

# A quantitative study on whether sustainable and environmentally-friendly packaging by a company influences customers' intentions to repurchase in a South African Context.

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| <p>I hereby declare that the Research Report submitted for the Bachelor of Commerce Honours in Management degree to The Independent Institute of Education is my own work and has not previously been submitted to another University or Higher Education Institution for degree purposes.</p> |
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## Abstract

Packaging waste is having a major impact on the environment and this is becoming a major concern for society to deal with today. Approximately a third of the waste that is entering the environment is as a result of packaging waste (Davies, 2016). Therefore, organisations are required to address this issue in order to become more sustainable and environmentally-friendly to reduce the impact that they have on the environment. This quantitative research study examines whether the use of sustainable and environmentally-friendly packaging materials by an organisation increases customers' intentions to repurchase their products within a South African context. The researcher collected the data using a closed-ended questionnaire because objectivity was important for the purpose of this study. Furthermore, the results that were obtained from the questionnaires are easy to quantify and analyse. The results indicated that there is a moderate relationship between the use of sustainable and environmentally-friendly packaging materials and customers' intentions to repurchase. Therefore, the results indicate that if organisations were to utilise sustainable and environmentally-friendly packaging materials, it may have an impact on customers' attitudes towards them and increase the market share they currently have.

## Introduction

### Contextualisation

Packaging is a crucial part of product-presentation today and one of the challenges for organisations is to manufacture packaging products in a sustainable manner (Jindal, 2009). According to the research of Davies (2016), plastic has been utilised by organisations in the packaging process because it is convenient to use and is generally cheaper than other materials. However, organisations generally do not ensure that the disposal of their packaging materials is done so in a responsible manner (Davies, 2016). Jindal (2009) discusses further that the majority of the packaging products used today are harmful to the environment if they are not managed effectively through recycling efforts. Packaging waste is becoming a significant factor that affects the health of humankind and it is an increasingly large expense for society. Therefore, it is important for organisations to make an effort to reduce the impact that they have on the environment. These are all issues that the researcher is motivated to address because they are factors that will have a major effect on the wellbeing of the planet, society, organisations and future generations of humankind. However, organisations that are attempting to utilise environmentally-friendly packaging alternatives may be doing so at an extra cost (Moser, 2012). This will impact organisational profit margins and may discourage some companies from considering environmentally-friendly packaging. Therefore, the researcher aims to explore whether organisations that are making investments in environmentally-friendly packaging materials benefit from increased levels of customer loyalty in the form of increased intentions to repurchase, thus, leading to a positive return on investment.

### Rationale

The rationale for this project was to understand whether efforts to use sustainable and environmentally-friendly packaging actually have a benefit for the organisation's bottom line. According to Bolton (2017) consumers and organisations are becoming more reliant on packaging despite the many negative environmental effects that packaging has on the environment. Jindal (2009) concurs with the research of Bolton (2017) in terms of how reliant organisations and people are on packaging materials.

Nearly every product that humankind uses today will be packaged in some way or another in order to ensure that the product arrives at its final destination without being damaged.

In this research study, the researcher wanted to highlight the importance of environmental sustainability for an organisation. Furthermore, the researcher's aim was to find a positive correlation between environmental sustainability and customer loyalty which could motivate organisations to increase their focus on utilising packaging materials that are environmentally-friendly. Therefore, the information the researcher presented may motivate organisations to utilise sustainable, environmentally-friendly packaging in the future.

### Problem Statement

According to Knoblauch (2009) plastic is one of the main materials utilised in the packaging process by organisations around the world. Organisations have been utilising plastics to package the products they sell because it is convenient to produce at a lower cost to alternative packaging options (Davies, 2016). The issue arises due to the negative impact that packaging waste is having on the environment. Therefore, it is essential that a sustainable alternative is found and utilised by organisations. The research study aims to address this issue because organisations that are attempting to utilise eco-friendly packaging alternatives may be doing so at an extra cost. Therefore, the author will be attempting to explore if organisations making these investments are enjoying positive levels of return on investment as a result of customer loyalty, in order to compensate for the extra expense of paying for sustainable packaging.

### Research goal/ aim

#### Purpose statement

The purpose of this study was to establish whether there is a relationship between the use of environmentally-sustainable packaging materials by an organisation and the impact it has on customers' intention to repurchase using a correlation design. The

final results are a statistical analysis of the topic being researched. The aim was to highlight how important it is for organisations to become sustainable, as well as to explore possible benefits the organisation may receive from being environmentally sustainable.

At this stage in the research, customers' intention to repurchase will be defined as customers who are inclined to repurchase a product from the particular organisation studied. The use of environmentally-sustainable packaging materials will be defined as packaging materials that have a minimal negative impact on the environment such as paper, cardboard and new technologies such as hemp-gluten-based plastics.

## Research questions

### Question

Is there a relationship between the use of sustainable, environmentally-friendly packaging and customers intention to repurchase the product?

### Hypothesis/ aim

The aim of this research study is to investigate whether organisations that utilise sustainable environmentally-friendly packaging alternatives have a positive impact on customers' intention to repurchase. This can potentially provide motivation for other organisations to utilise sustainable environmentally-friendly packaging alternatives.

The researcher hypothesises that organisations that utilise sustainable environmentally-friendly packaging alternatives will have a positive relationship with customers' willingness to repurchase.

H0: There is no relationship between customers' intentions to repurchase and the environmental friendliness or sustainability of an organisation's packaging materials.

H1: There is a relationship between customers' intentions to repurchase and the environmental friendliness or sustainability of an organisation's packaging materials.

H0:  $p=0$

H1:  $p \neq 0$

The level of significance was set to 5%.

#### Sub-question

What are customers' attitudes towards a company that uses sustainable packaging?

## Literature review

### Theoretical Framework

The researcher utilised the theory of planned behaviour as a framework for this study. This study aims to incorporate the theory of planned behaviour in order to attempt to understand the behaviour of consumers towards the purchasing of products that use environmentally-friendly packaging materials. The theory of planned behaviour was postulated by Ajzen (1991) and it evaluates the way in which individuals have intentions to perform behaviours of different kinds and whether these behaviours can be predicted with a high level of accuracy. The theory of planned behaviour proposes that the individuals' attitudes towards behaviours, subjective norms, perceived behavioural control, and these intentions, together with perceptions of behavioural control, account for considerable variance in actual behaviour.

According to Ferguson, Hair, Silver and Mollah (2017) the theory of planned behaviour involves three different constructs that represent the determinants of a customer's intentions, and these are; attitudes towards a behaviour, subjective norms, and perceived behavioural controls. Attitudes towards the behaviour refers to the expected outcome that should occur if actions are taken and the value that the outcome may offer in terms of the expectation occurring (Ferguson et al, 2017). Individuals will act in certain ways because of the subjective norms that they are exposed to (Ferguson et al, 2017). The subjective norms that a consumer is exposed to refers to the perceived pressure to perform or not to perform the specific behaviour (Ajzen, 1991). If consumers have the correct resources in order to act on an intention, for example to purchase a specific product, they will act on these intentions based on their perceived behavioural controls (Ferguson et al, 2017). The attitudes that customers have

towards the environment and towards the sustainability of products in terms of the environmental implications that the products have, will therefore have an impact on their purchasing patterns. Furthermore, subjective norms such as the values an individual upholds and the influence of the various reference groups with which the individual is associated, will also have an influence on the behaviour and decision-making process of the individual when purchasing various products.

This theory is the most relevant to this topic because the researcher is attempting to understand whether organisations that use environmentally-friendly packaging materials have an impact on customers' intentions to repurchase the product. Customers who are making the decision to purchase products that use packaging that is environmentally-friendly may be doing so due to the attitudes that they may have about the environmental impact of packaging. Therefore, the theory of planned behaviour will assist the researcher in being able to understand whether customers make purchasing decisions based on the sustainability of the packaging materials that are utilised by organisation. This would also potentially indicate to the researcher whether organisations who take this approach to packaging enjoy an increased level of customer loyalty.

Over the last decade there has been an increase in the manufacturing and supply of environmentally-sustainable products such as recyclable products, energy-efficient appliances and biodegradable packaging alternatives, but the benefits of these changes are not realised because of the major increase in consumption, which negates the move towards sustainability (Kumar, 2012). This is another major reason why it is important to understand the factors that have an impact on the customers' intentions to repurchase. There may be customers who have major environmental concerns and these concerns may have an impact on the purchase decisions that a consumer may make (Kumar, 2012).

## Review of Past Literature

### Introduction

According to Borin (2013) organisations have been using the concept of being sustainable as a mantra in order to create a competitive advantage in the market place

today. Furthermore, Borin (2013) stipulates that in order to be a sustainable organisation, organisations need to implement various programmes that are critical to the future success of the organisation. Therefore, this indicates to the researcher that organisations are placing more emphasis on being sustainable when conducting various business activities. Taking into consideration that organisations are focusing on sustainability, there must be reasons that are forcing organisations to place a larger emphasis on the issue. Based on the research of McKay (2010), Kumar (2012) and Moser (2012) consumers are focusing more on thinking *green* when making purchasing decisions. Making *green* purchasing decisions means that customers are focusing on various aspects of the organisation such as; how organic the products the organisation utilises are, what fair-trade practices the organisation participates in, the treatment of animals in the way organisational processes are taken out, the eco-friendliness of the ingredients used in the production of products and finally, the environmental-friendliness of the packaging materials that are utilised (McKay, 2012). Therefore, the researcher will be investigating to what extent the use of environmentally-friendly packaging materials has an impact on customers' intentions to repurchase, which is only a single factor of a sustainable organisation.

#### Overview of environmentally-friendly packaging

According to Davies (2016) consumers place a large amount of focus on the aesthetics of the design, practicality and size of packaging. However, it is still important that the effects that various packaging materials have on the environment are considered. In the research of both Jindal (2009) and Davies (2016) packaging materials generally comprise of paper, glass, aluminium, steel, plastic or a mixture of those materials. The need for these packaging materials is clearly outlined by Jindal (2009), as it is stated that products are usually produced in a different place to where the products are used. Therefore, packaging assists in ensuring that products are safely transported. This assists the consumer in having peace of mind over the safety of the products when being transported from the place of purchase to the place of use (Jindal, 2009). However, it is imperative that organisations consider the environmental impacts of these packaging products. The first way in which organisations can utilise environmentally-friendly packaging materials is through the use of materials that can

be recycled. Davies (2016) discusses the various materials used in packaging and the number of times each material can be recycled. The findings showed that paper can be recycled 5 to 7 times, cardboard 3 to 4 times, glass can be recycled infinitely, plastic only once, polystyrene only once and all metals can be recycled infinitely (Davies, 2016). Therefore, the first approach to utilising environmentally-friendly packaging would be through the use of recycled products because that will assist in reducing the current volumes of waste. However, it is important to note that paper, cardboard, glass and metal packaging materials will be more favourable to use than plastic and polystyrene because of the number of times the products can be recycled.

Although the use of recycled products as environmentally-friendly packaging materials is advised, it is still not ideal. According to Davies (2016) and Fischer (2017) the most ideal situation would be for organisations to utilise materials that are biodegradable and come from renewable sources. There has been a large amount of research conducted on using hemp gluten-based plastics as a biodegradable packaging alternative. Wretfors, Cho, Kuktaite, Hendenqvist, Marttila, Nimmermark and Johansson (2010) discuss the way in which hemp gluten-based plastics have little to no impact on the environment and are able to biodegrade within 50 years of use without leaving any damage to the environment. Another research study conducted by Smith (2017) discusses the way in which new plastic technologies have been created using cassava plants and various bio-oils to make plastic bags that are biodegradable and have no negative impacts on the environment as they use completely renewable products to create the plastics. Therefore, there are options available for organisations who want to attempt to build a competitive advantage by eliminating the impact that their packaging waste has on the environment.

#### The need for environmentally-friendly packaging

According to Moser (2015) packaging waste amounts to approximately one third of all the waste in the world today. Packaging waste has a major negative effect on the environment and has contributed in many ways to the pollution of the ocean and the releasing of CO<sub>2</sub> emissions which leads to the depletion of the ozone layer (Jindal, 2009). Most of the literature provided on this topic places a large amount of focus on the ways in which packaging waste ends up in our environment due to being disposed

of irresponsibly. As stipulated by Davies (2016) there are approximately 5,35 trillion pieces of plastic debris floating in the ocean causing massive plastic islands to form because of the ocean currents. Furthermore, Flaherty (2017) and Jindal (2009) touch on the impact that landfill sites have on the underground water systems. The above-mentioned factors are evidence of the environmental impacts of plastic waste on the environment, however, packaging materials also have an impact on the environment in their manufacturing processes. Both Jindal (2009) and Flaherty (2017) discuss further the impacts that manufacturing can have on the environment, whereby, all the processes involved in reaping the raw materials, manufacturing the packaging products and recycling of these products have major negative impacts on the ozone layer. In order to manufacture a large amount of packaging products, in particular plastic and polystyrene, a large number of fossil fuels is burnt in order to achieve the finished product (Jindal, 2009, Flaherty, 2017, Davies, 2016 and Li, 2017). Therefore, organisations need to consider the impacts that packaging materials have on the environment in order to address this issue.

The impact of corporate social responsibility (CSR) is another important factor to consider when reviewing this topic. CSR encompasses three different responsibilities that the organisation has in terms of creating revenue or profit, addressing various social factors and addressing environmental concerns (Erasmus et al, 2013). According to Venter et al (2014) environmentally-orientated CSR activities refer to the ways in which organisations can reduce the impact that they have on the natural environment through the use of natural resources, using environmentally friendly packaging, recycling, waste reduction and by addressing many other environmental factors. The most important environmental concerns that are highlighted by Venter et al (2013) include the consumption of materials and energy, and the handling of pollution and waste in the most environmentally-friendly manner. Erasmus et al (2013) discuss various drivers of CSR which are the social drivers, governmental drivers, market drivers and ethical drivers. The social drivers consider the reactions of society towards organisations that are environmentally sustainable, whereby, it is discussed that customers are beginning to prefer socially responsible products and services (Erasmus et al, 2013). The governmental drivers that are highlighted by Erasmus et al (2013) include the legal systems that are put in place to ensure environmental management. The market drivers consider the various advantages that organisations

enjoy because of CSR activities. Finally, Erasmus et al (2013) describe the ethical drivers as the process whereby an organisation decides between what is considered to be right and wrong and then conducts their business processes in a way that is considered to be ethical.

Asemah et al (2013), Venter et al (2014) and Erasmus et al (2013) discuss various similar advantages that organisations can enjoy by participating in CSR activities. Firstly, Erasmus et al (2013) discuss how organisations can exploit the CSR premium. This means that organisations can charge higher prices for being environmentally sustainable. However, the research of Moser (2012) disagrees with this advantage as he states that customers are more price sensitive even if they are environmentally conscious. Venter et al (2014) conducted a study on small and medium-sized enterprises (SMME's) in the Nelson Mandela Bay region of South Africa and the findings of this research study found that organisations who participate in environmental CSR activities enjoy increased competitiveness in terms of profitability because customers find it desirable to associate themselves with organisations that are sustainable. The research of Asemah et al (2013) concurs with the research of Venter et al (2014) whereby it is discussed that organisations engage in CSR activities in order to improve the stakeholders' perceptions of the organisation. The image of the organisation has a major impact on the competitive advantage that the organisation will have. Although there are many advantages of CSR activities, the researcher could only find one disadvantage associated with CSR activities. In the research of Asemah et al (2013) it was discussed that if customers lack education on the issue that the CSR activities are addressing, it may not result in an increased competitive advantage.

#### *What types of organisations will benefit from using environmentally-friendly packaging*

Another important factor to consider is what types of organisations will benefit from using environmentally-friendly packaging alternatives. The researcher has identified various research studies that consider the price sensitivity of consumers and the way in which this will have an impact on the purchasing decisions that will be made. Borin (2013) conducted a research study in the Swiss market that analysed various customer reactions to *green* products. Switzerland is considered to be a first-world country and the majority of the consumers within the Swiss market are highly educated

individuals. In the analysis of the customers' reactions to *green* products it was found that 75% of consumers would not pay more than a ten percent premium for products that attempt to attain a competitive advantage through eco-branding (Borin, 2013). Scott and Vigar-Ellis (2014) conducted a research study within the South African context that produced very similar results. Although there is a large amount of pressure for organisations to utilise sustainable packaging alternatives, Scott and Vigar-Ellis (2014) found that packaging designs can be extremely costly to organisations, and therefore, organisations require a large amount of support from consumers or they will be unlikely to make such commitments. The main reason for this as stipulated by Scott and Vigar-Ellis (2014) is because consumers are not willing to pay the extra premium for environmentally-friendly packaged products, thus, organisations will only produce environmentally-friendly products if it has an influence on customers' intentions to purchase or repurchase. Another major consideration that was highlighted by Scott and Vigar-Ellis (2014) was the gap between the rich and the poor in South-Africa. Wealthy consumers are generally well-educated and are more likely to understand the environmental impacts of packaging; therefore, these consumers may be more willing to purchase products that utilise environmentally-friendly packaging without a major increase in price (Scott and Vigar-Ellis, 2014). Consumers who earn lower salaries and consumers who are considered to be at the bottom of the pyramid are generally less educated and thus, may be less aware of the environmental impacts of packaging (Scott and Vigar Ellis, 2014). Furthermore, if the poorer consumers are educated on the environmental impacts of packaging waste, they are not willing to pay any more than the cheapest substitute product available because these consumers are extremely price-sensitive (Scott and Vigar Ellis, 2014). Therefore, the findings of Borin (2013) and Scott and Vigar-Ellis (2014) indicate to the researcher that consumers in developing nations and developed nations generally have similar reactions to price increases in order to accommodate for environmentally-friendly packaging alternatives, therefore, consumers will not purchase environmentally-friendly packaged products if the price increase is more than ten percent. However, the poorest consumers in developing nations will generally not accommodate for any increase in price because of their sensitivity to price (Scott and Vigar-Ellis, 2014).

Another important aspect to consider is the impact that brand loyalty has on the purchasing behaviour of consumers. According to Shukla (2009) consumers will tend

to support a particular brand due to their own personal opinions or ideas of a particular brand. This will have an impact on these consumers supporting another brand even if they are utilising sustainable and environmentally-friendly packaging materials. Therefore, organisations will need to consider whether they are competing in a market space where the brand of the product is considered to be more important than the sustainability and environmental-friendliness of an organisation. Shukla (2009) further adds that brand loyalty is created through consumers having preferences in certain products due to the characteristics of the products or because of habitual purchasing patterns. Furthermore, consumers can build brand loyalty from a young age due to the influence of their family members' purchasing patterns (Shukla, 2009).

#### Disadvantages of environmentally-friendly packaging

Although there are many environmental advantages of utilising environmentally-friendly packaging materials, there are still many disadvantages that need to be considered. The first disadvantage the researcher will be considering are the factors that minimise the support of sustainable products, keeping in mind that environmentally-friendly packaging materials are only one component of sustainable products. According to Ferguson et al (2017) these factors include the strength of a brand, culture, demographics, finances, education, lifestyle, personality, disbelief of *green* claims, lack of interest, and ethical issues. Furthermore, Ferguson et al (2017) adds to these claims by stating that it takes a considerable amount of time and effort for consumers to act sustainably. The research of Moser (2012) concurs with the research of Ferguson (2017). However, Moser (2012) adds that consumers make subjective evaluations on their *green* purchasing decisions and these evaluations may be incorrect due to the complexity of products.

In the research conducted by Davies (2016) it was found that almost half of the waste that is generated by houses in the UK is recycled and the awareness of the impacts of waste on the environment is on the rise. However, Scott and Vigar-Ellis (2014) argue that developed nations place a large amount of focus on being environmentally-friendly by focusing on recycling efforts and making *green* purchasing decisions as compared to developing countries. Scott and Vigar-Ellis (2014) further discuss the awareness of consumers towards environmentally-friendly packaging alternatives

within a South African context, and South Africa is considered to be a developing country. It was concluded that there is a major need for consumers to be educated and better informed on the current environmental issues that are apparent in the world we live in (Scott and Vigar-Ellis, 2014). Therefore, based on the research that has been conducted within the South African context, the researcher believes that informing customers of what constitutes an environmentally-friendly packaging material is imperative in order to counteract these disadvantages.

Another disadvantage associated with producing environmentally-friendly packaging alternatives is the increased cost of producing these materials. Fisher (2017) stipulates that using plastic as a packaging material is the most convenient way to package products, and is also the cheapest packaging option. Therefore, this is a major driver as to why organisations utilise plastic as the main source of packaging. Furthermore, Borin (2013) stipulates that organisations are generally charging more for products that are considered to be *green* over the conventional products in order to factor in cost, consumer value, and competitive effects. Moser (2012) concurs with the research of Borin (2013); however, the main focus of the research conducted by Moser (2012) only considers that organisations are generally charging more for the environmentally-friendly packaged products due to the increased costs associated with producing the packaging materials. Although organisations are doing the right thing in terms of their environmental impacts, even the pro-environmental consumers are still generally taking price into consideration over being *green* as their primary purchasing decision, particularly during times of economic downturn (Borin, 2013). However, Borin (2013) stipulates that there has been an increase in organisations who are providing sustainable products at regular prices in the marketplace. Although this trend has been increasing, there is no concrete evidence whether organisations who are providing sustainable products at regular prices are impacting consumers' decisions to repurchase, thus, further research is needed on this topic.

## Methodology

### Research Design

#### Research Paradigm

In this research study, the researcher used the positivistic approach. According to Du Plooy-Cilliers et al (2014) and Tronvoll (2011) positivists view reality in an objective manner because the majority of the research is driven by theory. Furthermore, researchers who take the approach of positivism do so in order to find a relationship between variables (Du Plooy-Cilliers et al, 2014). Therefore, it is clear that the researcher conducted this study under the positivistic paradigm because this research study aims to understand if organisations that utilise environmentally-friendly packaging materials see an increase in customers' intention to repurchase. The researcher also attempted to establish whether knowing that the organisation utilises environmentally-friendly packaging, influenced the customers' attitudes towards the company.

From the epistemological position of positivism, Du Plooy-Cilliers et al (2014) discuss how positivists believe that knowledge can only be gained from objective, observable evidence. Therefore, knowledge that can only be confirmed by the senses is genuinely real knowledge. Researchers who take this approach aim to understand the way the world works in order to predict and control events and take action (Du Plooy-Cilliers et al, 2014). Positivists attempt to obtain knowledge by carefully observing and testing hypotheses against the views they have of the real world (Du Plooy-Cilliers et al, 2014). Therefore, for this research study, the researcher made observations of the relationships that exist between organisations using environmentally-friendly packaging and whether the customers of the organisations make their purchasing decisions based on that.

The ontological position of positivism refers to the researcher's view of reality. According to Du Plooy-Cilliers et al (2014), a researcher that uses the paradigm of positivism will hold the view that there is a single, objective and stable social and physical reality that is governed by laws. It is further believed that reality is observable and measurable, therefore reality is known, and it is up to the researcher to discover the laws that govern reality (Du Plooy-Cilliers et al, 2014). In the context of the influence of environmentally-friendly packaging on customers' intention to repurchase,

the researcher attempted to discover if laws do exist that govern this reality, as well as assess whether there is a regularity in these phenomena.

From the metatheoretical position of positivism, positivists develop generalisations about the causal relationships that exist between variables. Therefore, according to positivists, theories are universally valid or true and the culture and history of the phenomena are disregarded. Thus, the theories are thought to be universally applicable (Du Plooy-Cilliers et al, 2014). Researchers using this approach will place emphasis on objective and value-free research, where theories are tested using hypotheses (Du Plooy-Cilliers et al, 2014). Thereafter, once the hypotheses have been tested for validity and reliability, a theory explaining the causal relationship between phenomena can be postulated (Du Plooy-Cilliers et al, 2014). Furthermore, researchers using this position place a large amount of focus on the relationship that may exist between the variables being studied (Du Plooy-Cilliers et al, 2014). In this research study the researcher stated a hypothesis that aims to indicate whether there is a correlation between the variables being studied, considering whether organisations using environmentally-friendly packaging causes the effect of increased intentions by customers to repurchase.

From the methodological position of positivism, positivists uphold that science is based on empirical data that is produced as a result of direct observations (Du Plooy-Cilliers et al, 2014). Furthermore, Du Plooy-Cilliers et al (2014) indicates that, in order to ensure objectivity and precision, positivists prefer to record facts by utilising numbers that can be analysed and processed using statistical techniques. Therefore, the research strategy adopted is that of quantitative research.

When considering the axiological position of positivism, the positivist paradigm has an objectivist axiology that is integral to the paradigm, which means that positivists value research that is not tainted by personal bias (Du Plooy-Cilliers et al, 2014). As stipulated by Du Plooy-Cilliers et al (2014) positivists want to be able to trust the findings of the research because then the research will be considered to be an accurate reflection of the objective reality. Positivists attempt to obtain an understanding of reality in order to be able to predict and control variables (Du Plooy-Cilliers et al, 2014). Positivist also value preciseness because they aim to achieve an accurate reflection of reality; and the more precise the measurement, the more

accurate the reality will be (Du Plooy-Cilliers et al, 2014). Therefore, in the context of this research study, the researcher only considered precise information that pertains to the study as information that is be reliable for the purpose of this research study. Information that requires interpretation was valued less than information that is considered to be objective.

### *Conceptual Approach and Design*

The researcher conducted a quantitative research study. The quantitative approach is the most relevant to this study because the researcher aims to attain objective information that is free of bias (Du Plooy-Cilliers et al, 2014). Furthermore, the researcher evaluated whether there is a relationship between organisations utilising environmentally-friendly packaging alternatives and the willingness for consumers to repurchase from the organisation. This shows that the researcher considered if there is a correlation between the variables being studied.

### *Line of reasoning*

This research study was conducted through deductive reasoning. The main reasons why a researcher would conduct a research study through this line of reasoning is because the deductive line of reasoning involves reasoning from general assumptions to more specific assumptions (Du Plooy-Cilliers et al, 2014). Furthermore, the researcher did not explore the broader and more general aspects of the theory under investigation, but rather applied the theory to the specific sample. According to Du Plooy-Cilliers et al (2014) a theory is constructed before a study is conducted.

### *Type of study and Time dimension*

The researcher conducted a descriptive study because, in descriptive research, the aim is to describe a phenomenon that is identified through the research that is conducted (Du Plooy-Cilliers et al, 2014). Furthermore, a cross-sectional time dimension was utilised because the researcher wants to create an overall picture of

the phenomenon at one point in time (Du Plooy-Cilliers et al, 2014). Therefore, this means that the researcher went into the stores of the organisation that is under study and handed out questionnaires only once. This was the first and last time that the researcher approached participants to complete the questionnaires for the research study.

## Research Plan

### Population

#### *Unit of analysis*

Individual consumers of the target organisation.

#### *Target and Accessible population*

The target population for this research study includes all the customers of the organisation under study. The organisation from which the sample was drawn is a fast food outlet that sells mainly chicken products which also utilises sustainable, environmentally-friendly packaging alternatives. However, the accessible population will be those consumers who were at one of the stores of the organisation being studied on the day that the researcher was handing out the questionnaires at the selected store locations.

#### *Population parameters*

The researcher handed out questionnaires to anyone over the age of 18 who was purchasing products at the organisation being studied on the day that the researcher was in the selected stores.

## Sampling

### *Non-probability sampling*

Based on the research of Du Plooy-Cilliers et al (2014) non-probability sampling is used when it is virtually impossible to determine who the entire population is or when it is difficult to gain access to the entire population. The researcher used a non-probability sampling method as this is the most convenient way in which to gather the data. The reason for this is because the researcher is unable to gain access to the entire population of customers who frequent the organisation.

### *Sampling method*

According to Du Plooy-Cilliers et al (2014) convenience sampling is used because the researcher aims to find a sample that it is easily accessible. Furthermore, Dudovskiy (2018) expands on this by adding that convenience sampling is utilised when the first primary data source will be used for the research study without needing additional requirements. This means the first participants that the researcher could find, and this is typically wherever most convenient (Dudovskiy, 2018). Therefore, the non-probability sampling method that was utilised is convenience sampling because the researcher was able to gain easy access to the participants. The researcher also approached the first participants that were found at the selected store locations in order to complete the questionnaires. According to Creswell, Ebersöhn, Eloff, Ferreira, Ivankova, Jansen, Nieuwenhuis, Pietersen and Plano Clark (2016) the advantages of convenience sampling include; the ease and availability of collecting data and the time this method saves the researcher when collecting the data. However, Creswell et al (2016) indicate that there are also disadvantages to utilising this sampling method which include; the possibility of the results being biased, a high possibility of a sampling error and that the results cannot be generalised.

### *Sample size*

The researcher used a sample size of 25 participants. The motivation behind selecting a sample size of 25 participants is because Varsity College limited the researcher to

a maximum of 25 participants for a questionnaire. The sample included both genders and participants from a variety of race groups from the ages 18 and upwards.

#### *Data Collection Methods*

The researcher was initially required to request gatekeeper permission in order to conduct the research study through the organisations selected stores situated throughout Durban. Thereafter, the researcher selected three of the organisations stores in different geographical locations in order to hand out a questionnaire (Addendum 1) to 25 consumers. Once the gatekeeper permission was requested, the researcher waited until the permission was granted before handing out the questionnaires at the store locations. The researcher approached the participants and explained the context of the research study as well as the purpose of the research study when asking the participants to assist in completing questionnaires. Once the participants had completed the questionnaire, the researcher collected the questionnaire from the participants in order to capture and analyse the data. The questionnaire included a variety of closed-ended questions that firstly clarified whether the participant had any knowledge that the organisation being studied is an environmentally-friendly organisation and secondly, address issues surrounding the consumers' attitudes and perceptions concerning sustainable and environmentally-friendly organisations. The motivation behind utilising a questionnaire is because the researcher requires answers that are simple and easy to quantify (Du Plooy-Cilliers et al, 2014). Furthermore, the researcher can avoid answers of a subjective nature by asking closed-ended questions, because the researcher only values objective data that is free of bias.

However, there are a variety of disadvantages associated with questionnaires. According to Du Plooy-Cilliers et al (2014) in order to conduct a questionnaire survey successfully, the researcher is required to have an extensive understanding of the errors that may occur when collecting and interpreting the questionnaires. Furthermore, Du Plooy-Cilliers et al (2014) and Milne (2018) indicate that the answers to questionnaires may become superficial if the questionnaire takes a long period of time to answer. Finally, Milne (2018) indicates that questionnaires are standardised surveys so it is not possible to explain any points to the participants of the study and

this may lead to misinterpretation. In order to overcome this particular disadvantage, Milne (2018) recommends that the questionnaire is tested on peers or friends before being handed out to participants. Therefore, the researcher conducted a pilot questionnaire on three friends in order to ensure the success of the questionnaire and negate the possibility of the above disadvantage having an impact on the results.

## Data Analysis Methods

Once the questionnaires were all completed and collected, the researcher analysed the data. The first step of this process was to record all the data from each of the participants so that it was organised and simple to deal with. The data was analysed using basic and inferential statistical techniques. According to Trochim (2006) descriptive statistics are used in order simply to describe what the data shows; and inferential statistics try to reach conclusions that extend beyond the immediate data alone. Furthermore, inferential statistics may be used to analyse the difference between variables and to deduce whether there is a relationship between the variables or if the relationship is by chance alone (Trochim, 2006). The researcher wanted to find a linear relationship between organisations utilising sustainable, and environmentally-friendly packaging alternatives, and whether their customers have an increased intention to repurchase their product. In order to do this, the researcher utilised Likert scales in order to measure customers' attitudes concerning the variables being studied. The findings were analysed using the Pearson's correlation coefficient. As stipulated by Du Plooy-Cilliers et al (2014) the correlation coefficient is used to find out whether two values are related in a linear way. Additionally, Learntech (2018) discuss further that correlation in inferential statistics is a technique that is used in order to investigate the relationship between two quantitative, continuous variables. The Pearson's correlation coefficient is a measure of the strength of association between the two variables (Learntech, 2018). The researcher used Microsoft excel in order to calculate the Pearson's correlation coefficient and the associated p value.

According to Du Plooy-Cilliers et al (2014) reliability refers to measuring whether the research method utilised by a researcher is reliable. This refers to whether a research study conducted by a different researcher will produce similar results utilising the same research method. The researcher utilised a closed-ended questionnaire (addendum 1) in order to collect the required data, therefore, the results obtained in this research study should not differ drastically from the results a different researcher would obtain using the same research method. Du Plooy-Cilliers et al (2014) also stipulates that generalisation is another important term to use when considering reliability of a research study. Therefore, reliability refers to the extent to which results can be generalised and similar results obtained if the research study were to be conducted again.

The reliability of this research study was increased because the researcher utilised a closed-ended questionnaire which allowed the answers from the participants to be standardised. Furthermore, a sample of 25 participants was used, which contributed to the reliability of the study because the researcher could not increase or decrease the number of participants in order to skew the results. Through standardisation of results and a pre-set sample size, the researcher was able to have a positive impact on the reliability of the results that were obtained.

When considering the validity of a research study, the researcher considers whether the research measured what it was supposed to measure. The first consideration for the researcher is to measure the internal validity of the research study. According to Du Plooy-Cilliers et al (2014) internal validity refers to whether the research method will answer the research question. In order to do this the research design must not have any errors and the research method must assist in answering the research questions. The researcher ensured this by testing the questionnaire before handing it out to the participants. The second consideration for the researcher is the external validity of the research study. Du Plooy-Cilliers et al (2014) describe external validity as the extent to which a researcher is able to state with confidence that, if the same research method and design applied to the selected sample were applied to the rest of the population, the same results would be obtained. In order to ensure this, the researcher selected the stores of the organisation from which the sample is being

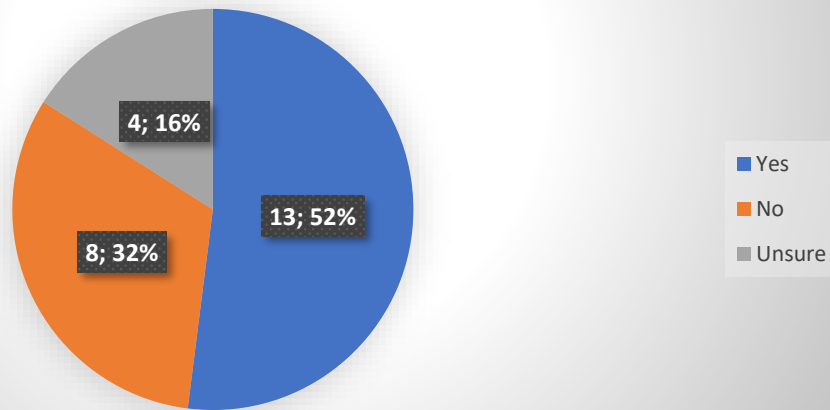
collected, in a variety of geographic locations in order to access a wider variety of consumers. Therefore, this contributed to the external reliability of the study and increased the possibility of the same results being achieved if the study were to be applied to the entire population.

## Findings and Interpretation of findings

### Findings

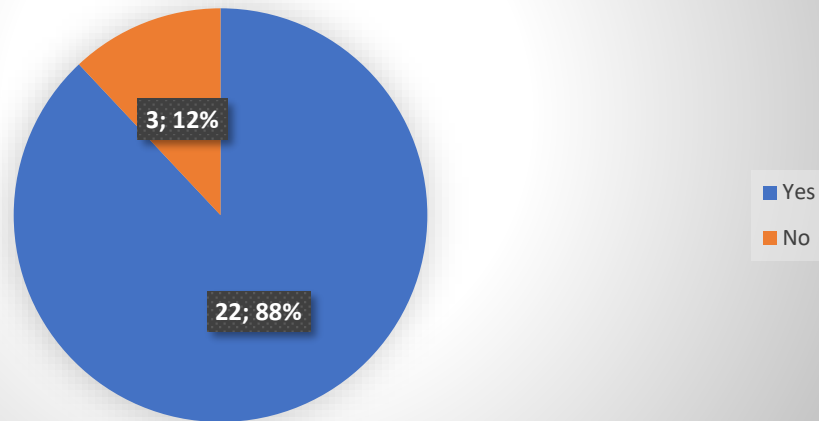
The researcher hypothesised that there is a relationship between organisations that utilise sustainable and environmentally-friendly packaging materials and customers' intentions to repurchase. Therefore, the following results will either allow the researcher to accept or reject the null-hypothesis. Question 4 and 5 from the questionnaire (Addendum 1) required the participants to answer the questions on a scale from 1 to 5, with 1 being *not important* and 5 being *very important*; for question 4, 1 being *no influence* and 5 being *definitely influences my decision* for question 5. Question 4 addressed how important it was to the participants that the organisation under study utilised sustainable and environmentally-friendly packaging materials. Question 5 addressed the extent to which the participants' purchasing decisions were made based on the organisation's sustainability and environmentally-friendliness of their packaging materials. From the results, the researcher calculated the Pearson's R correlation coefficient and the Pearson's P value for the study. From the results (Addendum 2) the Pearson's R correlation coefficient was found to be  $r = 0,548$  and the P value for this subset of data was  $P = 0,005$ . This indicates a significant relationship at both the 5% and the 1% levels.

### Percentage of participants who make purchasing decisions based on the environmental-friendliness of an organisation



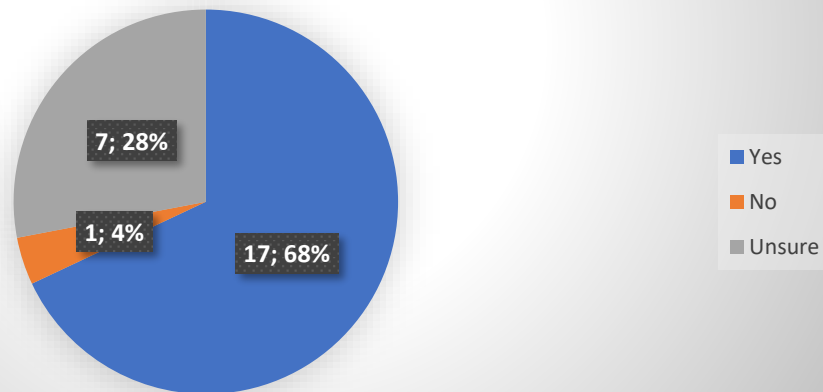
From the research conducted in the field, it was found that all 25 of the participants are aware of the current impacts that packaging waste is having on the environment. However, as indicated in the pie chart above, only 52% of these participants make purchasing decisions based on the environmental friendliness of an organisation. 32% stated that they do not make purchasing decisions based on the environmental friendliness of an organisation and 16% are unsure as to whether they do. The above results were pertaining to question 1 and 2 of the questionnaire (Addendum 1).

### Percentage of participants who knew that the organisation is making efforts to be a sustainable organisation



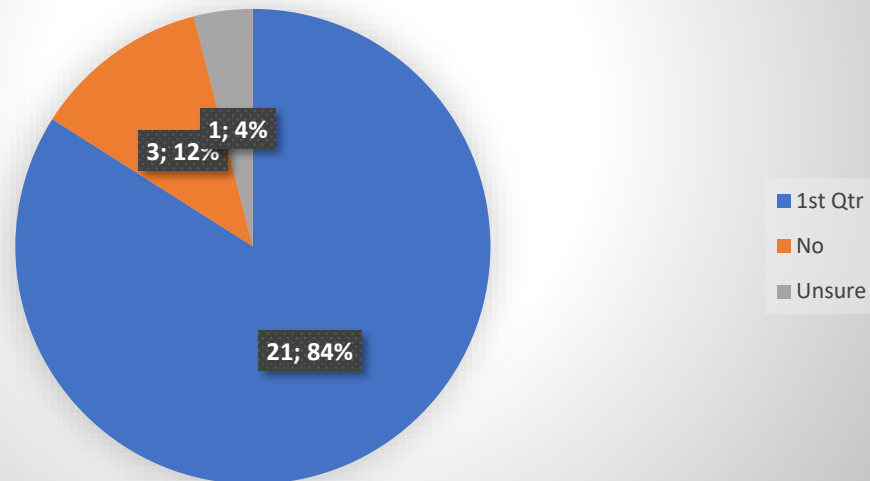
Question 3 addressed whether the participants had any prior knowledge of the organisation under study making efforts in order to be a sustainable and environmentally-friendly organisation. The results indicated that 88% of the participants were aware that the organisation under study is making efforts in order to be a sustainable and environmentally-friendly organisation, as shown in the pie chart above.

**Percentage of participants who would support an organisation that increases their prices by a reasonable amount to compensate for sustainable and environmentally-friendly packaging.**



Question 6 from the questionnaire (Addendum 1) asked the participants whether they would be willing to support an organisation that increased their prices by a reasonable amount in order to compensate for the higher costs of producing sustainable and environmentally-friendly packaging materials. From the pie chart above, the results indicated that 68% of the participants would be willing to pay a reasonable amount more for responsibly packaged products. Of the remaining participants, 4% would be affected by the price increase and not purchase the product and a further 28% were unsure as to whether they would make the purchasing decision if there was a reasonable increase in price.

**Percentage of participants who would support an organisation utilising sustainable and environmentally-friendly packaging materials instead of their competitor.**



Question 7 addresses whether the participants would support an organisation that utilised sustainable and environmental-friendly packaging materials, instead of purchasing from the organisation's competitors. The results from the pie chart above indicated that 84% of participants would purchase from an organisation that utilises environmentally-friendly packaging, instead of supporting the organisation's competitors; 12% indicated that they would not and 4% were unsure.

### Discussion of findings

At the beginning of the research study, the researcher hypothesised that there is a relationship between organisations that utilise sustainable and environmentally-friendly packaging materials and customers' intentions to repurchase. The results that were obtained from the Likert scales in questions 4 and 5 of the questionnaire (Addendum 1) were presented in the form of a Pearson's R correlation coefficient and the Pearson's P value. The Pearson's R value was  $r=0,548$  which indicates that there is a positive relationship between the variables under study (Du Plooy-Cilliers et al, 2014). Therefore, it was found that there is a positive relationship between organisations that utilise sustainable and environmentally-friendly packaging materials

and the influence that it has on customers' intentions to repurchase products from the same organisation. However, Du Plooy-Cilliers et al (2014) stipulates that a value between 0,4 and 0,7 indicates that there is a moderate positive correlation between the two variables. This indicates that the values of y may be related to the values of x (Du Plooy-Cilliers et al, 2014). Furthermore, Minitab (2018) discusses the importance of determining whether the correlation coefficient is significant. The significance level that is used to calculate the significance of the results that were obtained is 0,05, thus, the Pearson's P value needs to be lower than 0,05 in order to indicate that the correlation coefficient is significant (Minitab, 2018). The results indicated that the Pearson's P value was 0,005 which means that the Pearson's R correlation coefficient is statistically significant.

Therefore, from the results of the questionnaire as shown in the Pearson's correlation coefficient and level of significance it can be said that a relationship does exist between the sustainability and environmental-friendliness of an organisations' packaging materials and customers' intentions to repurchase. Venter et al (2014) stipulates that the image of an organisation can have a major impact on the competitive advantage that the organisation may enjoy. Therefore, it is possible that the organisation under study has created a positive image of itself which may have led to the positive results obtained in the correlational test that was conducted. With this being said, the researcher can accept the hypothesis (H1) and reject the null hypothesis (H0).

According to Ferguson et al (2017) consumers are becoming increasingly aware of the impacts that packaging materials and other business activities are having on the environment. The results from question 1 of the questionnaire (Addendum 1) provides substantial evidence that this is now a reality in society today. All 25 participants indicated that they are aware of the negative effects that packaging waste is having on the environment. Although these results indicate that consumers are aware of the environmental impacts of organisations' packaging waste on the environment, it was found in question 2 of the questionnaire (Addendum 1) that only 52% of the participants are currently making purchasing decisions based on the environmental-friendliness of organisations. This indicates that awareness of the problems of plastic waste is not necessarily enough to change people's purchasing behaviour. The contradiction between knowledge and behaviour may be as a result of a variety of factors that minimise the support of sustainable products. According to Ajzen (1991)

the theory of planned behaviour involves three different constructs that represent the determinants of a customer's intentions. These include; the attitudes towards a behaviour, the subjective norms of the consumer and perceived behavioural controls (Ajzen, 1991). Therefore, while a person may have a positive attitude toward buying environmentally-friendly products, he/she may not do so because he/she does not feel that he/she has the ability to influence such a large problem as an individual (perceived behavioural control). Furthermore, Ferguson et al (2017) stipulates that other factors that may have had an impact on the results include; the strength of certain brands, the culture of a country, education, lifestyle and lack of interest to mention a few. This could indicate that perhaps what is stopping consumers from purchasing products using environmentally-friendly packaging is the impact that powerful brands have on customers perceptions on products. Furthermore, Scott and Vigar-Ellis (2014) indicate that a major issue within the South African context that minimises the support of sustainable organisations is the education of consumers on this topic. This does not seem to be a problem in the sample, as they were all aware of the major impact that plastic packaging has on the environment. Another further consideration postulated by Ferguson et al (2017) is that, to be a sustainable consumer takes a large amount of effort. The participants in this study may not view it as a priority to find out what products are packaged sustainably as it requires effort. Therefore, these reasons may contribute to the reason why only 52% of the sample consumers do make purchasing decisions on the sustainability and environmental-friendliness of an organisation.

Question 3 from the questionnaire (Addendum 1) found that 88% of the sample did know that the organisation under study is making efforts in order to utilise sustainable and environmentally-friendly packaging materials. Therefore, this made it easier for the participants to answer the questions involving Likert scales because the questions were related to this prior knowledge. However, this contradicts the statement made by Scott and Vigar-Ellis (2014) whereby it is stated that an issue within the South African context is the limited education of the consumers on the usage of sustainable and environmental-friendly packaging materials.

Question 6 of the questionnaire (Addendum 1) addressed the impact that a minor price increase in order to accommodate the production of sustainable and environmental-friendly packaging materials would have on the purchasing decisions of the consumer. Question 7 asked the participants to indicate whether they would support an

organisation that utilised sustainable and environmental-friendly packaging materials instead of the organisation's competitors. By comparing the results from question 6 and question 7, it was possible to identify the potential impact that price has on the purchasing decisions of consumers. According to Borin (2013) customers will generally make their primary purchasing decisions based on price instead of being sustainable consumers. This was evident in the results that were obtained from questions 6 and 7. When price was a factor, only 68% of the participants would definitely purchase the product if there were a minor price increase in order to facilitate the production of sustainable and environmentally-friendly packaging materials. When price was no longer a factor, 84% of consumers would purchase the product if it was packaged in a sustainable and environmentally-friendly manner. This indicates the price sensitivity of the participants of the study, potentially pointing to the economic pressure that South Africans are currently experiencing.

The results from question 2 and question 7 provided a slight contradiction. Question 2 indicated that 52% of consumers are making purchasing decisions based on the sustainability and environmental-friendliness of an organisation. However, question 7 indicated that 84% of consumers would support an organisation instead of the organisation's competitor if the organisation were utilising sustainable and environmentally-friendly packaging materials. It indicates the difference between attitudes and behaviour. Just because someone has an attitude about something, does not mean they will act accordingly. This links back to the theory of planned behaviour because of the three constructs that customers intentions are determined by, including; attitudes towards a behaviour, subjective norms, and perceived behavioural controls. Therefore, this either indicates that there are not enough organisations making efforts in order to become sustainable and environmentally-friendly, or that the results contradict one another.

## Conclusion

From this research study it was found that there is a positive relationship between organisations utilising sustainable and environmentally-friendly packaging materials, and customers' intentions to repurchase. The results that support this statement were obtained through conducting a quantitative research study utilising a questionnaire. From these results it can be said that organisations could enjoy increased levels of sales if they utilise sustainable and environmentally-friendly packaging materials.

However, there are other factors that may prevent the customer from purchasing a product with sustainable packaging. Firstly, Ferguson et al (2017) indicates that factors such as brand, finances, education, lifestyle and ethical issues may have an impact on customers' purchasing decision-making. Secondly, some organisations may be competing in a market space where the product's brand is valued more than the sustainability and environmental-friendliness of the packaging that it uses. Therefore, organisations that utilise sustainable and environmentally-friendly packaging materials may enjoy a positive level of return on investment as a result of customer loyalty, in order to compensate for the extra expenses that are associated with the extra expense of sustainable packaging. Therefore, the research problem has been solved to an extent because the researcher has explained which factors will induce participants to buy products with sustainable and environmentally-friendly packaging. Furthermore, the research goal has been reached because the researcher will accept the hypothesis (H1) and reject the null hypothesis (H0).

The researcher believes that this research study has been a success, however, there are a variety of factors that should be considered for future research on this topic. Firstly, in order to obtain better results, a larger sample size should be drawn so that the results are more generalisable. Secondly, the industry that was selected by the researcher may have had an impact on the results of the study. Consumers buying food from a restaurant will generally not make purchasing decisions based on the sustainability and environmental-friendliness of an organisation's packaging, but rather on taste. Therefore, this may have had an impact on the results that were obtained from the study.

### Implications of findings for future practices

Through conducting this research study, the researcher has made various contributions to this field. Firstly, through conducting this study, the researcher has increased the awareness of the readers around the impact that packaging waste has on the environment. Secondly, the results from the research prove that utilising environmentally-friendly packaging alternatives can have a positive impact on customers' intentions to repurchase from an organisation. This should motivate other

organisations to make efforts in reducing the environmental impact that their packaging materials have. Furthermore, this could provide motivation for individuals to start businesses that manufacture environmentally-friendly packaging materials.

### Ethical considerations

According to Du Plooy-Cilliers et al (2014) the researcher was required to consider various ethical considerations when conducting field research with the participants. It is important that the researcher receives informed consent from the respective participants of the research study (Du Plooy-Cilliers et al, 2014). Therefore, the researcher is required to inform the participants that they will be a part of the research study before they are involved in the research study (Du Plooy-Cilliers et al, 2014). The researcher clearly indicated why the research study was being conducted, and explained exactly what the research aimed to discover so that the participants were able to give their permission to participate in the research study when they agreed to complete the questionnaire. Finally, the researcher needed to avoid deceiving the participants of the research study by clearly indicating what the research study aims to achieve (Du Plooy-Cilliers et al, 2014). The researcher answered all questions honestly in order to avoid deceiving the participants and in order to remain ethical.

Du Plooy-Cilliers et al (2014) highlight various ethical considerations the researcher had to take note of. The researcher should not falsify information, which pertains to an action whereby the researcher deliberately fabricates the data (Du Plooy-Cilliers et al, 2014). It is important that the researcher also avoids bias which may be as a result of the way in which the researcher interprets the information based on personal opinions (Du Plooy-Cilliers et al, 2014). Finally, the researcher was required to ensure that all information acquired in the process of data-collection is interpreted correctly and used within the correct context (Du Plooy-Cilliers et al, 2014). The researcher ensured that the data from each questionnaire was captured correctly and entered into Microsoft Excel in the correct format. Thereafter, Microsoft Excel did the relevant calculations which made the data easier to interpret for the researcher.

When the researcher was in the data-collection process, it was important for the researcher to contact the organisations in order to get gatekeeper permission in order

to hand out questionnaires to the customers of these organisations. The gatekeeper permission letter is attached as Addendum 3. Furthermore, once the data was collected, the researcher placed the data in a safe place so that no one had access to the raw data. The raw data has only been seen by the researcher and the researcher's supervisor.

## Limitations

As stipulated by Du Plooy-Cilliers et al (2014) research limitations refer to the constraints that limit a research study that are out of the control of the researcher. Firstly, the researcher was limited by a time constraint because the research study had deadlines and this limited the amount of data and information that the researcher could collect on the area of investigation. Another limitation was the number of participants on which the researcher was able to conduct the research study. The maximum number of questionnaire participants is limited to 25. Another possible limitation pertaining to this study was whether the participants were aware that the organisation being studied is utilising sustainable packaging materials. However, only 3 of the participants were unaware that the organisation under study was making efforts in order to be a sustainable and environmentally-friendly organisation. For this research study, the researcher did not receive additional funds in order to conduct the research study, therefore, this added a budget limitation. The final limitation addressed is the language barriers that may limit the results obtained from the questionnaire because South Africa is an extremely diverse country with many languages. The entire questionnaire was in English; therefore, the researcher was only able to approach participants who are relatively fluent in English. This may have had an impact on the final results in the questionnaire because it may bias the final results in some way or another. A further limitation to the study pertaining to question 6 of questionnaire (Addendum 1) is the use of the word "reasonable". Different consumers would interpret the word differently because each consumer would have a different idea of what a reasonable amount would be. For further research in this field, the researcher advises that the same research topic is conducted within a different industry in order to evaluate whether similar results could be obtained. Furthermore, conducting the study with a larger sample size could produce more accurate results, therefore, it may be

important for a more extensive research study to be conducted on this topic. Further research also needs to be conducted on the number of organisations that are making efforts in order to be sustainable and environmentally-friendly. Consumers may not be able to make purchasing decisions based on these factors because there are simply not enough organisations that are making efforts in order to package their products in a sustainable and environmentally-friendly manner.

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## Addenda

### Addendum 1 – Questionnaire

My name is Struan Cowie and I am a BCom honours student at the IIE Varsity College Durban North. I am conducting a study that is investigating whether organisations that use sustainable and environmentally-friendly packaging materials have an influence on customers' intentions to repurchase their products. By assisting me in completing this questionnaire, you will be making a contribution towards a research study that is addressing a major issue that society is dealing with today: the environmental impact of product packaging.

- I will ensure that all answers will be kept anonymous.
  - The estimated time for completing this questionnaire is 7-15 mins
  - Instructions:
    - Please answer all of the questions by circling the option that fits with your opinion best.
    - There are no right or wrong answers, so simply answer as honestly as possible
- 

**Are you concerned about the impacts that packaging waste is having on the environment?**

1. YES
  2. NO
  3. UNSURE
- 

**Do you ever make purchasing decisions based on the environmental friendliness of an organisation?**

1. YES
  2. NO
-

### 3. UNSURE

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**Are you aware that the organisation is making an effort in order to be a sustainable and environmentally-friendly organisation by not using plastic as a packaging material?**

1. YES
  2. NO
- 

**On a scale from 1-5 how important is it to you that the organisation uses sustainable and environmentally-friendly packaging materials?**

- 1= Not important
  - 2= Slightly important
  - 3= Neutral
  - 4= Important
  - 5= Very important
- 

**On a scale from 1-5 how much influence does the environmentally-friendly packaging have on your intention to buy the organisation's products again?**

- 1= No Influence
  - 2= A little influence
  - 3= Neutral
  - 4= A large influence
  - 5= Definitely influences my decision
-

**Would you support organisations increasing their prices by a reasonable amount, if you knew that they are using sustainable and environmentally-friendly packaging materials?**

1. YES
  2. NO
  3. UNSURE
- 

**If you were aware of an organisation that utilised sustainable and environmentally-friendly packaging materials, would it cause you to repurchase products from this organisation instead of purchasing from their competitor?**

1. YES
  2. NO
  3. UNSURE
- 

**Do you think organisations could increase customers' intentions to repurchase by providing recycling bins for their packaging waste?**

1. YES
2. NO
3. UNSURE

## Addendum 2 - Results

**Figure 1: Raw Data**

|   | Q1 | Q2 | Q3 | Q6 | Q7 | Q8 |
|---|----|----|----|----|----|----|
| Y | 25 | 13 | 22 | 17 | 21 | 20 |
| N | 0  | 8  | 3  | 1  | 3  | 3  |
| U | 0  | 4  |    | 7  | 1  | 2  |

|   | Q4 | Q5 |
|---|----|----|
| 1 | 0  | 3  |
| 2 | 1  | 6  |
| 3 | 2  | 7  |
| 4 | 13 | 5  |
| 5 | 9  | 4  |

**Figure 2: Pearson's R**

**Correlation matrix  
(Pearson):**

| Variables | Q4           | Q5           |
|-----------|--------------|--------------|
| Q4        | <b>1</b>     | <b>0,548</b> |
| Q5        | <b>0,548</b> | <b>1</b>     |

*Values in bold are different from 0 with a significance level alpha=0,05*

**Figure 3: Pearson's P value**

p-values

(Pearson):

| Variables | Q4           | Q5           |
|-----------|--------------|--------------|
| Q4        | <b>0</b>     | <b>0,005</b> |
| Q5        | <b>0,005</b> | <b>0</b>     |

## Addendum 3 - Gatekeeper Permission Letter

## Addendum 4 – Ethics Clearance Letter

### Information sheet for participants (i.e. students or staff members)

To whom it may concern,

My name is Struan Cowie and I am a student at The IIE Varsity College Durban North. I am currently conducting research about whether organisations that utilise sustainable and environmentally-friendly packaging materials increases customers' intentions to repurchase. I hope that this research will enhance our understanding of the impact that packaging waste is having on the environment as well as ways in which organisations can benefit from being sustainable and environmentally-friendly.

I will be clearly explaining to you exactly what participation in my research study will involve, which I have done below. I have listed these in the forms of questions that I will try to fully answer. If you have any questions that you feel are not addressed or explained fully in this information sheet, please do not hesitate to ask the researcher for more information. Once you have read and understood all the information contained in this sheet, please complete and sign the consent form below.

#### What will I be doing if I participate in your study?

I would like to invite you to participate in this research because it will assist in establishing whether my hypothesis is plausible. If you decide to participate in this research, I would like you to complete a closed-ended questionnaire.

You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular interview questions.

#### Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no impact on your work. There are no direct risks or benefits to you if you participate in this study.

#### Do I have to participate in the study?

- Your inclusion in this study is purely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;
- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

#### Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to recognise you. I would like to ask your permission to record the interviews, but only a professional transcriber and I (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at The IIE Varsity College Durban North, will have access to your interview. I would like to use quotes when I write a summary of the research but I will make sure that nobody will be able to recognise you.

What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be published in academic journals or books, or presented at academic conferences. You may ask me to send you a summary of the research.

What happens if I have more questions about the study?

Please do feel free to contact me should you have any questions about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed. The contact details of the researcher are as follows:

Kind regards  
Struan Cowie

[Redacted]  
[Redacted]

## Addendum 5 - Safe Assign Report

10/28/2018

SafeAssign Originality Report



RESM8419\_2018\_HBCE\_VCDN1 - RESM8419\_VCDN1

Activity 5.3.2: Submitting your final report

Struan Cowie on Sun, Oct 28 2018, 10:32 AM

6% highest match

Submission ID: ed142126-efcb-4a24-ab16-c9b642aa15d

Struan Cowie 15010815.docx

Word Count: 10,181

Attachment ID: 236977461 | 4%

Citations (15/15)



1

Another student's paper



2

Another student's paper



3

Another student's paper



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Another student's paper



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## Addendum 6 - Research Report Summary Table

| Research Purpose/Objective                                                                                                             | Primary Research Question                                                                                               | Research Rationale                                                                                                                               | Seminal Authors/Sources         | Literature Review – Conceptual Framework                                             | Paradigm                                                                                                 | Approach                                                         | Data Collection Method(s)                                                             | Ethics                                                                                                                            | Anticipated Findings                                                                                                  | References                    |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Correlation between sustainable packaging and customer buying behaviour.<br>Aim to show a positive correlation.                        | Is there increased customer loyalty to organisations that utilise sustainable packaging alternatives.                   | The impact of waste in the environment as a result of packaging. It is important organisations begin to become more environmentally sustainable. | Casey.                          | Theme 1:<br>Overview of environmentally friendly packaging                           | Positivist                                                                                               | Quantitative                                                     | Questionnaire                                                                         | Informed consent.<br>Avoid deception.<br>Gatekeeper.                                                                              | Positive correlation between sustainable packaging and customer loyalty                                               | Aizer. 1991                   |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  | Masipier and Crie.              |                                                                                      | Epistemology:<br>Objective observable evidence                                                           | Population                                                       |                                                                                       |                                                                                                                                   |                                                                                                                       | Asemah et al. 2013            |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  | Mishal et al.                   | Theme 2:<br>The need for environmentally friendly packaging                          |                                                                                                          | Customers of the organisation being studied.                     |                                                                                       | Interpret data correctly. don't falsify info.                                                                                     |                                                                                                                       | Bolton. 2017                  |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  | Moser.                          |                                                                                      |                                                                                                          |                                                                  |                                                                                       | Keep raw data between supervisor and researcher.                                                                                  |                                                                                                                       | Borio. 2013                   |
| Research Problem                                                                                                                       | Secondary Questions/<br>Hypotheses/<br>Objectives                                                                       | Key Concepts                                                                                                                                     | Key Theories                    | Theme 3:<br>Disadvantages of environmentally friendly packaging                      | Ontology:<br>single, objective and stable social and physical external reality that is governed by laws. | Sampling                                                         | Data Analysis Method(s)                                                               | Limitations                                                                                                                       | Anticipated Contribution                                                                                              | Davies. 2016                  |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 | Theme 4:<br>Organisations that will benefit from environmentally friendly packaging. |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Du Plooy-Gilliers et al. 2014 |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Dudovskiy. 2018               |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Erasmus et al. 2013           |
| Organisations make large investments in sustainable packaging. It is important to investigate if they get a good return on investment. | Customer attitudes towards companies using sustainable packaging.<br>Perceptions of customers influencing repurchasing. | Environmental sustainability<br><br>Customer loyalty<br><br>Corporate Social Responsibility                                                      | The theory of planned Behaviour |                                                                                      | Axiology:<br>research that is objective in nature and free of personal bias.                             | Non-probability<br><br>Convenience sampling.<br><br>25 consumers | Customers intention to repurchase<br><br>Basic and inferential statistical technique. | Customers willingness to pay extra for sustainable packaging.<br><br>Sample size =25<br><br>Language barriers<br><br>Participants | Motivate other organisations to utilise sustainable packaging alternatives<br><br>Create an awareness for the need to | Ferguson et al. 2017          |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Fisher. 2010                  |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Flaherty. 2017                |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Jindal. 2010                  |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Knoblauch. 2009               |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Kumar. 2012                   |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Leamtech. 2018                |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Li. 2017                      |
|                                                                                                                                        |                                                                                                                         |                                                                                                                                                  |                                 |                                                                                      |                                                                                                          |                                                                  |                                                                                       |                                                                                                                                   |                                                                                                                       | Mavi et al. 2012              |