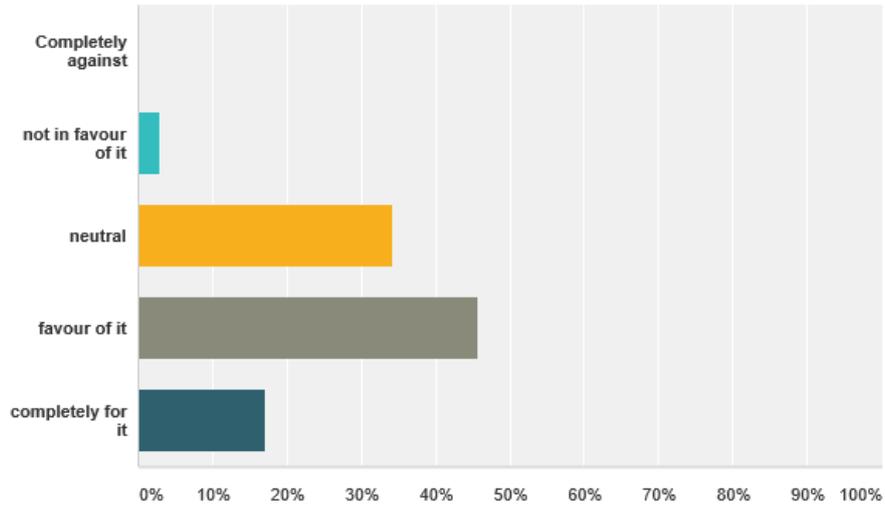


Figure 9: Students opinion on online shopping

Question 5 of the survey asked respondents if they did make use of online shopping how many times did they use it per month. The first question did ask low income respondents if they did make use of online shopping and only 24.14% said they did. The results showed that of the sample that did make use of online shopping only 11(37.93%) said that they used online shopping 1-4 times per month and then 2 members of the sample used between 5-9 times a months. The rest of the sample just indicated zero as the amount of times per month.

Table 3: Amount of times low income consumers made use of online shopping per month

0	1-4	5-9	10-20	Over 20	Not applicable
16	11	2	0	0	0

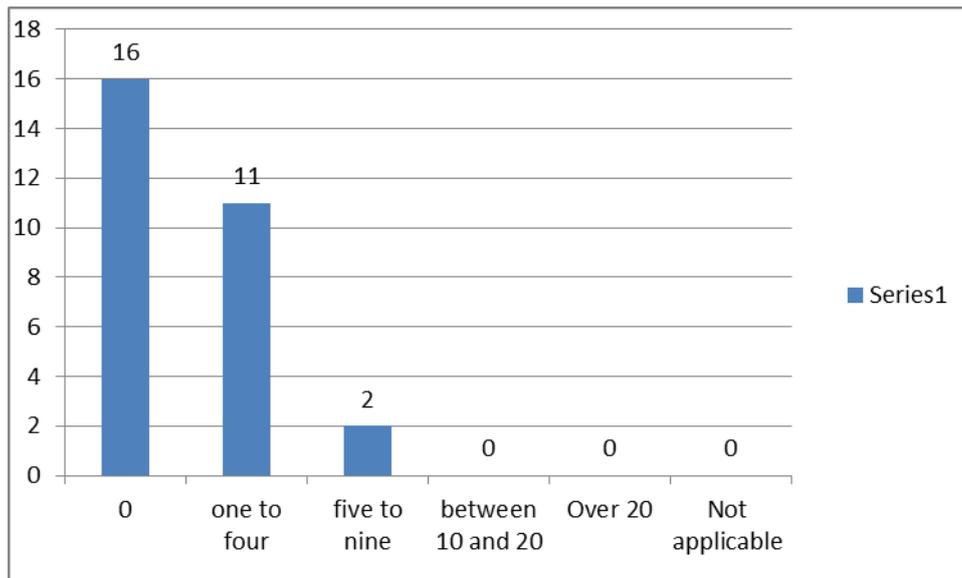


Figure 10: Amount of times low income consumers made use of online shopping per month

The student sample group were also very similar to the low income consumer sample group as their monthly online shopping buying patterns were very much the same as the sample favoured online shopping only 1-4 times per month. However in the case of the students 45.71% of the sample used online shopping 1-4 times per month and 5.71% used online shopping 5-9 times per month.

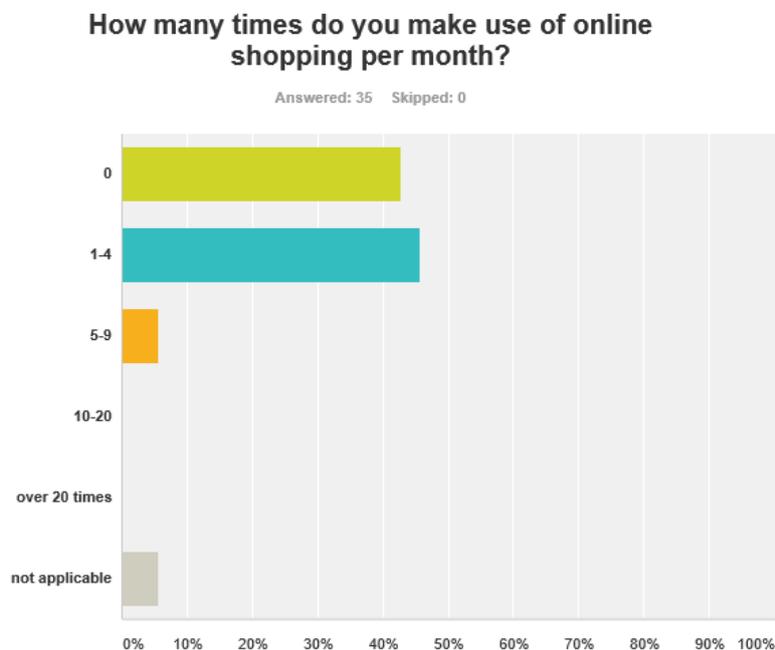


Figure 11: Amount of times students made use of online shopping per month

Question 6 of the survey only asked the low income respondents if they felt that online shopping was something that they would rather do than go to a retail store. The results showed that 18 out of the 29 (62.07%) respondents felt that they would rather do online shopping and 11 (37.93%) felt that they wouldn't do online shopping than go to a retail store.

Question 7 of the survey asked the low income sample group on what frustrated them with going to retail shops to purchase goods. The results were tabulated below:

Table 4: What frustrated the low income consumers on going to a retail store

Waiting lines	Traveling there	time	Not enough shop assistance	Busy shops
11	7	3	4	5

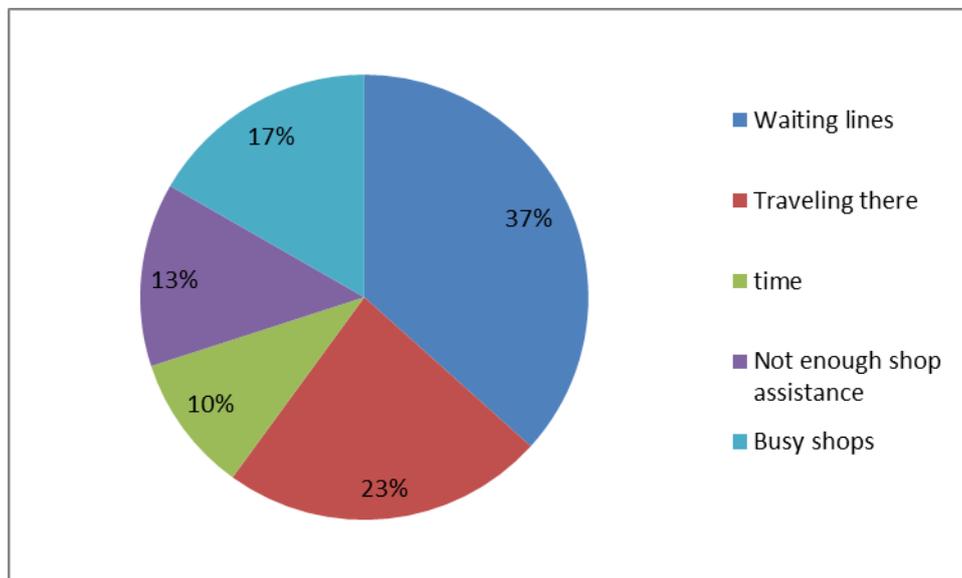


Figure 12: What frustrated low income consumers on going to retail stores

Question 8 of the survey was very crucial for the study as it asked respondents their reasons as to why they do not make use of online shopping. The reasons that were listed in the survey were discovered through various sources within the literature review. The list is an exhaustive list which various people feel that these are the underlying concerns with regards to online shopping. The categories that respondents could indicate were security reasons, unsure how to use online shopping, don't have the required access to the internet, people will see my information, lack of trust in the internet, because you can't view the product properly and other with specification. The results from question 8 of the survey showed for low income households:

Table 5: Reasons why low income consumers did not make use of online shopping

Security reasons	7
Unsure how to use online shopping	3
Don't have the required access to the internet	0
People will see my information	9
Lack of trust in the internet	12
Because you can't view the product properly	19
Other: please specify	1

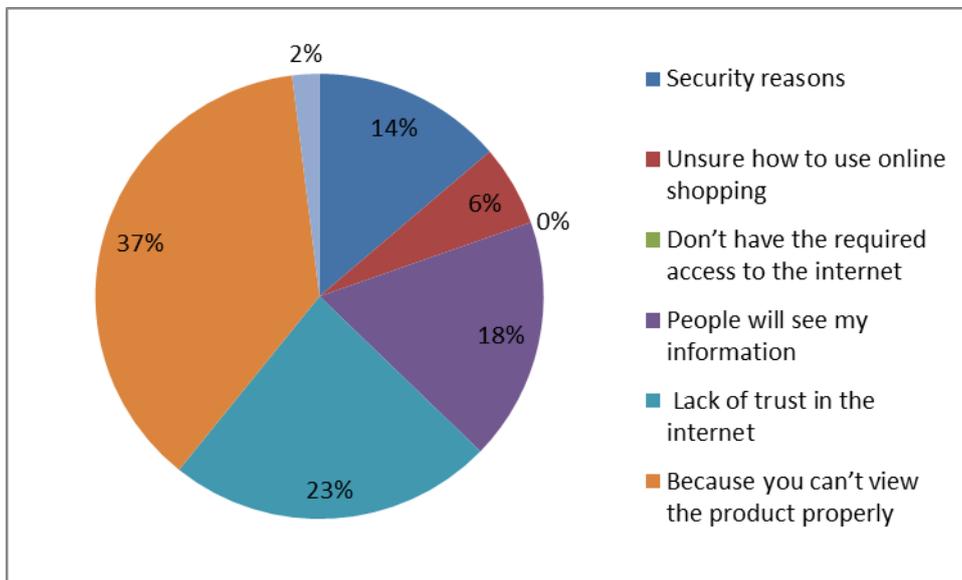


Figure 13: Reasons why low income consumers did not make use of online shopping

Respondents predominantly felt that the reasons for the lack of use of online shopping were because of the lack of trust within using the internet as a means of shopping and also because you cannot view the product properly online.

Students however for question 8 did not provide as many answers because the sample was mostly in favour of online shopping and only 40% of the sample provided reasons as to why.

The main issue that discouraged the student sample group from using online shopping was the issue that you cannot view the product properly and security risks.



Figure 14: Reason why students did not make use of online shopping

Question 9 of the survey was very crucial for the study as it analysed the favourite incentives of the respondents with regards to shopping in general. However this question was indirectly linked to online shopping in that the researcher asked this question with him knowing that these incentives are provided by online shopping, but yet people are unaware of them. So the question would give a perfect indication on which areas online retailers should focus on in order to draw in more consumers.

Table 6: Incentives for low income consumers for online shopping

Free delivery	11
Discounts	23
Cheaper prices	25
More choice in products	12
Save time and petrol	12
No waiting lines	8

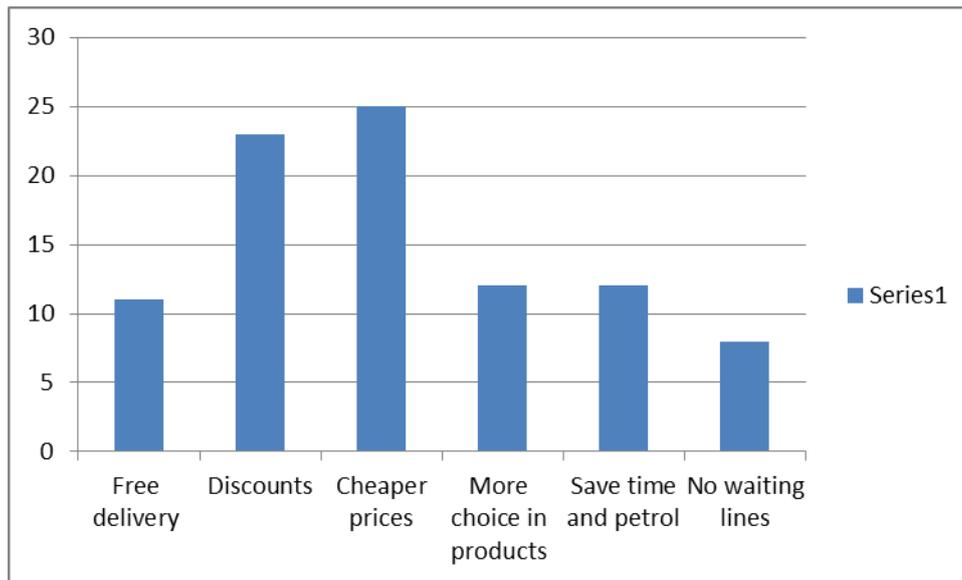


Figure 15: Incentives for low income consumers for online shopping

Question 9 of the survey indicated that low income households preferred if incentives for shopping were directly linked to the price of the product. This was evident because respondents favoured the categories of cheaper prices and discounts.

When the students were asked question 9, the results were similar in that students also did care about the price of the product being less, however the students seemed to have a far more diverse incentive range than low income households. Students also favoured the factor of free delivery as a major concern when purchasing online.

Question 10 of the survey asked respondents if they were not positive users of online shopping then what would encourage them to make use of online shopping?

Student's opinions on this matter were quite diverse as it varied between quite a few categories. Many students felt that prices of the product, security of using online shopping and information on the product were the three main categories that need to be improved in order for them to be encouraged to use online shopping. Along with other things some students felt that these categories also needed a mention: a return policy, more user friendly accessible websites and more advertising and use of debit cards.

Table 7: Encouragement towards online shopping by students

Prices	Security	Information on product	Other
3	2	3	1

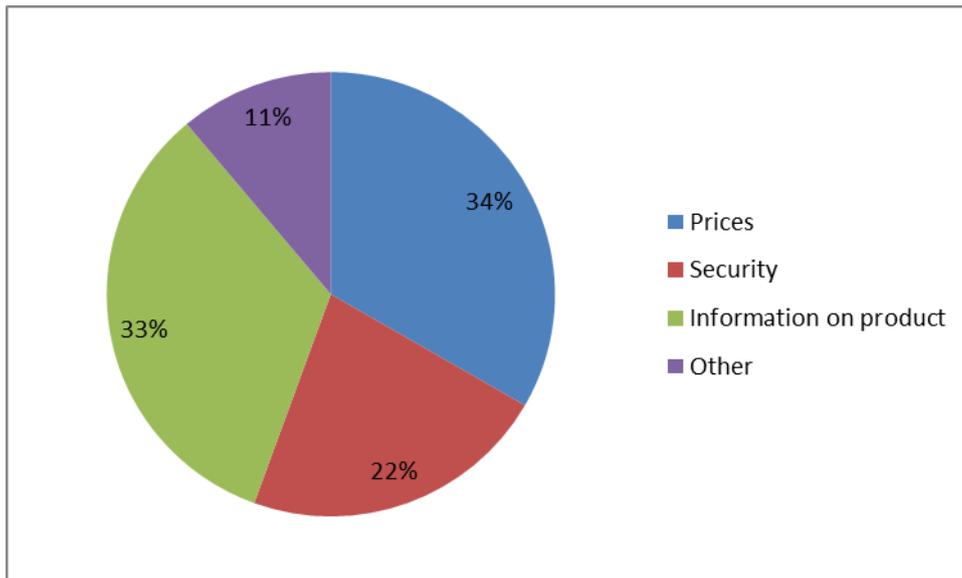


Figure 16: Encouragement towards online shopping by students

Low income households were more responsive with this question as they had more to say and were less encouraged to make use of online shopping. The categories of issues for online shopping were a lot more diverse however these seem to be the main issues.

Table 8: Encouragement towards online shopping by low income consumers

prices	Delivery	choices	View	time	Terms and conditions	Return policy	Safety	Advertising	Credit card
5	1	3	6	2	1	2	3	2	1

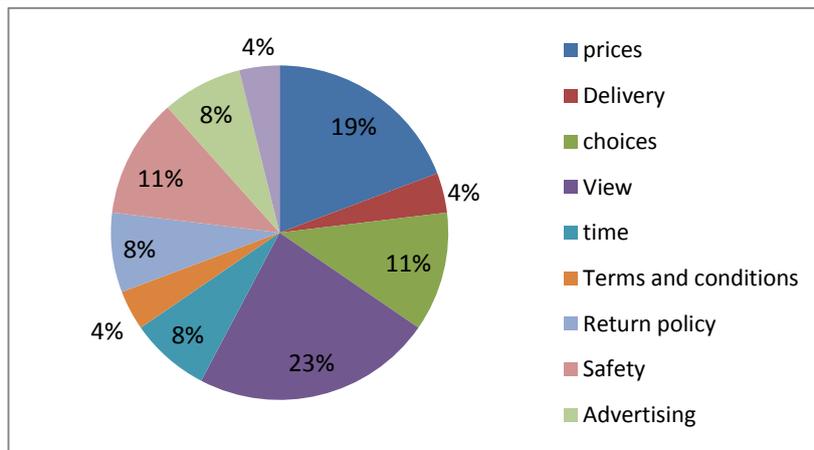


Figure 17: Encouragement towards online shopping by low income consumers

Within analysing the data it's clear to see that prices and being able to view the product were of the main concern for low income households. Another underlying issue with online shopping that was identified within both samples was the need for a credit card which many people in the population do not have. This is another area which could be attended to in order to promote online shopping to the public.

Question 11 accessed the various categories of items that respondents would purchase if they made use of online shopping. The list of items included food, clothing, kitchen, appliances, technology, furniture and other.

Table 9: Items that low income consumers would purchase online

Food	12
Clothing	18
Kitchen Appliances	28
Technology	13
Furniture	15
Other	0

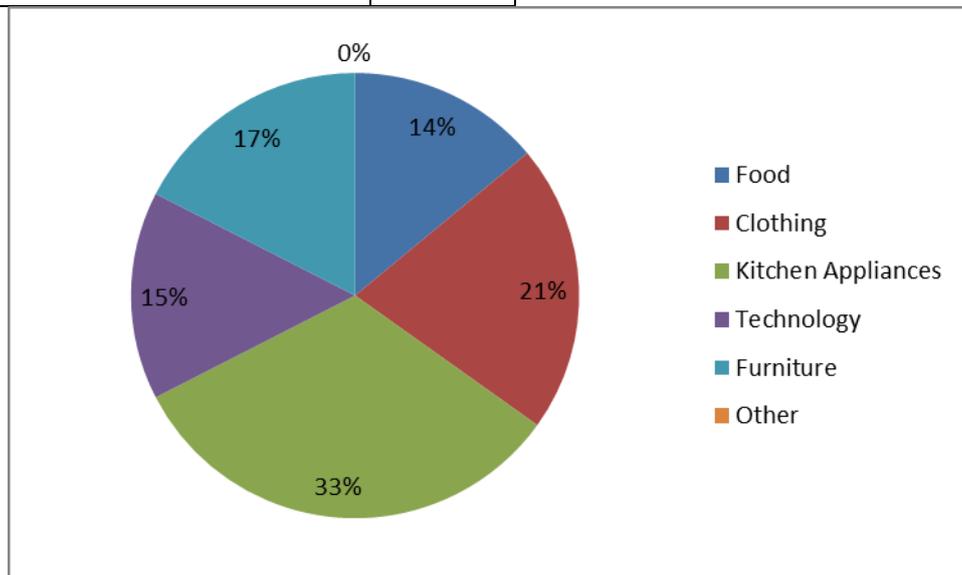


Figure 18: Items that low income consumers would purchase online

Question 11 showed that low income households predominately would purchase kitchen appliances and clothing online rather than other goods.

When students were asked the same question about the various categories that they would purchase online, the results showed that students and low income households were very similar as

both sample groups favoured buying technology and clothing items through the internet. The other categories didn't seem to have as much importance to the two sample groups.

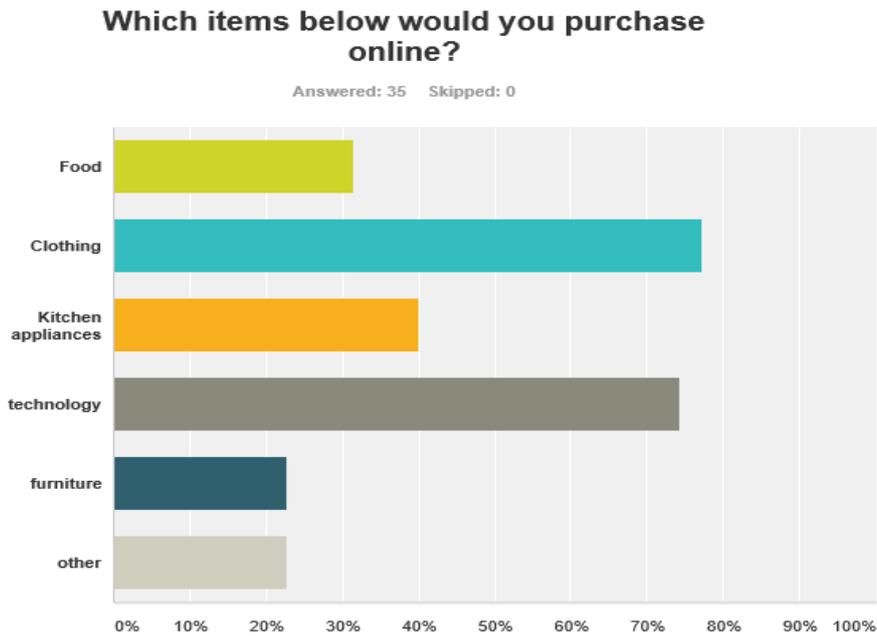


Figure 19: Items that students would purchase online

Question 12 asked respondents just to comment further on online shopping. The results for

Table 10: Further comments on online shopping

For it(saves time and money)	Safety concerns	Make it apply to consumer and make them aware of it	Choices of products and sizes	Need of credit card	Easier to use	Return policy	Prices
7	5	3	2	4	1	1	3

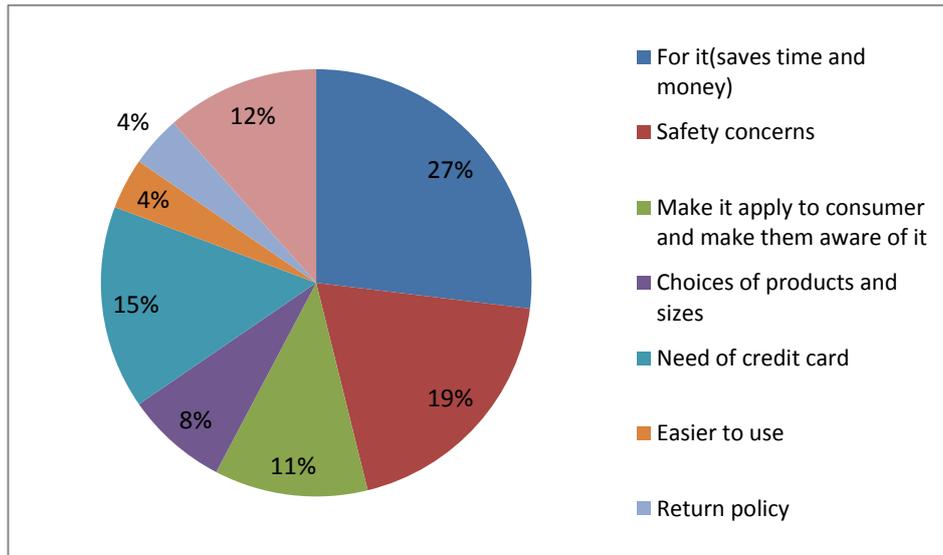


Figure 20: Further comments on online shopping

From this analysis it's clear to see that the samples concerns were mostly focused around how they are in favour of online shopping because of its benefit of saving time and money. However there are underlying concerns with online shopping being the need for a credit card which not everyone has or the safety concerns when using the internet to purchase goods. Also the need for advertising of the benefits of online shopping was needed by the respondents.

5.3 DATA ANALYSIS

For question 1 the researcher used chi square test in order to determine if there is a significant relationship between using online shopping between the two sample groups.

The calculations were done below:

	Yes	NO	<i>Marginal Row Totals</i>
Students	21 (15.31) [2.11]	14 (19.69) [1.64]	35
Low income households	7 (12.69) [2.55]	22 (16.31) [1.98]	29
<i>Marginal Column Totals</i>	28	36	64 (Grand Total)

The researcher calculated the p- value at a significance level of .05 in order to reach a measurable percentage. Therefore from looking at the calculations given the chi-square statistic is 8.2881 and the p value is therefore .003991. From these results it clear to see that the result is significant at $p <$

.05. Therefore according to the chi-square test there is in actual fact a significant relationship between the two samples in purchasing goods online.

Question 5 of the survey analysed the amount of times the two samples shopped online per month. The researcher made use of Fisher's Exact Probability Test in order to determine if there was a significant difference between the two samples. The results were calculated below and the results indicated between the two samples the amount of times that they shop online per month compared to each other.

Data Entry

	C ₁	C ₂	C ₃	Totals
R ₁	15	16	2	33
R ₂	16	11	2	29
Totals	31	27	4	62

Fisher Exact Probability Test

$P_A = 0.7262763181312634$

$P_B = 0.7262763181312635$

No. of tables evaluated = 137

According to Fisher's Exact Test there is no significant difference between the amount of times the two samples did online shopping per month.

Question 4 of the survey asked the two sample groups on their opinions regarding online shopping. The categories would indicate whether or not the sample groups were against online shopping. The results for the calculations can be seen below in the table. However the researcher used a chi-square 5x2 table in order to determine if there was a significant difference between the two samples.

Results						
	completely against	not in favour of it	neutral	favour of it	completely for it	Row Totals
students	0 (3.83) [3.83]	1 (5.47) [3.65]	12 (10.94) [0.10]	16 (10.94) [2.34]	8 (3.83) [1.23]	35
low income households	7 (3.17) [4.62]	9 (4.53) [4.41]	8 (9.06) [0.12]	4 (9.06) [2.83]	1 (3.17) [1.49]	29
Column Totals	7	10	20	20	7	64 (Grand Total)

The results indicated a chi-squared statistic of 24.6254 which resulted in a p-value of .00006. Therefore in accordance to the results and the resulting p-value the result is significant at <.05. This therefore means that there is a significant relationship between the two sample sizes of their opinions with regards to online shopping.

Question 9 of the survey asked respondent's which their favourite incentives when doing shopping were. Within this question the researcher used chi squared in order to determine if there is a significant difference between the two samples.

	Incentives						
	Free delivery	Discounts	Cheaper prices	more choice in products	save time and petrol	no waiting lines	
Students	23 17.72 (1.58)	15 19.80 (1.16)	22 24.49 (0.25)	14 13.55 (0.02)	14 13.55 (0.02)	11 9.90 (0.12)	99
Low income households	11 16.28 (1.71)	23 18.20 (1.27)	25 22.51 (0.28)	12 12.45 (0.02)	12 12.45 (0.02)	8 9.10 (0.13)	91
	34	38	47	26	26	19	190

The resulting χ^2 statistic equals 6.567. Five degrees of freedom were used and therefore $\chi^2/5$ equals 1.31. $P(\chi^2 > 6.567) = 0.2549$.

Therefore since the 0.25 is not less than the significance level of 0.05 then the results is not significant. Therefore there is no significant difference between the two samples chosen incentives for online shopping.

However there's seems to be a more focus from low income households towards the price of the products rather than other benefits of online shopping, such as free delivery which was favoured by students.

5.4 FINDINGS:

From the data analysis above it is clear to see that there is a significant difference in the two sample groups and there online shopping behaviour.

First off, the amount of students that shop online compared to that of the low income households is significantly different. It was found that students are more active with online shopping than low income households. Only 24.14% of the sample of low income households made use of online shopping compared to the 60% of the sample of students who used online shopping.

It was however found that the monthly patterns of the two samples were very similar when doing online shopping. This is strange due to one sample having a lot higher percentage of people doing

online shopping. But what this result actually shows is that consumers of this sample are not fully comfortable to use online shopping on a regular basis. This shows a lack of adoption all around towards online shopping by both samples.

It was also found in Question 4 on how the respondents felt towards online shopping that there was a significant difference in the perceptions of the respondents between the two different samples. This was showed through using a chi squared analysis and concluded that there was a significant difference in how the samples felt towards online shopping. In that the majority of the students were in favour of online shopping and the majority of low income households were against online shopping.

When analysing the favoured incentives of online shopping between the two different samples it was indicated that there was not much of a significant difference. This shows that between the two samples those both favoured the same form of incentives when wanting to shop online. This could be very crucial for online retailers wanting to target certain segments of the market for online shopping.

Question 7 of the survey asked specifically the low income shoppers on what frustrates them about shopping at a physical retail store. The results showed that majority of the sample were frustrated of having to travel to a retail store to do shopping. Other issues included waiting lines, not enough shop assistance, busy shops and wasting time. What this shows is that consumers actually do not like to go to retail shops to purchase goods, so online retailers need to appeal to these issues, find solutions and advertise where necessary.

The items that were bought were significantly different, so online retailers need to take this into account when wanting to target certain areas of the population. When the samples were asked the different reasons for not using online shopping, the results were significantly different. The student sample felt that security risks and the issue of not being able to view the product as the main reasons for not using online shopping. The low income households sample was however different as 6% of them were unsure how to use online shopping properly. This is very alarming and could indicate a major reason in the lack of adoption towards online shopping by the South African population. Security risks were again another issue with this sample and the issue of not being able to view the product as another flaw in online shopping. If online shopping is to be improved within South Africa, online retailers need to attend to these issues.

Online shopping is an innovative and a great way to do shopping but as can be seen in the results above structural changes and security risks would need to be adhered to in order for online shopping to be a favoured method in purchasing goods and services.

6 CONCLUSIONS

6.1 VALIDITY, RELIABILITY AND LIMITATIONS OF THE STUDY

Reliability is the credibility of one's research, this is linked to the findings of the research and demands consistency of the research (du Plooy-Cillers, Davis and Bezuidenhout, 2014). What reliability entails for the instruments and methods of the research study is that would the same results be achieved if the research were to be repeated by a different researcher using the same method or instrument (du Plooy-Cillers, Davis and Bezuidenhout, 2014).

The survey of the research study was pre tested on five members of each sample group before the survey was handed out. This ensures that the survey would be appropriate to hand out to each sample. The surveys were however slightly different as the wording was changed due to the difference in literacy levels between the two samples. The pre-test enabled the researcher the ability to engage on how to structure the research study further in order to bring about the best results. This enabled reliability as it ensured that the instruments chosen were accurate and reliable. The study made use of a field worker whereby this individual would go into the various areas where the sample would be located in order to collect the research data. This ensured validity and reliability as it enabled the respondents to be confident and give honest answers when answering the survey. This is because the researcher would imagine that people from this sample group being of low income would not respond well to a researcher of his physical appearance also they would respond better to someone of similar demographic characteristics.

Validity for the research study is all about determining whether or not the research study measured what the study aimed to measure in the first place as stated by du Plooy-Cillers, Davis and Bezuidenhout (p256, 2014). As mentioned validity was ensured throughout the study through using a pre-test whereby a segment of the sample was pre tested in order to determine if the survey was actually measuring what the study set out to measure. Validity was also guaranteed through using a fieldworker to collect answers from the sample group as mentioned above. Validity was further confirmed through identifying the demographics of the sample groups to ensure that these individuals fitted the description of the sample group required.

Limitations according to du Plooy-Cillers, Davis and Bezuidenhout (p275, 2014) are the constraints or limits within the research study that are out of the researcher's control. These limitations may include time, financial resources and access to information. The time limit for this research study would in fact be the actually amount of time the researcher has been given to conduct the thesis.

The due date for the assignment is on the 24th of October 2016. Thus this would be the time constraint for the research study.

There is a location limitation as the researcher cannot interview everyone within South Africa thus the sample group would be limited to those low income consumers and students within Cape Town.

The research study does not necessarily have any financial constraints other than spending money on fuel in order to reach the certain individuals within the sample. Access to the population would be the main limitation for the researcher as he cannot access everyone within the low income household's population group. Due to this reason the researcher employed the services of a fieldworker to further help his cause and enable him to obtain more data for the research study. Another limitation that actually occurred within the study was the lack of responses by respondents. So in other words respondents would start answering a survey but would not respond to the full extent and leave certain questions out which did not benefit the study. Another aspect could include honesty from participants whereby the researcher cannot be hundred percent sure that participants are giving honest answers.

6.2 ETHICAL MATTERS RELATED TO THE STUDY

Ethical concerns according to du Plooy-Cillers, Davis and Bezuidenhout (p263, 2014) is the moral or professional code that sets a standard for the research to be conducted. The participants of the research study were formally informed and had to give their consent to partake in the research study. Participants were informed what is required of them and were informed on how the results will be used. This therefore ensures that participants are not deceived in any way and it ensures participants what the researcher is actually looking for. Informed consent shall be used for the security of the researcher whereby it would allow the researcher certain privileges of the research study without any disagreements from the respondents.

Within the research study anonymity was granted to respondents whereby respondent's names and details will not be recorded so thus responses will not be able to be matched back to respondents. This therefore ensures that respondents will be confident when answering the surveys due to the fact that no one will be able to see their individual answers.

The research study shall also avoid harm through not asking participants questions that may affect their emotional state. Thus respondents will not be harmed or affected through answering questions of the survey.

With regards to the researcher he shall neither distort the results or falsify information in order to avoid difficult, boring or time consuming aspects of data collection and analysis. He shall also not distort results in order to gain a favoured result which suits his hypothesis of the study. The researcher shall also not show bias or misuse information and this will be ensured through the use of a supervisor whereby she will oversee all the findings and research aspects and ensure that they are accurate as possible.

6.3 RESEARCH CONTRIBUTION

The research study unfolds into two forms of contribution, being the professional contribution and the academic contribution. The study seeks to first contribute to online retail stores to identify the reasons as to why consumers behave in the way they do towards online shopping. Then secondly the research also addresses the benefits of online shopping to the consumer.

The professional contribution

The research proposal would help online retail stores in combating the various obstacles that face them when trying to access the low income market of South Africa. The insight gained from this study shall gain brands a competitive edge over their competitors and improve on methods and techniques in targeting the lower income market. Companies such as Takealot.com, e-Bay, One Day Only and Superbalist would find this beneficial in improving their business strategy and achieving a more dominant position within the market.

The academic contribution

The field of this research study is marketing and more specifically marketing communication. The research proposal will add to the marketing communication knowledge that already exists. The research would more specifically add knowledge to online shopping behaviour of consumers.

6.4 IMPLICATIONS OF THE FINDINGS

The study sought out to analyse the underlying behaviour of consumers towards online shopping. The study further set out to analyse if there was a difference between two different groups within the population. The findings indicated that there was indeed an actual difference in the online shopping behaviour between the two different sample groups of students and online shoppers which was proved through a chi-squared test.

The results showed that students favoured online shopping lot more than low income consumers did however both samples had very similar monthly patterns of when they did online shopping. This result is crucial as it shows that even though students did use online shopping more often there is still a major lack of adoption across both sample groups to do online shopping more than than 4-four times a month. This figure was further backed up through the reasons as to why consumers do not use online shopping and these were mostly centred on not being able to view the product and security risks. In order for online shopping to improve within South Africa online retailers need to address these issues and try resolve them in order to promote an easier shopping technique. Other issues that arouse were the matter of having to obtain a credit card which many members of the population do not have. Thus retailers need to address this and find different solutions for payments.

The findings stipulate that even though low income consumers are indeed frustrated of having to go to a retail store and purchase goods they still are not in favour of having to do online shopping instead. Therefore as already mentioned online retailers need to adhere to the issues that have been mentioned and try to appeal to the different sample groups needs in order to promote this form of shopping technique.

Online shopping is a very innovative technique and one which the researcher sees as the future of purchasing goods within South Africa. However for it to work in South Africa there needs to be structural changes within the country and security risks need to be fixed.

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Appendix A

Research Survey Instrument

Survey: The understanding of consumer behaviour towards online shopping

Dear respondent thank you for your willingness to complete the survey on online shopping behaviour. The survey is aimed at determining online shopping behaviour of consumers. The survey should take no longer than five minutes to finish. This survey is anonymous and confidential. You cannot be traced back to this survey and the answers provided will be used for research purposes only. Most questions require you to indicate a cross within the boxes.

Please could you answer all the following questions. There are no right or wrong answers.

Gender: Indicate with a cross

Male	Female	Other	Don't want to say
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Date of Birth:

Area you live in:

Race: Indicate with a cross

Asian	Black	Coloured	White/Caucasian	Other (please specify)	Don't want to say
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What is the highest level of education you have completed? Please circle relevant option

- 1 = graduated university or college or equivalent
- 2 = some university (in process or did not graduate)
- 2 = intermediate between secondary level and university (e.g. technical training)
- 3 = secondary/high school/matric
- 4 = primary school (or less)
- 5 = no schooling

Which of the following statements about employment status apply to you? Please circle relevant option

- 1=Not working at the moment
- 2=Part-time or hourly work (less than < 15 hours per week)
- 3=Part-time work (15 to 34 hours per week)
- 4=Full-time work
- 5=On temporary leave (education leave, public service leave, maternity leave)
- 6=In training (apprentice)
- 7=Retired

1.) Do you make use of online shopping? Please indicate with a cross

Yes
No

2.) Do you have access to the internet? Please indicate with a cross

Yes
No

3.) If Yes to question 2 please indicate how you make access to the internet? Is it by:

	Indicate with a cross
Cell phone	
Laptop	
Tablet	
Public computer	
Other please specify	

4.) How do you feel about online shopping?

	Completely Against	Not in favour of it	Neutral	Favour of it	Completely for it
Please Indicate with a cross					

5.) How many times do you make use of online shopping per month (if yes to first question)?

	0	1-4	5-9	10-20	Over 20 times	Not applicable
Please indicate with a cross						

6.) Do you see online shopping as something that you would rather do than go to a retail store?

Yes
No

7.) Is there anything that frustrates you in having to go to a retail store to do shopping?

--

8.) If you do not use online shopping what are your reasons?

	Indicate with a cross
Security reasons	
Unsure how to use online shopping	
Don't have the required access to the internet	
People will see my information	
Lack of trust in the internet	
Because you can't view the product properly	
Other: please specify	

9.) Please choose three incentives from the list which you find the most appealing with regards to shopping? Please indicate with a cross.

Indicate with a cross	Rank between 1-6
Free delivery	
Discounts	
Cheaper prices	
More choice in products	
Save time and petrol	
No waiting lines	

10.) If you not a positive user of online shopping what would encourage you to make use of online shopping?

11.) Which items below would you purchase online? Please tick all that apply

Indicate with a cross	Activity
Food	
Clothing	
Kitchen Appliances	
Technology	
Furniture	
Other	

12.) Is there anything further that you would like to comment on with regards to online shopping?

8 APPENDIX

Figure 1: **Description of Figure**

Figure 2: **Description of Figure**

All figures and calculations are done and can be seen within the data analysis

APPENDIX B

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9 DATA GATHERING SEQUENCE AND RESEARCH PLAN

Table 1: Proposed data gathering sequence and research plan

<i>ID</i>	<i>Task Name</i>	<i>Start</i>	<i>Finish</i>	<i>Duration (Weekdays)</i>
1	Compilation of Quant survey	18 April	23 April	6
2	Pre-Test survey (incl. Ethics Approval)	24 April	28 April	5
3	Amendments to Draft	1 May	6 May	6
4	Creation of survey on online portal	8 May	13 May	6
5	Final Data collection (Quant)	15 May	4 June	21
6	Reminder to respondents	15 May	4 June	21
7	Qualitative interviews (if necessary)			
8	Analysis of results & write up	15 July	24 July	10
9	Submit Draft Report	1 August		
10	Edit Report	5 August	15 August	11
11	Submit Research Report	21 st October		