Establishing the influence of packaging on profitability in the South African craft spirit industry

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ABSTRACT

The alcohol industry us one of the only industries growing despite the struggling economy. Even during negative economic growth, this industry tends to continue its growth. Over the last few years, a number of small craft distilleries entered the market to capitalise on the recent consumer trend towards uniquely crafted alcoholic beverages. These distilleries contribute to the economy through job creation, but experience the same limitations as other small, medium and micro-enterprises, and they also have to compete against the large commercial distilleries that dominate the market. The craft spirit market is highly populated. Distilleries need to produce a quality craft spirit, distinguishable from other competing products, and addressing the needs of the consumer. Packaging both distinguishes the product from other products, and influences the consumer during their decision-making process. It influences the profitability of the distillery since it influences the demand for a product through its role in the decision-making process, but also comes at a cost to the distillery. The correct selection of packaging can maximise profitability and ensure sustainability in this highly competitive market.

The aim of this research was to determine the influence of packaging on profitability in the South African craft spirit market. It was limited to distilleries within South Africa, which are defined as craft distilleries and produce craft spirits.

The research began with a thorough background on craft distilleries, their importance and the market in which they operate. This led to a detailed problem statement, sketching the current situation craft distilleries find themselves in, and suggesting a model for these distilleries to be sustainable in a populated market dominated by a few large companies. The objectives were defined to determine how packaging influences the demand for products through its role in the consumer's decision-making process and linking it to the cost of the packaging to determine the influence on profitability of craft distilleries. Secondary objectives were defined to support the primary objective and to assist in creating a sustainable model.

A literature study was done on the on the craft spirit market in South Africa, detailing their importance in job creation and discussing the market they find themselves in, in term of legislation, risk and competing forces within the market. The functions of packaging were discussed and its role in the consumer decision-making model thoroughly analysed, especially in distinguishing the product from other products and in creating a positive association with the consumer to convince them to buy the product. Profitability measures are listed to determine the influence of the cost of packaging. The study was concluded with critical analyses of packaging in the craft market, highlighting the cost insensitivity of both the consumer and distilleries.

An empirical study was completed using two newly developed questionnaires based on the literature study. The first questionnaire collected selection criteria and packaging preferences from the consumer. The analysis of this data showed the consumers' price insensitivity and their preferred craft spirit packaging; it also confirmed the importance of packaging in the consumers' decision-making process. To confirm the importance of packaging and to determine the packaging used by distilleries, the second questionnaires collected data from the distilleries regarding the packaging they use and selection criteria for packaging. The analysis confirmed the importance of packaging in the marketing strategy of distilleries, in line with the findings in the literature study and consumer data. The two sets of data were them compared to determine the correlation between packaging used and consumer preference.

The analysis of the data found that packaging plays an important role in persuading the consumer to buy a product; craft spirit consumers are not sensitive to price and they preferred craft packaging in terms of bottle, label, content, secondary packaging, and green initiatives. This consumer preference and price insensitivity were then linked to determine how changes to consumer preferred packaging influence profitability.

The research was concluded with a discussion of the findings of the research in terms of the importance of packaging, cost sensitivity in the craft spirit market, consumer preferred packaging and the influence of packaging on the profitability of craft distilleries. Based on this, recommendations were provided to distilleries on how they can implement the results of this research. The findings were evaluated against the primary and secondary objectives with the conclusion that both were achieved. The conclusion ends with recommendations for further research into the profitability and sustainability of craft distilleries.

Keywords: South Africa, alcohol, spirits, craft spirits, packaging, consumer behaviour, profitability, small, medium and micro-enterprises, craft distilleries, craft gin, craft vodka, craft rum, craft whiskey

OPSOMMING

Die alkoholbedryf is een van die enigste bedrywe wat groei, ondanks die sukkelende ekonomie. Selfs tydens negatiewe ekonomiese groei is hierdie bedryf geneig om sy groei voort te sit. Gedurende die afgelope paar jaar het ’n aantal klein, boetiekdrankie-distilleerderye die mark betree om munt te slaan uit die onlangse verbruikerstendens tot uniek vervaardigde alkoholiese drankies. Hierdie distilleerderye dra by tot die ekonomie deur werkskepping, maar ervaar dieselfde beperkings as ander klein, medium en mikro-ondernemings, en hulle moet ook meeding teen die groot kommersiële distilleerderye wat die mark oorheers. Die boetiek-spiritusbedryf is dig bevolk. Distilleerderye moet ’n kwaliteit boetiekdrankies produseer wat onderskei kan word van ander mededingende produkte en die behoeftes van die verbruiker aanspreek. Verpakking onderskei beide die produk van ander produkte en beïnvloed die verbruiker tydens hul besluitnemingsproses. Dit beïnvloed die winsgewendheid van die distilleerdery, want dit beïnvloed die vraag na ’n produk, alhoewel dit in die besluitnemingsproses draai, maar dit hou die distilleerdery ook ten koste. Die korrekte keuse van verpakking kan winsgewendheid maksimeer en volhoubaarheid in hierdie uiters mededingende mark verseker.

Die doel van hierdie navorsing was om die invloed van verpakking op die winsgewendheid in die Suid-Afrikaanse boetiek-spiritusmark te bepaal. Dit was beperk tot distilleerderye in Suid-Afrika, wat gedefinieer word as ’n boetiekspiritus-distilleerdery, en boetiek-spiritus vervaardig.

Die navorsing het begin met ’n deeglike agtergrond oor boetiek-distilleerderye, die belangrikheid daarvan en die mark waarin hulle werk. Dit het gelei tot ’n gedetailleerde probleemstelling, waarin die huidige situasie geskep word waar boetiek-distilleerderye hul bevind, en voorgestel dat ’n model vir hierdie distilleerderye volhoubaar sal wees in ’n bevolkte mark wat deur enkele groot maatskappye oorheers word. Die doelstellings is gedefinieer om te bepaal hoe verpakking die vraag na produk beïnvloed deur sy rol in die verbruiker se besluitnemingsproses en dit te koppel aan die koste van die verpakking om die invloed op winsgewendheid van die boetiek-spiritusbedryf te bepaal. Sekondêre doelstellings is gedefinieer om die primêre doel te ondersteun en om ’n volhoubare model te help skep.

’n Literatuurstudie is gedoen oor die mark vir boetiek-spiritus in Suid-Afrika, waarin die belangrikheid daarvan in die skepping van werksgeleenthede uiteengesit word en die mark bespreek word in terme van wetgewing, risiko’s en mededingende kragte binne die mark. Die funksies van verpakking is geanaliseer en die rol daarvan in die besluitnemingsmodel vir verbruikers is deeglik bespreek, veral om die produk van ander produkte te onderskei en om ’n positiewe verbintenis met die verbruiker te skep om hulle te oortuig om die produk te koop.

Winsgewendheidsmaatreëls word gelys om die invloed van die koste van verpakking te bepaal. Die studie is afgesluit met ’n kritiese ontleding van verpakking in die boetiek-spiritusmark, wat die koste-ongevoeligheid van verbruikers sowel as distilleerderye beklemtoon.

’n Empiriese studie is voltooi met behulp van twee nuut ontwikkelde vraelyste gebaseer op die literatuurstudie. Die eerste vraelys het seleksiekriteria en verpakkingsvoorkeur by die verbruiker ingesamel. Die ontleding van hierdie gegewens het getoon dat die verbruikers die prysgevoeligheid en hul voorkeurverpakking vir handwerkgees het, en dit bevestig ook die belangrikheid van verpakking in die besluitnemingsproses van verbruikers. Om die belangrikheid van verpakking te bevestig en om die verpakking wat deur distilleerderye gebruik word, te bepaal, is die tweede vraelys vanuit die distilleerderye versamel is, aangaande die verpakking wat hulle gebruik en seleksiekriteria vir die verpakking. Die analise het die belangrikheid van verpakking in die bemarkingstrategie van distilleerderye bevestig, ooreenkomstig die bevindings in die literatuurstudie en verbruikersdata. Die twee stelle data is vergelyk met mekaar om die korrelasie tussen die gebruikte verpakking en die verbruikersvoorkeur te bepaal.

Uit die ontleding van die data is bevind dat verpakking ’n belangrike rol speel in die oortuiging van die verbruiker om ’n produk te koop; verbruikers van spiritus is nie sensitief vir prys nie en geniet voorkeurverpakking vir handwerk in terme van bottel, etiket, inhoud, sekondêre verpakking, en groen inisiatiewe. Hierdie verbruikersvoorkeur en prysongevoeligheid is dan gekoppel om vas te stel hoe veranderinge aan die voorkeurverpakking van verbruikers winsgewendheid beïnvloed.

Die navorsing is afgesluit met ’n bespreking van die bevindinge van die navorsing in terme van die belangrikheid van verpakking, kostesensitiwiteit in die boetiek-spiritusmark, die voorkeurverpakking van die verbruiker en die invloed van verpakking op die winsgewendheid van boetiek-spiritusdistilleerderye. Op grond hiervan is aanbevelings aan distilleerderye gemaak oor hoe hulle die resultate van hierdie navorsing kan implementeer. Die bevindinge is geëvalueer aan die hand van die primêre en sekondêre doelstellings met die gevolgtrekking dat albei bereik is. Die gevolgtrekking word afgesluit met aanbevelings vir verdere ondersoek na die winsgewendheid en volhoubaarheid van boetiek-spiritusdistilleerderye.

Sleutelterme: Suid-Afrika, alkohol, spiritus, verpakking, verbruikersgedrag, winsgewendheid, klein, medium en mikro-ondernemings, boetiek-spiritusdistilleerderye, boetiek-jenewer, boetiek-vodka, boetiek-rum, boetiek-whiskey

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GLOSSARY OF TERMS

ABV	Alcohol by volume
SMME	Small, medium and micro-enterprises
SACDI	Southern African Distilling Institute
GDP	Gross domestic product
DTI	Department of Trade and Industry South Africa

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

This research aims to determine the influence of packaging on the profit margin of craft distilleries in South Africa. In the following chapter, the reader will be given a brief background on the research to be conducted, the problem to be addressed, research objectives and the importance thereof.

1.2 BACKGROUND

Small, medium and micro-enterprises (SMMEs) play a vital role in the South African economy. It contributes 28% of all jobs (Business Tech, 2018), 56% of jobs in the private sector and makes up 36% of the GDP (Bick & Sidubi, 2018). Despite its importance, 70% of new SMMEs are still failing within two years of inception (Business Tech, 2018) (Business Tech, 2018), even with the government's support programmes (Jere *et al.*, 2015). This has dire consequences for a country with an economy trying to reduce its unemployment rate of 27.2% (Stats SA, 2019).

The alcohol industry is one of the industries growing despite the struggling economy. Positive growth has been reported in every quarter since the second quarter of 2013 (Department of Agriculture Forestry & Fisheries, 2017) and is valued at approximately R130bn (Research and Markets, 2019). Even with some quarters showing negative economic growth over the last few years (Stats SA, 2019), South Africans increased alcohol expenditure and moved up to fifth in the world in alcohol consumption (Business Tech, 2019).

Several craft distilleries and breweries have popped up over the last few years to try and tap into the market (Kretzmann, 2018). These distilleries are classified as SMMEs (Small Enterprise Development Agency, 2016) due to the limitations on production (South African Craft Distillers Institute, 2019) and contribution to job creation (Business Tech, 2018). They experience similar problems as other SMMEs, such as access to finance, crime and poor infrastructure (Small Enterprise Development Agency, 2016), but fail predominantly due to the scale of large manufacturers (Thompson & Vanderford, 2016:1) and legislation (Bick & Sidubi, 2018:10). To try and survive, it is important for craft distilleries, like all SMMEs, to maximise profitability which can be done by the effective and efficient implementation of packaging in line with consumer preference.

1.3 PROBLEM STATEMENT

T The South African economy needs SMMEs to flourish. This will assist in creating job opportunities, add to the GDP and ultimately assist with growth (Business Tech, 2018). The current economic climate and global market pressure make it difficult for an individual to start a sustainable enterprise (Small Enterprise Development Agency, 2019).

One example of SMMEs struggling with market penetration and sustainable growth is craft distilleries (Bick & Sidubi, 2018:12). Craft start-ups have the same risk as other SMMEs, but the added risks of the possibility of not attaining the necessary licenses make it even more difficult to access funds (Business Tech, 2018). Even when funds are obtained for the input cost, failure remains high due to the high operating costs associated with the production caps on craft distilleries (South African Craft Distillers Institute, 2019).

Not only does the craft distillery have to compete with other craft distilleries, but also with commercial distillers. Automated processes and economies of scale enable these distillers to move large volumes at low cost (Thompson & Vanderford, 2016:1), making it difficult for small newcomers to the market.

The high manufacturing cost for craft distilleries makes it difficult for them to be sustainable in a market dominated by a few companies (Department of Trade and Industry, 2004:9); and to even stand a chance of competing, they need to decrease manufacturing costs while increasing the demand for their product (Thompson & Vanderford, 2016:1). Unless this can be achieved, craft distilleries will continue to fail like all other SMMEs in South Africa.

1.4 RESEARCH OBJECTIVES

The main objective of this study is to determine the influence of packaging on demand for a product and the consumer's willingness to pay for it and then linking it with the cost thereof to enable conclusions to be drawn on how it can be used to maximise profitability within the craft spirit industry.

1.4.1 PRIMARY OBJECTIVES

The primary objective of this study is to determine the influence of packaging on profitability in the South African craft spirit industry.

1.4.2 SECONDARY OBJECTIVES

The secondary objectives of this research are:

- Determine the importance of packaging in the consumer's decision-making process.
- Determine craft spirit consumers' sensitivity to cost.
- Determine how primary and secondary packaging influences consumer buying behaviour.
- Determine consumers' preferred craft spirits packaging.
- Determine how green initiatives influence consumer behaviour.
- Determine distillery criteria for selecting packaging.
- Determine whether the packaging used by distilleries correspond with consumer preferences.

1.5 SCOPE AND LIMITATIONS OF THE STUDY

1.5.1 Definition of concepts

This study aims to determine the influence of packaging on profitability in the South African craft spirit industry by gathering quantitative data from consumers, craft distilleries and packaging suppliers within the boundaries of South Africa.

Consumer: Any person over the age of 18, living in South Africa, who has bought or is planning to buy craft spirits.

Craft distillery: As defined by the South African Craft Distilling Institute (SACDI): a legally registered micro-manufacturing liquor producer that (South African Craft Distillers Institute, 2019):

- Produces less than 100 000l of pure alcohol;
- Does not have automated production processes;
- Is managed and operated by a craft distiller with more than 25% ownership; and
- Uses natural materials to produce more than 50% of the alcohol.

A craft distiller is a:

- Natural person;
- Who has training and experience in distilling;
- Who has operated small batch stills; and
- Who produces innovative, high-quality craft spirits

Packaging: Includes bottle, caps, label, content and secondary packaging

1.5.2 Expected limitations of the study

The study has the following limitations:

- Limited amount of craft distilleries in South Africa.
- Consumers cannot be approached at alcohol distribution points to ensure anonymity.
- Numerous craft distilleries are unlicensed and may be reluctant to participate in the study.
- Respondents will be limited to those consumers/distilleries with access to connected electronic devices to complete online questionnaires.

1.6 RESEARCH METHODOLOGY

The following research method will be followed to reach both the primary and secondary objectives.

1.6.1 LITERATURE STUDY

All concepts are clarified and the current body of available research is investigated and analysed in the literature study under the following topics:

- **Craft spirit packaging:**
    - Alcohol production
    - Alcohol industry in South Africa
    - Packaging
    - Packaging in the craft alcohol industry
- **Craft distillery profitability:**
    - Small, medium and micro-enterprises
    - Profitability
    - Market segmentation
- **Critical analysis of craft spirit packaging**

1.6.2 EMPIRICAL STUDY

The knowledge gained in the literature study will be used to develop a questionnaire for both the craft distiller and the customer. Both questionnaires will contain a section according to which respondents will be categorised. One questionnaire will be used to gather data from craft distilleries on the following:

- Material and labour cost of packaging
- Factors influencing packaging decisions

- Sales volumes
- Distribution methods

The second questionnaire will gather the following data from the consumer:

- Packaging preferences
- Influence of green initiatives
- Alcohol consumption
- Distribution preference

This data and the actual pricing of packaging will then be used to draw conclusions on the influence of packaging of profitability and make suggestions on improving profitability through the effective use of packaging.

1.7 LAYOUT OF THE STUDY

The study will have the following layout:

Chapter 1: Nature and scope of the study

The first chapter gives the reader a brief background on the purpose of this study as well as the layout of this document. It includes the formal problem statement, research objectives, limitations of the study and the research method.

Chapter 2: Literature review

In this chapter, the topic is dissected into its contributing concepts. Each of them is introduced and explored within the context of this study.

Chapter 3: Empirical study

In this chapter, the knowledge gained in the literature study is used to develop a questionnaire to collect data from craft distilleries and consumers on their craft spirits packaging preferences. These results are analysed and discussed.

Chapter 4: Conclusions and recommendations

In this chapter, conclusions are drawn and recommendations made from the knowledge gained in the literature study and results from the empirical study.

CHAPTER 2: LITERATURE REVIEW

This section provides a detailed discussion and summary of research done into alcohol production, the alcohol industry in South Africa, packaging, and the importance of SMMEs in the South African economy. The information presented forms a crucial part of the research design and supports the motivation and the importance of this study.

Alcohol has been consumed from almost the beginning of time. The oldest evidence points to beer being brewed and consumed as early as 10 000 B.C. and wine as early as 4 000 B.C. This industry kept on growing, developing throughout the years (Hanson, 2019). Alcohol has developed from a limited variety in the four categories, namely beers, ciders, wine and spirits, into thousands of available products in each category (Department of Trade and Industry, 2004:5).

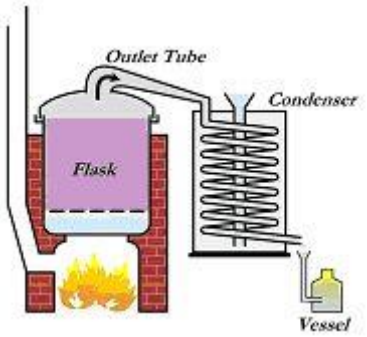
The basic process of manufacturing alcohol has remained the same over the years, but has been adapted and improved to manufacture all the varieties available.

2.1 ALCOHOL PRODUCTION

The fermentation process is part of the manufacturing of all types of alcoholic products. It is a biochemical process where yeast converts the sugar in a liquid into ethanol and other by-products such as carbon dioxide and methanol. The sugar in the liquid can be simple sugar added to water or the sugar from plant material mixed with water (Buratti & Benedetti, 2016:2). For beer, wine and cider, the process stops here and can be bottled or placed in casks.

Fermented liquid needs to be distilled to concentrate the alcohol content of the liquid to produce spirits. The content of alcohol is measured as a percentage of ethanol in the liquid. This is referred to as alcohol by volume (ABV). Most fermentation processes deliver an ABV of between 7 and 10% depending on the yeast used, sugar content, temperature and duration of fermentation. Ethanol alcohol's boiling point is lower than the 100°C of water and in the vicinity of 78°C. Therefore, to try and separate ethanol from water, the fermented liquid is placed in a tank and heated. The vapour formed moves up into the distillation column/head and then into the condenser, which cools the vapours to return to the liquid, which drips into a container. All the liquid captured below 78°C is called the heads and discarded. The usable alcohol, called the heart, is captured between 78°C and 92°C and the rest, called tails, above 92°C is reused in the next distillation. The distillation process is illustrated in Figure 2-1:

Figure 2-1: Illustration of the distillation process



Source: The science of distillation (Difford, 2019)

The ABV of the distilled alcohol is more than 40% and depends on the shape, size and content of the distillation column/head. The ABV is measured using a hydrometer. If it is more than the desired ABV, water is added to dilute it (Difford, 2019).

The fermentation of sugar obtained from different plants results in different types of spirits. For example:

- Brandy from grapes
- Tequila from agave

For some types of spirits, the process does not stop here. The more nuanced whiskey, rum and brandy, for example, are placed in casks and left for a certain time to achieve the desired taste. The less expensive varieties simply contain a flavouring agent. On the other hand, gin is natural alcohol made from any type of sugar, infused with botanicals to produce the desired gin flavours (Ocejo, 2017:79). The three main botanicals used in the production of gin are juniper berries, coriander and cinnamon. More botanicals are added to produce a variety of flavours.

After the desired taste and ABV are achieved, the spirit is bottled and sold to the consumer.

2.2 ALCOHOL INDUSTRY IN SOUTH AFRICA

South Africa has some of the heaviest drinkers in the world and is ranked fifth in the world for consumption, taking into consideration only the drinking population. If the population is expanded to include non-drinkers, the consumption per capita drops to 52nd in the world (Business Tech, 2019). The alcohol industry is valued at R130bn (Research and Markets, 2019) and has shown continuous growth over the past six years (Department of Agriculture Forestry & Fisheries, 2017). Legislation and taxes are used to control the manufacturing and consumption of alcohol (Bick & Sidubi, 2018:14-18).

2.2.1 LEGISLATION

Alcohol abuse goes along with alcohol consumption and has resulted in numerous indiscretions over time (Parry, 2005:1). As a result of this, proper legislation has been put in place to regulate the manufacturing, distribution and consumption thereof. South Africa has one of the most regulated alcohol industries (Parry, 2010:2-6). The Department of Trade and Industry is responsible for regulation and the help of the South African Revenue Service and South African Police Service (Bick & Sidubi, 2018:38).

The DTI uses the Liquor Act to regulate the industry (27 of 1989). The act's main objectives are to develop a responsible, sustainable and representative alcohol manufacturing environment and to ensure responsible consumption to reduce harmful indiscretions (Bick & Sidubi, 2018:14-18). The act provides clear regulations and restrictions on (Parry, 2010:2-6):

- Alcohol advertisements
- Retail sales and manufacturing of alcohol
- Taxation
- Alcohol packaging

Restrictions on advertisement are, for example, the requirement to display warning information on labels, limits on sports sponsorships and television air time. Restriction on the packaging was put in place to reduce harmful consumption. In 2007, alcohol packaging was limited to a maximum of five litres. This meant the end of the aluminium foil bags (Parry, 2010:4).

SARS is responsible for taxing alcohol manufacturing as set out in its policies; in this case, the spirit policy (South African Revenue Service, 2019). Currently, absolute alcohol is taxed at R190.08 per litre, which translates to R61 per 750ml 43% bottle.

Tax is not the only cost associated with alcohol manufacturing. There are yearly and registration fees required to obtain a manufacturing license. Fees are based on a sliding scale according to annual turnover. This is shown in Table 2-1. A manufacturer with a turnover less the R5m will pay an initial fee of R5 500 and thereafter R2 000 per year (Department of Trade and Industry, 2019). These costs are still insignificant to the cost of a commercial property that must be used according to the Liquor Act (27 of 1989) for manufacturing.

Table 2-1: Alcohol manufacturing license fees

Annual turnover from activities regulated under the Act	Type of fee	Amount
Less than R 5 000 000	Application (s.11) Initial Registration Notice to review [Schedule 1 Item 4 (6)] Annual Renewal of registration Transfer Fee (s.15) Request for variation of conditions [s. 16(1)] Notice of change in location or activities [s. 16(3) Appointment of person to conduct activities (s. 17)	R500 R2 000 R500 R2 000 R1 500 R1 500 R1 500 R1 500
At least R 5 000 000 but less than R 15 000 000	Application (s.11) Initial Registration Notice to review [Schedule 1 Item 4 (6)] Annual Renewal of registration Transfer Fee (s.15) Request for variation of conditions [s. 16(1)] Notice of change in location or activities [s. 16(3) Appointment of person to conduct activities (s. 17)	R1 000 R4 000 R1 000 R4 000 R3 000 R3 000 R3 000 R3 000
At least R15 000 000 but less than R 250 000 000	Application (s.11) Initial Registration Notice to review [Schedule 1 Item 4 (6)] Annual Renewal of registration Transfer Fee (s.15) Request for variation of conditions [s. 16(1)] Notice of change in location or activities [s. 16(3) Appointment of person to conduct activities (s. 17)	R7 500 R5 000 R7 500 R5 000 R5 000 R5 000 R5 000 R5 000
At least R 250 000 000, but less than R 1 billion.	Application (s.11) Initial Registration Notice to review [Schedule 1 Item 4 (6)] Annual Renewal of registration Transfer Fee (s.15) Request for variation of conditions [s. 16(1)] Notice of change in location or activities [s. 16(3) Appointment of person to conduct activities (s. 17)	R10 000 R7 500 R10 000 R7 500 R7 500 R7 500 R7 500 R7 500

Source: Department of Trade and Industry (Department of Trade and Industry, 2019)

2.2.2 LARGE COMMERCIAL DISTILLERIES

The South African liquor industry is dominated by a small number of companies owning numerous distilleries, breweries and wine manufacturers including their labels. The five largest companies as per the latest official publication of the (Department of Trade and Industry, 2004:9) (from the latest published turnover):

- Distell: Turnover 2018 R24448.8m (Nederburg, Savanna, Viceroy)
- Douglass Green Bellingham: Turnover unknown (Zappa, Beefeater, Red Heart)
- KWV Limited: Turnover 2016 R1224m, (Beyerskloof, Rust en Vrede, Kanonkop)
- Esnell: Turnover 2003 R500m (Wellington, Firstwatch, Famous Grouse)
- Guinness UDV: Turnover unknown (Bells, Guinness, Smirnoff)

These companies manufacture the majority of the alcohol consumed in South Africa. For example, Distell is estimated to produce 70% of all brandy and 40% of all South African spirits.

There are a few reasons why these companies are dominating the market and continuing to grow. The first reason is that only a few people know who owns whom in the industry. This allows these companies to capitalise on the generalised labels. They have the financial resources for research, development and to defend their intellectual property. Economies of scale, due to access to automated processes and shared skilled employment, allow them to manufacture and sell at a lower cost than competitors (Thompson & Vanderford, 2016:1). As a result of this, the large companies are becoming so big that even the other large companies are struggling to survive (Department of Trade and Industry, 2004:4-7), not even to mention the craft alcohol manufacturers (Martinne, 2015).

2.2.3 CRAFT DISTILLERIES

In recent years, there has been an increasing move from commercial labels towards local and authentic small-batch produced products. The USA has reported a 50% growth in craft distilleries since 2010 (Martinne, 2015). South Africa is following the trend. As an example, the gin market has expanded from a limited variety to 135 gins produced by a combination of 65 craft and large distilleries.

The Southern African Craft Distilling Institute came into being in 2012 to support and promote craft alcohol manufacturing by identifying common challenges and facilitating and driving sustainable solution usable by all its members. There are 53 registered craft spirit producers with another 47 in the pipeline (South African Craft Distillers Institute, 2019) who collectively contribute to the industry's turnover of more than R1 billion per year (Kretzmann, 2018).

There are limitations to manufacturing techniques, production and ownership to be classified as a craft distillery. According to the South African Craft Distilling Institute (SACDI), a craft distillery is a legally registered micro-manufacturing liquor producer that (South African Craft Distillers Institute, 2019):

- Produces less than 100 000l of pure alcohol
- Does not have automated production processes
- Is managed and operated by a craft distiller with more than 25% ownership
- Uses natural materials to produce more than 50% of the alcohol.

A craft distiller is a:

- Natural person
- Has training and experience in distilling
- Operated small batch stills
- Produces innovative high-quality craft spirits

The 100 000l of pure alcohol production cap translates to 311 006 bottles 750ml 43% of alcohol. There is no set quantity limit on what is classified as a small batch, but it is seen as a batch of alcohol produced by a manually operated distillation system (Norris, 2013:4). These restrictions contribute to the high manufacturing cost, along with (Martinne, 2015):

- High price of equipment (mostly due to price of copper and stainless steel)
- Licensing fees
- Cost of training
- Product development cost
- Labour-intensive operations
- Packaging

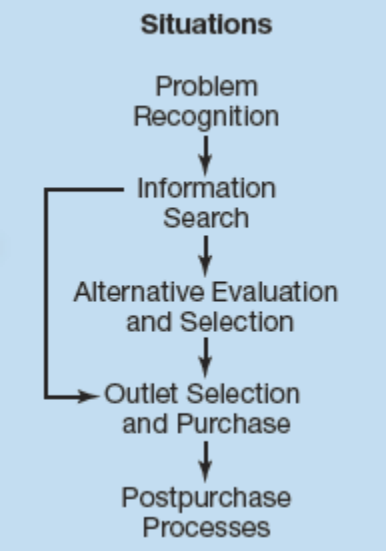
The high manufacturing costs and taxation result in an expensive product on the market competing with other craft products and less expensive products of large distilleries. The production capabilities of the manually operated system and craft classification restriction limit the number of finished products a distillery can sell if the market allows it. This highlights the importance of keeping manufacturing cost as low as possible (Department of Trade and Industry, 2004:7), while keeping demand constant to maximise profit and ensuring total asset utilisation (Thompson & Vanderford, 2016:1). In the craft industry, packaging is a significant contributor to manufacturing price.

2.3 PACKAGING

The primary function of packaging is containment, protection, communication and utility (Jeffrey *et al.*, 2014:24). The baseline function is to keep the content together (containment), to allow for efficient handling in such a way that the content is protected from the environment and the environment from the content (protection). Containment and protection can easily be measured since either the packaging meets the containment/protection standard, or it does not (Jeffrey *et al.*, 2014:24)

Utility is an ambiguous measurement of client satisfaction or pleasure. The contents of a product are the major contributor to the utility, but the packaging also influences it in terms of ease of opening, content access and disposal (Jeffrey *et al.*, 2014:24). Gomez *et al*. (2015) define two phases in the decision process of the consumer. The first being the moment of procurement and the second after consumption (2015:3). This supports the decision-making model of Mothersbaugh, as shown in Figure 2-2 since most consumers get their information from the packaging of the product on the shelf where they can compare it with other options and make a decision based on the information on the label and the overall look and feel of the packaging itself (Ståhlberg & Maila, 2012:221), and the after consumption phase defined by Gomez forms part of the post-purchase processes.

Figure 2-2: Mothersbaugh decision-making model



Source: (Mothersbaugh, 2015:3)

To increase the likelihood of being the preferred product of the consumer at the point of sale, manufacturers implement a variety of packaging material as primary packaging and in some cases, secondary packaging. Primary packaging can be described as the last piece of packaging

to be removed by the user to gain access to its contents, while secondary packaging is the packaging the user can remove without gaining access to the content. In the case of spirits, the primary packaging is the bottle, and secondary packaging can be a box/bag that contains the bottle (Mothersbaugh, 2015:302).

The function of packaging is no different in the food and beverage industry, but the information communicated on the packaging along with the visual appearance of the package plays a bigger role in grabbing the consumer's attention, creating a positive association about the company/product and influencing the consumer's perception on the quality of the product and taste expectations (Simmonds & Spence, 2017:4-9). This is of great importance in the food/beverage industry, since more than 75% of purchase decisions are made at the point of sale, and 90% of consumers first examine the front of the product before making the decision (Simmonds & Spence, 2017:4-9). In his book, *Shopper marketing*, Stahlberg refers to packaging as being the best marketing investment. This is due to the low cost of altering packaging with a low to no impact on manufacturing processes and can easily be changed (Ståhlberg & Maila, 2012:215). The different packaging aspects are classified as either a visual or informational element (Tinonetsana & Penceliah, 2017:2-3).

2.3.1 Visual elements

The elements of the packaging contributing to the visual appeal include the package colour, shape, graphics, weight and typeface (Underwood & Klein, 2002:3-5). The main purpose of this is to distinguish the product from competing products, but also to influence consumer behaviour. A study shows that 79% of consumers regard packaging as important, but where each packaging element is not of equal importance (Hamdar *et al.*, 2018:3-6). Zekiri and Hasani define the following elements of packaging to influence consumer behaviour (2015:4-9):

- Colour
- Package labelling
- Quality of packaging
- Design of wrapper (typography)
- Brand image
- Innovation

The four elements generally seen as the most important are colour, shape, typography and graphics/image (Khan *et al.*, 2019:4-7). Along with the brand name, these elements form a brand identity, or the image of a brand. This is not only the look and feel of the packaging, but also the overall quality thereof (Tinonetsana & Penceliah, 2017:3).

2.3.2 Informational elements

Most consumers deem it essential to read the label information (Tinonetsana & Penceliah, 2017:6); this is due to most information being obtained from the packaging itself during the information search phase of the consumer decision-making model (Mothersbaugh, 2015:520-543). The package communicates crucial information to the consumer, which can include information on the product, company and even the environmental impact of the company/packaging (Becker *et al.*, 2011:2). Product information includes (Tinonetsana & Penceliah, 2017:6):

- Usage instructions
- Expiry date
- Storage instruction
- Nutritional data

Customers filter this information to only what they see as relevant or meaningful (Ståhlberg & Maila, 2012), which they then use to compare products to allow them to make an informed choice. Information is not limited to the above-mentioned. Some companies extend the basic information on the packaging to include awards won and expert opinions (Vannevel *et al.*, 2018:3).

2.3.3 Green initiatives

The general consensus among consumers, governments and environmental activist to conserve the environment has grown over the last few decades (Kaufmann *et al.*, 2012:2). Environmental concerns are forcing countries to develop and enforce legislation to ensure sustainable and environmentally friendly manufacturing and consumption. This is supported by more environmentally cautious consumers who tend to limit their green footprint by supporting environmentally-friendly/green products. These consumers who know their behaviour impacts the environment and adjust their purchasing behaviour accordingly are referred to as green consumers (Bisschoff & Liebenberg, 2016:9). They research products and weigh up the cost thereof against its green benefit. Generally, they are inclined to pay more for these green products. This is also true for the South African consumer; 64% of participants in a study indicated that using green products was beneficial to their quality of life (Ketelsen *et al.*, 2020:11-12). Therefore, not only do companies have to adhere to the environmental legislation of the country they are operating in, but also continuously improve their environmental footprint to stay competitive in a market with consumers predominantly concerned about their environmental footprint.

They achieve this by changing/modifying the production process, product and packaging to be more environmentally friendly. These green initiatives are then used by these green companies to market their product using environmentally friendly methods such as electronic media and not environmentally unfriendly methods such as printed media (Govender & Govender, 2016:1-3). This is referred to as green marketing. There are two fundamental parts to green marketing:

1. Green advertising
2. Green product

2.3.3.1 Green advertising

Green advertising refers to using the company's green initiatives for marketing purposes. This can be communicated through electronic media or simply included as information of product packaging (Maziriri, 2020:2-5).

2.3.3.2 Green product

Green products are any environmentally friendly products. They are generally recyclable, non-contaminable and non-toxic, produced by low-energy and non-polluting manufacturing processes using a minimal of preferably recycled material (Bisschoff & Liebenberg, 2016:9-11). Not all of these green aspects are implemented by every company, but rather one or a combination of two or more. The following are examples of green product initiatives (Ståhlberg & Maila, 2012:43-47).

- **Reduced packaging:** Use minimal packaging material**.**
- **Green packaging:** Use environmentally friendly and recyclable packaging material.
- **Green manufacturing:** Environmentally friendly manufacturing processes and material.

Consumers tend to look for green information on the packaging of the product (Govender & Govender, 2016:3).

2.3.4 Packaging in the alcohol industry

In the alcohol industry, bottles and cans are used as primary packaging to contain alcohol. This is either printed on or has a label with all the relevant information on it. Due to the addictive and unhealthy nature of alcohol, the government provides and enforces legislation to promote responsible alcohol usage.

2.3.4.1 Legislation

As mentioned in 2.2.1, the Liquor Act (27 of 1989) restricts alcohol packaging in terms of volume. However, legislation on alcohol packaging does not end with the Liquor Act (27 of 1989). The

Foodstuffs, Cosmetics and Disinfectants Act (54 of 1972) provides regulations on health messages on container labels of alcohol products. The health message must:

- Be visible, legible and indelible and no other aspect of packaging is allowed to affect this
- Be on a devoted space at least one-eighth of the label sizes
- Be in black on white background

The health message can be one of the following in any official South African language corresponding to the language of the label:

- Alcohol reduces driving ability, do not drink and drive.
- Do not drink and walk on the road, you may be killed.
- Alcohol increases your risk to personal injuries.
- Alcohol is a major cause of violence and crime.
- Alcohol abuse is dangerous to your health.
- Alcohol is addictive.
- Drinking during pregnancy can be harmful to your unborn baby.

Further restrictions include:

- No words, pictures or descriptions may give the impression that the alcoholic beverage has been produced in accordance to any health practitioner, organisation, foundation or association.
- The following words may not appear on the label: health, heal, cure, restorative or any statements claiming the beverage is beneficial to the consumer's health.
- May not make any reference to the Medicines and Related Substances Act (101 of 1965).

Any person found guilty of contravening this act is liable to a fine and/or a maximum of five years' imprisonment.

2.4 SMALL, MEDIUM AND MICRO-ENTERPRISES

A healthy and growing economy is important to the general welfare of all its residents. The economic growth of a country is directly related to its gross domestic product (GDP). GDP is basically a country's income. If it rises, the economy grows, and *vice versa*. This increased income leads to increased employment, tax revenue and consumption. This means a(an) (Economics Essays, 2017):

- Reduction in poverty

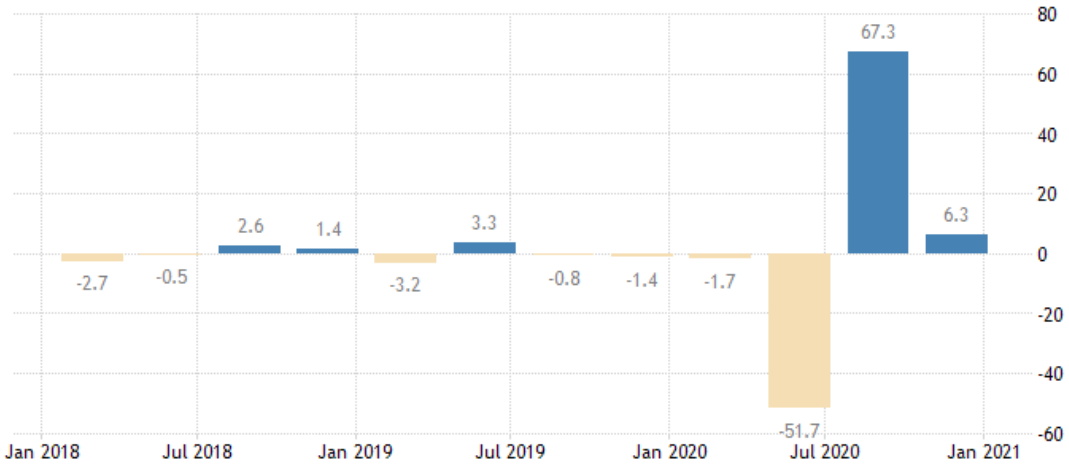
- Improved public service
- Lower unemployment

The South African economy's importance is no different from other economies.

2.4.1 SOUTH AFRICAN ECONOMY

The South African market is classified as an emerging market (Bick & Sidubi, 2018:15) and its economy has been struggling over the last few years, like most of the emerging markets. It has struggled to show continuous growth and almost went into recession in the third quarter of 2018. The quarterly growth from June 2016 is shown in Figure 2-3:

Figure 2-3: South African GDP



Source: Statistics South Africa (Stats SA, 2019)

This inconsistent growth does not help decrease the unemployment rate of 27.2% (Stats SA, 2019). A consistent growth above population growth is required to address this problem.

2.4.2 SMALL, MEDIUM AND MICRO-ENTERPRISES IN SOUTH AFRICA

Small, medium and micro-enterprises (SMMEs) play a vital role in the South African economy. In the first quarter of 2019, there were 2 550 540 SMMEs. This is a 4.4% increase from the previous year. This includes SMMEs in both the formal and informal sector. Excluding micro-enterprises, they currently provide a total number of 10 838 819 jobs (Small Enterprise Development Agency, 2019), an increase of 22% from 2018. This is shown in Table 2-2. It contributes 28% of all jobs (Business Tech, 2018), 56% of jobs in the private sector and makes up 36% of the GDP (Bick & Sidubi, 2018:20).

Table 2-2: Number of SMMEs and jobs provided

Key indicators	2018Q1	2018Q4	2019Q1	q-o-q change	y-o-y change
Number of SMMEs	2 443 163	2 557 762	2 550 540	-0.30%	4.40%
Number of formal SMMEs	658 719	745 061	736 198	-1.20%	12%
Number of informal SMMEs	1 714 233	1 744 013	1 754 443	0.60%	2.30%
Number jobs provided	8 886 015	10 597 371	10 839 819	2.30%	22.00%
% operating in trade & accommodation	39.30%	41.10%	41.30%	0.20%	2%
% operating in community services	15.10%	12.70%	12.70%	0.00%	-2.40%
% operating in construction	13.60%	14.90%	13.90%	-1%	0.20%
% operating in fin. & business services	13.30%	13.00%	13.30%	0.30%	0%
% black-owned formal SMMEs	74.90%	74.70%	74.50%	-0.10%	-0.30%
% contribution of SMEs* to turnover of all enterprises	39.50%	37.10%	38.20%	1%	-1.30%

Source: (Small Enterprise Development Agency, 2019)

It can be seen in Table 2-2 that the number of SMMEs in both the formal and informal sector is growing, even though 70% of new SMMEs are still failing within two years of inception (Business Tech, 2018). Government support programs does not make much of a difference (Jere *et al.*, 2015:2-3). Reasons behind the high failure rate include:

- Struggling economy (Small Enterprise Development Agency, 2019)
- Limited access to funds (Small Enterprise Development Agency, 2016)
- High crime rates (Jere *et al.*, 2015:4)
- Poor infrastructure (Small Enterprise Development Agency, 2016)
- Uneducated workforce (Small Enterprise Development Agency, 2016)
- Large corporation domination (Thompson & Vanderford, 2016:1-2)

The government should improve and adapt supporting programmes to reduce the number of stumbling blocks faced by SMMEs. This will result in greater growth, which will contribute positively to the GDP and directly and indirectly create job opportunities.

2.5 PROFITABILITY

In his book, *The Personal MBA*, Josh Kaufman states that any successful business has five attributes, namely (2011:54):

1. Provides or creates value (value creation)
2. People want or need this value (customer demand)
3. People are willing to pay for this value (transaction)
4. The value satisfies the expectations and needs of the purchaser (value delivery)
5. Makes it worthwhile for the owners to continue operation through the revenue generated (profit)

All these factors are universal and essential for any person. Take away any one of them and you no longer have a business. The easiest way to determine whether a business has these attributes, is to measure its profitability. If a business does not create value, it will not be profitable (Kaufman, 2011:54). This is also the same for the other three factors.

There are numerous profitability margins and ratios to measure a business's profitability. These margins/ration are tools to translate financial data into information that managers and investors can use to understand the profitability of a business (Rist & Pizzica, 2014:1-2).

2.5.1 Profitability margins

The most used profitability margin is profit margin (Rist & Pizzica, 2014:46). It measures the amount of money kept for every sale. The formula for profit margin is:

Equation 1: Profit margin

$$Profit\ margin = \frac{Net\ income}{Sales}\%$$

Profit margin could be an indication of the maturity of a market. A lower margin could indicate that the market is more mature because more competitors have entered the market (Kaufman, 2011). A business strives to maintain a profit margin that ensures the highest profitability ratio (Strong, 2014).

2.5.2 Profitability ratios

There are several profitability ratios; the most common are (Rist & Pizzica, 2014:7):

1. Return on assets
2. Return on equity

3. Return on investment
4. Return on net assets
5. Return on sales

All of them measure different aspects of profitability. It is important to know beforehand what aspect one wants to measure before deciding on a ratio (Rist & Pizzica, 2014:7).

2.5.2.1 Return on equity

Return on equity (ROE) is described as the most important ration (Rist & Pizzica, 2014:46-136). It is the amount of net income generated from shareholder equity expressed as a percentage. The formula for ROE is (Rist & Pizzica, 2014:7):

Equation 2: Return on equity

$$ROE = \frac{Net\ income}{Equity}\%$$

The DuPont ratio breaks ROE into its three components to give a better picture of the business' performance:

Equation 3: Return on equity - DuPont ratio

$$ROE = \frac{Net\ income}{Sales} X \frac{Sales}{Total\ assets} X \frac{Total\ assets}{Equity}\%$$

2.5.3 Return on investment

Return on investment (ROI) measures the profitability of an investment and is used to determine an investment's efficiency. The formula for ROI is:

Equation 4: Return on investment

$$ROI = \frac{Gain\ from\ investment - cost\ of\ investment}{Cost\ of\ investment}\%$$

2.5.3.1 Return on net assets

Return on net assets (RONA) measures the financial performance of a company's assets. The formula for RONA is:

Equation 5: Return on net assets

$$RONA = \frac{Net\ income}{Fixed\ assets + working\ capital}\%$$

2.5.3.2 Return on sales

Return on sales (ROS) is a ratio to measure a business' operational efficiency. The formula for ROS is:

Equation 6: Return on net sales

$$ROS = \frac{EBIT}{Net\ sales}\%$$

Where EBIT is the earnings before interest and taxes.

The four ratios discussed measure the majority aspects of a business' profitability, namely:

- Profitability of owner's equity
- Profitability of assets
- Profitability of the investment
- The efficiency of operations

A higher ratio for Equation 1 to Equation 6 indicates better profitability (Rist & Pizzica, 2014:46-136).

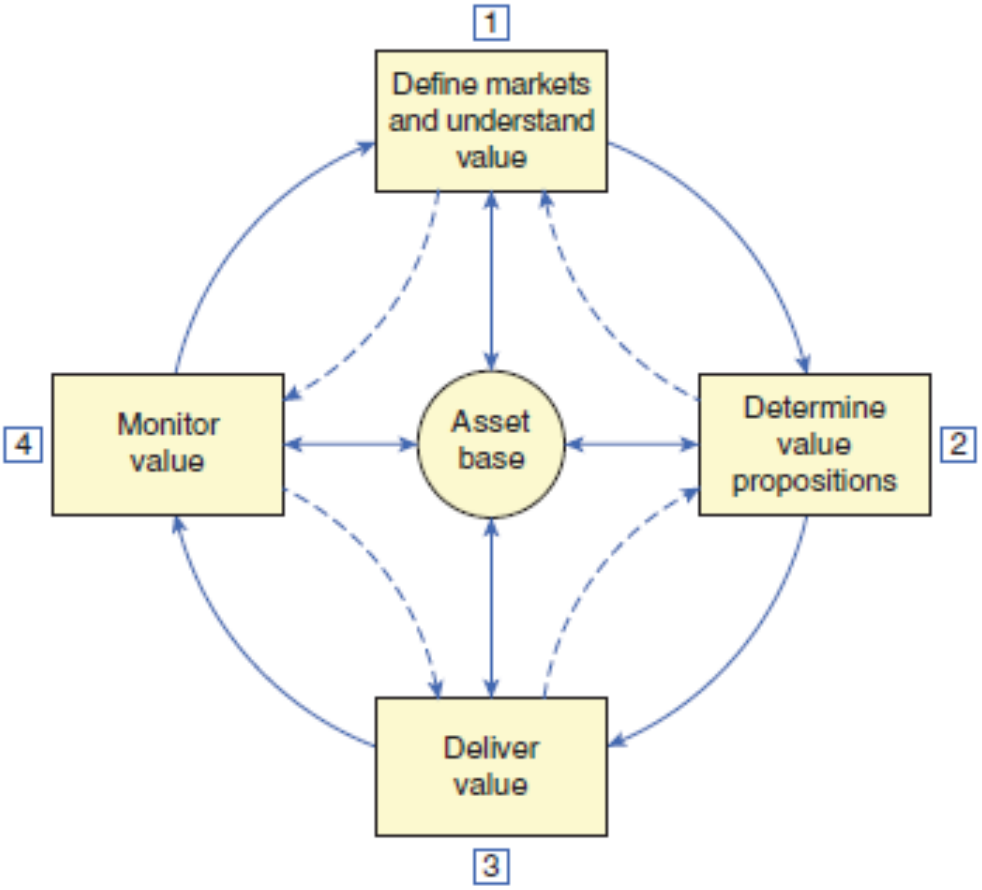
2.6 MARKET SEGMENTATION

As mentioned in section 2.5 for a business to be profitable, it needs to create value that people are willing to pay money for (Kaufman, 2011:54). To do this, a business needs to know what its customer wants and who they are. A business does this by using its asset base to (McDonald, 2012:2-11):

1. Define markets and understand the value
2. Determine value proposition
3. Deliver value
4. Monitor value

This process is referred to the marketing domain and is shown in Figure 2-4.

Figure 2-4: The marketing domain



Source: Market segmentation: How to do it and how to profit from it (McDonald, 2012:2-11)

The majority of businesses improve the accuracy of their market definition by dividing their customers or future customers into segments. This enables them to get a more accurate picture of the needs of the customers by determining the needs of all the segments (McDonald, 2012:2-11). This is called market segmentation and is defined formally by McDonald and Dunbar, in their book, *Market Segmentation* (2012:2-11), as a process of dividing/splitting current and potential customers in a market into segments with similar or comparable needs that can be satisfied by a distinct market proposition.

The smaller market segments, their clear definitions and needs allow a business to (Dolnicar *et al.*, 2018:1-42):

- Adjust marketing to target specific segments
- Rethink their value proposition to match their customers' needs
- Make strategic decisions to ensure its sustainability.

Market segmentation consist of three phases (Dolnicar *et al.*, 2018:1-42):

1. Segment the market and define each segment
2. Collect data and profile each market
3. Analyse each market

2.6.1 Market segmentation and definition

A business' broad customer definition is based on the nature of it. For example, a car manufacturer is in the business of manufacturing and selling cars and their customers are people who buy or wants to buy cars (Dolnicar *et al.*, 2018:1-42). Customers can then be divided into smaller segments using segmentation variables. These can include (McDonald, 2012:9-18):

- Demographics (sex, age, socio-economic)
- Geographic information
- Channels
- Psychographics

Segmentation can be based on one variable or a combination of variables. For example, a segment can be any person between the ages of 20 and 30 or any female between the ages of 20 and 30.

2.6.2 Data collection and market profiling

There are three possible data sources (Dolnicar *et al.*, 2018:39-52):

- Internal data (data collected over the years of doing business)
- External data (data obtained or procured from an external party)
- Data collected through questionnaires

This data is then analysed to create a profile for each of the defined segments (McDonald, 2012:9-18).

2.6.3 Market segment analysis

Market segmentation comes at a cost. Data collection and analysis all come with a price tag (McDonald, 2012:148-149). Consequently, a business needs to analyse its implementation of market segmentation to ensure that it remains beneficial. This is done by continuously evaluating success and monitoring change (Dolnicar *et al.*, 2018:255-267).

2.6.4 Market segmentation in alcohol industry

The broad definition of a customer in the alcohol industry is any person of the legal age who buys or plans to buy alcohol. Customers can be segmented using the usual variables such as demographics, geographic information, channels and psychographics. Merk defines one of these psychological attributes and states alcohol consumers are (2016:5):

- Deal seeking
- Price preference
- Hangover avoiding or
- Quality seeking

In the alcohol industry, there is variety of types available. This can be used to further segment the customers based on their alcohol beverage of choice and consumption.

2.7 CRITICAL ANALYSIS OF CRAFT SPIRIT PACKAGING

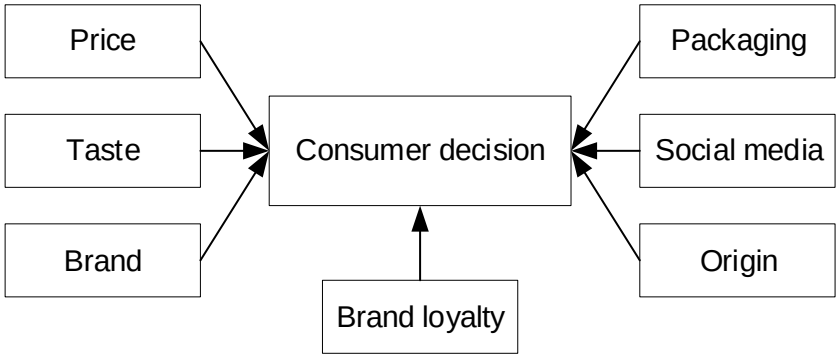
Limited by legislation, the distiller has the choice of what type of bottle is used and what additional elements are used in the packaging. There are a variety of bottles available in all shapes and sizes, from a simple wine bottle to fancy gin bottle. Additional elements come at a price and include front and back labels, cork cap, box or bag to place the bottle and in some cases even an ingredient that causes the spirit to change colour when shaken. All of these packaging decisions have an effect on the price. The fancier the bottle and the more additional elements the packaging has, the more expensive it and ultimately the product will be. Just like any product packaging, each packaging element influences consumer behaviour, but also increases the price of the product. In the craft alcohol industry, packaging is selected to contribute to the marketing strategy to persuade the consumer in their decision-making process (Kilani *et al.*, 2020: 78-93). This, along with the low-cost sensitivity in the craft alcohol market, has led to some distilleries over-packing their products (Lerro *et al.*, 2020:1-13). Even though the consumers have a low sensitivity to cost, there has to be a point where profit margin is at a maximum since both price and packaging influence consumer behaviour (Mueller *et al.*, 2001:1-12). There is limited research on the influence of packaging on consumer behaviour in the alcohol industry, but the available few support the general research done on a wider range of products. In the case of wine, studies show consumers are more likely to buy wine that includes an endorsement of an expert or an award on the label. Even more so in the craft industry where there are numerous entities and competitions that endorse and award the prestigious in a wide variety of available craft products. Consumers of these craft products are more likely to select an endorsed or awarded product from the wide variety of options (Vannevel *et al.*, 2018:3).

In the craft beer industry, the main purpose of packaging other than containment, is to create a unique and recognisable brand image that stand out on an overcrowded shelf. Brewers rely on the packaging to differentiate their product form the other available products. The consumers first filter the available products/beers into their preferred type and then decide on beer based on the emotional connection formed. This connection is a result of the brand image and information provided on the packaging such as ingredients, alcohol content, brewer's story and the flavour the consumer can expect. Packaging has to show the uniqueness of the product (Locicero, 2018).

The visual elements allow potential consumers to differentiate between the available products and help, along with the informational elements and green initiatives, form an emotional bond with them (Tinonetsana & Penceliah, 2017:2). All of this comes at a price. The quality of the packaging and the number of packaging elements used are directly related to the price of the product (Zekiri & Hasani, 2015:4-9). The price of packaging is the sum of the material and labour cost. This is supported by Mothersbaugh and Hawkins. They add to the argument stating the importance of unique packaging. Packaging that differs from consumer expectations tends to get noticed more (Mothersbaugh, 2015:520-543). They continue to mention the escalated price of quality packaging and the influence of it on consumer behaviour. This is no different in the alcohol industry. Consumers follow the same decision-making model and prefer the product with which they form the strongest emotional bond. Therefore, the packaging influences consumer behaviour directly through the look, feel and quality of it and indirectly with the effect it has on the price of the product. Consumers are less likely to buy the less expensive product if they perceive the quality to be the same as the more expensive product (Zekiri & Hasani, 2015:4-9). These factors need to be taken into consideration by management of craft distilleries when making packaging decisions to influence the consumer in buying their product without increasing the price (Mothersbaugh, 2015:520-543).

Based on the above information, the factors influencing the alcohol consumers decision making can be modelled as illustrated in Figure 2-5.

Figure 2-5: Alcohol consumer decision making model



To determine the influence of packaging on consumer behaviour and ultimately the profitability of a craft distillery, the importance of packaging in the above consumer making model need to confirmed and compared to the other factors, and if it is as important as the literature study suggest, the preference of the spirit packaging elements should be determined. Based on the above research and investigation of packaging used in the South African craft spirits industry, the following packaging constructs were identified:

- Bottle: look, shape and material
- Label: look, placement and information
- Secondary packaging
- Green initiatives

2.8 CONCLUSION

The literature review highlights the important role that SMMEs play in a failing South African economy. They provide the majority of jobs in the private sector and contribute hugely to the economy's GDP. One of the few industries that kept on showing growth over time is the alcohol industry. This industry is dominated by a few companies, but a modern trend shows a move from these popular labels to locally produced unique products. These craft alcohol manufacturers are classified as an SMME and face similar challenges in a highly regulated environment. One of these challenges is the high manufacturing cost.

One of the aspects identified to have an influence in both manufacturing cost and consumer behaviour is the packaging. Ideally, these distillers would want to keep packaging cost as low as possible while still influencing positive consumer behaviour.

In the next chapter, the above literature study was used to develop questionnaires to collect data from the consumer to determine their selection criteria and packaging preference and from distilleries to determine the packaging used by distilleries and their selection criteria when selecting packaging. This data was analysed and compared to identify differences in the

preference form the consumer and packaging used to allow the formulation of recommendation based on these differences and their impact on the profitability of distilleries.

CHAPTER 3: EMPIRICAL STUDY

3.1 INTRODUCTION

This chapter provides details on the empirical study performed within the craft spirit industry in South Africa to determine the influence of packaging on profitability. This was the primary objective of the study. The secondary objectives were to determine the cost sensitivity of both the consumer and distilleries, consumer packaging preference and the packaging used by the distilleries.

Two questionnaires were developed based on the findings in Chapter 2. The one questionnaire collected data from the consumer on the criteria used when selecting craft spirits to determine whether packaging was so important as the literature study suggested and what packaging do consumers prefer. The second questionnaire collected data from craft distilleries on the selection criteria they use when selecting to determine whether the marketing aspect of packaging is so important as what the literature suggested and to test if there is a correlation between the packaging used, consumer preference and distillery performance. The procedure and scope of this quantitative research is detailed in this chapter with a clear outline of the sampling group, sampling method and test instruments.

Frequency analysis was performed on both data sets to determine whether the data collected from the sampling groups were representative of the two populations. The Cronbach Alpha Coefficient was used to ensure the reliability of the data. The Cronbach Alpha Coefficient was calculated on the homogenous constructs and the assumption made that this reliability results were also applicable to the other heterogeneous constructs.

Descriptive statistics (median, correlations and linear regression) were used to determine the selection criteria for both the consumer and distillery and the packaging preference. The results of the analysis on each of the data sets are discussed and linked to the cost of packaging at the end of each of the analysis. The comparison of the packaging used and consumer preference are discussed in the conclusion of the distillery data analysis.

3.2 SCOPE AND PROCEDURE

3.2.1 Sample groups

This study was limited to only South Africa. The two parties involved in any craft spirit transaction are the end-users (buyers) and the craft distillery (seller). The distillery wants to sell its product at

the highest price possible while maintaining the lowest production cost to maximise its profitability. This can be done through the efficient use of consumer preferred packaging for example:

- Remove packaging elements with no influence on consumer behaviour
- Add packaging elements with influence on consumer behaviour

Data was sampled from the following populations to determine the relationship between packaging and profitability:

- Consumers
- Distilleries

3.2.1.1 Consumers

There are numerous methods, including packaging, which distilleries use to influence the demand for their product. Since this study aimed to determine the influence of packaging, data was collected to determine the factors influencing consumer decision-making and preferences pertaining to packaging only. Therefore, it is noteworthy that other decision-making criteria were not examined because it falls outside the scope of this study.

The consumer population consisted of any person over the age of 18 living in South Africa, who has bought or is planning to buy craft spirits.

The sample of the population was not limited to a specific people (gender, geographic area, or age) within the greater craft spirit consumer group. The whole sample population was surveyed and clustered to compare packaging preferences across the groups. It was also not limited to minimum of craft spirits procured within a time limit, but open to anyone who has bought or is planning to buy craft spirits in the future.

The aim was to collect data from at least 250 consumers to ensure accuracy due to the heterogeneity of this population. A convenient snowball sampling was used to reach as many consumers as possible. Personal contacts, social media, online groups and distillery client information were used to reach as many consumers as possible to complete and distribute the survey instrument.

3.2.1.2 Distilleries

The craft distilleries are the second sample population in this study and also needed to be surveyed to determine their packaging cost (material and labour), the number of units produced/sold and their preferred target market.

The distillery sample population included any distillery in South Africa classified as “craft” according to South African Craft Distilling Institute’s definition (South African Craft Distillers Institute, 2019):

- Legally registered micro-manufacturing liquor producer
- Produces less than 100 000l of pure alcohol
- Does not have automated production processes
- Is managed and operated by a craft distiller with more than 25% ownership
- Uses natural materials to produce more than 50% of the alcohol

The sample drawn for this study was limited to only include distilleries selling at least 75% of their products locally, and also distil one or more of the following craft spirits:

- Gin
- Vodka
- Rum
- Whiskey
- Brandy

A combination of cluster and random sampling was used to reach distilleries nationwide. The aim was to collect data from two distilleries in each of the nine South African provinces to ensure all the regions were represented. All the distilleries whose information is available online were identified and clustered into the nine provinces. Then, four distilleries were selected from each province to collect data from. Therefore, a target population of 36 distilleries.

3.2.2 Questionnaires

A quantitative research design was used to determine the correlation between the packaging of the produced craft spirit and profitability of the distillery.

The quantitative design was best suited because (Whitley & Kite, 2012:36):

- It promotes objectivity since the researcher maintains an emotional and psychological distance
- Allows for respondents to be classified through a series of questions with a list with fixed options for answers
- Data gathered is measurable and can be statistically analysed.

Two separate questionnaires were used to collect data from the target populations, namely the consumers and distilleries. The consumer questionnaire tested the selection criteria and influence that packaging has on the consumer. The distillery questionnaire was used to determine whether the correlation between the packaging of distilleries and their sales supports the data collected from the consumers. Both questionnaires were anonymous and had only close-ended questions to collect ordinal, nominal and interval variables, which allowed the target populations to complete it quickly and supported the analysis of the data since closed questions are (Dawson, 2009:90):

- Easy to administrate
- Quick to answer
- Fixed
- Easy to record and analyse

A 5-point Likert scale was used to gather the data for the questions where respondents could perceive ambiguous terms such as often/moderate/little differently.

3.2.2.1 Consumer

The questionnaire for the consumer was self-developed based on the literature review in Chapter 2 to collect data on the selection criteria when choosing craft spirits, packaging preference and the influence of green initiatives on their decision-making to be compared over different groups within the respondents and to the alcohol consumption of the respondents. The questionnaire consisted of four sections, namely: Section 1 - classification; section 2 - alcohol consumption; section 3 - selection criteria; and section 4 - packaging preference.

Section 1 - Classification/cluster

- Demographics:
    - D1: Gender
    - D2: Home language
    - D3|: Age
    - D4: Monthly income
- Geographical information:
    - G1: Province
    - G2: Settlement type

Section 2 - Alcohol consumption:

- AC1: All alcohol consumption per week
- AC2: Spirit consumption per week

- AC3: Beer/cider consumption per week
- AC4: Alcohol preference
- AC5: Monetary value spent on alcohol
- AC6: Craft spirit consumption per week
- AC7: Monetary value spent on craft spirits
- AC8: Preferred type of craft spirits

A five-point Likert scale was used for the questions in sections 3 and 4, with: 1 - strongly disagree; 2 - disagree; 3 - neutral; 4 - agree and 5 - strongly agree.

Section 3 - Selection criteria:

- SC1: Price
- SC2: Taste
- SC3: Name/brand
- SC4: Packaging
- SC5: Social media
- SC6: Place of origin
- SC7: Brand loyalty

Section 4 - Packaging preference:

Table 3-1: Consumer questionnaire section 4 - packaging preference

	Construct	Packaging factor
B1	Bottle	Glass bottle
B2		Unique bottle
B3		Tall bottle
B4		750 ml Bottle
B5		Cork
B6		Mushroom-shaped cork
L1	Label	Matt label
L2		Front label
L3		Back label
L4		Cap sealing label
L5		Background story
L6		Funny/unique names
L7		Ingredient information
L8		Language
C1	Content	Coloured content
C2		Transparent content
C3		Content colour change
SP1	Secondary packaging	Cardboard box
SP2		Wooden box
SP3		Secondary packaging
SP4		Value pack
SP5		Gift pack
GI1	Green initiatives	Recycled water
GI2		Bottle recycle initiative
GI3		Recycled glass bottle
GI4		Recycled paper label
GI5		Organic ingredients

3.2.2.2 Distilleries

The questionnaire for the distilleries was also developed from the literature review in Chapter 2. The purpose of the questionnaire was:

- to determine whether the correlation between the sales of the distillery and the packaging they use supports the data collected from the consumer.
- to determine the correlation between sales methods and sales as well as distribution methods and sales

- to determine the packaging selection criteria of distilleries
- to compare sales over different general clusters and geographical areas within South Africa.

The questionnaire consisted four sections to allow the relevant data to be collected and to support the above-mentioned analysis, namely: section 1 - classification; section 2 - production, sales and distribution; section 3 - packaging selection criteria; and section 4 - packaging used.

Section 1 - Classification/cluster

- General:
    - GL1: Distillery age
    - GL2: Number of owners
    - GL 3: Number of employees
- Geographical information:
    - G1: Province
    - G2: Settlement type

Section 2 - Production, sales and distribution

- Production
    - P1: Type of spirits produced
    - P2: Different flavours available
    - P3: Weekly production
    - P4: Maximum production
    - P5: Batch size
- Sales and distribution
    - SD1: Sales
    - SD2: Target market
    - SD3: Sale methods
    - SD4: Distribution methods

A five-point Likert scale was used for the questions in section 3 with: 1 - strongly disagree; 2 - disagree; 3 - neutral; 4 - agree and 5 - strongly agree.

Section 3 - Packaging selection criteria

- PS1: Price

- PS2: Ease of use
- PS3: Marketing
- PS4: Effectiveness
- PS5: Labour requirement
- PS6: Distribution

Section 4 - Packaging used:

Table 3-2: Distillery questionnaire section 4 - packaging used

	Construct	Packaging factor
B1	Bottle	Material
B2		Shape
B3		Length
B4		Volume
B5		Cap material
B6		Cap shape
L1	Label	Material
L2		Back label
L3		Front label
L4		Cap sealing label
L5		Distillery background
L6		Ingredient information
L7		Unique names
L8		Language used
C1	Contents	Colour
C2		Special effects e.g. changing colour when mixed
SP1	Extra packaging	Cardboard box
SP2		Wooden box
SP3		Value pack
SP4		Gift pack
SP5		Sample pack
LC1	Labour cost	Bottling machine
LC2		Labelling machine
LC3		Labour to bottle
LC4		Labour to label
GI1	Green initiatives	Recycle initiatives
GI2		Initiative to recycle bottles sold
GI3		Organic ingredients

3.2.3 Data collection

Both the consumer and distillery questionnaires were imported to Google Forms to be distributed. The informed consent and background of the research were included as section 1 of both of the questionnaires. Respondents acknowledged this information and gave their consent to participate by means of a check box at the bottom of the first section. Anonymity was ensured for both questionnaires by not requiring respondents to give up any personal or contact details. The settings on Google Forms were also set to not track the IP addresses of the devices used by the respondents to complete the questionnaire. As mentioned earlier, a convenient sampling method was followed to sample the distilleries. This was the first step as the distilleries also formed part of the initial outreach for the snowball sampling method followed for the consumer population. Four distilleries were identified using public information on the internet from each of the nine provinces. The distillery questionnaire was then sent out via email to the 36 distilleries identified. Included in the email were the contact details to request the results of the research as well as a link to the consumer questionnaire. There is limited research available on consumer behaviour in the craft alcohol industry; this fact was used in an attempt to persuade the distilleries to distribute the consumer questionnaire as the results of this research would also be beneficial to them.

As for the consumer questionnaire, the link to the questionnaire was, as mentioned, sent to the distilleries to distribute. It was also sent out via email and WhatsApp to as many people as possible using social, work-related and family networks. In the message sent out, participants were also asked to distribute it to their networks. Initially, only Afrikaans and English responses were obtained using these networks. An explanation and the link to the questionnaire was posted to numerous Facebook craft distillery and marketing groups across the country to reach more demographic groups. This strategy was successful as an additional 100 respondents were obtained predominantly from indigenous groups.

3.3 CONSUMER DATA ANALYSIS

A total of 323 consumers completed the questionnaire. They were equally spread in terms of gender with 49.85% being male and 50.15% female. Therefore, the data is representative of both genders. The gender of the respondents is summarised in Table 3-3.

Table 3-3: Consumer response - Demographic D1: Gender

D1	Gender	Frequency	Percent
1	Male	161	49.85%
1	Female	162	50.15%
	Total	**323**	**100.00%**

The questionnaire included all 11 of the official South African languages as an option for the respondents to choose from. The respondents were predominantly Afrikaans speaking with a total of 46.11% of the 323 respondents speaking the language. This is a result of the predominantly Afrikaans-speaking social networks used to sample the population. English-speaking consumers were second most from the original 11 languages, with 21.36%. The other nine languages varied between 0.5% and 5%. To simplify the analysis, these nine languages were grouped together as an indigenous group and cumulatively contributed to 36.53% of the respondents. Based on this, it can be concluded that the data collected is representative of the Afrikaans, English and indigenous groups as summarised in Table 3-4.

Table 3-4: Consumer response - Demographic D2: Language

D2	Language	Frequency	Percent
1	Afrikaans	136	42.11%
2	English	69	21.36%
3	Indigenous	118	36.53%
	Total	**323**	**100.00%**

Table 3-5 is a summary of the age of the respondents. The majority of them were between the ages of 18 and 48 years with 74% of the respondents falling within this age group. Half of this group is aged between 18 and 28 years. This again can be contributed to the sampling strategy as younger people tend to use social media more than the older generation. The other 36% were above 49 years. Although the age distribution is skew to the left (younger), it still represents all the age groups allowed to consume alcohol. The smallest group was the above 65 years old with 5.26%.

Table 3-5: Consumer response - Demographic D3: Age

D3	Age	Frequency	Percent
1	18 to 28	121	37.46%
2	29 to 38	86	26.63%
3	39 to 48	34	10.53%
4	49 to 58	44	13.62%
5	59 to 65	21	6.50%
6	>65	17	5.26%
	Total	**323**	**100.00%**

The interval variables were coded as numeric variables in SPSS to assist with the analysis. Each numeric value for a specific variable was then assigned the according interval value. The numeric value and corresponding interval value for each of the variables are indicated on the questionnaires included in Annexures A and B.

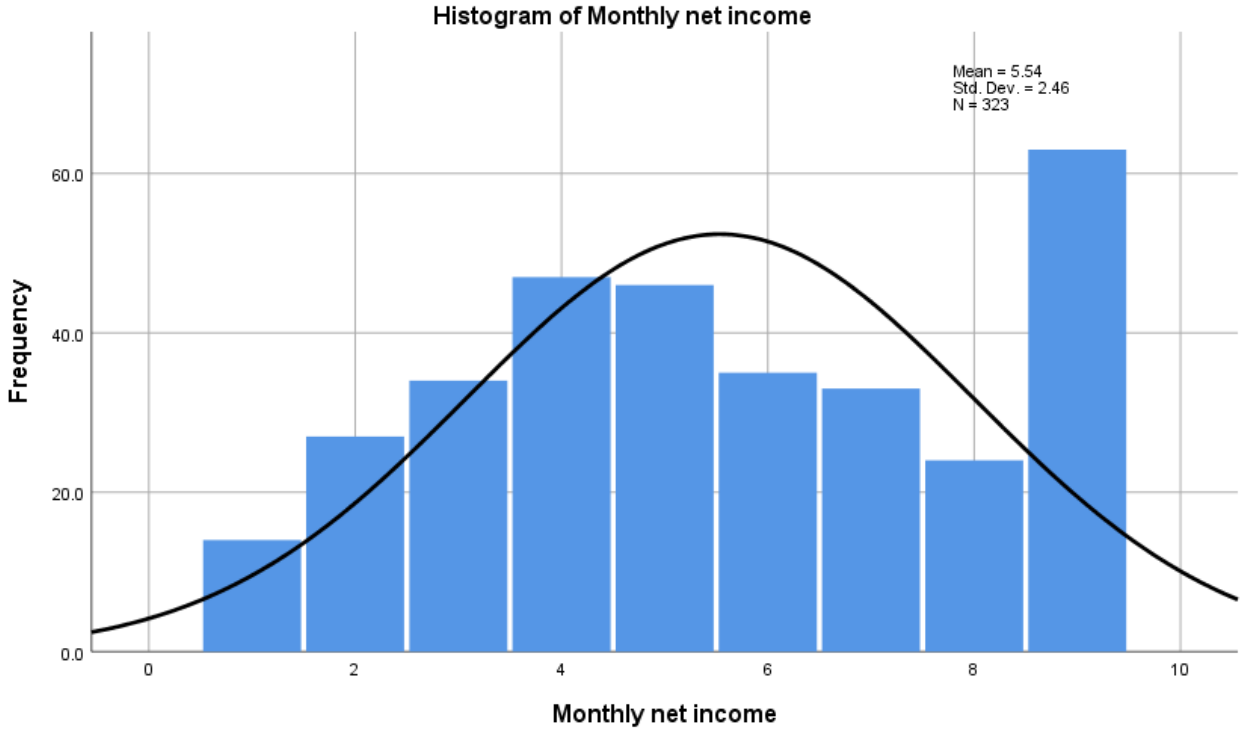
The majority of the consumer respondents, 49%, earned a monthly income between R15 000 and R34 999. Only 13% earned an income of less the R9 999. The frequency for the different income intervals is summarised in Table 3-6.

Table 3-6: Consumer response - Demographic D4: Monthly net income

D4	Monthly net income	Frequency	Percent
1	< R5000	14	4.33%
2	R5 000 to R9 999	27	8.36%
3	R10 000 to R14 999	34	10.53%
4	R15 000 to R19 999	47	14.55%
5	R20 000 to R24 999	46	14.24%
6	R25 000 to R29 999	35	10.84%
7	R30 000 to R34 999	33	10.22%
8	R35 000 to R39 999	24	7.43%
9	> R39 999	63	19.50%
	Total	**323**	**100.00%**

From Figure 3-1 it can be seen that the mean of the income variable was 5.54, which falls within the R20 000 to R24 999 group. The distribution is a bit skew to the right. The skewness is caused by the large number of respondents earning more than R39 999. The satisfactory response rate is a result of the extensive data collection methods. Many of the respondents were reached on craft distilling and consumer groups on Facebook, which means these respondents are actively consuming and willing to pay for craft products that are more expensive than traditional products. This conclusion was drawn based on the high increase in responses after the electronic link to the questionnaire was posted on these consumer groups. These consumers usually earn enough to be able to consume these products.

Figure 3-1: Consumer response -- Histogram of monthly income



In terms of demographics, the consumer respondents were representative of all gender, language and age groups and income. Therefore, the analysis of the data over all the different groups can be seen as representative of the consumer population.

3.3.1 Frequency statistics

Since the research aims to investigate the craft spirit market in South Africa, it was also important to collect data from all of the provinces and over a variety of settlement types to ensure adequate representation. Of the 323 respondents, most were from Gauteng at 38.7% and the fewest from the Northern Cape at 3.41%. The number of Gauteng respondents can be attributed to the province being the most populated in South Africa and the social networks used to sample accessed consumers predominately within Gauteng. From the nine provinces, only Mpumalanga and the Northern Cape had fewer than 20 respondents. Overall, all nine of the provinces are represented by the data. The responses per province are summarised in Table 3-7.

Table 3-7: Consumer response - Geographic G1: Province

G1	Province	Frequency	Percent
1	Gauteng	125	38.70%
2	Free State	41	12.69%
3	Limpopo	24	7.43%
4	Western Cape	34	10.53%
5	Northern Cape	11	3.41%

6	Eastern Cape	20	6.19%
7	KwaZulu-Natal	24	7.43%
8	Mpumalanga	16	4.95%
9	North West	28	8.67%
	Total	**323**	**100.00%**

As can be seen from Table 3-8, 53% of respondents live in either the city or in a suburb. This is followed by 21.67% of respondents living in towns. The rest of the respondents lived in more remote locations, such as farms and informal settlements. This was expected because the majority of South Africans live in cities, suburbs and towns, they also have better access to connectivity to use social media where most of the questionnaires were distributed. People from these three settlement types are also more likely to consume craft spirits because they have better access to these products and tend to earn more than those in rural and remote areas. It can be concluded that the data is representative of respondents from all the settlement types in South Africa.

Table 3-8: Consumer response - Geographic G2: Settlement type

G2	Settlement type	Frequency	Percent
1	City	88	27.24%
2	Suburb	85	26.32%
3	Town	70	21.67%
4	Village	17	5.26%
5	Informal settlement	22	6.81%
6	Farm	27	8.36%
7	Other	14	4.33%
	Total	**323**	**100.00%**

Table 3-9 shows the total alcohol consumption per week for the respondents. With one unit of alcohol equal to:

- 218ml beer
- 76ml wine
- 25ml spirits

Only 15 of the 323 respondents indicated that they do not consume any alcohol weekly. The rest all consume at least one unit of alcohol per week, with 45% indicating they consume between one and six units of alcohol per week. From Table 3-9, it can be seen that the data represents consumers from moderate to excessive consumption. The data of those who do not consume alcohol was not excluded in the analysis. This group is seen as potential customers for either themselves or as a gift and their packaging preference of importance to distilleries.

Table 3-9: Consumer response - Alcohol Consumption AC1: All alcohol

AC1	All alcohol consumption (units per week)	Frequency	Percent
1	0	15	4.64%
2	1 to 3	84	26.01%
3	4 to 6	62	19.20%
4	7 to 9	37	11.46%
5	10 to 12	37	11.46%
6	13 to 15	23	7.12%
7	16 to 18	17	5.26%
8	19 to 21	14	4.33%
9	21 to 24	14	4.33%
10	> 24	20	6.19%
	Total	**323**	**100.00%**

Table 3-10, Table 3-11 and Table 3-12 are summaries of units of spirits, beer/cider and craft spirits consumed per week. 43.34% indicated they do not consume any beer per week. This can be attributed to the sampling method used. The distilleries used to distribute the questionnaire only produce craft spirits, and their clients mostly consume spirits. Almost 90% consume more than one unit of spirits per week, which is more than the 67% that consume more than one unit of craft spirits per week. Therefore, almost 23% of the respondents consume spirits, but not craft spirits. This is an indication that not all consumers are willing to pay more for craft products.

The difference between the total alcohol consumption and the sum of spirit, beer/cider and craft spirit consumption, can be attributed to wine consumption (the wine consumption statistics were not collected from the respondents in the questionnaire).

Table 3-10: Consumer response - Alcohol Consumption AC2: Spirits

AC2	Spirit consumption (units per week)	Frequency	Percent
1	0	36	11.15%
2	1 to 3	167	51.70%
3	4 to 6	45	13.93%
4	7 to 9	31	9.60%
5	10 to 12	17	5.26%
6	13 to 15	8	2.48%
7	16 to 18	8	2.48%
8	19 to 21	2	0.62%
9	21 to 24	7	2.17%
10	> 24	2	0.62%
	Total	**323**	**100.00%**

Table 3-11: Consumer response - Alcohol Consumption AC3: Beer/cider

AC3	Beer/cider consumption (units per week)	Frequency	Percent
1	0	140	43.34%
2	1 to 3	99	30.65%
3	4 to 6	43	13.31%
4	7 to 9	19	5.88%
5	10 to 12	16	4.95%
6	13 to 15	2	0.62%
7	16 to 18	2	0.62%
8	19 to 21	1	0.31%
9	21 to 24	0	0.00%
10	> 24	1	0.31%
	Total	**323**	**100.00%**

A third of the respondents do not consume any craft spirits per week. This data was not removed for the analysis as this group is seen as potential customers. The majority consume between one and nine units of craft spirits per week. If the 188 of the consumers who fall in this group consume three units of craft spirits per week, they will need to procure a new bottle of 750ml craft spirits every six weeks. Calculated as follows:

- 25ml spirits is equal to one unit of alcohol
- One bottle of 750ml spirits is equal to 30 units of alcohol

Thus:

$$Spirits\ bottle\ requirement\ in\ weeks = \frac{Alcohol\ units\ in\ bottle}{Units\ consumption\ per\ week} = \frac{30}{5} = 6\ weeks$$

Converted to requirement per year, this is almost nine bottles per year. The consumption of craft spirits is summarised in Table 3-12.

Table 3-12: Consumer response - Alcohol Consumption AC6: Craft spirits

AC6	Craft spirits consumption (units per week)	Frequency	Percent
1	0	107	33.13%
2	1 to 3	144	44.58%
3	4 to 6	32	9.91%
4	7 to 9	22	6.81%
5	10 to 12	10	3.10%
6	13 to 15	4	1.24%

7	16 to 18	0	0.00%
8	19 to 21	0	0.00%
9	21 to 24	3	0.93%
10	> 24	1	0.31%
	Total	**323**	**100.00%**

In terms of monetary value spent on alcohol, the data corresponds with the consumption data. As can be seen from Table 3-9 and Table 3-13, the distribution of total alcohol consumption is similar to the distribution of monetary value spent on alcohol. Of the respondents, 14 indicated they do not consume any alcohol, but only 11 indicated they spent no money on alcohol. Although in theory this should be the same, the difference of three can be attributed to those who have spent money on alcohol not for own consumption, but as a gift or for someone else. This highlights the importance of taking into consideration of the packaging preference of those who do not consume alcohol, because it is likely they will somewhere in time procure alcohol for someone else. This correlation is an indication of respondents accurately completing the questionnaires and not simply selecting randomly from the options provided. Table 3-13 is a summary of the total money spent on alcohol by the respondents.

Table 3-13: Consumer response - Alcohol Consumption AC5: Money spent on alcohol

AC5	Monetary value spent on alcohol per month	Frequency	Percent
1	R0	11	3.41%
2	R1 to R499	102	31.58%
3	R500 to R999	81	25.08%
4	R1000 to R1499	33	10.22%
5	R1500 to R1999	24	7.43%
6	R2000 to R2499	22	6.81%
7	R2500 to R2999	14	4.33%
8	R3000 to R3499	10	3.10%
9	R3500 to R3999	11	3.41%
10	R4000 to R4499	14	4.33%
11	R4500 to R4999	1	0.31%
	Total	**323**	**100.00%**

The correlation between craft spirit consumption in Table 3-12 and monetary value spent on craft spirts in Table 3-14 corresponds with the aforementioned correlation between total consumption and total monetary value spent on alcohol. Almost half of the respondents spend between R1 and R499 on craft spirits per month. This supports the calculation made that the average respondent requires a new bottle of craft spirits every six weeks as a bottle of craft spirits ranges from R300 to R600 per bottle. Table 3-14 is a summary of the monetary value spent on craft spirits by the respondents.

Table 3-14: Consumer response - Alcohol Consumption AC7: Money spent of craft spirits

AC7	Monetary value spent on craft spirits	Frequency	Percent
1	R0	105	32.51%
2	R1 to R499	146	45.20%
3	R500 to R999	47	14.55%
4	R1000 to R1499	16	4.95%
5	R1500 to R1999	4	1.24%
6	R2000 to R2499	3	0.93%
7	R3500 to R3999	2	0.62%
	Total	**323**	**100.00%**

As for most consumables, consumers tend to prefer certain products over others. This is no different for alcohol consumers. The data collected indicated that 51.24% prefer spirits as their beverage of choice. This is followed by wine at 21.74% and beer at 16.77%. Apart from the other option, cider is the least favourable choice. The alcohol preference is shown in Table 3-15.

Table 3-15: Consumer response - Alcohol Consumption AC4: Preference

AC4	Alcohol preference	Frequency	Percent
1	Spirits (whiskey, brandy, gin, vodka, etc.)	165	51.24%
2	Beer	54	16.77%
3	Cider	23	7.14%
4	Wine	70	21.74%
5	Other	10	3.11%
	Total	**322**	**100.00%**

In terms of craft spirits, 52.53% prefer craft gin as their craft spirit of choice. This is followed by craft whiskey and vodka. Only 6% preferred rum. This corresponds to the craft spirits market. There is a larger variety of craft gins available than rum, vodka and whiskey Table 3-16.

Table 3-16: Consumer response - Alcohol Consumption AC8: Preferred craft spirits

AC8	Preferred type of craft spirit	Frequency	Percent
1	Gin	166	52.53%
2	Rum	19	6.01%
3	Vodka	32	10.13%
4	Other	99	31.33%
	Total	**316**	**100.00%**

From the above frequency analysis, it can be concluded that the data is representative of all nine of the provinces and settlement types in South Africa and is inclusive of a variety of alcohol consumers in terms of consumption, preference and monetary value spent on alcohol. The data

is sufficient to perform analysis on the selection criteria and packaging preference of alcohol and possible alcohol consumers over various cluster variables.

3.3.2 Reliability and validity

Before the data obtained from the two questionnaires can be analysed and conclusions drawn, it must first be tested if the questionnaires are reliable and valid.

The results of an analysis done on date collected from a select population to measure a certain construct are irrelevant if the said data is not consistent and reliable (Cronbach, 1951:297-298). It is important to determine the accuracy of data to determine whether the results are reliable and dependable. Reliability measures the ability of a test instrument to measure a construct consistently (Tavakol & Dennick, 2011:53-55). It answers the question of whether a test instrument will gather the same data if the instrument is completed by the same respondents for a second time.

There are various methods to test the reliability of a questionnaire. All of the methods available test the internal consistency of the data. One method is to split the set into two, calculate the score for each set, and compare. If the values are the same, the test is reliable. The problem with this is that sets can be split in two in more ways than one (Field, 2013:1044-1060). The other option is to calculate the correlation between all the tests within the construct, but this only shows the correlation between two tests at a time and not all at once. The Cronbach alpha coefficient addresses these problems as it is the average of the correlation among all the items (Pallant, 2020). The Cronbach alpha coefficient is used in this study to test reliability.

Validity refers to the extent to which a test measures what it was intended to measure. Validity and reliability are associated. An instrument cannot be valid if it is not reliable, and therefore the importance of reliability. However, when an instrument is valid, it does not necessarily mean it is reliable. It is important to test both (Tavakol & Dennick, 2011:53-55). Validity determines the extent in which different tests within a construct measure the construct and whether the tests cover all aspect of the construct (Pallant, 2020:23).

3.3.2.1 Cronbach's alpha

The Cronbach alpha reliability coefficient is one of the methods used to test the consistency of the data collected by a test instrument. It was developed by Lee Cronbach in 1951 in an attempt to evaluate the consistency with which different components measure a specific construct (1951:300). It measures how related the components are as a group by splitting the data into two in all the possible ways and then calculating the correlation coefficient for all the split sets of data

(Field, 2013:1044-1600). The average of these correlations is then the Cronbach alpha coefficient. It is most suited for questionnaires that make use of a Likert scale to test a construct. The equation for the coefficient is as follows, in Equation 7:

Equation 7: Cronbach' s alpha reliability coefficient (Cronbach, 1951:298-334).

$$\alpha = \frac{n}{n-1}(1 - \frac{\sum_1^n STDEV_i^2}{STDEV_T^2})$$

Where:

$\alpha = Cronbach's\ alpha\ reliability\ coefficient$

$n = Number\ of\ subsets\ in\ the\ data\ to\ be\ analised$

$STDEV_i = Standard\ deviation\ of\ subset\ i$

$STDEV_T = Total\ standard\ deviation\ of\ data\ analised$

The Cronbach alpha coefficient expresses reliability of which subsets measure a specific contract as a number between 0 and 1. The value shows the amount of error in which the subsets measure the construct. If the coefficient is 0.7, there is a 0.51 error variance (1 - 0.7 x 0.7 = 0.51) (Tavakol & Dennick, 2011:53-55). The length of the test influences the value of the coefficient. The more tests there are in the construct, the higher the coefficient will be, and *vice versa*. Generally, a value between 0.7 and 0.8 is considered reliable, but this differs between different constructs. For cognitive tests, a value of 0.8 is generally accepted, a value of 0.7 for intelligent test and even below 0.7 for more diverse constructs such as psychological tests (Field, 2013:1044-1060). Preference can be seen as a psychological test as it is the psychological process of making a judgement or decision. Therefore, coefficient values below 0.7 are an acceptable indication that the construct tests reliability (Warren *et al.*, 2011:1-13).

The only construct to which the Cronbach alpha coefficient can be applied is the green initiatives. Although the other construct measures the same aspect of packaging, the different components in the construct measure preference for the different aspects of the said construct. For example, the label construct tests the preference of three different labels (front, back and sealing), language and information. All of these are heterogeneous and do not correlate. They just fall under the same construct.

As for the green initiative construct, the different components all measure the respondent's attitude towards the environmental impact of the craft distillery and the packaging used for the produced craft spirits.

Table 3-17: Cronbach's alpha reliability - Consumer: Green initiatives

Construct	Number of items	Cronbach's alpha
Green initiatives	5	0.739

3.3.3 Descriptive statistics

The mean or arithmetic mean is a measure of central tendency most often used. It is the balance point of a set of data and represents the average response from respondents for a test or variable of a test instrument. The reason for its popularity is the equal emphasis placed on each value of a specific variable in a dataset (David, 2017:144 - 145). It is calculated by adding all the values and dividing it by the number of values:

Equation 8: Arithmetic mean

$$\overline{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

The standard deviation of a variable in a dataset is the standard error of differences of the variable data It measures the extent of variation from the mean and is therefore an indication of how far or close data is spread around the mean. The higher the standard deviation, the further the data is spread around the mean, and *vice versa*.

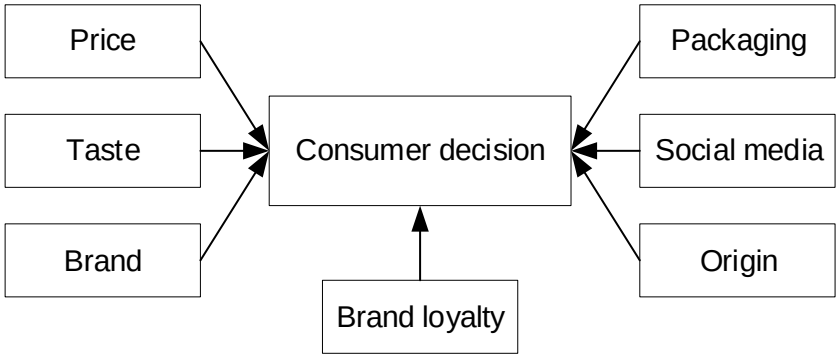
The mean and standard deviation were used to determine firstly the selection criteria and secondly the packaging preference in terms of all the different elements of the consumer population. This was then compared over a variety of users based on the clustering variables to investigate the differences in selection criteria and packaging preference of the different groups.

3.3.3.1 Selection criteria

The first analysis was performed on the selection criteria section to determine whether the importance of packaging as a marketing method in the selection process of the consumer corresponds with the literature review in Chapter 2.

From the literature review, seven elements of an alcoholic product were identified that have an influence on the consumers' decision-making process. This is referred to as the selection criteria and is illustrated in Figure 3-2:

Figure 3-2: Consumer selection criteria model



Section 3 of the consumer questionnaire tested the emphasis placed by the respondent on these different criteria. This was tested using a five-point Likert scale with 1 being strongly disagreeing and 5 strongly agreeing. The mean and standard deviation of the seven selection criteria for craft spirits are summarised in Table 3-18. Taking into consideration all of the data, respondents indicated taste as the most important with a mean of 3.75 and standard deviation of 0.975. The values were closely grouped around the mean. This was followed by brand loyalty with a mean of 3.13 and closely thereafter packaging with a mean of 3.10. Social media and the origin of a product are the least import criteria with means of 2.34 and 2.37, respectively.

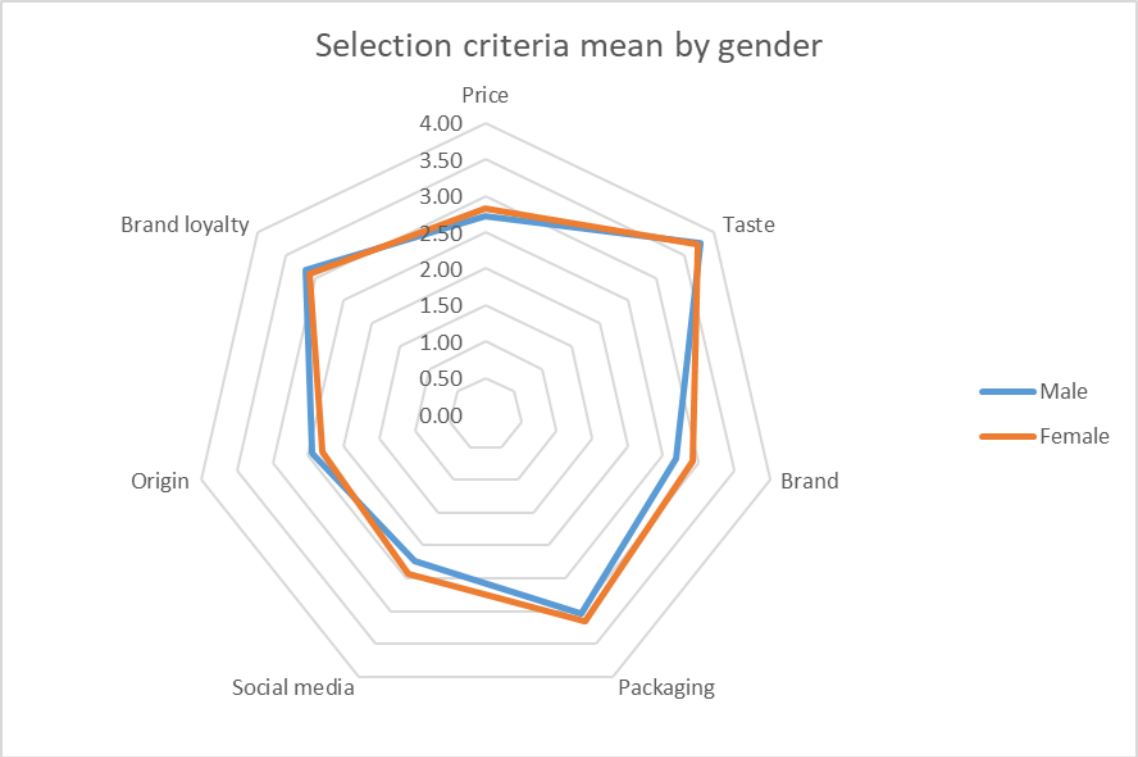
The standard deviation for packaging was 1.2, which is an indication of variety in the importance of packaging in the selection process of different individuals. The same is the case for all of the other criteria, except for taste. These differences between individuals and the scale thereof were further investigated by comparing the means of the different criteria over different groups.

Table 3-18: Consumer - Mean and standard deviation: Selection criteria

	Criteria	N	Mean	Standard deviation
SC1	Price	323	2.77	1.209
SC2	Taste	322	3.75	0.975
SC3	Brand	322	2.80	1.300
SC4	Packaging	322	3.10	1.210
SC5	Social media	322	2.34	1.203
SC6	Origin	321	2.37	1.233
SC7	Brand loyalty	322	3.13	1.178

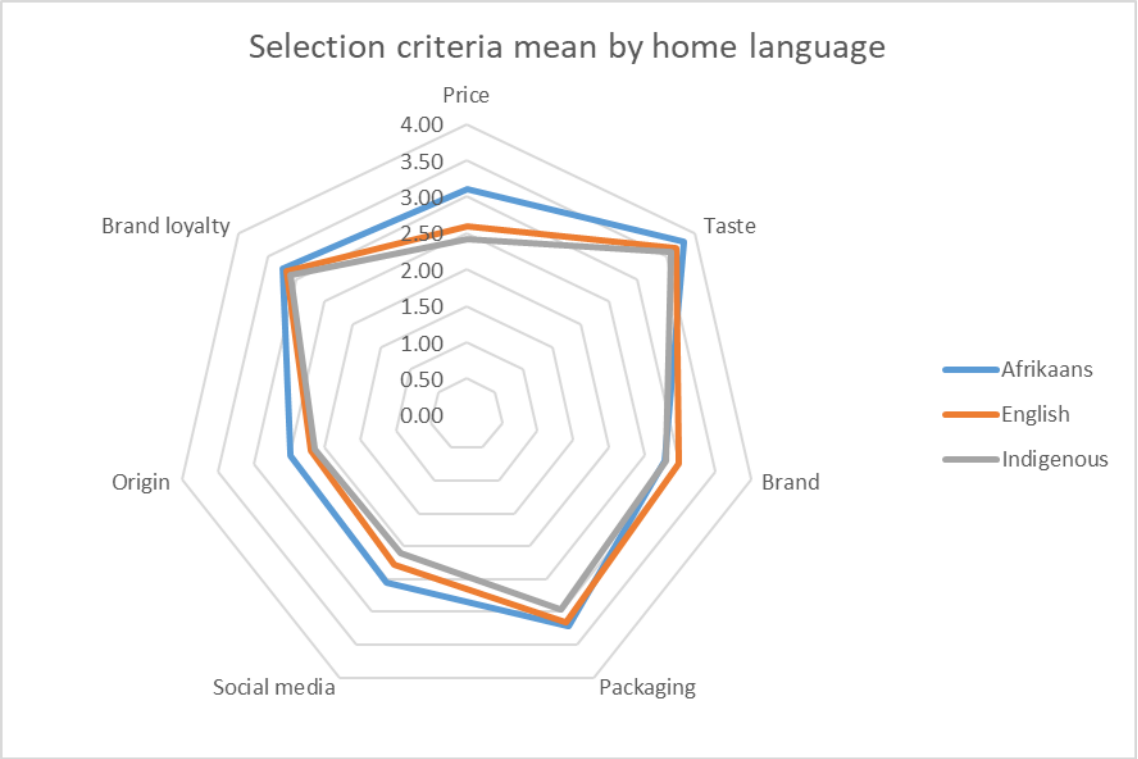
Figure 3-3 to Figure 3-11 are illustrations of the comparison of the average means for the different selection criteria for gender, language, age, income, consumption, settlement type, province and preferred craft spirit. The differences are discussed below.

Figure 3-3: Consumer response - selection criteria mean by gender



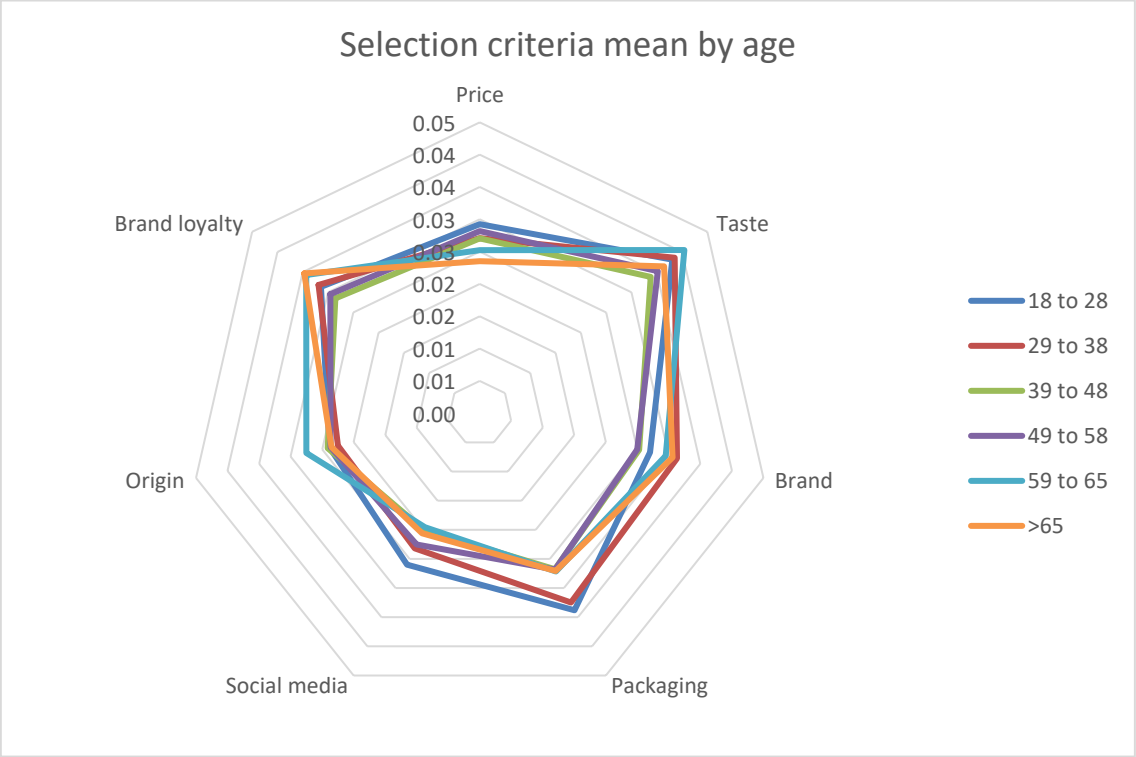
The packaging is almost just as important for both genders, but there is a difference in the emphasis placed on price, origin, brand and social media. From Figure 3-3, male consumers are more concerned with the origin of craft spirits than females. Females, on the other hand, place more emphasis on brand, packaging, social media and price. The biggest differences are between social media and brand. In comparison to the other criteria, females place more emphasis on these two criteria.

Figure 3-4: Consumer response - selection criteria mean by home language



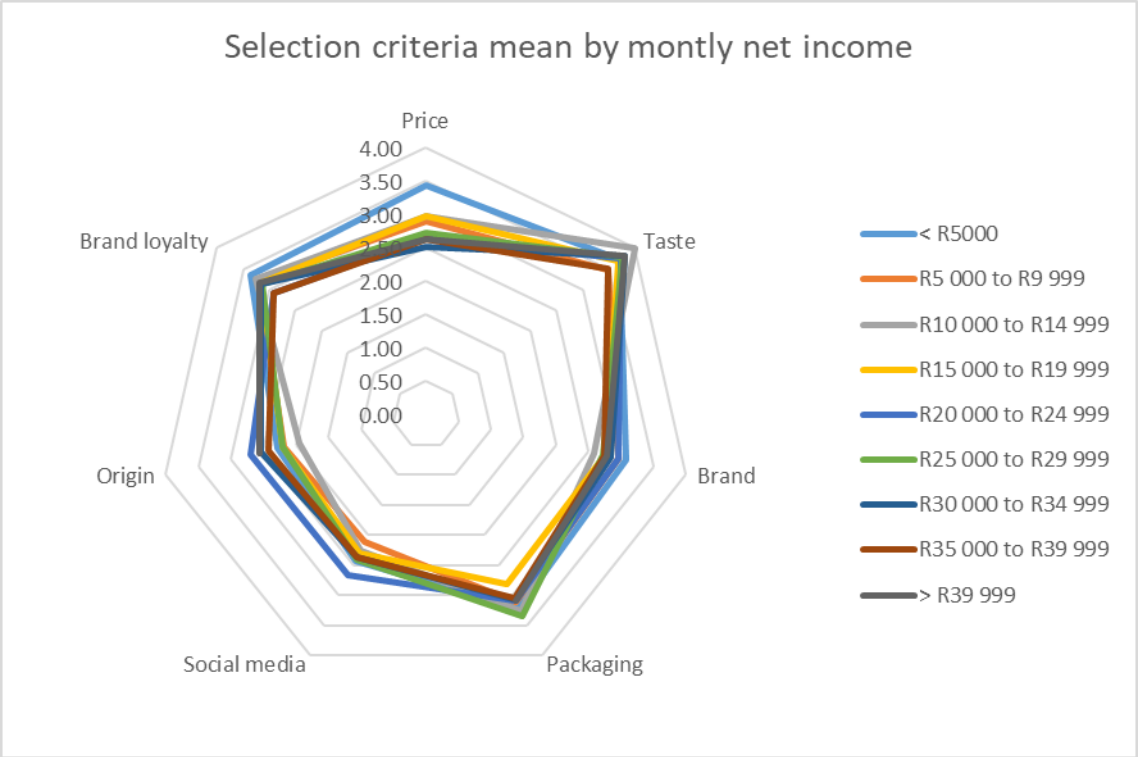
Comparing the selection criteria over the three different home languages also gave interesting results. English- and indigenous language-speaking respondents place more or less the same emphasis on the criteria, except for social media, price, brand and packaging. English-speaking respondents see social media, price and packaging as more important than indigenous language-speaking individuals. It is clear that the indigenous speaking respondents are not as price cautious as the rest. The Afrikaans-speaking respondents showed the highest price sensitivity, care the most about the origin of a craft product and are the most likely to be influenced by social media. The taste and packaging are regarded as almost equally important by all three language groups.

Figure 3-5: Consumer response - selection criteria mean by age



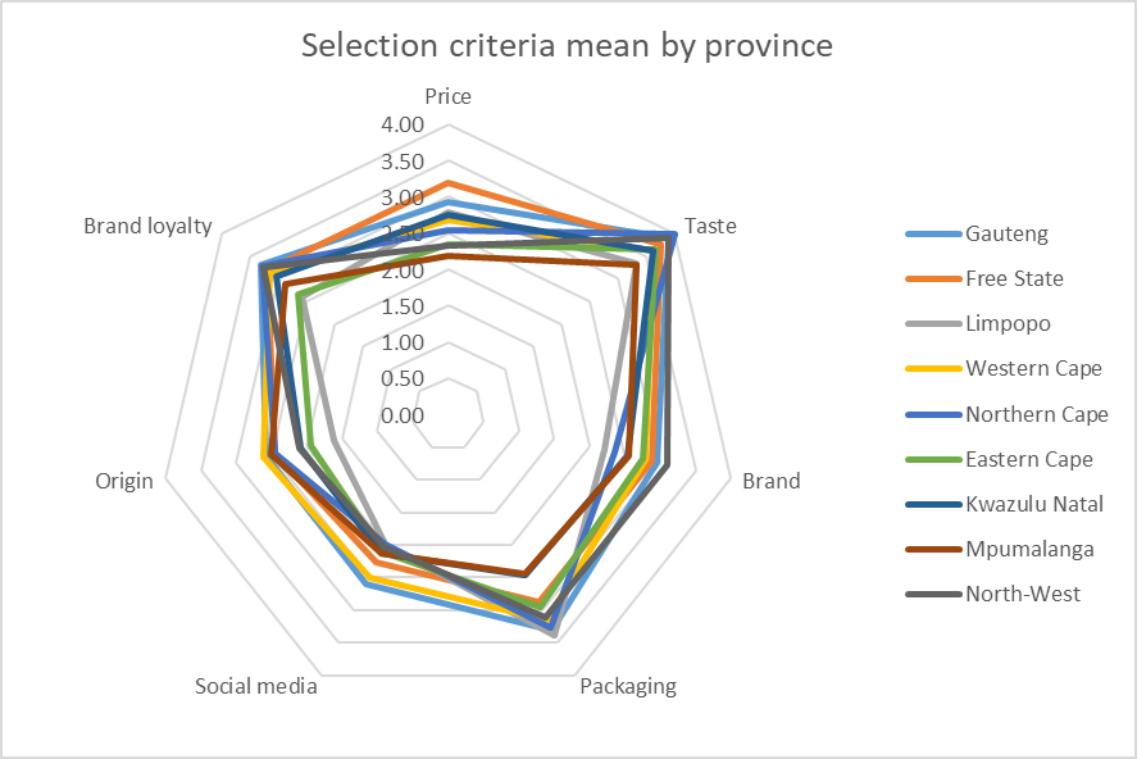
The standout differences in terms of age are origin, packaging, social media and taste. The younger age group of 18 to 38 places the most emphasis on the packaging, while the older group of 59 to 65 cares the most about origin. This is understandable as the older generation tends to value tradition and origin more than the younger generations. The older groups are also less price sensitive and care more about the taste. This is an indication that the older respondents are in a more financially stable position than the younger ones. They are likely to have made their money and care less about the price of a product and more about the taste. The 18 to 28 age group is the most likely to be influenced by social media. These differences are illustrated in Figure 3-5.

Figure 3-6: Consumer response - selection criteria mean by monthly net income



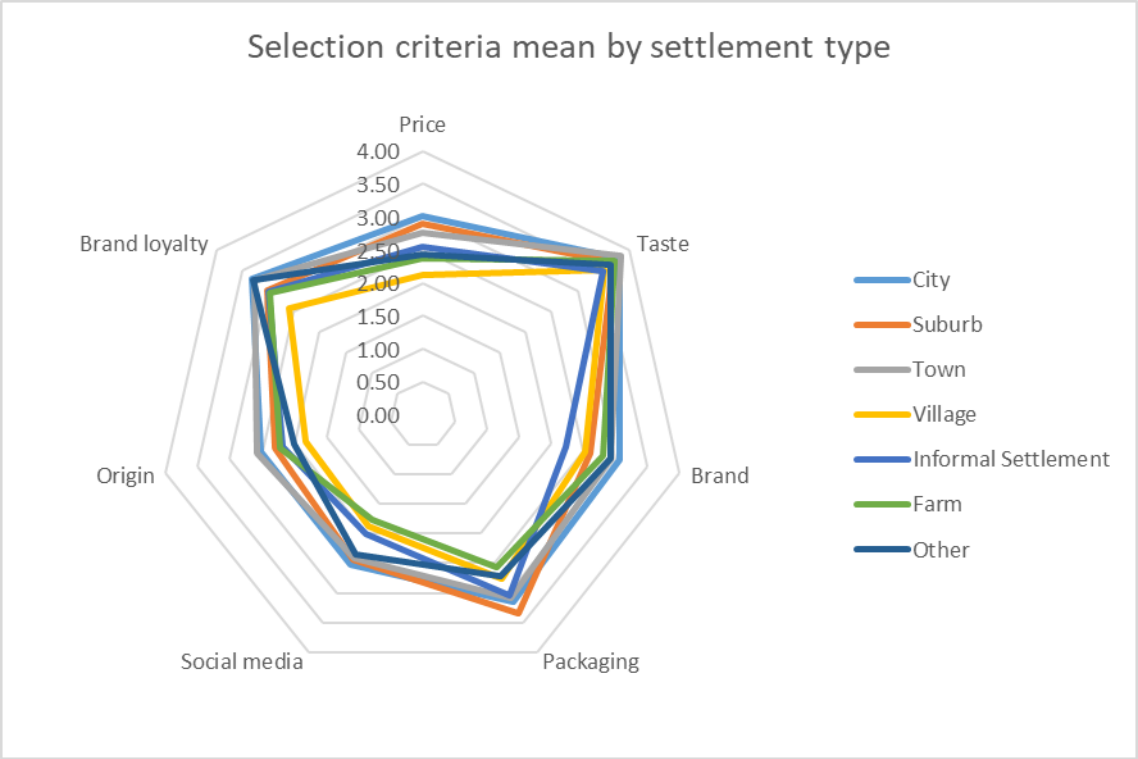
As for the different income groups, the respondents earning less than R5 000 are the most price-sensitive. This was expected as this group does not have a great deal of disposable income to spend on alcohol. The only other standout difference is origin. The higher income groups are more concerned about the place of origin. No clear conclusion can be made about packaging as all of the groups indicated a similar amount of influence from packaging. These differences are illustrated Figure 3-6.

Figure 3-7: Consumer response - selection criteria mean by province



Respondents from Mpumalanga care the least about packaging and price and Limpopo the least about brand and brand loyalty. Apart from these clear differences, it can also be seen from Figure 3-7 that respondents from the Free State are the most sensitive to price.

Figure 3-8: Consumer response - selection criteria mean by settlement type



What is strange about the differences of selection criteria by settlement type, is that respondents from the city indicated the highest price sensitivity, while those from villages are less sensitive to price. One would have thought that this would have been the other way around. This can be an indication that although people in the cities tend to earn more money than those in rural areas, the cost of living in the city is so high that they have to be more considerate to the price of a product. All of the groups cared equally about the taste. This is illustrated in Figure 3-8.

Figure 3-9: Consumer response - selection criteria mean by total alcohol consumption

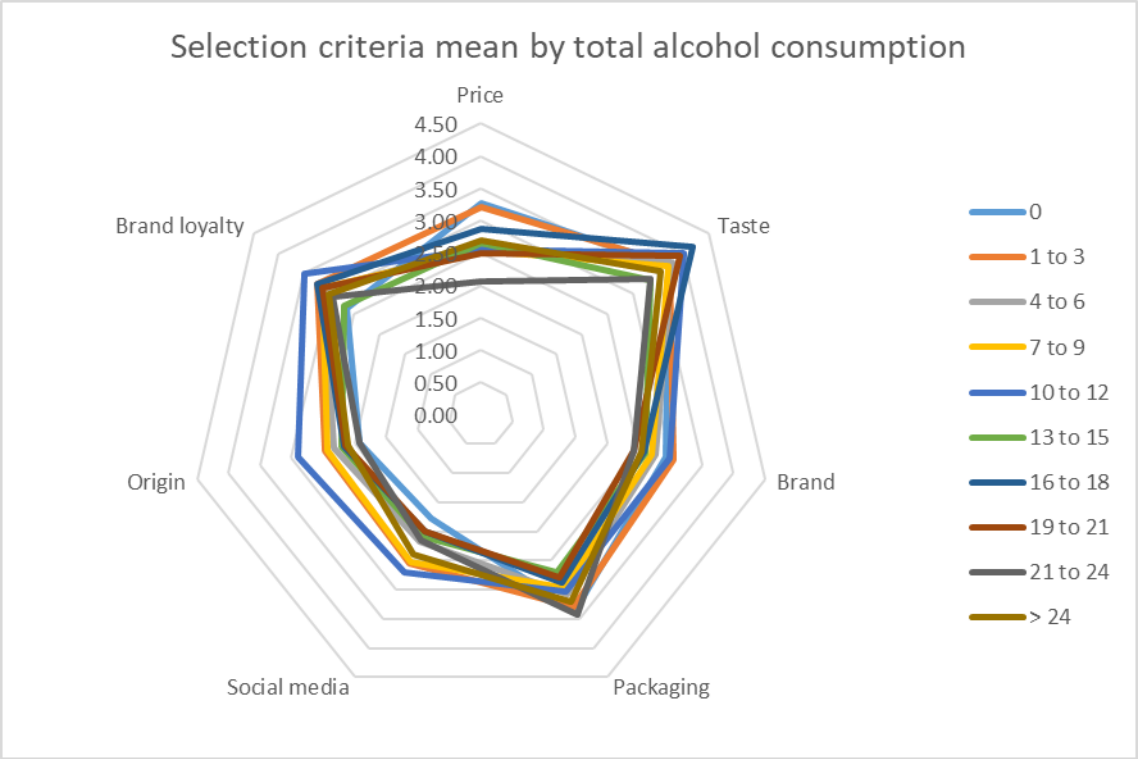
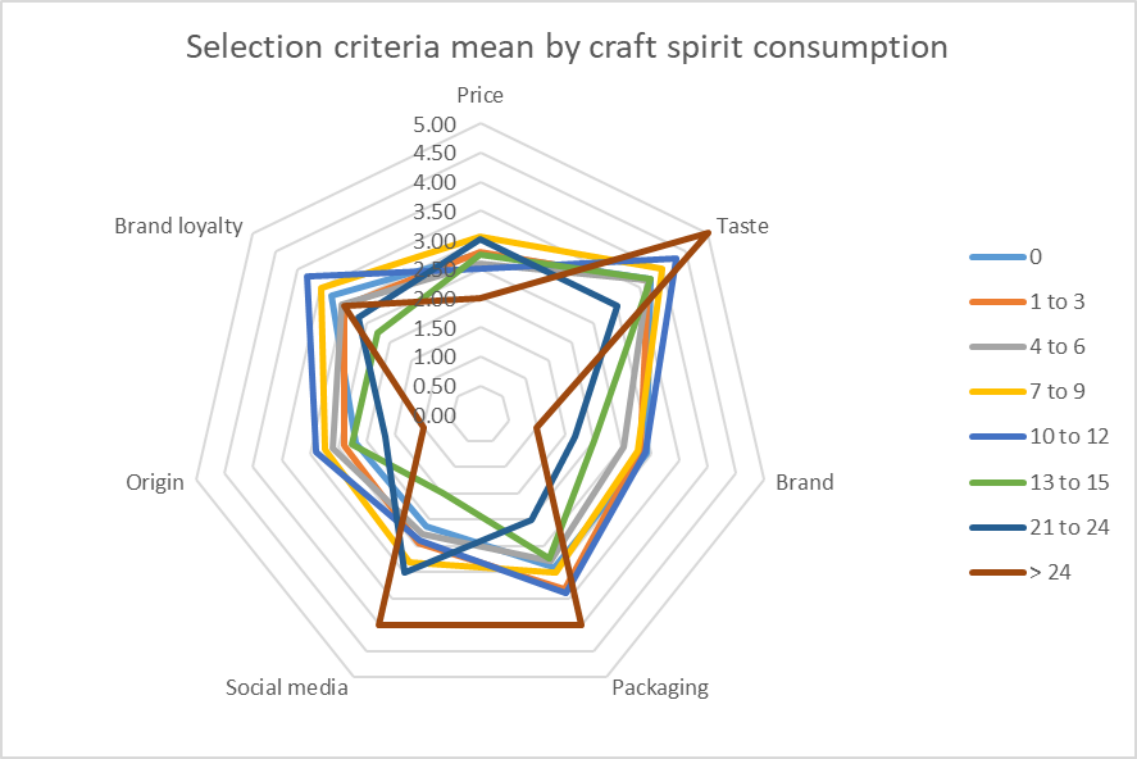


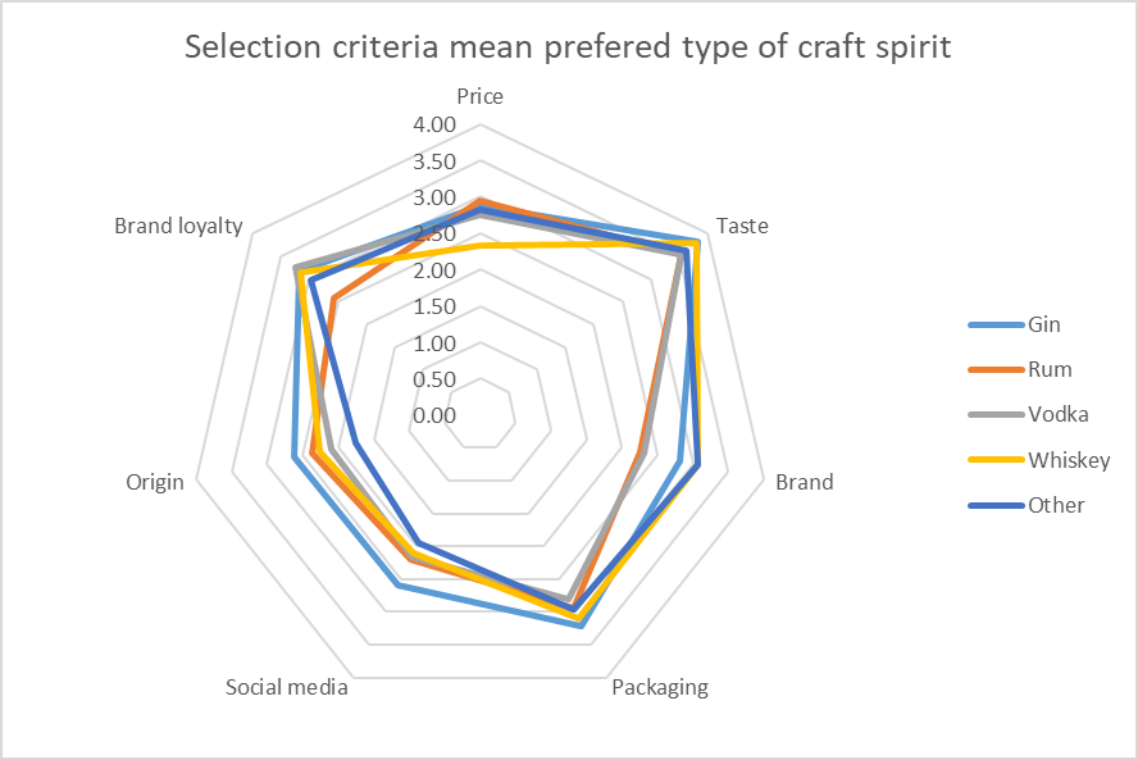
Figure 3-9 is an illustration of the differences in selection criteria over total alcohol consumption. The standout difference is price sensitivity. The less alcohol the respondent consumed, the more price sensitive they are and the more they consume the less price sensitive they are. The average consumer with a consumption of 10 to 14 units per week place the most emphasis on social media, origin and brand loyalty. No definite conclusion can be made on the influence of packaging over consumption groups. The lower 1 to 3 group and higher 21 to 24 units per week group had the highest value for the packaging criteria.

Figure 3-10: Consumer response - selection criteria mean by craft spirit consumption



Not much can be deduced from the differences in selection criteria over the consumption of craft spirits. At first glance, it looks from Figure 3-10 that there are major differences, but taking into consideration the limited data collected in the 13 units and above groups these groups should be excluded from this analysis. For the rest of the groups, the lower consumption groups placed more emphasis on packaging than the higher consumption group. The lower consumption groups do not often buy craft spirits, but when the do they are influenced more by packaging than the other groups.

Figure 3-11: Consumer response - selection criteria mean by preferred craft spirit



The respondents who prefer gin place the most emphasis on origin, social media and packaging. The differences in terms of packaging are small. Those who prefer gin care the most about packaging, followed by those who prefer whiskey. Those who prefer craft vodka care the least about packaging. Vodka and rum drinkers do not care as much about brand than the gin and whiskey drinkers. Another clear difference is the price insensitivity shown by the whiskey drinkers. The other groups indicated more or less the same sensitivity to price, but whiskey drinkers had an average mean almost 0.5 less than the other groups. This price insensitivity can be the result of the variety of expensive whiskeys available on the market. Whiskey drinkers place the most emphasis on taste and are willing to pay for a good quality product. These differences are illustrated in Figure 3-11.

From the above discussion, it can be concluded that a different emphasis is placed on each of the seven selection criteria when compared to the grouping variables. This is also the case for the influence of packaging in the consumer selection process. For some consumers, it is more important than others. Distilleries should take this into consideration when selecting and designing their packaging for a target market. For example, if the target market is the lower income consumer, more emphasis should be placed on the cost of the product than on the packaging.

Overall, the packaging had the third most influence of the seven criteria on the respondents' decision-making process. The mean was 0.03 less than the second most important brand loyalty

criterion. This difference is so small that it is insignificant. Therefore, packaging and brand loyalty can be seen as jointly second in terms of importance to the consumer. This confirms the assumption made in the literature study that packaging plays an important role in a marketing strategy and has a significant influence at the point of sale and information gathering stage in the consumer decision-making model.

The different packaging elements and the importance thereof are further analysed in the next section.

3.3.3.2 Packaging preference

As discussed in the previous chapter, the data collected from the consumer confirms the assumption made on the importance of packaging in the consumer decision-making model. The literature study identified different elements of craft spirit packaging and the questionnaire was developed to test the importance of these elements for the consumer. The mean of the responses for each test was used as indication of tendency for each of the tests. This is summarised in Table 3-19. The mean is sorted from low to high within each construct. These means and their comparison over the grouping variables are discussed in the section.

Table 3-19: Consumer - Mean and standard deviation: Packaging preference

	Construct	Packaging factor	N	Mean	Std. deviation
B3	Bottle	Tall bottle	321	2.74	1.071
B2		Unique bottle	321	3.12	1.291
B5		Cork	319	3.17	1.379
B4		750 ml Bottle	321	3.42	1.245
B6		Mushroom-shaped cork	321	3.44	1.293
B1		Glass bottle	322	4.5	0.847
LL2	Label - Look	Front label	322	2.6	1.007
LL3		Back label	322	2.81	1.218
LL1		Matt label	322	3.26	1.174

LL4		Cap sealing label	319	3.51	1.276
LI2	Label - Information	Funny/unique names	322	3.14	1.181
LI1		Background story	321	3.85	1.053
LI3		Ingredient information	321	3.73	1.071
LNG1	Label - Language	Language	321	2.6	1.198
C3	Content	Content colour change	321	2.63	1.19
C1		Coloured content	320	2.74	1.197
C2		Transparent content	320	3.07	1.19
SP1	Extra packaging	Cardboard box	321	2.55	1.106
SP2		Wooden box	321	2.6	1.261
SP3		Secondary packaging	319	2.95	1.166
VP1	Value packaging	Value pack	320	3.02	1.212
VP2		Gift pack	320	3.25	1.251
GI1	Green initiatives	Recycled water	320	2.79	1.195
GI4		Recycled paper label	319	2.9	1.279
GI5		Organic ingredients	320	3.37	1.145

GI3		Recycled glass bottle	320	3.42	1.1
GI2		Bottle recycle initiative	320	3.64	1.091

From all the elements tested, the standout element in terms of importance was the preference of a glass bottle. This test had a mean of 4.5 and standard deviation of 0.847. The standard deviation is lowest of all the elements and is a clear indication that the responses were closely spread around the mean of 4.5. Not only was this the standout element within its own construct, but also for all the elements tested.

For the rest of the bottle construct, there was a clear indication for the preference of a mushroom-shaped cork and a 750ml bottle. The bottling size question tested the preference of a 750ml to both bigger and smaller bottles. From the data it can be seen that a 750ml is the preferred size bottle. On the other side, respondents do not prefer a tall bottle when it comes to craft spirits. This supports the market tendency of short bottles used by craft distilleries. The craft spirit section of a liquor stores has predominantly shorter and stockier bottles. This is further investigated in the analysis of the distillery data in section 3.4.

In the label-look construct, respondents prefer a cap sealing label over an anti-tamper sleeve and matt labels over glossy labels. Although they do not prefer only a front label, they do not see a back label as a must. Other labels can be used to support the front label. Examples include a label around the neck of the bottle, cap sealing label or when a round bottle is used, a wrapping label. A wrapping a label is a front label that almost wraps the bottle completely. In these cases, there are no back label and the information that used to be on the back label is on the two edges of the wrapping label.

As for the information on the label, the respondents indicated they prefer both the distillery background story and ingredient information to be displayed on the label. The background story test had a mean of 3.85 and ingredient information a mean of 3.73. The standard deviation was 1.05 and 1.07, respectively. This indicates a close spread around the mean. These elements can easily be added to the label at small cost for the additional ink and printing time. The other element tested in this construct was the use of funny or unique names. The respondents did not care much if the product had a funny or unique name with an average of 3.14.

The last sub-section for the label construct was label information. It only has one test in the sub-section, which tested the preference for consumers to buy products with labels in their home language. Respondents indicated they do not care if the label is in their home language. This was

an unexpected result. Over the recent years, there have been distilleries that performed well by using distinct culture marketing. They make use of the language of a specific culture and use their traditions and values in their marketing campaigns. The data, however, shows little influence by the language. This means distilleries can make use of language that is understood by most of the population, without reducing the size of their target market.

Content was also included in the questionnaire as a construct of packaging. It does not fulfil the first two primary functions of packaging. It does not contain or protect, but is rather contained and protected by the packaging. It does, however, assist with the communication and utility function of the packaging. The content can be seen through the bottle and forms part of the overall appearance of the product. For example, a rooibos-infused gin's tea-like colour assists in communicating to the customer the ingredient information. The colour along with special attributes like colour change when mixed influences the utility of the product. Therefore, the inclusion of content construct in the questionnaire. There is no preference for transparent/clear content. This element had a mean of 3.07 and standard deviation of 1.19 indicating a variety in response around the neutral response of 3. The other two elements had a mean on the *do not agree* side of the scale. Respondents indicated that they do not prefer the content to have a colour or to change colour when mixed with a mean of 2.74 and 2.63, respectively. These two elements are only applicable to vodka and gin. Whiskey and rum have colour because they have to be kept in a wood barrel for a time.

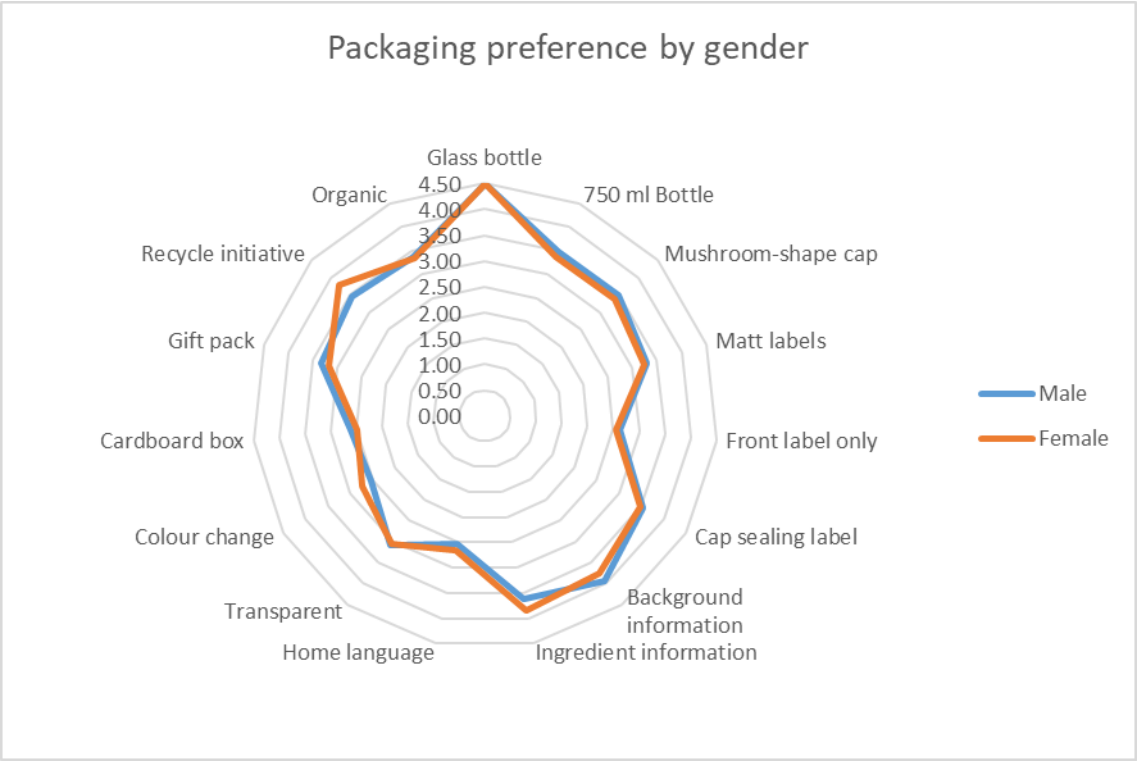
The secondary packaging construct was broken down into two section, namely extra packaging and value packaging. The extra packaging included packaging elements outside the bottle and the label. The subsection included three tests. The first one was extra packaging as a whole. For this test there was a neutral mean response of 2.95, but for the specific elements of a cardboard and wooden box the means, 2.55 and 2.6, respectively, were on the negative side. This is an indication that although the respondents did not care much about extra packaging, they are not positively influenced by the use of a cardboard or wooden box. Other extra packaging elements that were not tested include an element such as paper wraps. Secondary packaging is also used to create a value or a gift pack. Both were tested in the questionnaire. A value pack was defined as two or more craft products packed in one package and a gift pack as craft product packed with a gift element like a glass. The response was neutral for value packs with a mean of 3.02 and slightly more positive for gift packs with a mean of 3.25. From the whole construct it could be deduced that respondents do not prefer extra box packaging unless it was used to create a value or gift pack.

The green initiatives construct tested the use of recycled material for packaging and the production of the spirit, organic ingredients and initiatives to reduce environmental impact. These

elements are usually communicated on the packaging of the product. There was a slight trend towards not preferring recycled water. The mean for this test was 2.79. A reason for this can maybe that some people think recycled water is not as clean or preference for natural water sources like spring water. What was strange was the slightly negative response towards recycled labels with a mean of 2.9, but positive response towards recycled glass with a mean of 3.42. Respondents prefer it when organic ingredients are used to make the product with a mean of 3.37 and when the distilleries have a bottle recycling initiative with a mean of 3.64. Most of these craft products are made of organic ingredients. Distilleries should communicate this better to the consumers. One way is to add it to the labelling at a small cost of the additional printing.

The above discussion was on the mean of the different elements tested for all the respondents. The standard deviations of above one for the majority of the elements is an indication of some differences in the response. To analyse these differences, the mean of the elements was further investigated over the grouping variables. Only the elements with the highest and lowest mean within a construct were included in the analysis over the different groups.

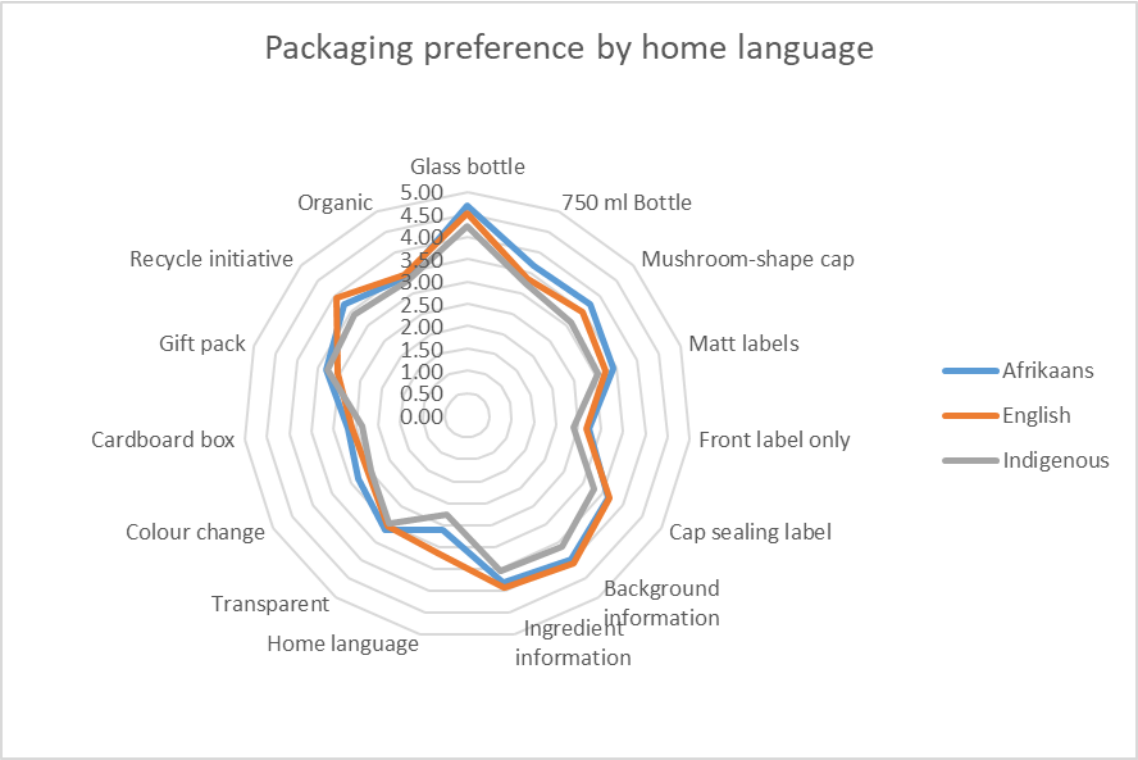
Figure 3-12: Consumer response - packaging preference mean by gender



There were not many clear differences in preference between the two genders. Females indicated a slightly higher preference for a recycling initiative and for the background information to be on the label, but less preference for the ingredient information than the male respondents. As for the

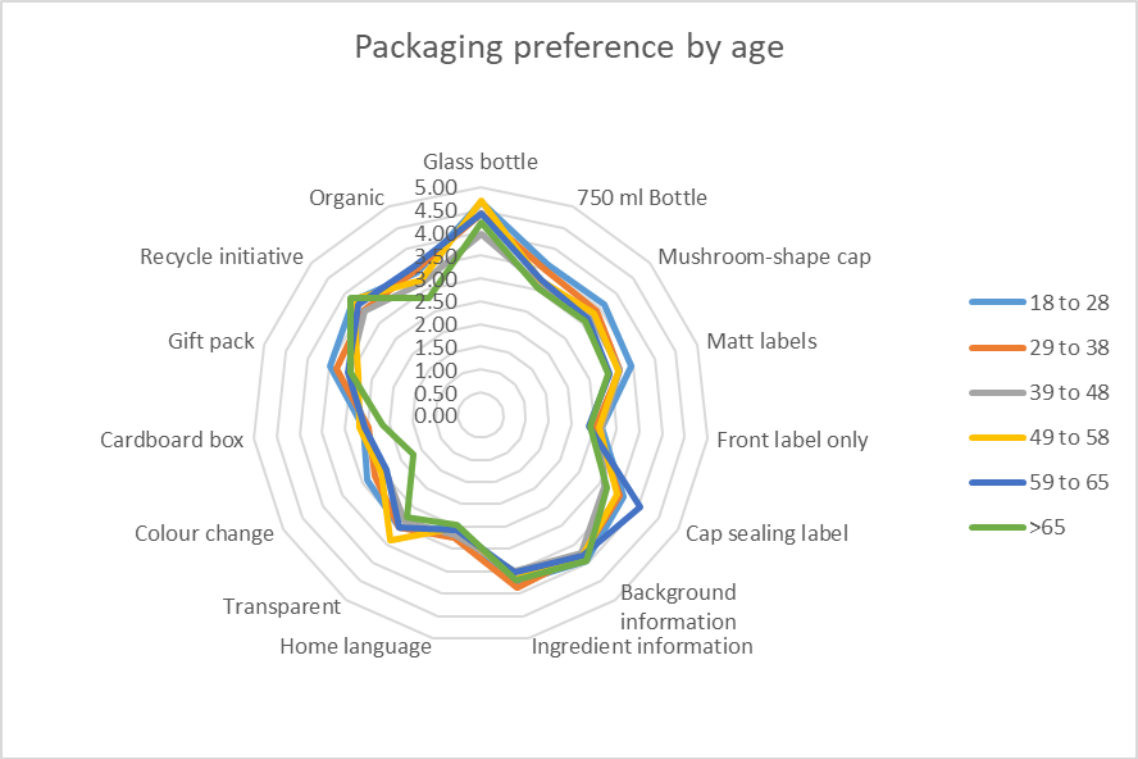
rest of the elements tested, both male and female respondents had more or less the same preference. This is illustrated in Figure 3-12.

Figure 3-13: Consumer response - packaging preference mean by home language



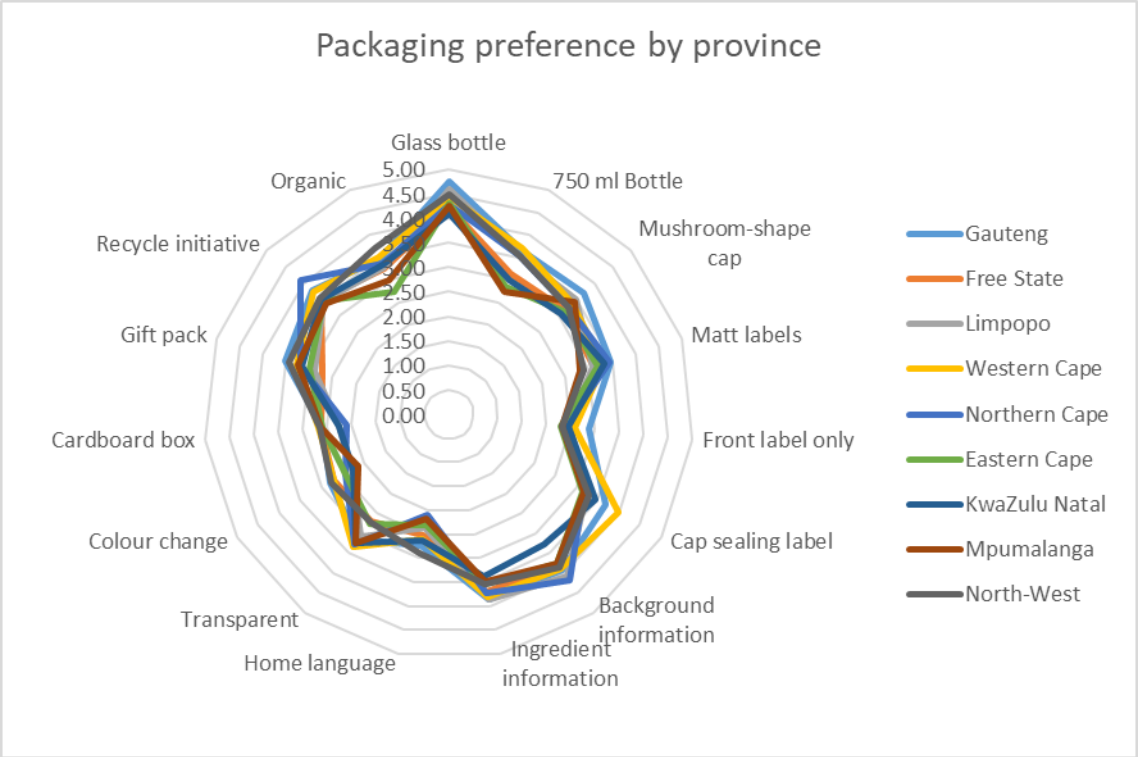
There were more clear differences when the data was grouped according to the home language of the respondents. English-speaking respondents had a bigger preference for the label to be in their home language than the other two groups. Looking at the success of companies marketing for the Afrikaans culture, one would have thought that the Afrikaans group would have shown the most preference for the label to be in Afrikaans. However, the mean of the language test was 2.6, indicating that there are other elements with greater influence on the consumer's decision-making. The Afrikaans group had a greater preference for 750ml bottles and mushroom-shaped cap. The indigenous group did not show the greatest preference for any of the tests, but indicated least preference for recycling initiatives, home language, ingredient and background information. Overall, distilleries should select packaging elements that are inclusive of all consumers. This is illustrated Figure 3-13.

Figure 3-14: Consumer response - packaging preference mean by age



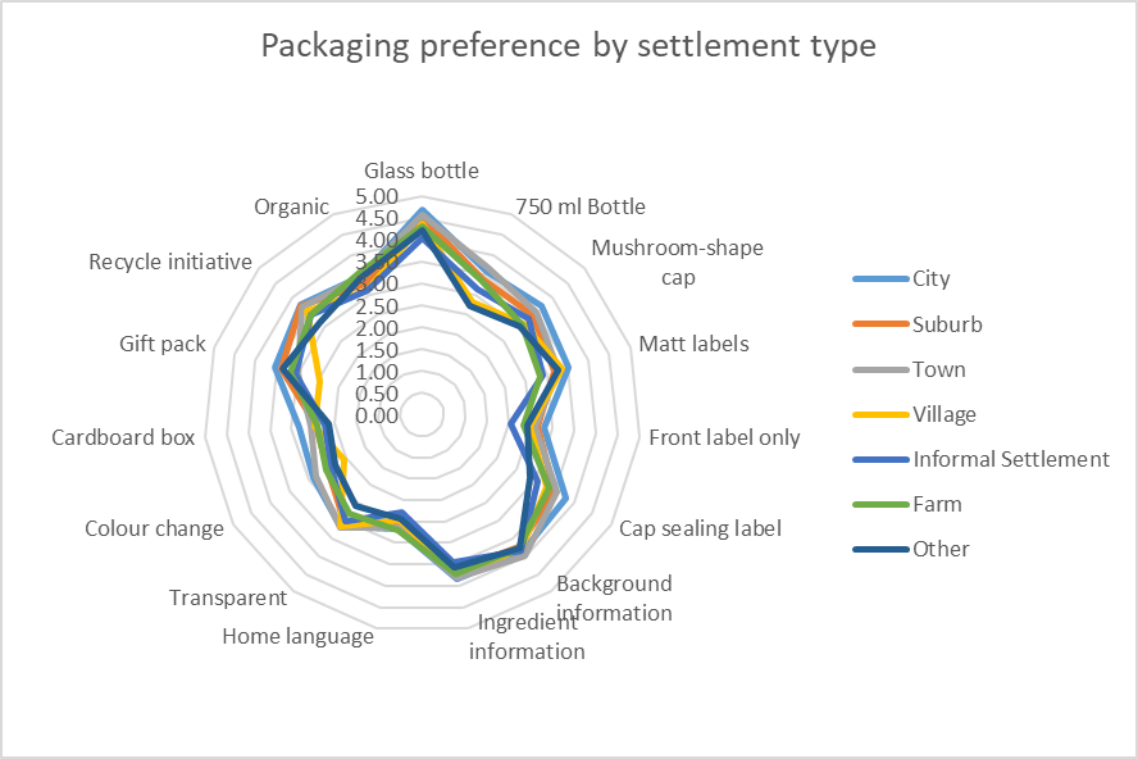
The packaging preference compared over the different age groups did not show many differences. The only two clear differences were the above 65-year age group's more negative response towards colour change of the content and the 59 to 65-year group's preference for a cap sealing label. All age groups showed similar preference for all the other elements. This is illustrated in Figure 3-14.

Figure 3-15: Consumer response - packaging preference mean by province



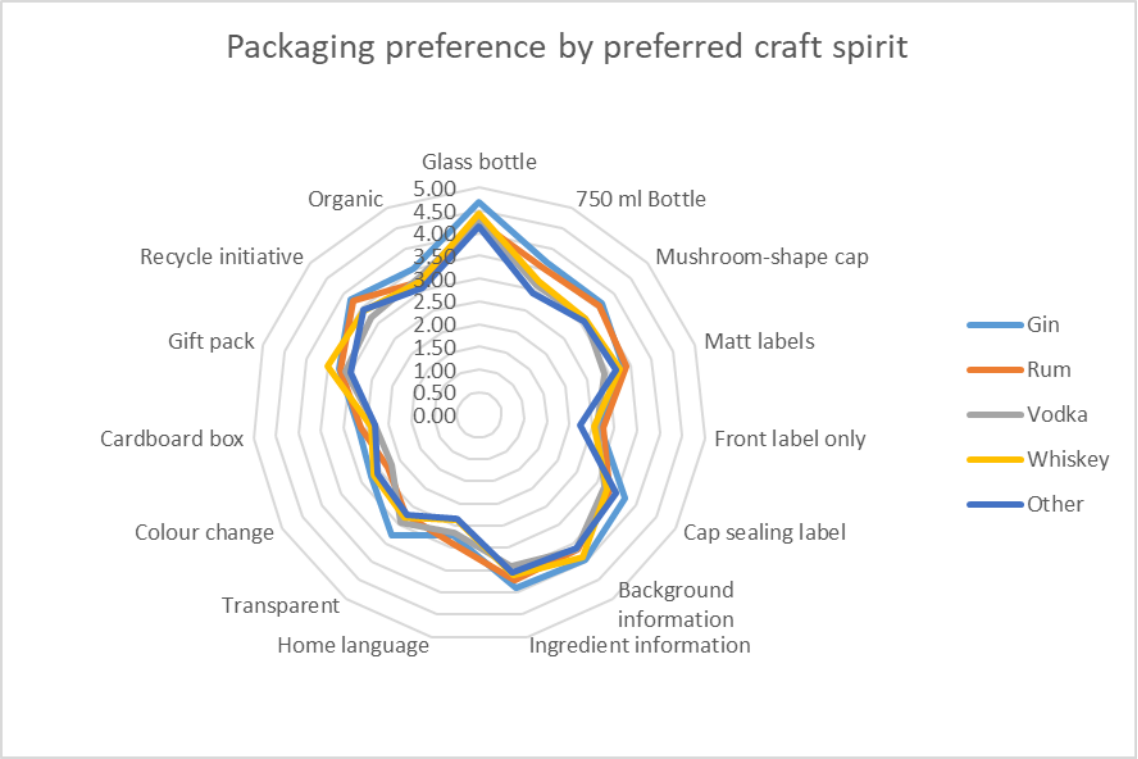
In Figure 3-15 the packaging preference compared over province is quite scattered. One of the clear differences were the Gauteng respondent's preference for a recycle initiative. This can be the result of a highly populated province with the highest income being exposed to and having access to the most information and marketing regarding green initiatives and an individual's green footprint. Gauteng is also the easiest province to implement a recycling initiative because of the small size of the province easing logistics and high number of recycling companies. The other clear difference was the Western Cape's preference for a cap-sealing label instead of an anti-tamper sleeve. A not so clear difference was Mpumalanga, Eastern Cape and Free State's more negative response towards a 750ml bottle then the other provinces. These provinces were neutral towards the size of the bottle.

Figure 3-16: Consumer response - packaging preference mean by settlement type



Respondents who live in a village indicated that they do not prefer a gift pack, the colour of their spirits to change when mixed and are not set on 750ml bottle. Those from the cities showed preference for a cap sealing label, the labels to be matt and for the bottle to have a mushroom-shaped cap. They were also less negative than the other groups towards the idea of only a front label. The informal settlement group showed the least preference to only a front label. These differences are illustrated in Figure 3-16.

Figure 3-17: Consumer response - packaging preference mean by preferred craft spirit



The difference in packaging preferences compared over the preferred craft spirit is the easiest to incorporate into a distillery's packaging and market plan because it is product specific. It will be more difficult to incorporate for example differences between provinces as it will result in more variety in packaging for a specific product. From Figure 3-17 it can be seen that those who prefer craft gin showed the greatest preference for the content to be transparent, the ingredient and background information to be included on the label, a cap sealing label and a 750ml glass bottle. The whiskey drinkers indicated that they prefer their whiskey in a gift pack. This conforms to the popularity of whiskey as a gift, especially in the corporate world. The gin and whiskey group showed similar preference for distilleries to have a recycling initiative.

The above analysis of the differences in packaging preference over the variety of groups can be used by distilleries in their marketing plan, especially when the distilleries make use of market segmentation. In this case the data can be used to create a model on the packaging preference of a specific market segment. Some of these can be incorporated at a low cost. For example, to add the background story to a label only add the cost of the additional ink and printing time.

The direction and strength of the relationships between the selection criteria, packaging preference, consumption and income was further investigated in the next section.

3.3.4 Correlation analysis

Correlation analysis analyses the direction and strength of a linear relationship between two variables (Pallant, 2020:163-166). Variables can be related in three ways (Field, 2013:334-367):

- **Negatively related:** When one variable increases, the other variable decreases and *vice versa.*
- **Not related:** The variables have no relation. A change in one variable has no effect on the other variable
- **Positively related:** When one variable increases, so does the other one and *vice versa*.

One of the methods used to determine the relationship between two continuous variables is the Pearson correlation coefficient (r), also known as the Pearson product-moment correlation coefficient (Pallant, 2020:163-166). It was invented by Karl Pearson and Florence Nightingale (Field, 2013:334-367). The coefficient is a value between -1 and 1. The symbol in the front of the coefficient indicates the direction of the relationship. A negative value indicates a negative relationship and positive value a positive relationship. The strength of the relationship is indicated by the absolute value of the coefficient, with 1 being a perfect relationship and 0 no relationship (Pallant, 2020:163-166). Cohen gives the following guidelines for the interpretation of the absolute value of the coefficient (2013:83):

- **Small:** .09 < r < .30
- **Medium:** .29 < r < .50
- **Large:** .49 < r

The Pearson coefficient was used to determine the relationship between the variables along with the Sig (2-tailed) p-value. The p-value indicates whether a correlation is significant. A p-value smaller than 0.05 is an indication of a significant relationship. The p-values are not shown in the correlation table, but indicated with an * next to the correlation coefficient:

- ** Correlation is significant at the 0.01 level
- * Correlation is significant at the 0.05 level

SPSS was used to calculate the Pearson correlation firstly between income and consumption variables, secondly income, consumption and selection criteria, and lastly between income, consumption and packaging preference. The interval variables were assigned a numerical value to allow the correlation analysis. The value and corresponding interval can be seen in the consumer questionnaire in Annexure A.

Table 3-20 is a summary of the correlation between the respondents' income, consumption and monetary value spent on alcohol per month. This correlation analysis was done to determine whether the data is reliable in terms of correlation between consumption and monetary value spent on alcohol as well as to analyse the relationship between income and alcohol consumption.

As can be seen from Table 3-20, there is a significant strong positive correlation between consumption of alcohol and monetary value spent on alcohol (r= .825; p <.01). This is a strong relationship was expected because more alcohol needs to be procured to accommodate higher consumption. This is also supported by the strong (r=.778; p<.01) positive correlation between consumption of craft spirits and value spent on craft alcohol. Both these strong correlations are an indication of reliable data. These correlations would have been weaker if respondents randomly completed the questionnaires. These correlations were significant with p <.01.

The relationship between monthly income and consumption was (r=.268; p.01) and monthly income and money spent on alcohol (r=.270; p<.01). These are both small positive relationships. The money spent on alcohol goes up slightly as income increases, which is an indication that poorer people proportional to their income spent more on alcohol than richer people.

Table 3-20: Consumer - Correlation analysis: Income and alcohol consumption

	Monthly income	Consumption of alcohol	Spirit consumption	Beer/cider consumption	Monetary value spent on all alcohol per month	Consumption of craft spirits
Monthly income						
Consumption of alcohol	.268**					
Spirit consumption	0.094	.653**				
Beer/cider consumption	.114*	.375**	.190**			
Monetary value spent on all alcohol per month	.270**	.825**	.488**	.215**		
Consumption of craft spirits	0.027	.322**	.527**	.245**	.221**	
Monetary value spent on craft spirits per month	0.084	.243**	.439**	0.090	.310**	.778**

3.3.4.1 Selection criteria

The above correlation analysis determined the relationships between income and alcohol consumption, but how do selection criteria correlate with income and consumption? is a summary of the correlations between income, consumption and selection criteria. The relationship between price and monthly income, alcohol consumption and value spent on alcohol were all negative with values of (r=-.140; p<.05), (r=-.166; p<.01) and (r=-.213; p<.01) respectively. All these correlations are small, but still indicated marginally that the more the respondents earn and drink, the less they care about price.

The relationship between packaging and craft spirit consumption was insignificant with p >.05, but the low value can still be seen as an indication of a constant influence by packaging over consumption. These relationships were further investigated using linear regression in section 3.3.5.1.

Table 3-21: Consumer - Correlation analysis: Selection criteria, income and alcohol consumption.

Selection criteria	Monthly income	Consumption of alcohol	Spirit consumption	Beer/cider consumption	Monetary value spent on all alcohol per month	Consumption of craft spirits	Monetary value spent on craft spirits per month
Price	-.140*	-.166**	-0.033	-0.035	-.213**	-0.008	-0.021
Taste	0.016	-0.033	0.002	.156**	-0.083	0.048	0.012
Brand	-0.020	-.128*	-0.074	0.013	-0.100	-.128*	-0.072
Packaging	-0.004	-0.055	-0.060	.120*	-0.078	-0.014	-0.014
Social media	0.011	-0.042	0.032	.162**	-0.037	.111*	0.074
Origin	.116*	-0.068	-0.001	0.061	-0.079	0.058	0.109
Brand loyalty	-0.037	-0.029	-0.008	0.096	-0.066	-0.012	-0.042

3.3.4.2 Packaging preference

Table 3-21 shows a summary of the correlations between income, alcohol, value spent on alcohol and packaging criteria. The significant correlations with p<.05 are discussed in this section.

The correlation analysis between monthly income and packaging criteria delivered one significant correlation with a p<.01. This was the small negative relationship of (r=-.147; p<.01) between income and the use of funny/unique names. This is only a small relationship, but it is still an indication that people who earn more care less about the use of funny and unique names.

Distilleries whose target market is the high-income group should think twice about using funny and unique names.

Three correlation between alcohol consumption and packaging preference were significant at p<.01. The use of recycled water, organic ingredients and recycled water had a negative relationship with the amount of alcohol consumed. All three were small. Between consumption and recycled water, it was (r-.178; p<.01), consumption and recycled bottle (r=-.173; p<.01) and for consumption and organic ingredient (r=-.159; p<.01). All three of these elements fall within the green initiatives construct. The other two elements in the construct also had negative relationship with consumption. Therefore, it can be concluded that the more the respondents drink, the less they care about green initiatives.

The consumption of spirits and packaging preference delivered only one significant relationship. The relationship between spirit consumption and the use of organic ingredients had a negative relationship of (r=-.146; p<.01). This is a small relationship and corresponds with the relationship of -.159** between total alcohol consumption and organic ingredients. This indicates that although there is a negative relationship between spirit consumption and organic ingredients, the relationship between spirit consumption and the rest of the green initiatives' elements did not correlate with the relationship between these elements and total consumption. Therefore, overall, the spirit consumers care a bit more about their environmental impact.

Due to the strong positive relationship between income and monetary value spent on alcohol, monetary value spent on alcohol and packaging criteria delivered more or less the same relationships than that of monthly income and packaging criteria. Relationships with the green initiative elements were more or less the same, but monetary value spent on alcohol also had a small negative relationship of (r=-.231; p<.01) with coloured content. Respondents who spend less on alcohol are more concerned with the content of the alcohol having a colour.

The consumption of craft spirits had only one correlation with significance p<.01. This was the small positive relationship of (r=.159; p<.01) with the preference of a 750ml bottle. Despite the weak strength of the relationship, it still indicates the preference for a 750ml over other bottle sizes with the increase in the consumption of craft spirits. Regular craft spirit drinkers prefer a 750ml bottle. The other relationships had a significance of p<.05. They were the small positive relationship of (r=.136; p<.05) with preference of the label being in the respondent's home language and the small negative relationship of (r=-.122; p<.05) with the use of a cardboard box as secondary packaging. Respondents who drink less craft spirits care less about the language of the label than those who drink more. The use of language that excludes some customers will probably not be beneficial over the long run, since there is not a lot of brand loyalty for craft spirit

products. As discussed in the descriptive analysis, the respondents do not prefer the use of a cardboard box as secondary packaging; this preference increases as consumption of craft spirits increases.

The same was the case for money spent on craft spirits and packaging preference. Only the negative relationship of (r=-.150; p<.01). As was the case for total money spent on alcohol, respondents who spend more on craft spirits showed less preference for coloured content than those who spend less. If a distillery's target market is the higher income group gin and vodka drinkers, they should give thorough consideration to the colour of the content. There were also small positive relationships of about (r=.130; p<.05) with the use of cork instead of a metal cap and tall/unique bottles. The more money the respondents spend on craft spirits, the greater their preference for a unique bottle with a cork.

Table 3-22: Consumer - Correlation analysis: Packaging preference, income and alcohol consumption

Packaging factor	**Monthly income**	**Consumption of alcohol**	**Spirit consumption**	**Beer/cider consumption**	**Monetary value spent on all alcohol per month**	**Consumption of craft spirits**	**Monetary value spent on craft spirits per month**
Glass bottle	0.019	-0.021	0.031	.153**	-0.091	0.021	0.045
Unique bottle	0.024	-.116*	-0.003	0.065	-0.094	.116*	.131*
Tall bottle	0.039	-0.061	0.056	0.080	-0.040	.125*	.135*
750ml bottle	0.096	0.030	.123*	.125*	-0.041	.159**	.129*
Cork	-0.013	0.000	.117*	0.096	-0.017	0.099	.130*
Mushroom-shaped cork	-0.051	-.119*	-0.006	0.081	-.127*	-0.011	0.026
Matt label	0.068	-0.025	0.065	0.020	0.002	0.000	0.075
Front label	0.000	-0.066	0.026	0.059	-.138*	-0.029	-0.058
Back label	-0.012	0.013	.118*	0.086	-0.004	0.075	0.096
Cap sealing label	-0.054	-0.080	-0.030	0.076	-0.106	-0.021	-0.008
Background story	0.091	-0.031	-0.006	0.031	-0.041	0.017	0.030
Funny/unique names	-.147**	-0.094	-0.027	0.053	-0.099	0.023	-0.052
Ingredient information	0.071	-0.104	-0.063	0.001	-.118*	-0.032	0.017
Language	-0.067	-0.069	0.016	.121*	-0.085	.136*	.117*
Coloured content	-0.051	-.202**	-.130*	-0.020	-.231**	-.138*	-.150**
Transparent content	-0.003	-0.082	-0.025	0.097	-0.094	-0.016	-0.028
Content colour change	-0.008	-0.079	-0.004	0.028	-0.099	0.058	0.015
Cardboard box	0.024	-0.082	-0.034	0.082	-.170**	-.122*	-0.045

Wooden box	-0.073	-0.045	0.039	0.071	-0.048	0.071	0.024
Secondary packaging	0.060	0.008	-0.066	0.047	0.017	0.042	0.037
Value pack	-0.055	0.007	0.040	0.060	-0.005	0.029	0.018
Gift pack	-0.035	-0.069	0.011	0.020	-.141*	0.080	0.070
Recycled water	0.021	-.178**	-.125*	-0.030	-.177**	-0.045	-0.071
Bottle recycle initiative	-0.011	-.123*	0.025	0.038	-.145**	0.015	0.025
Recycled glass bottle	-0.062	-.173**	-0.049	0.019	-.212**	-0.018	-0.045
Recycled paper label	0.000	-.122*	-0.024	0.039	-.117*	-0.021	-0.019
Organic ingredients	-0.037	-.159**	-.146**	0.056	-.153**	-0.043	-0.024

The greatest significant relationships were further investigated using linear regression in section 3.3.5.2.

3.3.5 Regression analysis

Regression evaluates how much of the variance in a dependent variable is explained by the independent variable (Pallant, 2020:168-188). (Pallant, 2020). It does this by taking into consideration all the data of a set dependent and independent variables and modelling an equation to describe the relationship (Cohen *et al.*, 2013:19-62). In this case, linear regression was used. Linear regression describes the relationship through a straight-line equation (Field, 2013:370-435):

Equation 9: Straight line

$$r_i = b_0 + b_1 X_i + E_i$$

Where:

$r_i = outcome\ (dependent\ variable)$

$X_i = input\ (independent\ variable)$

$b_0 = intercept\ with\ vertical\ axis$

$b_1 = slope\ of\ the\ line\ (strength\ of\ the\ relationship)$

$E_i = error$

SPSS was used to model the strongest significant correlations between consumption, income and selection criteria as well as consumption, income and packaging preference. Beta (β) was used in the analysis instead of b_0, because β uses standardised coefficients instead of

unstandardised. For standardised coefficients, all the variables have been converted to the same scale(Pallant, 2020:168 - 188).

3.3.5.1 Selection criteria

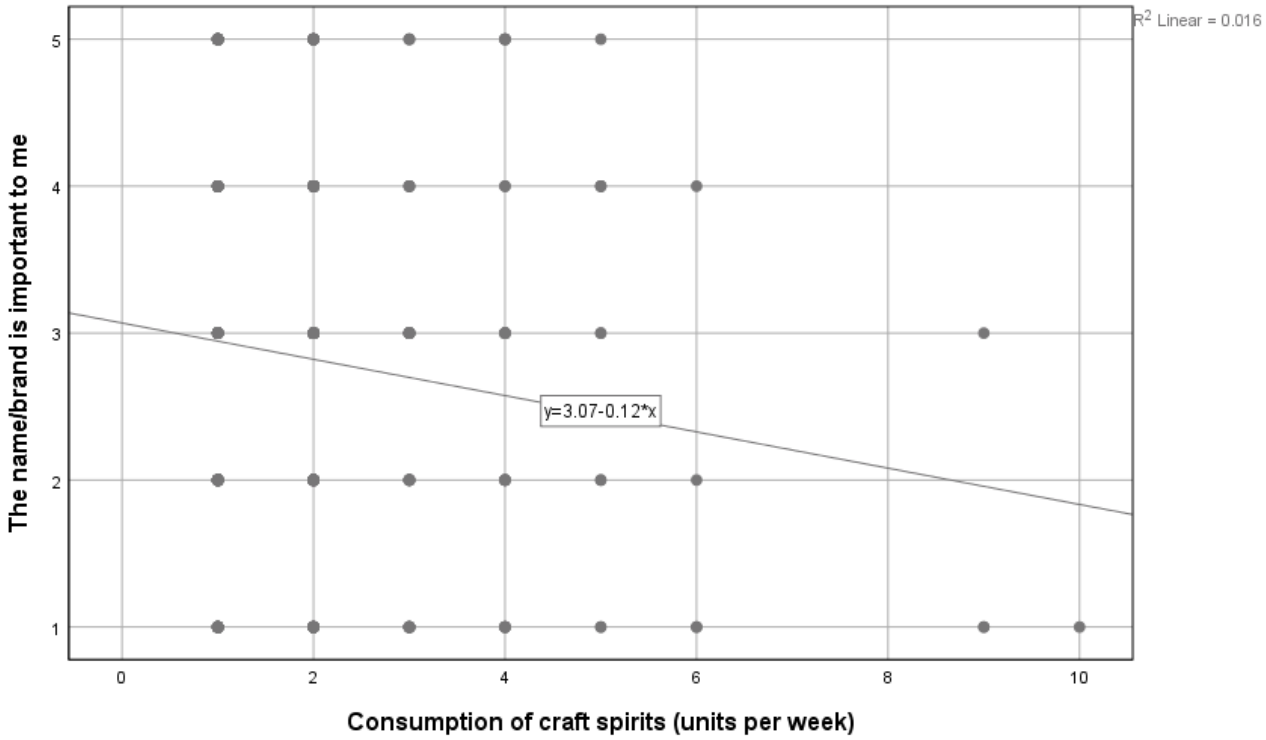
The first linear regression analysis was done with three of the selection criteria tests individually as dependent variable and consumption of craft spirits or value of money spent on alcohol as independent variable. These were the strongest significant p<.05 correlations from Table 3-21. However, the correlation between packaging influence and consumption of craft spirits was not significant at p>.05. The linear regression was done on the correlation just to indicate the constant influence of packaging over consumption. The beta and constant for the regression analysis of are summarised in Table 3-23 and illustrated in Figure 3-18 to Figure 3-20. The values on the x-axis of the graphs are the values assigned to each interval of the specific variable. This can be seen in the consumer questionnaire in Annexure A.

Table 3-23: Consumer - Linear regression: Selection criteria

Dependent variable	Independent variable	Beta	Constant
Name/brand importance	Consumption of craft spirits	-0.128	3.068
Price consideration	Monetary value spent on craft spirits per month	-0.213	3.201
Packaging influence	Consumption of craft spirits	-0.014	3.123

The first relationship analysed using linear regression was between the importance of name/brand and the consumption of craft spirits. This is a small negative relationship with $\beta = -0.128$ and significant with p<.05. As can be seen from Figure 3-18 and Table 3-23, the name/brand importance was not important for respondents. Those who do not drink any craft spirits had a neutral preference towards the name/brand of a craft spirits, this preference decreases as consumption increases. The respondents drinking more than 24 units of craft spirits per week do not agree that the name/brand is important. This is an indication of low brand loyalty and awareness in the craft spirit industry. Consumers will test a variety of product until they find a product which taste the like since taste is the most important selection criteria for the craft spirit consumer. Taste can only be evaluated after procurement or with a tasting, thus the increased influence of firstly the price of the product and secondly the look and feel of the packaging and information communicated through the packaging. Especially for those consumers who do not research a product or are influence by social media, they are influence at the point of sale by the packaging and price.

Figure 3-18: Consumer - Linear regression: Name/brand importance versus consumption of craft spirits



The importance of price decreases as consumption increases. This is a small negative relationship with a β = - 0.230 and significant with p<.05. Those who do not spend any money on craft spirits to those who spend less then R499 per month are above the neutral response of 3, ranging from 3.201 to 3 over the two groups. This is an indication of low-price sensitivity. The price sensitivity decreases and the groups who spend more than R500 per month on craft spirits range from neutral to not agreeing that price influences their decision-making. This is illustrated in Figure 3-19. The respondents who spend money of craft spirits are not bothered by the price of a craft product. A lower price, will not result in an increase in sales and if it does increase the sales, the chances are low that the increase will be enough to make up for the income lost by lowering the price.

Figure 3-19: Consumer - Linear regression: Price consideration versus value spent of craft spirits

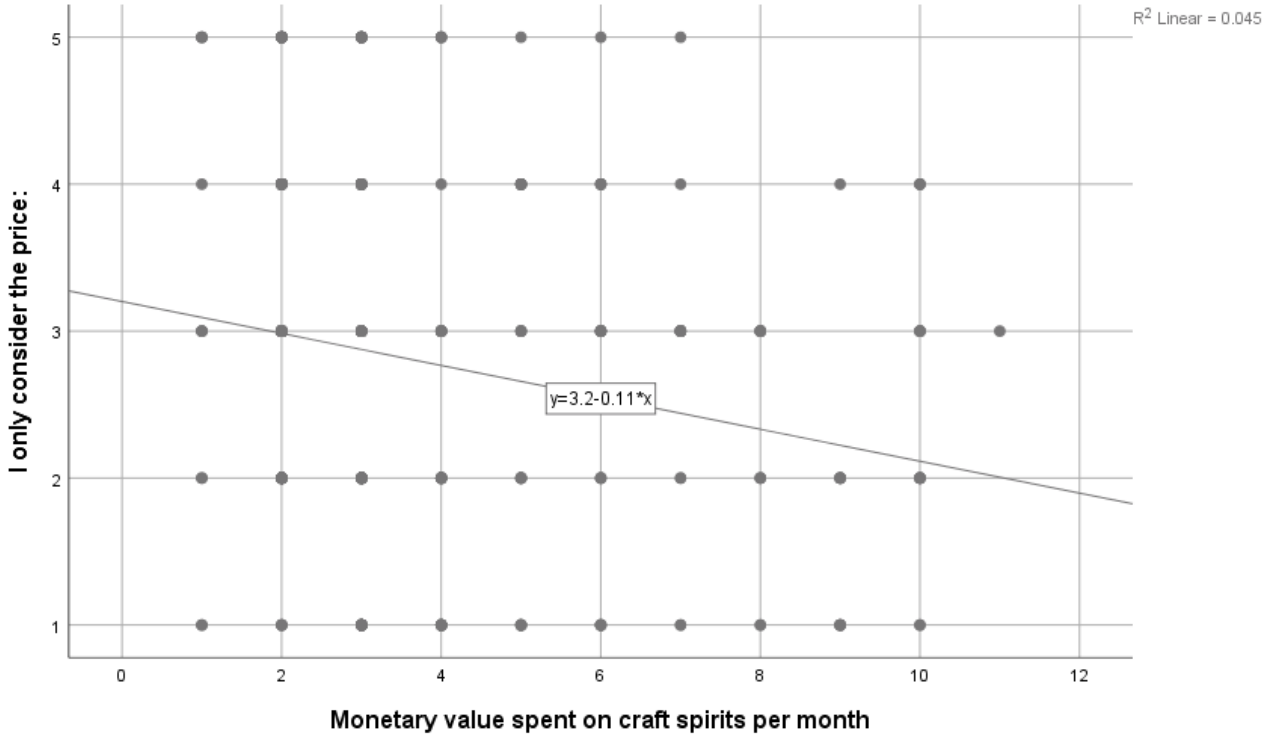
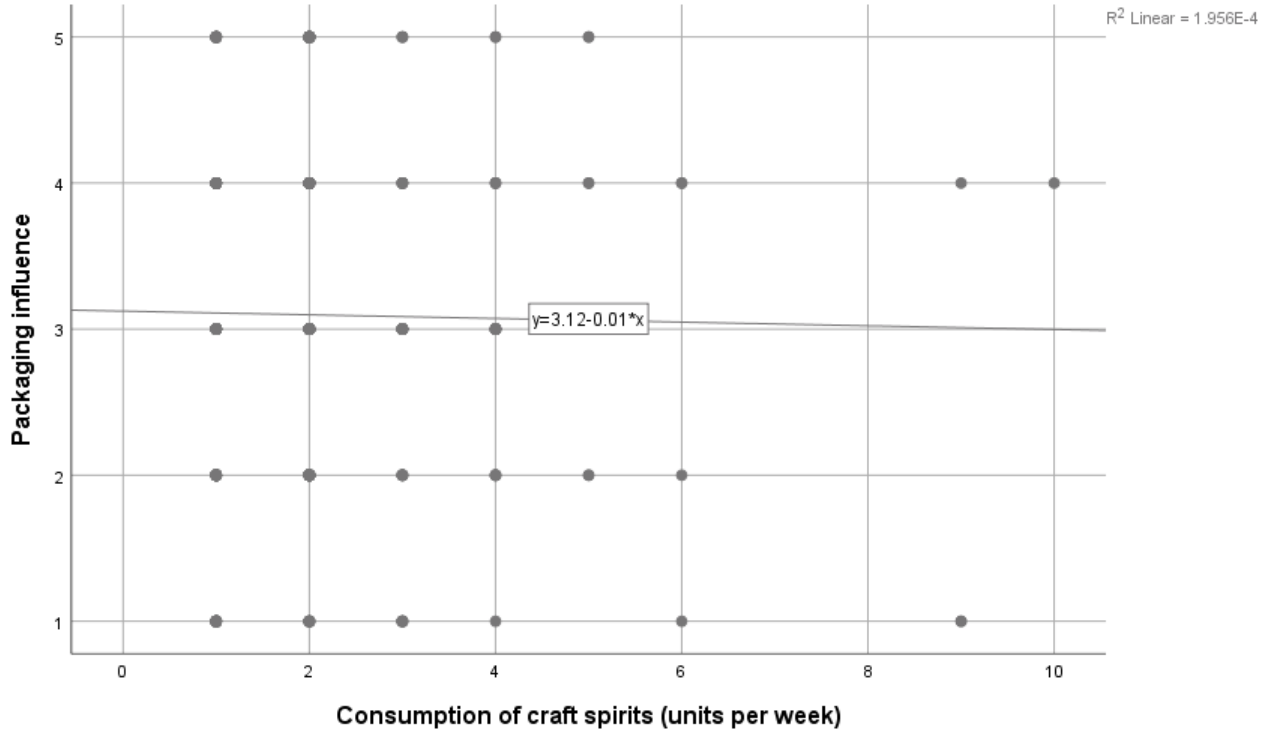


Figure 3-20: Consumer - Linear regression: Packaging influence versus consumption of craft spirits



As mentioned earlier, the correlation between packaging influence and craft spirit consumption was not significant at p>.05. The linear analysis was done on the relationship to indicate the constant influence of packing in the consumer decision-making process. The responses from those who do not drink craft spirits to those who drink more than 24 units per week had a neutral response to the influence of packaging as illustrated in Figure 3-20. Although this is not a clear indication of high influence of packaging, it is still the biggest influence after the taste and is constant over consumption. For those who do not obtain product information before procurement, packaging is the main communication channel from the distilleries to the consumer. The preference of packaging elements was further analysed in the next section.

3.3.5.2 Packaging preference

The seven biggest relationships in the in the monetary value spent on craft spirits and consumption of craft spirits columns of Table 3-22 were further analysed using linear regression. The beta (β) and constant of the analysis are summarised in Table 3-24. In all seven analyses, the packaging elements were the dependent variable and consumption or monetary value spent on craft spirits the independent variable.

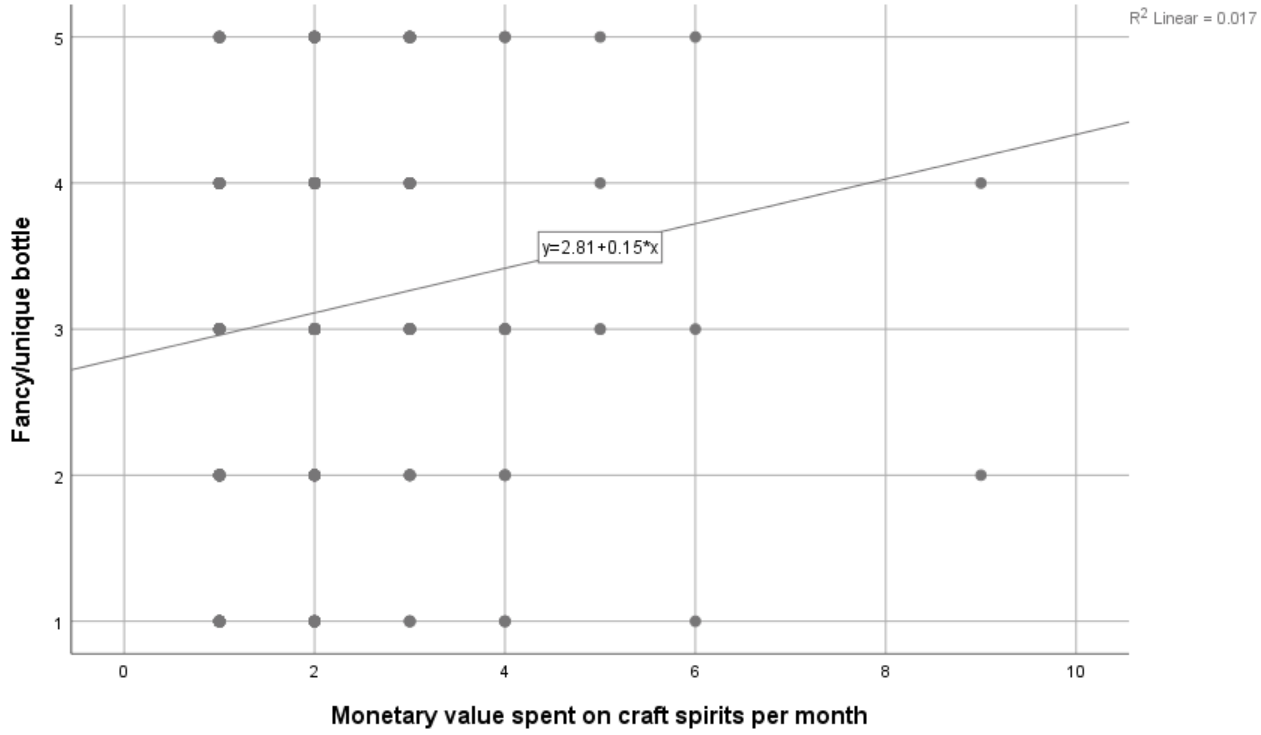
Table 3-24: Consumer - Linear regression: Packaging preference

Dependent variable	Independent variable	Beta	Constant

Fancy/unique bottle	Monetary value spent on craft spirits	0.131	2.807
Tall bottles	Monetary value spent on craft spirits	0.135	2.479
Cork	Monetary value spent on craft spirits	0.130	2.840
Home language	Monetary value spent on craft spirits	0.117	2.345
Coloured content	Monetary value spent on craft spirits	-0.150	3.073
750ml bottles	Consumption of craft spirits	0.159	3.110
Cardboard box	Consumption of craft spirits	-0.122	2.758

Figure 3-21 shows the small positive relationship between the use of fancy/unique bottles with a $\beta = 0.131$ and significant with $p<.05$. The respondents who spend less than R500 per month on craft spirits indicated they *do not prefer* or are *neutral* towards the use of fancy/unique bottles and those who spend more than R500 prefer the use of fancy/unique bottles. The respondents in the R500 to R3500 range from *neutral* to *agreeing* they prefer these bottles. Those who spend more than R3500 *prefer* to *strongly prefer* fancy/unique bottles. The mean of this test was 3.12 and the positive relationship indicates that a distillery has to have a unique and fancy bottle if they want to target the higher spenders on craft spirits.

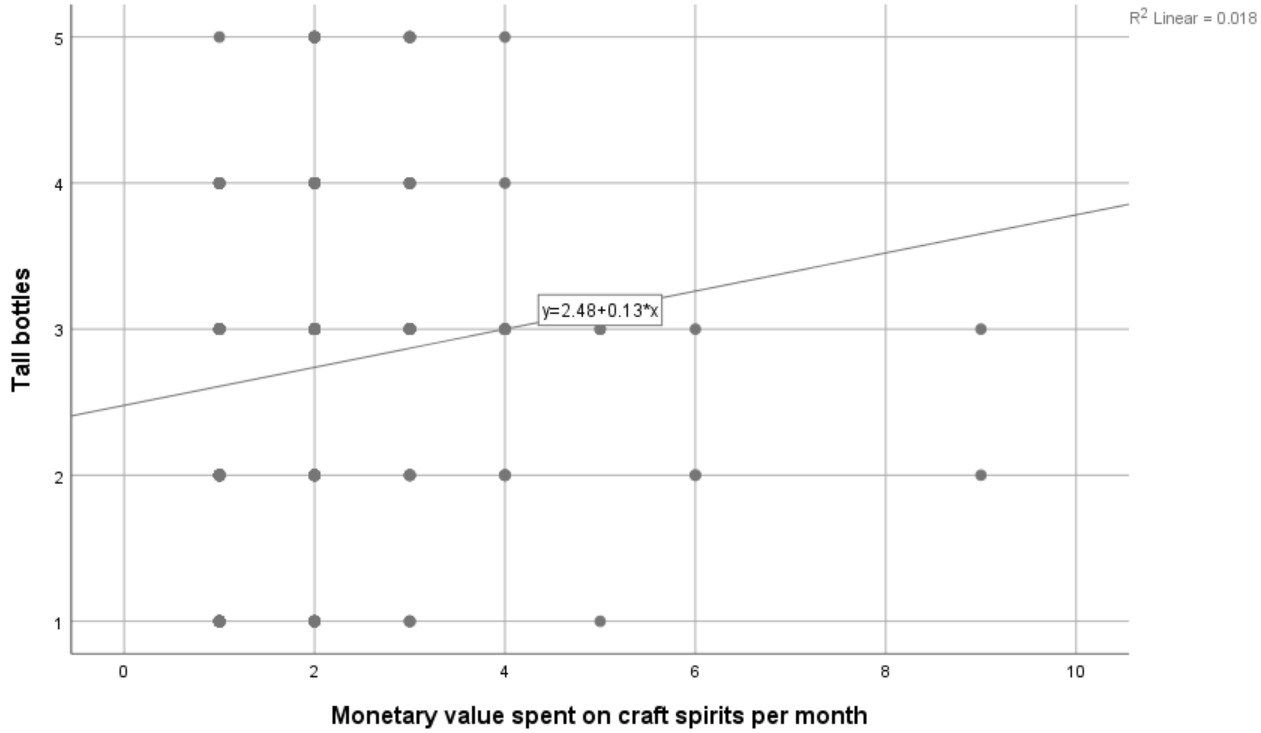
Figure 3-21: Consumer - Linear regression: Fancy/unique bottles and monetary value spent on craft spirits



In terms of the length of the bottle, those who spend less than R1500 do not prefer a tall bottle or feel neutral towards the length of the bottle. The relationship between money spent on craft spirits and the use of tall bottles is a small positive relationship with $\beta = 0.135$ and significant with $p<.05$.

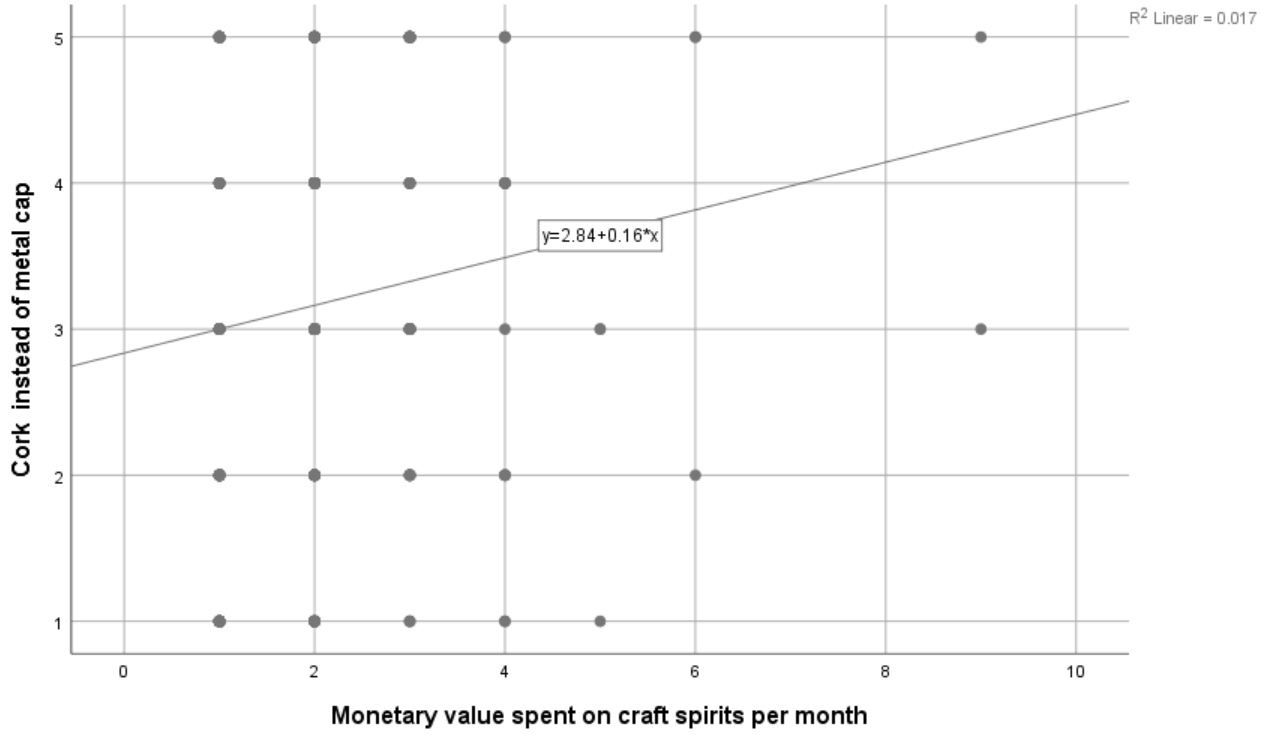
Those who spend more than R1500 range from a neutral attitude towards bottles to almost preferring tall bottles. The mean of the test was, however, 2.74 and the positive relationship small; therefore, the length of the bottle does not have a great influence on the consumer. The best will be to use a medium length bottle to target both the higher and lower spenders. This is shown in Figure 3-22.

Figure 3-22: Consumer - Linear regression: Tall bottles versus monetary value spent on craft spirits



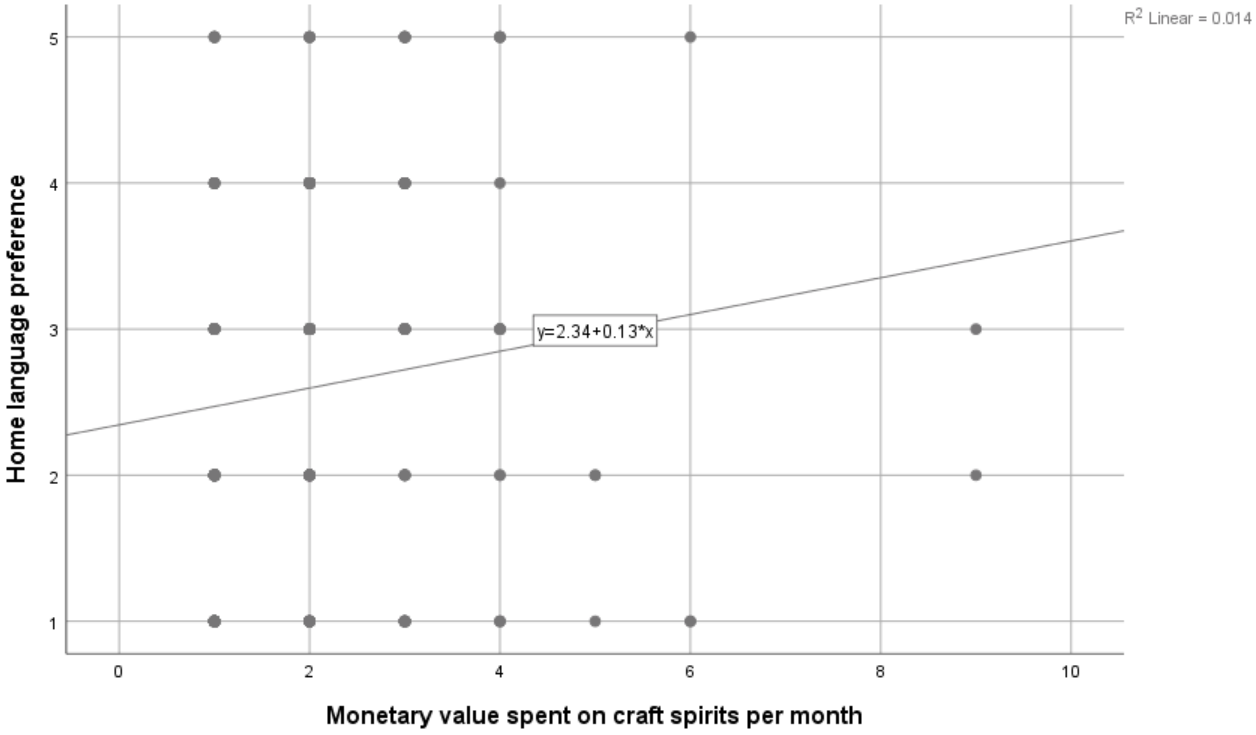
The mean for the preference of cork caps over metal caps was 3.17, and this preference is stronger for those who spend more on craft spirits. The relationship is a small positive with $\beta = 0.130$ and significant with $p<.05$. Those who spend money on craft spirits range from a neutral attitude towards the cap to preferring the use of cork as spending increases. The use of a cork is advisable when targeting those who regularly spend money on craft spirits. This relationship is illustrated in Figure 3-23.

Figure 3-23: Consumer - Linear regression: Cork caps versus monetary value spent on craft spirits



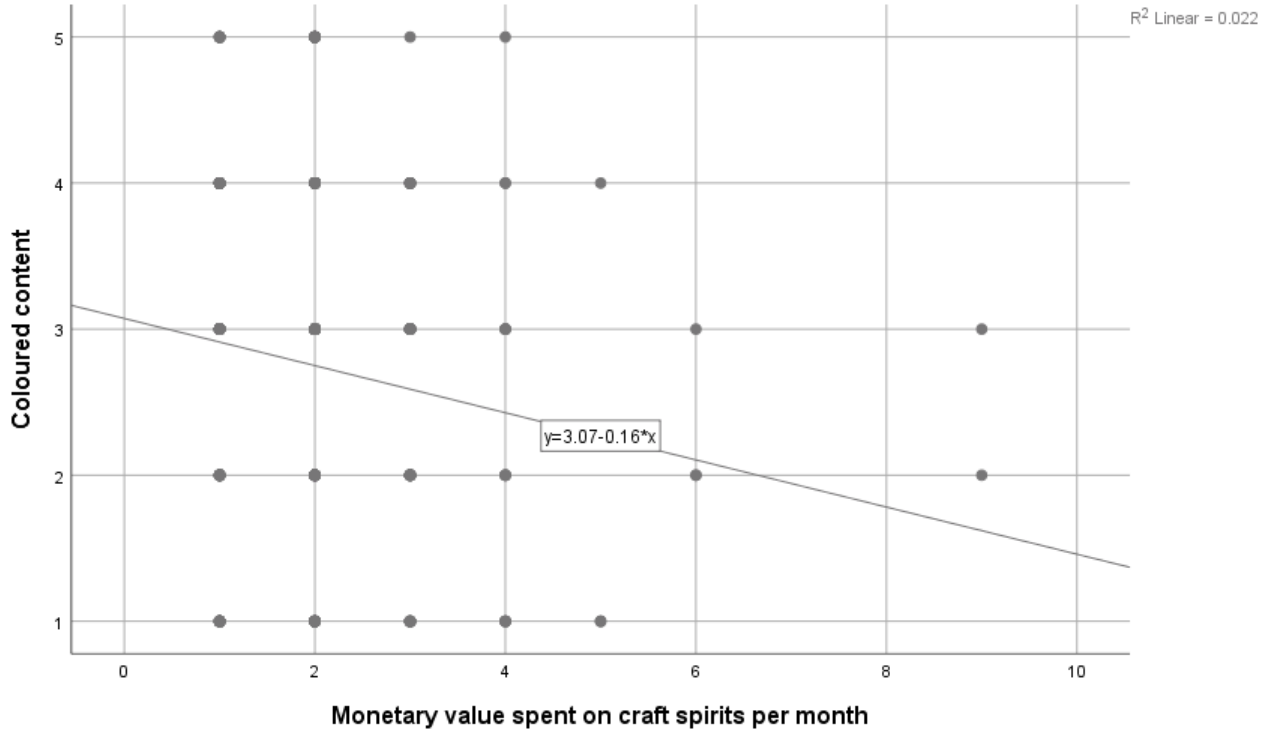
The use of the home language relationship with spending is almost the same as that of the use of a fancy/unique bottle and spending. This element had a mean of 2.6 and small positive relationship with $\beta = 0.117$ and significant with $p<.05$. The intersection with the neutral line at y=3 occurs in the middle of the value spent groups at R1750 per month. Consequently, as mentioned, it is advised to use a language that is understand and does not exclude any possible consumers. The preference and small relationship are an indication that the use of a specific language will not increase sales. This relationship is illustrated in Figure 3-24.

Figure 3-24: Consumer - Linear regression: Use of home language versus monetary value spent on craft spirits



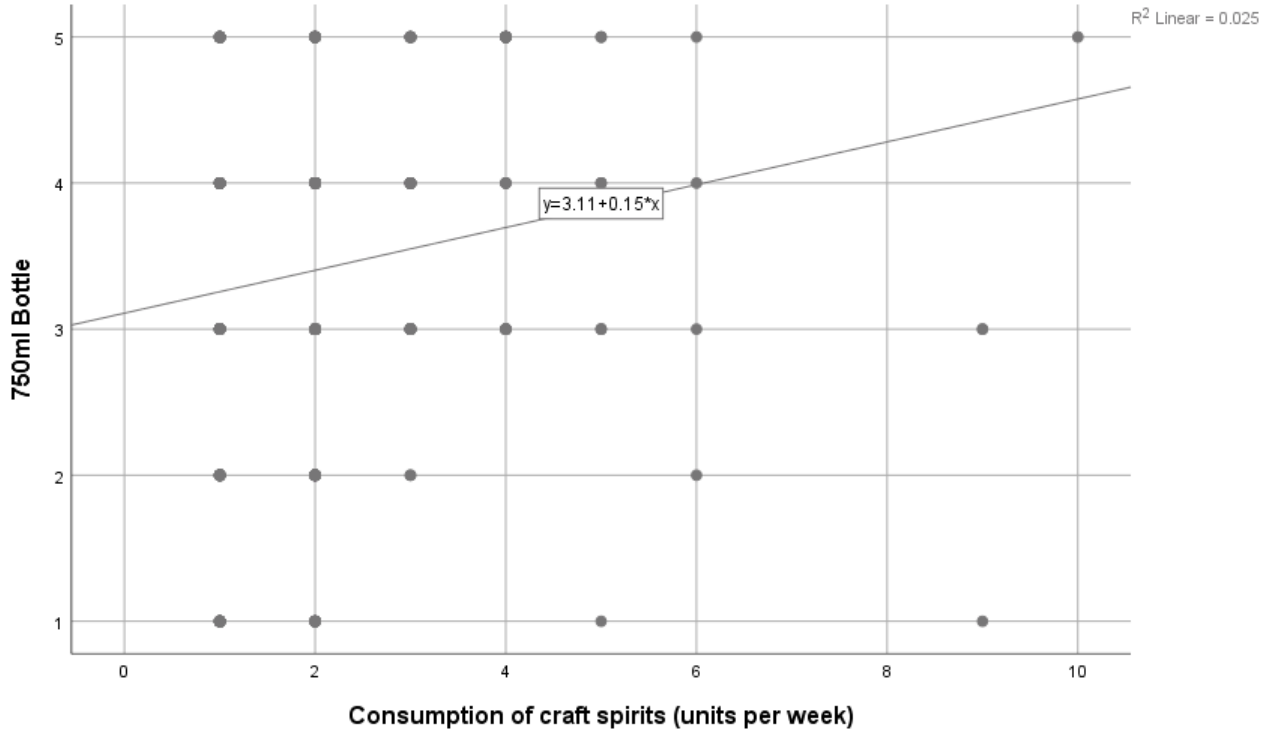
Respondents indicated that they do not prefer the craft spirits to have a colour. The test for this element had a mean of 2.74. As mentioned, this is only applicable to gin and vodka. The relationship between the preference for coloured content and monetary value spent on craft spirits is small and negative with a β=-0.150 and significant with $p<.05$. As can be seen on Figure 3-25, the regression line is under the neutral y=3 response from the lowest interval to the highest interval and the preference for uncoloured content increases with money spent on craft spirits. Those who spend more than R2500 per month, agree to strongly agree that the spirits do not have a colour. Distilleries who offer gin or vodka should consider keeping their products colourless if they want to target the upper spenders of craft spirits.

Figure 3-25: Consumer - Linear regression: Coloured content versus monetary value spent on craft spirits



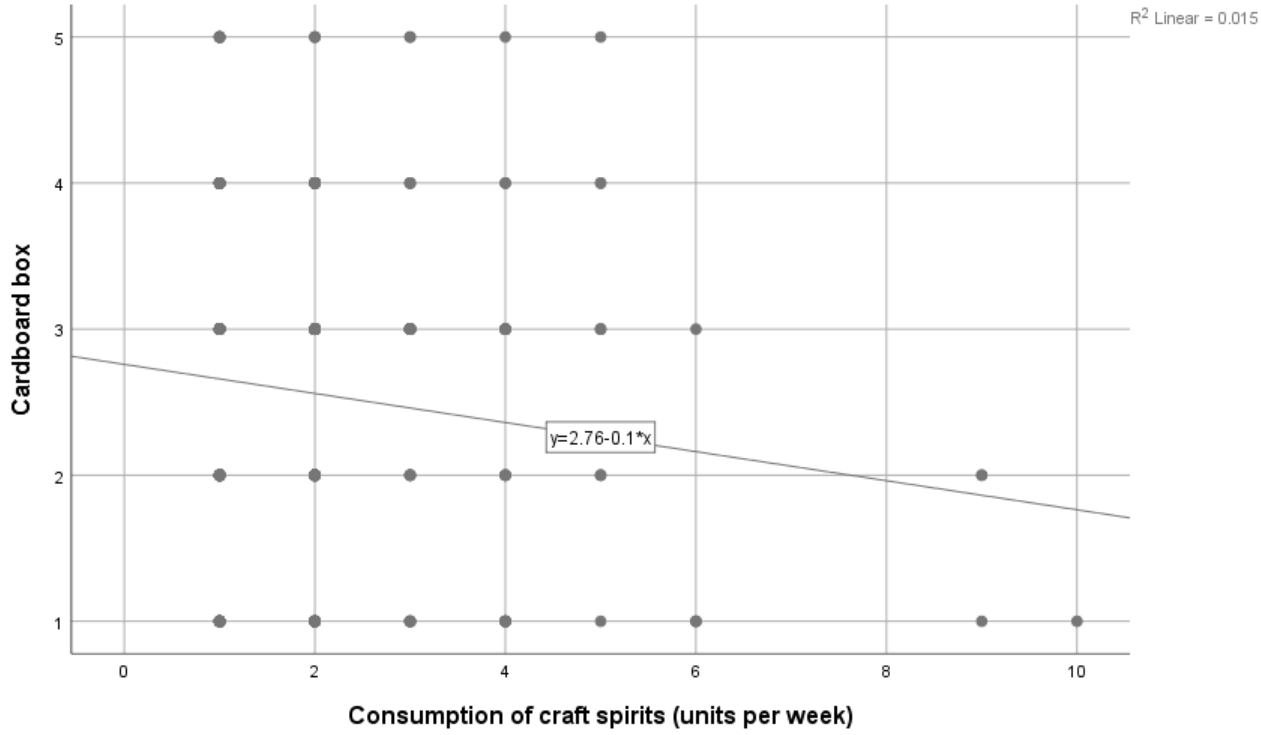
The test for the preference of a 750ml bottle had a mean of 3.42. This is an indication of respondents preferring a 750ml bottle over other bottle sizes. This preference increases as consumption of craft spirits increases as shown by the small positive relationship between these two tests with β=0.159 and significant with p<.05 in Figure 3-26. The regression line is above the neutral y=3 line for all the intervals and respondents who drink more than 13 units of craft spirits per week *prefer* to *strongly prefer* 750ml bottles.

Figure 3-26: Consumer - Linear regression: 750ml bottle versus consumption of craft spirits



Respondents do not prefer the use of a cardboard box as secondary packaging. The test for the element had a mean of 2.55 and the preference not to use a cardboard box increases as consumption increases. This small negative relationship with β=-0.122 and significant with p<.05 is shown in Figure 3-27. The line is under the neutral y=3 line for all the first eight intervals ranging between *moderately not preferring* to *not preferring* a cardboard box. Those who drink more than 21 units of craft spirits per week *more than just prefer not* to use this secondary packaging.

Figure 3-27: Consumer - Linear regression: Cardboard box versus consumption of craft spirits



From the above discussion, it can be concluded that the preferences of the respondents for some of the packaging elements change as consumption and value spent on craft spirit increase. These relationships can be used by distilleries to target specific consumers based on consumption or money spent. This is further discussed in the next section.

3.3.6 Conclusion

The main objectives of the empirical research conducted on the consumer were to determine the importance of packaging in the consumer's selection process as well as to determine what packaging elements have the most significant and least significant influence on the consumer in terms of the preference indicated for each of the elements. The information collected and analysed in the literature study was used to develop a new questionnaire that measures the selection criteria used and packaging preference of the consumers. It also included demographic, geographical and consumption information to allow for comparison over a variety of groups. The questionnaire was electronically sent out on Google Forms using a convenience and snowball sampling method. This process was completely anonymous and respondents were allowed to withdraw participation at any stage of the questionnaire.

The data collection approach was successful. A total of 323 responses were received, representative of a variety of South Africans over all demographic, geographical and alcohol

consumption variables. The nine indigenous languages were grouped together to ensure equal representation over Afrikaans-, English- and indigenous language-speaking respondents.

The data was imported into and analysed using SPSS. The reliability of the data was first tested by calculating the Cronbach alpha coefficient for the green initiatives section. It was only calculated in this section, as this section was the only section that tested the respondents' general attitude towards green initiatives through homogenous tests. Other sections tested distinct elements within a broader construct. The coefficient of 0.739 is higher than the accepted value of 0.7 for psychological tests and the data reliable.

The mean of the test for each of the selection criteria identified was used to determine the importance of packaging in the selection process relative to the other criteria and compared over the different consumer groups. A correlation and regression analysis were then used to determine the relationship between these criteria, income and consumption.

Taste was the most important selection criterion with a mean of 3.75. This was more or less the same across all the groups, except for alcohol consumption. There was a small positive relationship between the importance of taste and the amount of alcohol consumed. Taste becomes more important as consumption increases. This, however, is not part of packaging.

Packaging was the second most important selection criterion with a mean of 3.10. This is not that high, but in comparison to the others it is the second highest. This is more or less the same for all the groups, except for settlement type. Respondents from the city/suburbs place more emphasis on packaging. The relationship between packaging, income and consumption was insignificant with almost zero correlation. This suggests that packaging has the same importance across all income and consumption groups.

Besides the packaging criterion, the price criterion has the only effect on this study as this study's aim is to determine the influence of packaging on profitability. Respondents indicated price insensitivity when selecting craft spirits with a mean of 2.77. It also has a negative correlation with income and consumption. The higher the income and consumption, the less important price becomes when selecting craft spirits. This indicates that distilleries can maintain their price and make changes to their packaging without compromising the quality of the product to increase profitability.

The same analysis was done on the packaging preference section to determine what packaging elements are preferred and how this preference relates to the consumption of craft spirits. In the bottle construct, there was clear preference for a 750ml glass bottle with a mushroom-shaped cork. The preference for a 750ml bottle is directly related to the consumption of craft spirits. There

was neutral preference for a unique bottle, but this increases with money spent on alcohol. The bigger spenders prefer a fancy/unique bottle. This is the same for tall bottles, except that the preference showed by lower spenders is lower than for fancy/unique bottle.

In the label construct, respondents showed preference for the inclusion of the ingredients and background information of the distillery on the packaging. In terms of look and feel, they prefer matt labels, a cap-sealing label instead of an anti-tamper sleeve and more labels than just a front label, but not necessarily a back label. On round bottles, this can indicate the preference for a wrapping label. The language of the labelling does not matter to the consumers, but its importance does, however, increase with money spent on craft spirits. This increase is not significant enough for distilleries to move away from English, which is understood by the majority of the country.

Respondents indicated they prefer their craft spirits (only applicable to gin and vodka) colourless and do not want it to change colour when mixed. The disliking in coloured content increases with money spent on craft spirits.

Respondents did not show a clear preference for the use of secondary packaging. They do not prefer a cardboard or wooden box. This preference for not using a cardboard box increases with an increase in consumption. The only secondary packaging for which there was a slight preference was for value packs with a mean of 3.25.

As mentioned in the literature study, the implementation of initiatives to reduce the environmental impact of a distillery forms part of packaging because distilleries can communicate these initiatives on the packaging. Respondents indicated they do not prefer the use of recycled water and are neutral towards recycled paper for the label, but prefer the use of organic ingredients, recycled glass bottles and whether the distilleries have a bottle recycle initiative. These initiatives should be included on the packaging, if they are implemented.

Table 3-25 provides a summary of the influence on profitability if packaging is changed to fit consumer preference, increasing the demand of the product and ultimately the sales, assuming the price of the product is kept the same:

Table 3-25: Implementation of consumer packaging preference influence on profitability.

Implementation	Cost implication per bottle	Profit margin (if price is kept the same)	Return on investment	Return on assets	Return on sales
Change from 1l bottle to 750ml bottle	R10 - decrease	Increase	Increase	Increase	Increase

Change from 500ml bottle to 750ml bottle	R10 - increase	Decrease	Increase	Increase	Increase
Change from metal screw cap to mushroom-shaped cork	R3 - increase	Decrease	Increase	Increase	Increase
Change anti-tamper sleeve to cap sealing label	R0.8 - increase	Decrease	Increase	Increase	Increase
If round bottle, replace back label with wrapping label	R2 - decrease	Increase	Increase	Increase	Increase
Include background story	< R0.10 - increase	Decrease	Increase	Increase	Increase
Include ingredient information	< R0.10 - increase	Decrease	Increase	Increase	Increase
Change to language used on label to English	No cost implication	No influence	Increase	Increase	Increase
Remove cardboard box secondary packaging	R5 - decrease	Increase	Increase	Increase	Increase
If organic ingredients are used, include it on label	< R0.10 - increase	Decrease	Increase	Increase	Increase
If recycled glass bottle is used, include it on label	< R0.10 - increase	Decrease	Increase	Increase	Increase
Include recycle logo on label	< R0.10 - increase	Decrease	Increase	Increase	Increase

Implement bottle recycle initiative where consumers get discount if they return the bottle	Decrease - dependent on initiative cost structure	Increase	Increase	Increase	Increase

The distillery data is analysed in the next section and compared with the data collected from the consumers to determine whether the packaging used and selection criteria used to select packaging support the packaging preference of the consumer and the importance thereof in the consumers' decision-making process.

3.4 DISTILLERY DATA ANALYSIS

A total of 21 of the 36 distilleries identified completed the questionnaire. More than two responses were collected from seven of the nine provinces. Only the Northern Cape and KwaZulu-Natal had fewer than two responses, but they did at least have one response. Gauteng and the Western Cape both had four responses - the most of the provinces. The questionnaires were anonymous and the distilleries who did not respond cannot be identified. The data represents distilleries in all nine provinces as summarised in Table 3-26.

Table 3-26: Distillery response - Classification G1: Province

G1	Province	Frequency	Percent
1	Gauteng	4	19.0%
2	Free State	2	9.5%
3	Limpopo	2	9.5%
4	Western Cape	4	19.0%
5	Northern Cape	1	4.8%
6	Eastern Cape	3	14.3%
7	KwaZulu-Natal	1	4.8%
8	Mpumalanga	2	9.5%
9	North West	2	9.5%
	Total	21	100.0%

The age of the distilleries varies in age. There was one distillery that is less than a year old and one that is older than 10 years. The rest is almost evenly distributed between one and six years of age with the average age of distilleries between two and three years. It can be concluded that the data is representative of newer and older distilleries. The age of the distilleries is summarised in Table 3-27.

Table 3-27: Distillery response - Classification GL1: Distillery age

GL1	Distillery age in years	Frequency	Percent
1	0	1	4.8%
2	1	4	19.0%
3	2	3	14.3%
4	3	3	14.3%
5	4	3	14.3%
6	5	3	14.3%
7	6	2	9.5%
8	7	1	4.8%
9	>10	1	4.8%
	Total	21	100.0%

Ten of the 21 distilleries only have one owner. The capital burden on these distilleries falls on one person and the importance to operate profitably is of high importance to ensure sustainability. They do not have the luxury spreading losses between owners, but when profitable, only one person gets the spoils. The other 52.4% had more than one owner. Overall, the data collected represents distilleries that vary in age. Packaging selection criteria can be compared over the number of owners to determine how this criterion differs in terms of capital contributors. The number of owners of the responding distilleries is shown in Table 3-28.

Table 3-28: Distillery response - Classification GL2: Number of owners

GL2	Number of owners	Frequency	Percent
1	1	10	47.6%
2	2	3	14.3%
3	3	6	28.6%
4	4	2	9.5%
	Total	21	100.0%

All of the distilleries at least directly employ one person, with 71.4% of them indicating they employ between one and five employees, 23.8% between six and 10, and 4.8% between 11 and 15 as can be seen in Table 3-29. This is only direct employment and excludes the owners.

From Table 3-29 and Table 3-30, it is evident that these distilleries also create indirect job opportunities. In terms of sales methods use, 80% make use of an external agent to promote and sell their products. These agents are not full employees and normally work for more than one distillery, brewery or wine maker on a commission basis. Half of them also create opportunities by making use of platforms such as Takealot to sell their products.

They also create job opportunities through the distribution methods they use; 61.8% stated that they make use of both couriers and third parties to distribute their products. Third party distribution refers to PL4 transport companies who provide a distribution services along with warehousing, inventory management and supporting services (Norall, 2020).

All the distilleries contribute to the economy by creating direct and indirect opportunities. It is important for these distilleries to be profitable to keep on contributing to the economy and creating job opportunities.

Table 3-29: Distillery response - Classification GL3: Number of employees

GL3	Number of employees	Frequency	Percent
1	1 to 5	15	71.4%
2	6 to 10	5	23.8%
3	11 to 15	1	4.8%
	Total	21	100.0%

Table 3-30: Distillery response - Sales & Distribution SD3: Sales method

SD3	Agent	Internal	Website	Platform (e.g. Takealot)	Other
Total	17	16	18	10	2
Percent	80.95%	76.19%	85.71%	47.62%	9.52%

Table 3-31: Distillery response - Sales & Distribution SD4: Distribution

SD4	Internal	Courier	3rd party
Total	17	13	13
Percent	80.95%	61.90%	61.9%

Almost half of the distilleries are situated in a city, 23.8% in a town and the remaining 28.6 % on a farm. This emphasises the importance of small distilleries' economic impact as the majority of them operate from smaller settlements such as a town or farm, creating opportunities within the smaller communities. The settlement type in which the responding distilleries operate from is summarised in Table 3-32.

Table 3-32: Distillery response - Classification G2: Settlement

G2	Settlement type	Frequency	Percent
1	City	10	47.6%
2	Town	5	23.8%
3	Farm	6	28.6%
	Total	21	100.0%

From the above discussion it is evident the data collected is representative of distilleries from all across South Africa and vary in terms of age, size, location of operations and sales and distribution methods.

3.4.1 Frequency statistics

As mentioned in section 0, the purpose of the distillery questionnaire was to determine whether the sales, distribution and packaging of distilleries correspond with the preferences of the consumer deduced from the data collected. This data and comparison with consumer preference are discussed in this section.

Table 3-33 is a summary of the spirits produced by the respondents. More than 90% of the distilleries produce gin and rum, with rum produced the most by 95% of the distilleries. The production of gin by the majority of the distilleries corresponds with the consumer data where 52% of the respondents prefer gin as a craft spirit. The high number of rum producers, however, does not correspond with the consumer data where only 6% preferred rum. Vodka was the second lowest preferred spirit, yet 66% of distilleries produce it. Besides gin, rum and vodka, 33% of the consumers preferred another spirit. This can be for example whiskey or brandy. Although this high preference for a different spirit, only 38% of the distilleries produce a spirit that is not gin, rum or vodka. This should be further investigated by distilleries to determine exactly what other possible markets exist to allow them to expose the market.

Table 3-33: Distillery response - Production PS1: Spirits produced

PS1	Gin	Rum	Vodka	Other
Total	19	20	14	8
Percent	90.48%	95.24%	66.67%	38.10%

More than 50% of the distilleries produce five or more different flavours of spirits. A flavour was defined as a unique product. For example, if the distillery had three types of gin and one type of vodka, then they produce four flavours. Only two distilleries produce fewer than three flavours. This is summarised in Table 3-34.

Table 3-34: Distillery response - Production PS2: Different flavours

PS2	Different flavours available	Frequency	Percent
1	2	2	9.5%
2	3	3	14.3%
3	4	3	14.3%
4	5	5	23.8%

5	>5	8	38.1%
	Total	21	100.0%

All of the distilleries are classified as a craft distillery based on their production. All of them produce less than the 100 000l limit of the SACDI craft distillery definition. In terms of weekly production of 43% 750ml bottles, 52.4% produce fewer than 200 bottles and 14.3% more than 500 bottles. The average distillery produces between 100 and 200 bottles per week, which is 400 to 800 bottles per month. The weekly production is summarised in Table 3-35.

Table 3-35: Distillery response - Production PS3: Weekly production

PS3	Weekly production (bottles @ 43%)	Frequency	Percent
1	0	0	0%
2	0 to 99	5	28.6%
3	100 to 199	5	23.8%
4	200 to 299	1	4.8%
5	300 to 399	4	19.0%
6	400 to 499	2	9.5%
7	> 500	3	14.3%
	Total	21	100.0%

The distilleries also have a variety of batch sizes. Three distilleries have batch sizes less than 50l @ 43% ABV, 38.1% between 75 and 124l and 23.8% produce more than 200l at a time. In terms of number of bottles, 200l translate to 266 bottles 750ml. The average batch size was between 75 and 99 litres. This is summarised in Table 3-36.

Table 3-36: Distillery response - Production PS5: Batch size

PS5	Batch size (litres @ 43% ABV)	Frequency	Percent
1	0 to 24	2	9.5%
2	25 to 49	1	4.8%
3	75 to 99	3	14.3%
4	100 to 124	5	23.8%
5	125 to 149	3	14.3%
6	150 to 174	1	4.8%
7	175 to 199	1	4.8%
8	> 200	5	23.8%
	Total	21	100.0%

The weekly production and batch sizes are driven by the sales of the distilleries. This is a pull relationship; distilleries increase their production as a reaction to an increase in sales. The

average distillery sells 200 to 299 bottles of spirits per week. This is between 800 and 1200 bottles per month and more than 10 000 bottles per year. Almost 60% sell fewer than 300 bottles per week. Three of the distilleries produce more than 900 bottles per week. The sales information is summarised in Table 3-37.

Table 3-37: Distillery response - Sales & distribution SD1: Weekly sales

SD1	Weekly sales (750ml bottles @ 43%)	Frequency	Percent
1	0 to 99	7	33.3%
2	100 to 199	2	9.5%
3	200 to 299	3	14.3%
4	300 to 399	2	9.5%
5	400 to 499	1	4.8%
6	500 to 599	1	4.8%
7	600 to 699	1	4.8%
8	700 to 799	1	4.8%
9	> 900	3	14.3%
	Total	21	100.0%

To achieve these sales, distilleries make use of a variety of sales methods shown in Table 3-30, distribution methods shown in Table 3-31 and target a variety of markets. All of the distilleries target individuals, 90% have their own outlet in the form of a tasting room or restaurant, 85% sell to liquor stores and 76% sell to restaurants, pubs and bars. This an indication of a wide target market. They try to sell to as many as possible individuals either directly or by leveraging other institutions such as liquor stores. The target markets are shown in Table 3-38.

Table 3-38: Distillery response - Sales & distribution SD2: Target market

SD2	Individuals	Restaurants	Pubs and bars	Liquor stores	Own outlet (restaurant, tastings)	Other
Total	21	16	16	18	19	5
Percent	100.00%	76.19%	76.19%	85.71%	90.48%	23.81%

In terms of packaging, the distilleries combine a number of packaging elements to contain their product, communicate to the consumer and create an image that represents the distillery and makes the product stand out from other products. The different elements used by the distilleries are summarised in Table 3-39 to Table 3-48.

All of the distilleries use glass bottles. This corresponds with the consumers strongly preferring glass bottles. Distilleries should keep using glass bottles. The only way to save on bottles is to change bottle types or suppliers, but it is important to use glass bottles.

Table 3-39: Distillery - Frequency: Bottle material

Bottle material	Frequency	Frequency	Percent
Glass	21	100.0	100.00%

Twenty of the 21 distilleries have 750ml bottles, two have 1 litre bottles and nine have 500ml bottles. This corresponds with the data collected from the consumers indicating a preference for a 750ml bottle. Distilleries who only have 500ml bottles or 1l bottles should consider using 750ml bottles.

Table 3-40: Distillery - Frequency: Bottle size

Bottle size:	250 ml	500 ml	750 ml	1000 ml
Total	0	9	20	2
Percent	0.00%	42.86%	95.24%	9.52%

To seal the bottles, 57% of the distilleries use a cork with a wooden top. This was also the preferred cork by the consumers. The other distilleries make use of caps that are not preferred by the consumer. This preference for corks was only 3.17 and using the preferred cap would not necessarily result in an increase in sales.

Table 3-41: Distillery - Frequency: Cap material

Cap material	Frequency	Percent
Plastic	1	4.76%
Cork	3	14.29%
Synthetic cork	3	14.29%
Wooden top - cork/synthetic cork	12	57.14%
Plastic top - cork/synthetic cork	2	9.52%
Total	21	100.00%

Although the respondents did not show high preference for a cork, they did, however, prefer the use of a mushroom shaped cork. This test had a mean of 3.44, the second highest in the bottle construct. As for the distilleries, 61% use a press in cork and only 28% a mushroom-shaped cork. This is not in line with consumer preference. A change in the cork for those who do not use a mushroom-shaped cork based on this data probably increase sales. The cap shape is summarised in Table 3-42.

Table 3-42: Distillery - Frequency: Cap shape

Cap shape	Frequency	Percent
Screw on	2	9.52%

Press in	13	61.90%
Mushroom	6	28.57%
Total	21	100.00%

The material of the label has a big influence on the look and feel of the label. The two major types are matt and glossy labels. A third of the distilleries use a glossy label and two thirds use a matt label. This is more or less in line with what the consumers prefer. The respondents indicated a slight preference for matt labels with the test having a mean of 3.26. This is not a strong preference and remains constant over consumption, income and value spent on alcohol intervals. The label material is summarised in Table 3-43.

Table 3-43: Distillery - Frequency: Label material

Label Material used:	Frequency	Percent
Matt	14	66.67%
Glossy	7	33.33%
Total	21	100.00%

A bottle of spirits always has a front label on it that can be supported by a back label and front label. From the data collected, it is clear the distilleries did not understand the question about what labels they use correctly. If they did, they all would have indicated that they use a front label. The other two questions are correct because not all the bottles have a back label or cap sealing label. More than 79% indicated they use a back label or cap sealing label. This corresponds with the preference of the consumer to not only have a front label. Sixteen of the distilleries indicated that they use a cap sealing label, which is also in line with consumers' preference of a cap sealing label. The use of a back label by 71% of the distilleries is possibly an unnecessary expense since the test for the use of back label only had a mean of 2.6. This is an indication of consumers slightly leaning towards not preferring a back label. Distilleries that have round bottles can save money on printing and labelling cost by removing the back label and replacing it with a wrapping label. The labels used are summarised in Table 3-44.

Table 3-44: Distillery - Frequency: Label look

Label - Look:	Back label	Front label	Cap label
Total	15	18	16
Percent	71.43%	85.71%	76.19%

As mentioned in the literature study, there is information that is required by law to be on the label, for example the alcohol content and warning message. Apart from this, distilleries also sometimes

add other information, for example distillery background and ingredient information on their label and use unique names to communicate their uniqueness and product information to the consumer. These three elements were tested in the consumer questionnaire in terms of preference as well as in distillery questionnaire to determine the use of these elements.

All of the distilleries make use of unique names. This cannot be compared to the consumer data because the consumer questionnaire tested both funny and unique names in one test and the distillery questionnaire only unique names. There is a difference between a unique name and a funny name and therefore it cannot be compared.

Thirteen of the distilleries have their background information on the label and 14 the ingredient information. The test for background information and ingredient information had a mean of 3.85 and 3.73, respectively. This indicated that the consumers prefer this information on the label. This can be added to the label at only the cost of the redesign of the label and extra printing cost. The cost to label the bottle will remain the same and this will probably result in an increase in sales. The information included on the label is summarised in Table 3-45.

Table 3-45: Distillery - Frequency: Label information

Label - Information:	Distillery background	Ingredient information	Unique names
Total	13	14	21
Percent	61.90%	66.67%	100.00%

The distillery questionnaire language test had a multiple-choice answer. Distilleries could select more than one language because in some cases they use different languages for different products. For example, a distillery can use English on the majority of their products and have one product that is in Afrikaans. All of the distilleries make use of English on one or more of their products. This is in line with the consumer data where the home language test had a mean of 2.6. Although the small positive relationship between home language and money spent on craft spirits, the mean and the majority of the linear regression are still under neutral attitude towards language. It is better to use a language that is understood by the majority of consumers in South Africa to not exclude any consumers.

Three of the distilleries also use Afrikaans on one or more of their labels and four an indigenous language. Looking at the linear regression between language and money spent on craft spirits, those who spend more than R2500 per month *moderately prefer* to *prefer* the use of their home language. If distilleries want to target the high spenders of a specific language, they can use their home language to do so. It is suggested that distilleries use English on the majority of their labels. The home language products should be limited. The language used on products is summarised in Table 3-46.

Table 3-46: Distillery - Frequency: Label language

Label - Language:	Afrikaans	English	Indigenous
Total	3	21	4
Percent	14.29%	100.00%	19.05%

The consumers had a neutral response to the transparency of the content. They do not really care if the content is transparent or not. From the distilleries' side, 90% of them have clear products. This does not have an influence on the consumer and distilleries should stick to clear content. Consumers do, however, prefer their gin and vodka to not have a colour. The mean for this test was 2.74 and had a small negative relationship with money spent on craft spirits. Consequently, the preference for uncoloured content increases with spending. This cannot be compared with the distillery data as the test was on all products including rum and whiskey, which are coloured, and not only on gin and vodka. If distilleries have coloured gin and vodka, they should strongly consider to change it to uncoloured. Only two of the distilleries have special effects in their content, which is in line with the consumer not preferring special effects such as colour change. The content information is summarised in Table 3-47.

Table 3-47: Distillery - Frequency: Content

Content:	Clear	Opaque	Coloured	Special effects
Total	19	2	15	2
Percent	90.48%	9.52%	71.43%	9.52%

Two of the questions on secondary packaging used were also misunderstood by the distilleries. All of them indicated they use cardboard boxes as secondary packaging and 95% use wooden boxes. This cannot be true. Only a few of the distilleries to which the questionnaire was sent make use of cardboard or wood boxes as secondary packaging. It can maybe be that they thought these tests include boxes used to pack more than one bottle of spirits for distribution purposes. Therefore, it cannot be determined how many of the distilleries actually use wood or cardboard boxes as secondary packing. If they do, it is not in line with the preference of the consumer respondents not preferring this secondary packaging.

Consumers had a neutral preference towards value packs, yet 76% of the distilleries have value packs and only 42% gift packs, which is more preferable by the consumers. These can possibly be combined into value packs with gift elements based on the preference for gift packs. The sample pack was not tested in the consumer questionnaire. The secondary packaging used is summarised in Table 3-48.

Table 3-48: Distillery - Frequency: Secondary packaging

Secondary packaging:	Cardboard box	Wooden box	Value packs	Gift packs	Sample pack
Total	21	20	16	9	9
Percent	100.00%	95.24%	76.19%	42.86%	42.86%

Green initiatives apply to the spirits itself in terms of the water or ingredients used, the use of recycled packaging and other green initiatives to reduce the environmental impact, for example a bottle recycling initiative. This can be communicated to the consumer using the label of the product.

The consumers moderately did not prefer recycled water with a mean of 2.79 and had a neutral preference for a label made from recycled paper. This is in line with what distilleries are using; only 14% use recycled water and 4.7% use recycled paper for their label. Only two of the distilleries do not use organic ingredients, which corresponds with consumers preferring organic ingredients. Consumers also preferred the use of a recycled glass bottle, but only 47.6% of the distilleries actually use recycled glass bottles. The consumers showed highest preference for a bottle recycling initiative in the green construct and 66.6% of the distilleries actually have such an initiative. This is difficult to implement for remote distilleries because of the transport requirement to return the bottles. It is advisable for the distilleries to implement such initiatives in the communities wherein they operate. For example, if someone returns a bottle, they get discount on the next bottle. This discount should be smaller than the cost of the bottle and label minus the cost to clean the bottle. The use of organic ingredients and recycled glass should be included on the label. The green initiatives used are summarised in Table 3-49.

Table 3-49: Distillery - Frequency: Green initiatives

Green initiatives:	Recycled water	Recycled glass bottle	Recycled paper for label	Organic ingredients	Other	Bottle recycle initiative
Total	3	10	1	19	8	14
Percent	14.29%	47.62%	4.76%	90.48%	38.10%	66.67%

From the above discussion, it can be concluded that some of the packaging elements used by the distilleries correlate with the preferences from the consumer data and some do not correlate. This will be further discussed in the conclusion and recommendation will be made based on this data.

3.4.2 Reliability and validity

As discussed in section 3.3.2, it is important to determine whether data collected is reliable and valid before analysing it and drawing conclusions. As for the distillery questionnaire, only one

section made use of a five-point Likert scale. This was the section on selection criteria used by the distilleries when selecting packaging.

No factor analysis was done on the section, because six different heterogeneous criteria within the packaging selection construct were tested. Only the Cronbach's alpha coefficient was calculated using SPSS to determine the reliability of the data.

3.4.2.1 Cronbach's alpha

As show in Table 3-50 , the Cronbach's alpha coefficient was 0.609 for the packaging criteria section of the distillery data. This is lower than the suggested 0.7, but it is still acceptable due to the heterogeneity of the criteria tested, number of tests in the construct and the small sample of only 21 (Pallant, 2020).

Table 3-50: Cronbach's alpha reliability - Distillery: Packaging criteria

Construct	Number of items	Cronbach's alpha
Packaging criteria	6	0.609

It can be concluded that the data collected is reliable, and the probability of getting the same responses from respondents if they have completed the questionnaire again is high. The results of the analyses will therefore be reliable and recommendations can be made on the conclusions drawn from the analysis. The data was further analysed in the next section.

3.4.3 Descriptive statistics

The mean and standard deviation were calculated for the criteria tests in the selection criteria to determine the importance of the different criteria when distilleries select packaging for their products. This is summarised in Table 3-51.

Table 3-51: Distillery - Mean and standard deviation: Selection criteria

	Selection criteria	Mean	Standard deviation
SC1	Packaging price	2.67	1.155
SC2	Customer ease of use	3.67	1.017
SC3	Marketing strategy	4.38	0.590
SC4	Containment	3.14	1.315
SC5	Amount of labour in the packaging process	2.81	1.401
SC6	Safe distribution	4.00	0.548

Marketing strategy was the most important criterion when selecting packaging, with a mean of 4.38 and standard deviation of 0.590. This an indication of a narrow spread around the mean and correlates with the assumption made on the importance of packaging in the literature study, which

was proven in the analysis of the consumer data. The second most important criterion was safe distribution with a mean of 4 and standard deviation of 0.548. This also shows a narrow spread around the mean. This is due to the cost of breakage normally being on the seller and customers expecting delivery of undamaged goods.

The primary purpose of containment had a mean of 3.14. Distilleries have a neutral attitude towards the containment function as selection criteria, which can be due to the different bottles having the same containment function and therefore it is irrelevant when selecting packaging. The ease of use test that forms parts of the utility of packaging had a mean of 3.67. It is an important selection criterion, but not the most important. This can also be due to different bottles having more or less the same ease of use. To open a bottle, pour the spirits and dispose of the bottle, which is more or less the same for all glass bottles and therefore not that important selection criterion. It is also an indication that ease of use has a smaller influence on the evaluation of utility by the consumer and that taste, as proven in the consumer analysis, is the most important aspect of utility.

What is strange from the data is the unimportance of the two criteria involving price. Distilleries indicated that both the price of packaging as well as the labour involved in packaging, which also contributes to the cost, are not important criteria with a mean of 2.67 and 2.81. In the tough economic conditions, the high capital cost of starting a distillery and high number of competitors in the craft spirit market, one would have thought that the price will be an important criterion when selecting packaging.

These packaging criteria and relationships with the interval variables in section 1 and 2 of the distillery questionnaire is furthermore analysed using correlation analysis in the next section to determine the strength and direction of the relationships.

3.4.4 Correlation analysis

Table 3-52 is a summary of the correlation analysis done using SPSS. The significance of the correlations is indicated with an * next to the coefficient:

- ** Correlation is significant at the 0.01 level
- * Correlation is significant at the 0.05 level

The significant correlations wit $p<.05$ are discussed in this section. As mentioned in the previous section, price was the last criterion used by distilleries from the six criteria. There is also a medium negative relationship of ($r=-0.356$; $p<.05$) with the number of owners. The more owners the distillery has, the less they care about the price of packaging. More than one owner means the

capital burden is shared among owners and there is access to more capital. Consequently, the price of packaging is less important. Price also had a small negative relationship of (r=-0.173; p<.05) with the weekly sales. The more product is sold, the less they care about the price. This is due to an increase in revenue as a result of the increased sales. If a distillery wants to make a certain amount of net profit, the importance of the price of packaging will naturally decrease when this amount is surpassed and the focus will shift to sell as many as possible.

What was unexpected is the medium negative relationship of (r=-0.438; p<.01) between ease of use and weekly sales. The more product is sold, the less the distillery cares about the ease of use for the customer. This can either be that the distillery cares less about it or they realise all packaging has more or less the same ease of use and that there are other more important aspects such as taste that influence consumer behaviour, as proven by the consumer analysis.

Selection of packaging based on the market strategy was the most importance selection criterion. There is also a medium positive correlation of (r=0.308; p<.01) with number of different flavours produced by the distillery. Higher capital and stock cost are associated with the production of more flavours of spirits by a distillery. The sales should cover these costs and ensure a return on investment, so it is logical that distilleries place more emphasis on packaging in their marketing strategy when they produce more spirits to ensure the sales are sufficient to cover the additional cost and ensure return on investment.

The biggest correlation was the medium positive relationship of (r=.445; p<.01) between containments as criterion and the age of the distillery. The older the distillery, the more they care about the containment function of the packaging. This is probably as a result of the experience gained over the years to ensure the spirits are properly contained by the packaging.

Table 3-52: Distillery - Correlation: Selection criteria and distillery performance

Selection criteria	Distillery age in years	Number of owners	Number of employees	Weekly sales	Different flavours available
Packaging price	-0.028	-0.356*	-0.125	-0.173*	0.000
Customer ease of use	-0.127	-0.180	-0.312	-.438**	-0.271
Marketing strategy	0.067	0.077	0.196	-0.052	0.308*
Containment	.445**	0.035	0.263	-0.023	0.075
Amount of labour in the packaging process	0.007	0.065	-0.289	-0.077	-0.274
Safe distribution	-0.389	0.083	-0.158	-0.056	0.314

These relationships are further analysed with linear regression using SPSS in the next section.

3.4.5 Regression analysis

The five biggest correlations were analysed using linear regression to determine the strength and direction of the relationships. The beta (β) and constant of the analysis are shown in Table 3-53. The selection criterion was the dependent variable and interval variables the independent variable.

Customer ease of use has a negative relationship β=-0.438 with the weekly sales. The more product is sold, the less the distilleries care about the ease of use. The importance is high initially at 4.214, but decreases to not being important when sales are more than 900 bottles per week.

Containment has a positive relationship β=0.445 with the age of the distillery. Initially, the regression line is below the neutral y=3 line, but crosses the line at three years. Therefore, distilleries older than three years care about the effectiveness of the packaging containing the spirits.

Packaging price as a selection criterion had a negative relationship with both the number of owners and weekly sales of the distillery with a β= -0.356 and β= -0.173, respectively. Distilleries with one owner are more or less neutral towards the price of packaging, but from two owners upwards they care less and less about the price of packaging. The regression line between price and owners is below the neutral y=3 line and gradually decreases as the weekly sales increase. The line remains between neutral and agreeing that the price influences the decision-making.

This research is based on the assumption that packaging is important to influence consumer behaviour and increases sales. This is supported by the importance of packaging as selection criterion to promote the marketing strategy of the distillery. It also has a positive relationship of β =0.308 with the number of flavours produced. The regression line is above y=4 from two different flavours upwards. It is the most important aspect that distilleries look at when deciding and procuring packaging.

Table 3-53: Distillery - Linear regression: Selection criteria and distillery performance

Dependent Variable	Independent Variable	Beta	Constant
Customer ease of use	Weekly sales	-0.438	4.214
Containment	Distillery age in years	0.445	2.322
Packaging price	Number of owners	-0.356	3.417
Packaging price	Weekly sales	-0.173	2.912

Marketing strategy	Different flavours available	0.308	3.792

It can be concluded from the above discussion that packaging as a marketing tool is the most important aspect when deciding on packaging for a product. The influence of price is not as large as was expected and decreases when the numbers of owners and sales of a distillery increase. Ease of use becomes less important with an increase of sales and containment becomes more important.

3.4.6 Conclusion

The main objective of the distillery questionnaire was to compare the packaging used by distilleries with the packaging preferences of the consumer to determine whether they correspond or not. The secondary objective was to determine whether the selection criteria used to select packaging correspond with the literature study's findings on the importance of packaging in the consumer's decision-making process. Based on the information collected in the literature study and the objectives of collecting data from distilleries, a new questionnaire was developed to collect data from the distilleries. The data included information on the packaging used and selection criteria used to select packaging. Demographic, geographic and performance information was also collected to compare packaging used and selection criteria over a variety of groups defined by this information. The questionnaire was electronically sent out using Google Forms to 36 distilleries, four from each province, to ensure nationwide representation.

The data collection was successful. Of the 36 distilleries asked to complete the questionnaire, 21 responded. They were spread over the nine provinces and representative of all demographic, geographic and performance variables. The Cronbach alpha coefficient calculated on the selection criteria section confirmed the reliability of the data.

Frequency statistics were used to determine the percentage of the distilleries using different packaging elements, their target markets, production capabilities and sales strategies. This was then compared to the packaging preference of the consumer.

The bottles used by the distilleries correspond with the preference of the consumer in terms material and size, but only 28% use a mushroom-shaped cork preferred by the consumer. The labels used include the information and cap label preferred by the consumer, but a third use glossy labels instead of the preferred matt labels and unnecessarily have a back label in the case of round bottles. The content data collected could not be compared with consumer preference because the questionnaire did not distinguish between normally uncoloured gin/vodka and normally coloured spirits such as whiskey. The use of secondary packaging is not in line with consumer preference; 90% use wooden boxes as secondary packaging, which is not preferred

by the consumer. The majority of the distilleries use organic ingredients and have a bottle recycle initiative that corresponds with the consumer preference, but only 50% use the preferred recycled glass bottle.

The mean of the selection was used to determine the most important selection criterion used when distilleries select packaging and to compare the different criteria. Correlation and regression analyses were then used to determine the relationship between the importance of the different selection criteria and distillery information.

The main selection criterion to select packaging was selecting packaging to contribute to the marketing strategy. This corresponds with importance of packaging in the food and beverage industry suggested by Simmonds and Spence (2017:4 - 9), and the conclusion is drawn that packaging plays an important role in the craft-spirit consumer's decision-making process. The least important criterion was the price of packaging; although this is strange, it must be remembered that the craft alcohol consumers are, according to Lerro (2020:1 - 13), not sensitive to cost and as an effect, distilleries are not worried about the price of the packaging, but are mostly concerned with influencing the consumer in their decision-making process (Kilani *et al.*, 2020:78 - 93).

The correlation analysis yielded a negative relationship between the price of packaging as selection criterion, the number of owners and the weekly sales. More owners increase access to capital and higher sales improve the financial position of the distillery, which both reduce the sensitivity to the cost of packaging. The importance of packaging in the marketing strategy is constant over all the performance/production variables, except for the number of flavours the distillery produces. The more flavours they have, the more important packaging is in the marketing strategy. This could be explained by the increased capital expenses and available products that must be supported by sales that can be influenced by the packaging.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The primary objective of this study was to determine the influence of packaging on profitability in the South African craft spirit market by determining the packaging preference of the consumer, comparing it to the packaging used by distilleries and linking it to the cost of these packaging elements. The literature study in Chapter 2 provides a summary on the research into the craft spirit industry in South Africa and included: alcohol production; alcohol industry in South Africa; packaging; small, medium and micro-enterprises; profitability; market segmentation and concluded with a critical analysis of craft spirit packaging. Chapter 3 provides details on the qualitative empirical study performed using two newly developed questionnaires, one for the consumer and one for the distilleries, based on the findings in the literature study performed. The chapter provides the analysis with a discussion of the data collected, comparison between consumer preference and packaging used by distilleries, and lists the influence of the cost to change to the preferred packaging on the profitability of the distillery.

This chapter draws conclusions form the results of the empirical study in Chapter 3. Based on these conclusions and the literature study, recommendations are made to craft distilleries operating in the South African craft spirits industry on how they can use consumer preferred packaging to improve their profitability and sustainability in difficult market conditions. The results of the research are critically evaluated against the primary and secondary objectives to determine the success of this study. The chapter is concluded with recommendations for future research related to success factors in the craft alcohol industry.

4.2 CONCLUSIONS

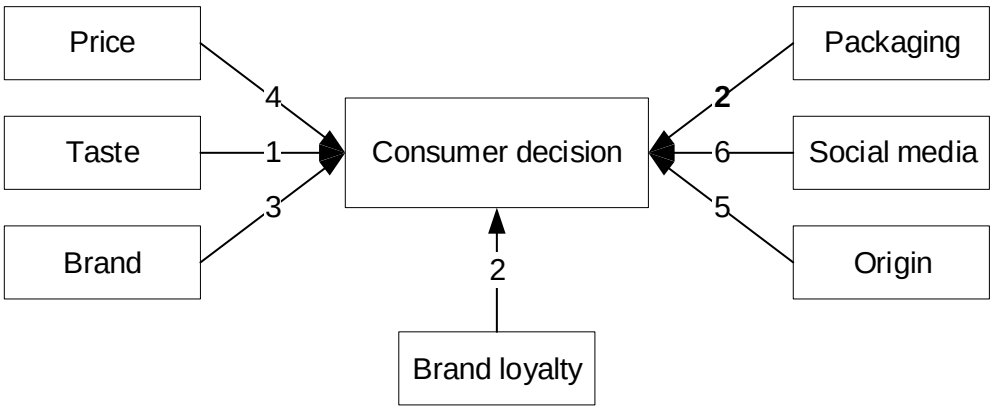
The empirical study in Chapter 3 explored the importance of packaging and packaging preference of the consumer by collecting and analysing data collected from both the consumer and distilleries to ensure representation from the producer and the consumer. Based on these analyses and comparison between the two analyses, conclusions will be drawn on the importance of packaging, cost sensitivity in the craft spirit market, packaging preference and the influence of packaging on profitability.

4.2.1 Packaging influence on consumer behaviour

The consumer decision-making model consists of four phases, namely problem recognition, information search, selection and post-purchase evaluation. Packaging has an influence on both the information search phase and post-purchase evaluation (Mothersbaugh, 2015:520 - 543). During the information search phase, the information conveyed on the packaging and the overall look and feel of the product have an influence on the consumer. It assists in distinguishing the product from competing products and to form an emotional connection with the consumer in an attempt to persuade them to purchase the product (Simmonds & Spence, 2017:4 - 9). Packaging also influences the consumer's post-purchase evaluation of the utility of the product (Jeffrey *et al.*, 2014:24); in this case, how easily the consumer gets access to the content of the bottle, ease of pouring, ease of storing and ease of disposing. Based on this, the conclusion was drawn from the literature study that packaging influences consumer behaviour (Ståhlberg & Maila, 2012:21 - 47), especially when packaging is the only source of information (Kapoor & Kumar, 2019).

The analysis of the data collected from the consumer confirms the importance placed on packaging by consumers in evaluating and selecting craft spirit products. From the seven factors identified to have an influence on the consumer's decision-making, packaging with a mean of 3.1 was second after the taste of the product. In the case of spirits, taste is the main contributing factor of the utility of the product. The importance of the different selection criteria is illustrated in Figure 4-1.

Figure 4-1: Consumer selection criteria with ranking



The importance of packaging differs when compared over demographic, geographical and consumption variables:

Gender: The importance placed on packaging between the two genders are more or less the same, it is slightly less important for male consumers.

Home language: Packaging is more important to English- and Afrikaans-speaking consumers than those speaking an indigenous language.

Age: Packaging plays a bigger part in the selection process of younger consumers aged between 18 and 38 and is less important for older people. This is in line with the findings of Swida that older people are less concerned with packaging; out of habit, they buy products with the highest utility and have confidence in the seller (Świda *et al.*, 2018).

Geographical location: In terms of residing province, consumers from Gauteng, Limpopo, as well as the Northern and Western Cape place more emphasis on packaging in their selection process, and those from Mpumalanga less. As for settlement types, packaging is the most important for those from more populated areas such as cities, suburbs and towns. This is as a result of a these areas offering a greater variety of products from which the consumer can choose (Kapoor & Kumar, 2019).

Craft spirit preference: Consumers who prefer gin and whiskey are influenced more by packaging than those preferring other types of spirits. This is explained by the findings of Kapoor and Kumar that emphasis placed on packaging directly correlates with the variety of products available (Kapoor & Kumar, 2019) as in the case of gin and whiskey.

Income and consumption: There are no clear distinctions on the importance of packaging in the consumer selection process compared to the income and consumption groups. This is supported by the almost zero correlation between importance of packaging, income and consumption as summarised in Table 3-21. The small relationship of β=-0.014 between importance of packaging and consumption is also an indication that there is a constant importance placed on packaging over consumption groups.

The results of the analysis on the data collected from the distilleries also confirm the importance of packaging to persuade the consumer in purchasing a product. Marketing strategy is the most important criterion when distilleries select packaging with a mean of 4.38 and standard deviation of 0.590. They select packaging to visually distinguish their product from competing products and to communicate a message that is in line with their marketing strategy for their target market to form a positive association with their product.

4.2.2 Cost sensitivity in the craft spirit market

Most research in the craft alcohol industry is done on craft beer. There is limited research available of craft spirits, but since both are classified as craft alcohol with authentic and unique products, it can be assumed research findings on craft beer will be similar for the craft spirits (Thurnell-Read,

2019). According to Lerro (2020:1 - 13), craft alcohol consumers are not sensitive to the cost of craft alcohol; they are willing to pay high prices for authentic and unique products that offer a special taste.

The analysis of the consumer selection criteria data supports this assumption. Price was only the fourth highest criterion of the seven criteria identified with a mean of 2.77, lower than the neutral response of three, slightly leaning to disagreeing that price is an important criterion when selecting craft spirits, compared to the different demographic, geographic and income/consumption variables:

Gender: The mean of the price test is below the neutral three for both males and females with males caring a little bit less about price than females.

Home language: The mean of the price test for Afrikaans-speaking consumers is slightly above the neutral three; they care more about price than the other two groups with a price test mean of around 2.5. Leaning more to *disagreeing* that price has an influence on their decision-making.

Age: Consumers older than 59 care less about price than younger consumers do. This is in line with the findings by Swida (2018) that older consumers care less about the price of a product.

Income and consumption: The influence of price is indirectly related to the income and alcohol consumption of the consumer. The correlation between income and influence of price is -.140* significance with $p<.05$. The more people earn, the more disposable income they have to spend on alcohol and the less they care about the price of the product. The correlation between the influence of price and consumption of alcohol is -.166* significance with $p<.05$. The more consumers drink, the less the care about the price. This supports the findings of Lerro (2020:1 - 13) that craft consumers are in the middle to upper class, with more disposable income, and low sensitivity to price.

Lerro (2020:1 - 13) also argues that the low sensitivity to cost in the craft market has led to distilleries over-spending on the packaging of their products. This is an indication of distilleries having a low sensitivity to cost when selecting their packaging. This is supported by the analysis of selection criteria distilleries use when selecting packaging.

The price of packaging is the least significant criterion to select packaging with a mean of 2.67 and labour the other cost component of packaging second least significant with a mean of 2.81. Both indicate a low sensitivity to cost. This sensitivity gets lower with an increase of available capital. The correlation between price and number of owners is negative -.356* significance with $p<.05$. More owners mean greater access to capital and lower sensitivity to cost. The performance

of the distillery also influences their sensitivity to cost. The correlation between price and weekly sales is negative -.173* significance with p>.05. The higher the sales, the more funds are available and the lower the sensitivity to cost.

4.2.3 Preferred packaging

As mentioned before, packaging assists in visually distinguishing the product from competing products and to communicate critical product and company information to the consumer. It influences the consumer's perception about the quality and taste of the product. If this is in line with the consumer's expectation, needs and preferences, it creates a positive association about the product, and increases their willingness to pay for the product (Simmonds & Spence, 2017:4 - 9). Therefore, it is important for the packaging of craft spirits to be in line with the preference of the consumer to bring about a positive outcome in their decision-making. From the analysis of the consumer preference data in section0, the consumer prefers the following:

Bottle: The consumer prefers a unique 750ml glass bottle with a mushroom shaped cork. This preference for the uniqueness and size of the bottle as well as the cork is directly correlated to the monetary value spent of craft spirits. Those who spend more, have a stronger preference for this type of bottle. If a distillery wants to target consumers who regularly spend money on craft spirits, it is advised to use this type of bottle.

Label: The consumer prefers a cap sealing label instead of an anti-tamper sleeve. In the case of a round bottle, they prefer a wrapping label instead of a back and front label. All of these labels are preferred on matt paper. In terms of information, they want the distillery to include ingredient and background information on the label. There is limited preference for the language of the labels to be in the home language of the consumer. The language used excludes those who do not understand it and reduces the market size. If a distillery does not want to target a specific language group of consumers, it is advised to use English.

Content: In the case of gin and vodka, the consumer prefers uncoloured content that does not change colour. The preference for uncoloured content increases with monetary value spent on craft spirits. The bigger spenders do not prefer their gin and vodka to have a colour. As with the bottle, if distilleries want to target regular craft consumers, it is advised they do not colour their gin or vodka.

Secondary packaging: The consumer does not prefer the use of a cardboard or wooden box as secondary packaging on single bottles; they only prefer the use of secondary when it is for a gift or value pack. Distilleries do not need to spend unnecessary funds on boxes for single products; they can rather use these funds for promotional campaigns in the form of gift/value packs.

Green initiatives: As mentioned before, green initiatives form part of packaging as the packaging itself can be environmentally friendly and can also be used to communicate green initiatives to the consumer. In terms of an environmentally friendly product, the consumer prefers the use of organic ingredients and a recycled glass bottle. As for green incentives, a bottle recycling initiative is appealing to them; for example, discount on the next bottle if you return the empty bottle. These initiatives should be communicated to the consumer on the packaging to influence them to buy the product by speaking to their environmental sensitivity.

4.2.4 Influence on profitability

Packaging is a great investment; as mentioned above, it plays an important in the consumer's decision-making process. In the beverage industry, 90% of consumers first examine the packaging before making a decision, and 75% of purchase decisions are made at the point of sale(Simmonds & Spence, 2017:4 - 9). This is supported by the finding from the analysis of both the consumer and distillery in section 0 and 0, respectively. The use of consumer preferred packaging increases the possibility of them creating a positive association with the product and ultimately buying it; consequently increasing the demand for the product by effectively using packaging in the marketing strategy. This makes it such a great investment, there is a low cost to altering packaging to fit the consumers with no impact on the manufacturing process (Ståhlberg & Maila, 2012). Based on the literature and empirical studies' findings, this will increase the demand for the product and sales of the distillery. Improving profitability happens in the following ways if packaging is altered to be in line with consumer preference, assuming the price of the product is kept the same and not taking into account once-off fees:

Cost saving:

The following changes improve the profit margin, return on investment, return on assets and return on sales:

- In the case of round bottles, replacing the front and back label with a wrapping label.
- Change from a 1l bottle to a 750ml bottle.
- Remove secondary packaging on single bottles.
- Implement a recycling initiative where the consumer gets discount less than the cost of a new bottle with labelling when returning the empty bottle.
- Change the language of the packaging to English (no cost implication).

Low cost:

The following changes will slightly reduce the profit margin, but increase the return on investment, return on assets and return on sales:

- Change packaging to include the ingredient information.
- Change packaging to include the distillery's background information/story.
- If organic ingredients or recycled glass bottles are used, change packaging to include this information.
- Change packaging to include the recycling logo.

Medium cost:

The following changes will reduce the profit margin, but increase the return on investment, return on assets and return on sales:

- Change from a 500ml bottle to a 750ml bottle.
- Change from a metal screw cap to a mushroom-shaped cork.
- Change from anti-tamper sleeve to a cap sealing label.

All the above-mentioned changes in profitability as a result of changing packaging to be in line with consumer preference assume the price is kept constant, but as derived from this study, craft spirit consumers are not sensitive to price. Therefore, the distilleries can increase the price of their products when implementing packaging changes to cover the cost of the additional packaging implementation and maintain their profit margins.

4.3 RECOMMENDATIONS

Based on the conclusions in the above sections, the following recommendations are suggested:

- The consumers of craft spirits are not sensitive to price; a drop in the price of a product will not necessarily increase sales. The consumers are willing to pay for a unique product and tasting experience. Distilleries should concentrate on producing such a product.
- When distilleries change the packaging of their product, they should also increase the price of the product to cover the increase in the production price. Consumers are not sensitive to price and the positive association the packaging creates plays a more significant role in persuading the consumer to buy the product.
- When a distillery removes a packaging element to be in line with consumer preference, they should not decrease the price of the product. The removal of the element will increase

the possibility of positively influencing the consumer to buy the product, more than a decrease in price.

- Distilleries should use organic ingredients for their spirits and recycled glass bottles as packaging. They should also have environmentally friendly initiatives in their manufacturing process and reduce their environmental impact. All of this should be communicated through their marketing methods to speak to the environmentally conscious consumer, especially on the packaging, as 70% of consumers find product information on the product itself.
- It is suggested that English is used on the packaging of most products, but a promotional product in a specific language can increase the variety of products produced and target a specific group of consumers. For example, a distillery that makes three flavours of gin can produce a limited brandy packaged in Afrikaans packaging.
- The consumer does not prefer secondary packaging on single bottles. Distilleries should only use secondary packaging when it is for a gift pack or value pack.
- Distilleries should ensure their bottle is unique, preferably a 750ml glass bottle with a mushroom-shaped cork.
- New distilleries that produce gin or vodka should consider not colouring the content. A change of the colour of gin/vodka for established distilleries is not suggested. This change in colour will change the look of the product and possibly have a negative influence on loyal customers.

4.4 EVALUATION OF THE STUDY

The success of this study depends on determining whether the primary and secondary objectives detailed in section 1.4 are achieved by critically evaluating them with the results of the research.

4.4.1 Primary Objectives

The main objective of this study was to determine the influence of packaging on profitability in the South African craft spirit industry.

This was achieved by means of the findings in the empirical study: packaging influences the consumers' decision-making; if the packaging is in line with consumer preference, it creates a positive association and increases the possibility of them buying the product, ultimately increasing the demand for the product. These changes come at a cost, but the consumer is willing to pay for the unique product and tasting experience. The increase in demand leads to an increase in sales and improves profitability.

4.4.2 Secondary Objectives

The secondary objectives of this research were:

- To determine the importance of packaging in the consumer's decision-making process
- To determine craft spirit consumers' sensitivity to cost
- To determine consumers' preferred craft spirits packaging
- To determine how green initiatives influence consumer behaviour
- To determine distillery criteria for selecting packaging
- To determine whether the packaging used by distilleries correspond with consumer preference

These were achieved by the findings of the empirical study:

- The analysis of the consumer data determined that packaging is the second most important selection criteria after the taste of the content. This was also supported by the analysis of the distillery data that showed packaging is selected in accordance with the marketing strategy of the distillery.
- Consumer data showed that price is the third least significant criterion when selecting craft spirits; it also becomes less significant as consumption increases. The consumer price insensitivity is also supported by the finding that distilleries do not look at the price when selecting packaging, because they know the consumer is willing to pay for it.
- Consumer data showed that gin is the preferred craft spirit.
- Consumer data showed the implementation of green initiatives and the communication thereof on the packaging increase the likelihood of them buying the product.
- The comparison of consumer and distillery data showed that some elements of the packaging used correspond with consumer preference; for example, the use of a glass bottle, and some do not for example, prefer the use of secondary packaging on single bottles.

4.5 LIMITATIONS OF THE STUDY

The study had the following limitations:

- The data was collected during the lockdown of the country during the Covid-19 pandemic. During this time, the distilleries were not allowed to operate, which made them difficult to reach using the contact details on their websites. This affected the planned snowball sampling of using the distilleries to get access to their clients.

- A number of distilleries who are in the start-up phase are unlicensed and were reluctant to participate.
- Some of the questions were misunderstood by the consumer and distillery. For example, the question on the distillery questionnaire on the use of a cardboard box was understood as a box to pack more than one bottle instead of an individual bottle.

4.6 IMPLEMENTATION SUGGESTIONS

It is suggested that the findings are implemented in phases in accordance with the cost implications. For example, start with the changes that will result in a cost saving, then the ones with a low cost and lastly the those with the highest cost implication. Parallel to this, it is suggested the distillery change packaging and procedures to be more environmentally friendly. The consumer trend towards environmentally friendly products will only get stronger over the next few years and consumers will be more willing to pay for these products, especially in the niche craft spirit industry. It is also an important factor in the sustainability of the distillery, resources like water are only going to get scarcer. It should also by emphasised that from the research it is clear that the distilleries with greater access to capital (financial and human) tend to be more successful, new or struggling distilleries should consider outside investments in the company.

4.7 SUGGESTIONS FOR FUTURE RESEARCH

The following suggestions are made for further research using this research as basis:

- It may be beyond the scope of a mini-dissertation, but extending this research to include other countries, to compare the packaging preferences between countries to create a basic packaging model to fit the majority of countries, could be explored. This model can then be used to maximise export opportunities.
- This research found that the importance of the price of packaging is indirectly correlated to the number of owners of the distillery due to access to the combined capital of the owners. Further work can be done to determine the influences of combined ownership in the success of craft distilleries.
- This research points to the high capital requirement of starting a distillery as one of the reasons distilleries fail. An alternative to starting a distillery to enter the craft spirits market is to make use of an established distillery to produce the spirits by means of contract distilling. Research can be done on contract distillation as an alternative to sustainably produce craft spirits.

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Classification						
Demographics						
1.1	Gender	Male (1)		Female (2)		
1.2	Home language	isiZulu (1)	Afrikaans (2)	English (3)	Sepedi (4)	
		isiXhosa (5)	Sesotho (6)	Xitsonga (7)	SiSwati (8)	
		Tshivenda (9)	isiNdebele (10)	Setswana (11)	Other (12)	
1.3	Age	18 to 27 (1)		28 to 37 (2)		
		38 to 47 (3)		48 to 57 (4)		
		58 to 67 (5)		>68 (6)		
1.4	Monthly net income	R5 000 to R9 999 (1)	R10 000 to R14 999 (2)	R15 000 to R19 999 (3)	R20 000 to R24 999 (4)	
		R25 000 to R29 999 (5)	R30 000 to R34 999 (6)	R35 000 to R39 999 (7)	> R39 999 (8)	
Geographical information						
1.5	Province where you live	Gauteng (1)	Free State (2)	Limpopo (3)		
		Western Cape (4)	Northern Cape (5)	Eastern Cape (6)		
		KwaZulu-Natal (7)	Mpumalanga (8)	North West (9)		
1.6	Settlement type where you live	City (1)	Suburb (2)	Town (3)		
		Village (4)	Informal settlement (5)	Farm/Other (6)		

Alcohol consumption						
One unit of alcohol is equal to: -218ml beer - 76ml wine - 25ml spirits						
2.1	**All alcohol** Consumption (units per week)	0 (1)	1 to 3 (2)	4 to 6 ()3	7 to 9 (4)	10 to 12 (5)
		13 to 15 (6)	16 to 18 (7)	19 to 21 (8)	22 to 24 (9)	> 24 (10)
2.2	**Spirit** consumption (units per week)	0 (1)	1 to 3 (2)	4 to 6 (3)	7 to 9 (4)	10 to 12 (5)
		13 to 15 (6)	16 to 18 (7)	19 to 21 (8)	22 to 24 (9)	> 24 (10)
2.3		0 (1)	1 to 3 (2)	4 to 6 (3)	7 to 9 (4)	10 to 12 (5)

	Beer/cider consumption (units per week)	13 to 15 (6)	16 to 18 (7)	19 to 21 (8)	22 to 24 (9)	> 24 (10)
2.4	**Alcohol** preference	Spirits (whiskey, brandy, gin, vodka, etc.) (1)	Beer (2)	Cider (3)	Wine (4)	Other (5)
2.5	Monetary value spent on alcohol per month	R0 (1)	R1 to R499 (2)	R500 to R999 (3)		
		R1000 to R1499 (4)	R1500 to R1999 (5)	R2000 to R2499 (6)		
		R2500 to R2999 (7)	R3000 to R3499 (8)	R3500 to R3999 (9)		
		R4000 to R4499 (10)	R4500 to R4999 (11)	> R5000 (12)		
2.6	**Craft spirits** Consumption (units per week)	0 (1)	1 to 3 (2)	4 to 6 (3)	7 to 9 (4)	10 to 12 (5)
		13 to 15 (6)	16 to 18 (7)	19 to 21 (8)	22 to 24 (9)	> 24 (10)
2.7	Monetary value spent on **craft spirits**	R0 (1)	R1 to R499 (2)	R500 to R999 (3)		
		R1000 to R1499 (4)	R1500 to R1999 (5)	R2000 to R2499 (6)		
		R2500 to R2999 (7)	R3000 to R3499 (8)	R3500 to R3999 (9)		
		R4000 to R4499 (10)	R4500 to R4999 (11)	> R5000 (12)		
2.8	Preferred type of **craft spirit**	Gin (1)	Rum (2)	Vodka (3)	Whiskey (4)	Other (5)

Selection criteria							
			Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
When buying craft spirits:							
Selection criteria	3.1	I only consider the price	1	2	3	4	5
	3.2	I only take into consideration the taste	1	2	3	4	5
	3.3	The name/brand is important to me	1	2	3	4	5

	3.4	The packaging largely influences my decision-making	1	2	3	4	5
	3.5	Social media influences my decision-making	1	2	3	4	5
	3.6	I prefer to buy craft spirits based on its place of origin	1	2	3	4	5
	3.7	I stay loyal to my preferred brand	1	2	3	4	5

Packaging preference							
			Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
When buying craft spirits:							
Bottle	4.1	I prefer a glass bottle over a plastic bottle	1	2	3	4	5
	4.2	I prefer a fancy/unique bottle shape	1	2	3	4	5
	4.3	I prefer tall bottles	1	2	3	4	5
	4.4	I prefer 750ml bottles over other quantities	1	2	3	4	5
	4.5	I like it more if the bottle has a cork instead of metal cap	1	2	3	4	5
	4.6	I prefer mushroom-shaped over traditional caps	1	2	3	4	5
Label	4.7	I like matt labels more than glossy ones	1	2	3	4	5
	4.8	I prefer only a front label	1	2	3	4	5
	4.9	I think a back label is a must	1	2	3	4	5
	4.10	A cap sealing label is better than a plastic anti-tamper sleeve	1	2	3	4	5
	4.11	I like it when the distillery background story is on the label	1	2	3	4	5
	4.12	I prefer if the distillery uses funny names for its products	1	2	3	4	5
	4.13	The ingredient information must be displayed on the label	1	2	3	4	5
	4.14	I prefer the language on the label to be my home language	1	2	3	4	5
Content	4.15	I prefer it if the contents have a colour rather than being colourless	1	2	3	4	5
	4.16	The contents must be transparent	1	2	3	4	5

	4.17	I like it when the content changes colour when mixed	1	2	3	4	5
Secondary packaging	4.18	I prefer that the bottle be packed in a cardboard box	1	2	3	4	5
	4.19	I prefer the bottle to be packed in a wooden box	1	2	3	4	5
	4.20	I would rather buy a value pack from a distillery than single products	1	2	3	4	5
	4.21	I like it when distilleries offer their products in gift packs with added items such as a glass	1	2	3	4	5
	4.22	I prefer the bottle without any other packaging	1	2	3	4	5
Green initiatives	4.23	I would rather buy from a distillery that uses recycled water	1	2	3	4	5
	4.24	I like it when a distillery has a bottle recycling initiative	1	2	3	4	5
	4.25	Distilleries must use bottles from recycled glass	1	2	3	4	5
	4.26	I think it is unacceptable for distilleries to use non-recycled paper for labels	1	2	3	4	5
	4.27	I prefer products made from organic ingredients	1	2	3	4	5

Classification					
General					
1.1	Age of distillery in years	<1 (1)	1 (2)	2 (3)	3 (4)
		4 (5)	5 (6)	6 (7)	7 (8)
		8 (9)	9 (10)	10 (11)	11 (12)
1.2	Number of owners	1 (1)	2 (2)	3 (3)	
		4 (4)	5 (5)	> 5 (6)	
1.3	Number of employees	1 to 5 (1)	*6 to 10* (2)	*11 to 15* (3)	
		16 to 20 (4)	21 to 25 (5)	26 to 30 (6)	
		31 to 35 (7)	26 to 40 (8)	> 40 (9)	
Geographical information					
1.4	Province	Gauteng (1)	Free State (2)	Limpopo (3)	
		Western Cape (4)	Northern Cape (5)	Eastern Cape (6)	
		KwaZulu-Natal (7)	Mpumalanga (8)	North West (9)	
1.5	Settlement type	City (1)	Suburb (2)	Town (3)	
		Village (4)	Informal settlement (5)	Farm/Other (6)	

Packaging selection criteria							
			Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
When selecting packaging:							
Selection criteria	3.1	We only look at the price when deciding on packaging	1	2	3	4	5
	3.2	Ease of use is main criteria when deciding on packaging	1	2	3	4	5
	3.3	We chose packaging to contribute to our marketing	1	2	3	4	5
	3.4	We only care about the effectiveness of packaging	1	2	3	4	5
	3.5	We pick packing that requires the least amount of labour	1	2	3	4	5
	3.6	We buy packaging that will promote safe distribution	1	2	3	4	5

Production and sales							
Production							
	Type of spirits	Gin (1)			Rum (2)		
		Whiskey (3)			Other (4)		
2.1	Different flavours	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	> 5 (6)
2.2	Weekly production (bottles)	0 to 99 (1)		100 to 199 (2)		200 to 299 (3)	
		300 to 399 (4)		400 to 499 (5)		> 500 (6)	
2.3	Maximum production (bottles)	0 to 99 (1)	100 to 199 (2)	200 to 299 (3)	300 to 399 (4)		
		400 to 499 (5)	500 to 599 (6)	600 to 699 (7)	700 to 799 (8)		
		800 to 899 (9)	> 900 (10)				
2.4	Batch size (litres)	0 to 24 (1)		25 to 49 (2)		50 to 74 (3)	
		75 to 99 (4)		100 to 124 (5)		125 to 149 (6)	
		150 to 174 (7)		175 to 199 (8)		> 200 (9)	
Sales and distribution							

2.5	Weekly sales (bottles)	0 to 99 (1)	100 to 199 (2)	200 to 299 (3)	300 to 399 (4)
		400 to 499 (5)	500 to 599 (6)	600 to 699 (7)	700 to 799 (8)
		800 to 899 (9)	> 900 (10)		
2.6	Target market	Individuals (1)	Restaurants (2)	Pubs and bars (3)	
		Liquor stores (4)	Own outlet (restaurant, tastings) (5)	Other (6)	
2.7	Sale methods	Agent (1)	Internal (2)	Website (3)	
		Platform (e.g. Takealot) (4)	Other (5)		
2.8	Distributors	Internal (1)	Courier (2)	3rd party (3)	

Packaging selection criteria							
			Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
When selecting packaging:							
Selection criteria	3.1	We only look at the price when deciding on packaging	1	2	3	4	5
	3.2	Ease of use is main criterion when deciding on packaging	1	2	3	4	5
	3.3	We choose packaging to contribute to our marketing	1	2	3	4	5
	3.4	We only care about the effectiveness of packaging	1	2	3	4	5
	3.5	We pick packaging that requires the least amount of labour	1	2	3	4	5

	3.6	We buy packaging that will promote safe distribution	1	2	3	4	5

Packaging used					
The packaging used by your distillery:					
Bottle	4.1	Material	Glass (1)	Plastic (2)	
	4.2	Shape	Normal (1)	Unique (2)	
	4.3	Length	Tall (1)	Short (2)	
	4.4	Volume	250 ml (1)	500 ml (2)	
			750 ml (3)	1000 ml (4)	
	4.5	Cap material	Plastic (1)	Metal (2)	Cork (3)
	4.6	Cap shape	Screw on (1)	Press in (2)	Mushroom (3)
Label	4.7	Material	Matt (1)	Glossy (2)	
	4.8	Back label	Yes (1)	No (2)	
	4.9	Front label	Yes (1)	No (2)	
	4.10	Cap sealing label	Yes (1)	No (2)	
	4.11	Distillery background	Yes (1)	No (2)	
	4.12	Ingredient information	Yes (1)	No (2)	
	4.13	Unique names	Yes (1)	No (2)	

	4.14	Language used	Zulu (1)	Afrikaans (2)	English (3)	Pedi (4)
			Xhosa (5)	Sesotho (6)	Tsonga (7)	Swati (8)
			Venda (9)	Ndebele (10)	Tswana (11)	Other (12)
Contents	4.15	Colour	Transparent (1)		Clear (2)	
			Opaque (3)		Coloured (4)	
	4.16	Special effects, e.g. changing colour when mixed	Yes (1)		No (2)	
Extra packaging	4.17	Cardboard box	Yes (1)		No (2)	
	4.18	Wooden box	Yes (1)		No (2)	
	4.19	Value pack	Yes (1)		No (2)	
	4.20	Gift pack	Yes (1)		No (2)	
	4.21	Sample pack	Yes (1)		No (2)	
Labour cost	4.22	Bottling machine	Yes (1)		No (2)	
	4.23	Labelling machine	Yes (1)		No (2)	
	4.24	Labour to bottle	Value			
	4.25	Labour to label	Value			
Green	4.26	Which of the following initiatives do you make use of?	Recycled water (1)		Recycled glass bottle (2)	
			Recycled paper for label (3)		other (4)	

	4.27	Initiative to recycle bottles sold	Yes (1)	No (2)
	4.28	Organic ingredients	Yes (1)	No (2)