DOES THE IMPACT OF CALORIE LABELLING ON MENUS IN FAST FOOD RESTAURANTS INFLUENCE CONSUMER-PURCHASING DECISIONS?

A case study into calorie labelling on fast food menu boards focusing on McDonalds

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Declaration

I declare that this Dissertation has not already been accepted in substance for any degree and is not concurrently submitted in candidature for any degree. It is the result of my own independent research except where otherwise stated

Signed: ..............................................

Date: ..................................................
Abstract

The aim of the dissertation was to investigate the impact calorie labelling on menus has on consumer purchasing decisions in fast food restaurants. The aim of the study was to explore the different influences affecting consumer purchasing along side consumers existing awareness around calories. The study comprised of both primary and secondary research staring with a literature review. The literature analysed the secondary data already produced around the topic, including information on calories and nutrition, the calorie labelling law, consumer behaviour and existing theories and studies already conducted on calorie labelling.

Within the study a case study was used focusing on McDonalds, one of the first fast-food outlets to introduce calorie labelling. The case study allowed a comparison between the researchers primary research and the research conducted by McDonalds.

A mixed method approach was used for the primary research, conducting interviews as well as questionnaires; the questionnaires involved a combination or open and closed questions. The results were then triangulated to form key issues raised by the data collected outlining clearly to the reader the outcome of the study.

The study has established that if consumers had more awareness of calories prior to purchasing there purchasing decision would be influenced. Consumers that aren’t aware or have no interest in calories were unlikely to be influenced by the calories displayed on menus especially within the fast-food industry.

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Abbreviations

FDA - Food And Drug Administration
MHRA - The Medicines And Healthcare Products Regulatory Agency
TRA – Theory Of Reason Action
QSR - Quick Services Restaurants
Chapter 1
1. Introduction

1.1. Overview

The introduction presents an overall background to the study and the rationale behind the chosen topic, additionally justifying the research questions, aims and objectives. A brief explanation of the methodology structure will be outlined providing information of the forms of data collection and data analyses.

1.2. Research Question

“How does calorie labelling in fast-food restaurants influence restaurant consumers purchasing decisions?”

The proposed research question evaluates the impact calorie labelling has on consumer purchasing decisions, looking closely at the fast food industry and whether the new introduction of calorie labelling has impacted consumer decision making. Therefore by the end of the research paper, the reader should have an understanding on whether calorie labelling on menus in the fast food industry has an impact on consumer purchasing and the decisions consumers make on food choices.

The chosen research question has been selected as the researcher feels that over the recent years new trends in healthy eating have influenced what people eat and the way consumers manage their calorie intake. The researcher also feels that displaying the calorie value of food is important, as it’s vital we understand what we are consuming on a daily basis.

With growing rates of obesity, policymakers have brought in new measures to help reduce obesity with the introduction in 2010 of calorie labelling on menus for chain restaurants (Ellison, 2012). Consequently, spiking interest in the menu labelling law, encouraging a stream of research towards "the effectiveness of calorie labels on restaurant menus" (Ellison, 2012, pg.34).
1.3. Research Hypothesis

A hypothesis provides “clarity, specificity, and focus to a research problem” (Kumar, 1999, pg.64). The purpose of the research hypothesis is to allow the data to be classified as either null or proven (Kumar, 1999).

The research Hypotheseses are:

H1: If calories are present on menus within fast-food restaurants it will influence consumer-purchasing decisions.

H2: Consumer behaviour towards calories on menus will be influenced by the age, gender and the consumer's current life stage status.

H3: When calories are presented on menus it influences consumer-purchasing decisions to choose lower calorie options

The three hypothesis have been selected based on the literature produced by the literature review (chapter 2).

H1: Based on previous information around the research topic alongside research conducted in both a field and laboratory setting by (Roberto et al., 2010 and Harnack et al., 2013) there is a strong suggestion towards calories being present on menus influencing consumer-purchasing decisions. Therefore the researcher hopes to prove or null the hypothesis based on the outcome of the primary research.

H2: Previous research conducted around the topic classed the sample as one, therefore, didn't look at how the age, gender or occupation of the participant could have an impact on the influence of calories labelling on menus. Consequently, the research has designed these hypothesis's to determine whether this has an impact, the questions within the primary research will help indicated this outcome to the researcher.

H3: Research conducted by Roberto et al., 2010 outlined within the literature review (Chapter 2) suggest that when the calories are presented on menus, it influences the
consumer to purchase a lower calories meal. Therefore the researcher will conduct primary research to determine if this hypothesis can be proven or null.

1.4. Aim

The aim of a researcher is to “produce not only credible empirical results and revisions of theories but also interesting and influential ideas and theories” (Alvesson and Sandberg, 2013, pg. 1). Taking this into account the purpose of the research aim of this study is to evaluate the impacts on consumer decision-making when calorie labelling are presented on menus within fast food industry.

1.5. Objectives

The research objectives have been devised based on key findings within the literature review. These include consumer decision-making, purchasing decisions and calorie labelling’s impact on fast food menus. Looking at these factors hypotheses developed will help determine whether there is a correlation between calorie labelling with fast food chains and consumer purchasing decisions. The objectives are as follows;

1. To critically evaluate the literature on purchasing decisions, consumer buying and calorie labelling within the fast food industry.
2. To analyse the impact compulsory calorie labelling is having on consumer purchasing decisions within fast food restaurants.
3. To explore how customers purchasing decisions are affected by calorie labelling on menus.
4. To draw conclusions on to what extent calorie labelling impacts purchasing decisions within the fast food industry.

1.6. Rationale

Over the years the increasing trend of eating out has become an essential part of people's lives, with eating out taking place in restaurants, it has become an integral part of consumer’s day-to-day lifestyles. Restaurants themselves, transform the social activity of eating out into a civilised ritual involving a combination of hospitality, satisfaction and imagination (Longart, 2015).

The Fast food industry is vastly growing with a predicted growth of 2.5% in the next
seven years making it ever more popular. The average global revenue produced by the fast food industry is $570 billion with the United States bringing in $200 billion in 2015 (Franchise Help, 2018).

The increasing popularity of eating out has meant the hospitality industry has adapted to meet demand, resulting in the increasing number of restaurants (Longart, 2015). Fast food restaurants accommodate the consumers looking for taste, low price and quality (Franchise Help, 2018). Fast food restaurants alongside fast causal restaurants (don't offer table service) are combined and classified as Quick Services Restaurants (QSR) within the restaurant industry, making up for more than 50% of sales within the sector (Franchise Help, 2018).

Therefore the increasing demand and popularity of the fast food industry can cause some issues especially for the health of consumers. Fast food products are renowned for having high energy density and glycemic loads as well as providing customers with large portion sizes. Therefore health specialists believe the increase in fast food indulgence is contributing to the escalating rates of overweight/obesity levels (Rosenheck, 2008). These growing issues are not limited to USA with growing rates of obesity within the UK, 2015 figures suggesting 58% of women and 68% were overweight/obese (NHS, 2017 A).

Therefore bringing to light the introduction of calorie labeling within fast food chains. Due to the increasing popularity of eating out and overweight/obesity rates increasing this has caught the attention of policymakers (Ellison, 2012). The Food and Drug Administration (FDA) and The Medicines and Healthcare products Regulatory Agency (MHRA) have introduced a law with the aim to help educate consumers on the food they are eating outside the home to help reduce the excessive weight gain (Harnack and French, 2008). As a result of this, the new law means chain restaurants or similar food retailers with more than 20 restaurants need to label the calorie intake of their food products on menus (FDA, 2016).

Furthermore, this study looks at identifying if the new calorie labeling law is helping to educate the consumer and change their purchasing decision. The study will look at the fast food industry and the new calorie labeling law, observing consumer behavior to help identify if this law will impact consumer-purchasing decisions and whether calorie labeling will help reduce overindulgence in calories consumption intern helping to educate consumer.
1.7. **Data**

This Project will require first-hand primary research alongside secondary research. The secondary research is formed within Literature review section of this study, examining research and theory around the topic area.

The Primary research will contain a mixture of qualitative and quantitative research. This information is required to get a full understanding of consumer’s opinions on calorie labelling and whether it has an effect on consumer purchasing decisions in fast food chains. Sample range comprises of both males and female fittings in the ages brackets of 18-35, 36-50 and 50+.

A case study will be used on McDonald's to help provide some additional secondary research to gain a better understanding of the research topic.

The research carried out will be aimed at fast-food consumers with an interest in calories. The research will be in the form of interviews and questionnaires; the two forms of data offer qualitative and quantitative data, providing the researcher with a greater range of data to draw an accurate conclusion.

Due to the size of the study, it will provide some limitations and constraints; the study is only looking at a small section of the industry and the issues around calories labelling, therefore, offers a particular view. Although the study is small, it will still contribute to the chosen field of study.

1.8. **Study Structure**

There are several ways in which a research study can be designed and processed, the most commonly used diagram to help understand the research process is shown in figure 1 below. The linear diagram shows the flow of the project starting with a problem (Pre-empirical stage) then heading into the Empirical stage that incorporates data collection and analysis in ordered to produce a written report (Blaxter, Hughes, and Tight, 2010).
Figure 1: Research Process

(Blaxter, Hughes, and Tight, 2010, pg.8)

The model will be used to help outline the structure of this report, dividing the study into six sections which allows and in-depth study towards the topic.

**Chapter 2** – Includes a critical evaluation of the literature around the chosen topic area, outlining the main issues associated with the topic as well as presenting the reasoning for further research. The literature review has been divided into five main sections in order to provide an overall background to the study.

**Chapter 3** – Takes into account the different primary research methods used. This section will consist of philosophy, design and methods in order to meet the aims and objectives. It will identify what primary research will be carried out and reasoning behind it providing the reader justifications for the author's process. The author has conducted interviews and questionnaires as part of their primary research.

**Chapter 4** – This section will reveal the results produced by chapter three. The results will be critically analysed through the methods outlined in chapter 4. This section aims to present the finding produced from the primary research in a way that provides a clear understanding of the outcomes discovered. The results will be presented in a way, which will reflect the different qualitative and quantitative approaches used in the methodology. Discussions around the topic will be incorporated within this section providing the opportunity to reflect upon the meaning and implications of the results. Alongside this will display any correlation or patterns between the research questions and the results as well as discuss the results towards the relevant hypotheses.
**Chapter 6** - The final chapter will conclude with the research study, reviewing the aims, objectives and research question together with a summary of the main finding. Recommendations for further research will also be made along with industry recommendations, concluding with the success of the study itself.

1.9. Chapter Summary

The overall objectives of this study have been established through exploring the impact calorie labelling on menus within the fast food industry can have on consumer purchasing decisions. Furthermore, a justification towards the chosen research topic is presented through new laws being introduced as well as previous studies and theories around the topic area.
Chapter 2
2. Literature Review

2.1. Introduction

This section provides literature around calorie labelling in restaurants and customers purchasing decisions. The literature will also support the research aims and objectives, discussing the suitability of the chosen topic. The purpose of a literature review is to identify current gaps in knowledge and set the background to the topic area as well as provide opposing work of previous works (Greenfield, 2002).

The beginning of the literature review will discuss calories and nutrition. The author will then outline consumer behaviour regarding the hospitality industry outlining the influences that impact purchasing decisions. The legal requirements for restaurants and reasoning behind the introduction of calorie labelling will be explained, as well as looking at a fast-food outlet which have introduced calorie labelling on their menus. Finishing with theories surrounding calorie labelling on menus within the fast-food industry previously conducted.

2.2. Background

One of the primary risk factors of obesity and being overweight is from overindulging in calories with two-thirds of adults in America being overweight/obese (Federal Register, 2014). Savage and Johnston (2006) state that nearly a third of food consumption is done so outside the home within the UK and USA (Savage and Johnston, 2006). Assuming that a third of consumer calories come from food prepared outside the home. With many people having little understanding of calories and nutritional content therefore underestimating the calories and nutritional value within food products resulting in the food labelling law by the FDA (Federal Register, 2014).

Although the issue is mainly spoken about in the USA and Canada, these are not the only countries facing these issues; over the years it’s become a growing issue in the UK. Statistics show that the adult population obesity level in the UK is 26% only 13% lower than the USA (National Statistics, 2017). Therefore menu labelling is the initial step to help consumers eat healthier and pick better meal choices with 26% of consumers already interested in calories on menus (Mintel, 2017).
Looking at both calorie and nutrition, the following section will focus on the difference between the two and provide information on what calories and nutrition are.

### 2.2.1. Calories

Calories within food relates to the amount of energy (NHS, 2017, B). The suggested guidelines for calorie intake for men is around 2,500kcal a day, with women’s intake being 2,000kcal a day (NHS, 2017, B). The guidelines are open to change as they are based on size, age and levels of physical health along with a combination of other factors. By consuming more calories than used, it leaves the extra calories to be stored as fat. Over time this adds up resulting in being overweight (NHS, 2017, B).

### 2.2.2. Nutrition

Nutrition looks at the body's dietary needs, outline the food that helps maintain a well-balanced diet. If your body does not receive the right foods, it can result in poor nutrition, in turn, causing reduced immunity and an increased chance of catching diseases (World Health Organization, 2017). Therefore, indicating the importance of nutrition with previous experiments also indicating that nutritional labelling can lead to healthier purchasing (Krieger, et al., 2013). Results have shown that providing nutritional information on menus is not just beneficial to consumers but also the restaurant, as it can help gain reassurance and confidence from the consumer and establish a better consumer image of the information's source (Hwang and Lorenzen, 2008).

### 2.3. Consumer Behaviour

#### 2.3.1. Definition Of Consumer Behaviour

Consumer behaviour can be defined as the “behaviour that consumers display in searching for, purchasing, using, evaluating and disposing of products or services” (Schiffman, Kanuk, and Hansen, 2012). Consumer behaviour deals with the different ways in which people interact in their role as a consumer, in relation to searching, buying and the products (John and Pine, 2002).
Restaurants in all areas of hospitality (hotels and chains), take-away, contract caterers are more impulsive, (John and Pine, 2002) "changeable and fashion-prone than hotel or tourist attractions" (John and Pine, 2002, pg.120). These are features within the Foodservice industry that set it apart from other services. It closely focuses on food choices and quality as well as offering a "rich meal experience to which many other factors contribute" (John and Pine, 2002. Pg.120)

2.3.2. Theories Of Consumer Behaviour And Decision-Making

Over 300 years ago Bernoulli developed the first explanation for decision-making. Von Newmann and Morgenstern then went onto expand this theory naming it the utility theory (Richarm, 2005). This theory suggested that consumer decision-making was based on expected outcomes due to consumer decisions. As part of this model, consumers were considered as "rational actors who were able to estimate the probabilistic outcomes of uncertain decisions and select the outcome which maximized their well-being" (Richarm, 2005). This theory presumes all consumers are entirely rational which one may view as not accurate, therefore subjecting the Utility model to several shortcomings (Richarm, 2005).

In contrast to the Utility Model, looks at a wide range of factors impacting the consumer, demonstrating a range of activities beyond purchasing (Bray, 2008). These activities include; “need recognition, information search, evaluation of alternatives, the building of purchase intention, the act of purchasing, consumption and finally disposal “(Bray, 2008, pg.2). Consumer behaviour has progressed via many distinct stages due to "new research methodologies and paradigmatic approached being adopted" (Bray, 2008, pg.2). This progression has become evident in the contemporary definition of consumer behaviour (Bray, 2008);

“consumer behaviour……. is the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires.”

(Solomon, et al., 2006. Pg,6).

Consumer behaviour and decision making incorporates a variety of different models and approaches especially when looking at the hospitality industry. There are general models
around consumer behaviour, for example, the cognitive approach which “explains how certain organisms or variables can affect the response” (Stanton, 2016), due to the outcome of purchasing decisions.

The cognitive approach perceives individuals as ‘Information processors’ “acknowledging the impact of environment and social experiences” (Dudovskiy, 2013) when processing information. During the 1950's Hebb introduced the Stimulus-Organism-Response model playing a considerable part in the development of cognitive psychology (Hall, 2016). Figure 1 below shows the cognitive consumer behaviour model.

![Figure 1: Cognitive Consumer Behaviour Model](image)

There are two differences when analysing the consumer behaviour model; they are either analytic or prescriptive. Although this model does not directly relate to the calories on menus it can be used to get a better understanding of how consumers make their decisions, especially within the hospitality industry.

2.3.2.1. Analytical Model

The analytic models provide “a framework of the key elements that are reported to explain the behaviour of consumers” (Bray, 2008, pg.9). These models highlight the influencing factors and bring together the relationships between the factors influencing
consumer decision-making (Bray, 2008). Further information on the model shown in figure 2 can be found in Appendix A and B.

### 2.3.2.2. Prescriptive Models

Prescriptive models provide a framework and guidance on the structure of consumer behaviour (Rodrigues, 2006). Prescriptive models include “the order in which elements should appear and prescribe the effect that should be observed given certain causal factors” (Bray, 2008, pg.9) highlighting what stimuli should be modified or emphasised to enable a certain response from consumers (Bray, 2008). Further information can be found on the prescriptive models in Appendix C.

### 2.4. Consumer Behaviour In Hospitality

As shown by the above models "consumers perform a hierarchy of expectations and needs, related in part at least to the environment in which the decision is made" (Williams, 2002, pg.51). The difficulty with associating these models with the hospitality industry is the environment is constantly changing with the decisions being made on "high levels of variability and intangibility" (Williams, 2002, pg. 51) especially in the fast food industry where the experience can be short due to a short consumption time. Although these models and theories do not specifically mention calories on menus, they can be used to help gain an understanding of the elements affecting consumer purchasing.

The analytical models use of information searching which is included in the five stages can help identify if consumers would benefit from calories on menus. Within the hospitality industry pre-purchasing information searching is mostly "determined by individual preference, availability and accessibility of the information" (Williams, 2002, pg. 57). There are several ways in which information can be used to help the consumer for example;

1. Consumers may expect to take better decisions after information acquisition and processing.
2. Information is seen to reduce perceived risk
3. Consumers may be more confident in using information
4. Information processing identifies desirable alternatives and rules out undesirable options
5. Information is used as a defence mechanism in justifying a decision after it has been made”

(Williams, 2002, pg. 58).

With calorie labelling being introduced to help educate the consumer, the five points made from information searching can help outline how this could improve consumer-purchasing decision. The five points demonstrate the more information the consumer has, the better their decision will be and by highlighting the different calorific content of food products could help provide consumers with an alternative which could be more beneficial for them.

Expanding on consumer behaviour another issue that needs to be addressed is what motivates consumers to visit certain hospitality outlets? To grasp what consumers are looking for the understanding of what motivates them is needed. Therefore looking at motivational theories such as Maslow's Hierarchy of needs it provides a rounded view of what influences the consumers. Williams (2002) has already stated that consumer behaviour models work with consumers "perform a hierarchy of expectations and needs” (Williams, 2002, pg.51). This is similar to Maslow’s Motivational model, taking five different human needs and displaying them in a pyramid commonly depicted as hierarchies (Mcleod, 2017).

Figure 3: Maslow’s Hierarchy of needs

(Research History, 2012)
As shown in figure 3 the basic need for consumers are physiological needs (food and water) with the second level being safety and security, incorporating health. This shows that the two basic needs are essential for consumers (Mcleod, 2017). The structure of the model allows the lower needs to lead to the progression of the higher needs (Fred van Raaij and Wandwossen, 1978). With a growing number of UK consumers becoming more health conscious around the calories and nutrition it bringing’s together the two needs highlighted in the model (Fletcher, 2008).

2.5. Legal Implementation Of Calorie Labelling

Over the years consumers have been left in the dark about the caloric content of food products in restaurant whereas food made at home provides nutritional information on the packaging. Therefore providing no transparency around food in restaurants (Belluz, 2017).

The lack of transparency around the calorific content of food then instigated the Patient Protection and Affordable Care Act (ACA) 2010 implemented by the FDA. The new rule requires calorie information to be listed on menus in chains restaurants. Aimed at chained restaurants it states that “restaurants and similar retail food establishments if they are part of a chain of 20 or more locations, doing business under the same name, offering for sale substantially the same menu items and offering for sale restaurant-type foods” (FDA, 2016) should show their calories on their menus. The introductions of this new law hopes to provide consumers with a better understanding of calorie content and help calculate their consumption (Belluz, 2017).

With the new ruling helping create transparency within the industry the FDA along with the ACA established that overconsumption of calories was on of the primary factors contributing to obesity (Food and Drugs Administered, HHS, 2014). Therefore the new introduction of calorie labelling in restaurants and other food establishments enables consumers to see the nutritional value of the food products and the calorie intake helping them to make healthier and better informed dietary choices (Food and Drugs Administered, HHS, 2014). According to health impact assessments conducted in 2008, the yearly weight gain in the county's population could be reduced by 39% if menu labelling were to be introduced into only 10% of major chain restaurants (Healthy Eating Research, 2009). Research taken from 2009 showed that consumers underestimated the number of calories
and fat content in food products outside of the home and menu labelling reduces the intention to order high-calorie labelled foods (Healthy Eating Research, 2013).

2.6. Fast Food Industry

The issues around calorie labelling and its impact on consumer purchasing are vastly spreading across the hospitality industry, to narrow the field down the researcher is primarily focusing on the fast food industry. Although this narrows down the area regarding the hospitality industry this still leaves a reasonably broad topic. The use of McDonalds as a case study will be used to evaluate how calorie labelling has impacted them.

With more than 160,000 fast food restaurants in America the fast food industry is rapidly growing (Statistic Brain, 2016) therefore the increase in calorie labelling and food labelling, in general, has increased tremendously, with restaurant providing customers with nutritional information on their food products and calorie labelling (FDA, 2016). As previously outlined in the study calories measures the level of energy in the food or drink whereas nutrition looks at the body’s dietary needs in food for example, fat and salt levels (NHS, 2017, B)

Using McDonalds as a case study enables the researcher to see if consumers are aware of the calorie labelling and whether it would impact their purchasing decision.

2.6.1. McDonald’s

McDonald’s originated in 1940, over the years it has grown massively spreads across 119 countries serving 58 million customers every day. McDonald's target their product at a range of people offering a variety of products. With such a large target market McDonald's can adapt their product based on the countries culture or dietary requirements (Vegetarian), this is implemented in countries such as Indonesia and Indian where they offer McRice and Portugal where they provide soup (Difference Between, 2011).

Since 1984, McDonald's has provided nutritional information about their food products with calorie labelling being the next step for (McDonald’s, 2011). As of September 7th, 2011 all 1,2000 McDonald restaurants have added calorie labels to their menus making calories visible to 3 million McDonalds consumers a day (McDonald’s, 2011). Alongside this, they
also introduced healthier food option on their menus with the USA president of McDonald's stating that (Strom, 2012)

“We recognize customers want to know more about the nutrition content of the food and beverages they order.”

(Storm, 2012)

2.7. Theory

A stream of research has been produced due to the new introduction of menu labelling especially around the topic of "the effectiveness of calorie labels on restaurant menus" (Davis et al, 2013,pg.174). Producing a combination of both experiments within a laboratory setting and field setting (Davis et al, 2013). “A laboratory experiment is an experiment conducted under highly controlled conditions” (Oxford Living Dictionary,2017 A) whereas a field experiment is "a research project carried out in the natural location or context of the subject of study, rather than in a laboratory or office" (Oxford Living Dictionary,2017 B).

Harnack et al. (2008) conducted research into whether “providing calorie information at the point-of-purchase on a fast food restaurant menu” (Harnack et al.,2008, pg.8-9) has an effect on “food selection and consumption among a sample of adolescents and adults who eat regularly at fast food restaurants” (Harnack et al.,2013,pg.9). The Laboratory experiment showed that among the sample used calorie labelling of food products has no impact on consumption, although after training around calorie labelling the results of the experiment significantly improved (Harnack et al., 2013).

After the research was conducted Harnack et al, (2013) believed that the "need to increase concern about nutrition when eating at fast food restaurants, as factors such as taste and convenience appear to be a far more important consideration for most consumers" (Harnack et al., 2013, pg.12).

On the other hand, Roberto et al. (2010) conducted a field study with 303 participants looking at “the impact of restaurant menu calorie labels on food choices and intake” (Roberto et al. 2010,pg.312). The results from the study showed that on average the participants in the calorie labelled group and the group with calorie labelling plus
information “consumed 124 and 203 fewer calories” (Roberto et al., 2010, pg.316). The impact of calorie labelling was demonstrated when the menus provided both calories and the recommended daily intake (Roberto et al., 2010).

In conclusion the results from this study found that "calorie information on restaurant menus reduced the total amount of calories people ordered and consumed for a meal” as it enabled participants to produce a better estimate on their calorie consumption (Roberto et al., 2010, pg.316).

Looking at both the experiments conducted, by Harnack et al., (2008) and Roberto et al., (2010) studies show conflicting results reaching different conclusions on the influence of calorie labelling on menus (Davis et al, 2013; Harnack et al., 2008; Roberto et al., 2010). Harnack et al. (2008) concluded there was no significant impact on consumer consumption when calories were displayed although did find a slight improvement if they were educated on food labelling first (Harnack et al. 2013). However, Roberto et al. (2010) concluded that calorie labelling helped reduce the calorie intake of consumers (Roberto et al. 2010) although this last theory is hugely contrasting to literature around calorie labelling.

Research on the impact of calorie labelling is reasonably mixed with results showing either little impact on consumers or previous studies are poorly designed (Belluz, 2017). Although some researchers found that consumers "who are already calorie-conscious do pay attention to labels, but those who are not don't" (Belluz, 2017) therefore it cannot be expected that calorie labelling will produce an immediate change.

2.8. Chapter Summary

In summary, this chapter has looked at a variety of areas around calorie labelling and the fast food industry. Exploring models related to consumer behaviour and motivation as well as highlighting the reasoning behind the calorie labelling law and the outlets, which have implemented it. It has also investigated a combination of different studies already conducted and outlined the results they produced. A brief background of McDonalds has been provided giving the research some knowledge around the outlet prior to the case study results (Chapter 4).
Chapter 3
3. Methodology

3.1. Introduction

The methodology section refers “to the philosophical framework and the fundamental assumptions of the research” (Van Manen, 1990 cited in Creswell and Plano Clark, 2007). The methodology highlights how the research will be carried out breaking it down into different sections (Creswell and Plano Clark, 2007). The Methodology will allow the author to evaluate the advantages and disadvantages of the different research methods, helping to identify the correct methods to use in order to adhere to the research objectives (Kumar, 1996).

Looking back at chapter 2 the use of secondary data helps provide previous research on the topic, which is vital to conduct before researching. This is essential as it reduces the risks and prevents the researcher from regurgitating what has already been studied (Rugg and Petre, 2007).

The secondary research found within the literature review highlighted there was a limited amount of academic literature around the topic of Calorie labelling within the fast-food industry therefore highlighting the importance of the use of primary research.

The methodology covers the methods used to help analyse the primary results, reflecting the approach the researcher is taking towards the topic. The methods will be discussed and explained; highlighting how each method will be executed in relation to the research topic and justified by the author. The chapter will end on the ethical issues surrounding the research and how this study has procedures in place to comply with the university's ethical requirements.

3.2. Research Purpose

The research purpose can be divided into four sections outlined by Sharp et al., (2010). These include: reviewing existing knowledge, describe a situations or problems, the construction of something useful and explanation (Sharp et al., 2010). The research within this study used explanatory research (Casual research) conducted to identify the cause-and-effect relationship between variable and concepts showing the impacts of changes within the
various process and existing norms (Given, 2008). Consequently, the purpose of the research study implements an explanatory purpose as its studies the cause-and-effect relationship between calorie labelling on menus and consumer purchasing decisions.

Combined with explanatory research the study also reviews existing theories, therefore, adopting a descriptive approach. Thus, the research study purpose is to link previous theory with the hypotheses developed.

3.3. Research Approach

The research uses a mixed method approached defined as “collecting and analysing quantitative and qualitative data” (Creswell and Plano Clark, 2007, pg. 6). The quantitative approach favours a structured and planned set of properties allowing different variables to be measures whereas qualitative uses a more flexible structure (Kumar, 2014). The mixed methods research will be applicable towards the topic area and researching the variable relationships that impact consumer-purchasing decisions when calories are present on menus boards.

The two forms of data will then be merged to give an overall representation of the data collected (Creswell and Plano Clark, 2007). Figure 4 below shows a brief diagram of the three ways mixing qualitative and quantitative data can be presented.

Figure 4: Mixing Data

(Creswell and Plano Clark, 2007, pg. 7)
For this study, the first method of merging data will be conducted. This form of integration can be achieved by combining the results of the qualitative and quantitative data (Creswell and Plano Clark, 2007). The results will then be compared and contrasted within the discussion session of the study. This is similar to triangulation, which will also be used to combine the two forms of data on the same topic highlighting the strengths of the two methods (Sage Publications, 2009). These forms of data analysis will be used to combine the result from the questionnaire and the interviews to give an overall conclusion on the research topic.

3.4. Research Design

The research approach shows there clear reasoning behind the use of mixed methods research. Looking at the research design Kumar (2014) defines research design as:-

"How you will collect your information from your respondents, how you will select your respondents, how the information you will collect is to analysed and how you will communicate your findings."

(Kumar, 2014, pg. 122).

3.4.1. Quantitative Research

Quantitative methods of research are “based on the measurement of quantity or amount” (Kothari, 2014, pg.3). This can be done through dichotomous variables for example “sex or gender, where one category is seen as representing more of that quality than the other” (Carmer, 2003, p.2). The quantitative research within this study will be through the use of online questionnaires created and distributed by the author. The questionnaire is targeted at both males and females aged 18+, who eat out at fast-food restaurants. It also looks at their attitudes towards calories on menus within the fast-food industry.

Appendix E displays the advantages and disadvantages of using quantitative research.

3.4.2. Qualitative

Given one of the objectives of the research is ‘to explore how customers purchasing decisions are affected by calorie labelling on menus’. Therefore the use of qualitative data will be used as this method is "concern with meanings and the way people understand
things" (Denscombe,2003, pg.207) in conjunction with patterns and behaviour. To allow the author more in-depth information four interviews will be conducted. The interviewees will consist of three participants in the 50+ categories, with the fourth interviewee fitting the lower category 18-35. They have been selected as they are fast food consumers, the mixed range offers the researcher to gain view points across the age categories and see whether the gender of the participant influences there response to calorie labelling. The questionnaires will also provide a small amount of qualitative data, as not all the questions are close-ended.

Appendix F demonstrated the advantages and disadvantages to using qualitative research methods.

3.5. Data Collections

3.5.1. Sample Design

The sample design is defined as “a definite plan determined before any data are actually collected for obtaining a sample from a given population” (Kothari,2009,pg.14). The sample design looks at the procedures or techniques the research undertakes when selecting the sample (Kothari,2009).

For the interviews and questionnaires purposive (purpose) sampling will be used, purposive sampling looks at “groups participants according to preselected criteria relevant to a particular research question” (CCS,2006, pg.5). Purposive sampling seeks “to identify participants based on selected criteria” (CCS, 2006, pg.5). The sample size for purposive sampling may not be fixed, meaning that the same amount of males and females may not be equal, rather than quota sampling which would potentially have an even amount with a 1:1 ratio for gender (CCS, 2006).

3.5.2. Sample Size

The sample size for the research question will vary depending on questionnaire or interview. The sample will be among males and females between the ages 18-55+. The age bracket will be split up into different sections, for example, 18-35, 36-50 and 50+. The author is aiming to conduct 70 questionnaires to get a reliable and validated result across the full age range with roughly the same amount of candidates in each age bracket. This will form quantitative date for the research question.
The researcher is aiming to conduct four interviews across the different age categories to give an overall collection of qualitative data supplying a valid and reliable result for the research questions.

3.6. Questionnaire Designs

For questionnaires to qualify as research questionnaires, it needs to collect data that can be analysed, contain a list of questions and gather the information by directly asking the person (Denscombe, 2003). Questionnaires are typically used as one-off sources of data collection, therefore, adding a lot of pressure to get it right the first time (Denscombe, 2003). The questionnaire uses questions as closely related to the topic area as possible avoiding any non-essential topics (Denscombe, 2003).

3.6.1. Formulation Of Questions

Developing a useful questionnaire requires meeting the studies aims and objectives (Gillham, 2007). To design the questions for the research questionnaire, prior studies have been reviewed to help formulate suitable research questions.

The questionnaire design by the author combines open and closed question giving a mixture of quantitative and qualitative data. Using closed questions means the "possible answers are predetermined" (Gillham, 2007, pg. 5) whereas open questions are not as restrictive, allowing the participant to produce their answer (Gillham, 2007). The questionnaire will be produced through Qualtrics an online survey software, Qualtrics provides a platform to create the questionnaire as well as distribute it. The results of the questionnaire will then be analysed and presented in chapter 4. Appendix G shows an example of the questionnaire constructed for the project.

3.6.2. Question 1-2

The first sets of questions were designed to establish if the participant was eligible to take part in the study, this was produced through closed questions. The results from this question have no impact on the finding in relation to the study.
3.6.3. Questions 3-4

Questions 3-4 were developed to create an overview of the participants taking part. Understanding the participant allows the author to use the data to analyse whether age, gender or lifestyle has an impact on consumer purchasing when calories are presented on menu boards.

3.6.4. Questions 6-13

The main body of the questionnaire focuses on the impact of calorie labelling within the fast-food industry and consumers attitudes towards it. This section involves both open and closed end questions with the use of a Likert Scale to generalise the responses (Zikmund et al., 2010). The use of a Likert Scale approach uses a fixed choice response, which assumes the participant either agrees or disagrees. This can help ensure the accuracy of the findings and can be displayed in graphs, chart and tables when analysing the data (McLeon, 2008).

3.6.5. Pilot Study

Prior to distribution of the questionnaire the author created a selection of example questions as a pilot study, five participants tested it out. The participants were asked to review the questions and highlight any issues this was “essential to prevent later problems, for once a fault has found its way into the main fieldwork, it will almost certainly prove irretrievable" (Oppenheim, 1992, pg. 49)

3.7. Semi-Structured Interviews

The study involved four interviews conducted by the author to gain a better understanding of the influence calorie labelling have on consumer purchasing decisions. Interviews consist of "presentation of oral-verbal stimuli and reply in terms of oral-verbal responses" (Kothari, 2009, pg. 97).

Face to face interviews will be conducted within this study; face-to-face interviews can be adapted depending based on the respondents answers. Denscombe (2007) states the motivations for the researcher to conduct semi-structured interviews for this research study.
"The choice of semi-structured interviews might seem appropriate because this method is particularly good at allowing the researcher to explore in depth the thoughts, feelings and reasoning of the pilots."

(Denscombe, 2007, pg.111)

The interviews will be conducted over a two-week period with the sample range being two males and two females across a selection of age ranges. For ethical reasons the participants will be referred to throughout the study as participant A, B, C and D. Refer to Appendix H for a template of the interview questions.

3.8. Case Study Approach

For this study, a case study approach will be used to allow the author to target a specific retailer. A case study approach has been defined by Kothari (2009) as:-

"An intensive investigation of the particular unit under consideration. The object of the case study methods is to locate the factors that account for the behaviour patterns of the given unit as an integrated totality."

(Kothari, 2009, pg. 113)

The fast-food chain McDonald's has been chosen as the specific retailer for this case study. This outlet has been chosen as the author has previous experience with purchasing within McDonald's and they were one of the first retailers to introduce calorie labelling on their menus. With previous research around McDonald's and calorie labelling already being produced, it provides a firm foundation. The rationale behind McDonald's as a case study is although there is previous research it was conducted eight years ago so the data collected may not be as accurate, especially with the awareness of calorie labelling increasing. To create a link between the case study and primary research a selection of questions within the primary research were aimed at McDonald's specifically in respect to whether consumer felt McDonald's would be a healthier option due to the fact calories are labelled on their menus. The questions asked also looked at whether McDonald's target market would be influenced by calories on menus.
3.9. Data Analysis

Once all the data has been gathered through the primary research, the process of reading and interpreting the data starts (Bazeley, 2009).

The questionnaires produced through Qualtrics allows all the data collected to be automatically formatted into charts giving the researcher instant results (Bell and Waters, 2014). This will then be analysed through a systematic approach. Quantitative data uses a systematic approach to data analysis, which involves transforming the numerical information collected by the researcher into numerical data, comprising of measuring and counting attributes (Bell, 2005).

The systematic approach enables the data to be tabulated. The use of cross-tabulation compares "two hypothetical variables" (Qualtrics, 2011, pg. 1) for example ‘gender' and ‘calorie awareness’. Cross-tabulation helps determine if the variables are independent or not, if the results conclude independent (Non-significant), this proposes a null hypothesis indicating there is no relationship between the two variables. If the results conclude there is a statistically significant relationship this proposes an alternative hypothesis (Qualtrics, 2011).

The interviews will use thematic analysis, this form of analysing data is used to analyse qualitative information transforming the qualitative information into qualitative data (Boyatzis, 1998). “Thematic analysis is the process of encoding qualitative information” (Boyatzis, 1998, pg. 4) this will be used to help to give a more in-depth answer to the research question.

When analysing all the information the researcher will use a combination of different resources, voice-recording equipment for the interviews and computer analysing packages for the questionnaires.

3.10. Validity And Reliability

Validity and Reliability look to “demonstrate and communicate the rigour of the research process and the trustworthiness of research findings” (Priest et al, 2006, pg. 41). The validity around the research topic looks at “how much meaning can be placed upon a set
of test results” (Shuttleworth, 2009). The reliability or the trustworthiness of the study comes down to a number of the research features including: research question, data collection, sample, data analysis and the conclusion (Priest et al, 2006).

Therefore to ensure the validity and reliability of this study measure have been put in place. For the distribution of the questionnaire and snowballing effected was used. The questionnaires were sent to participants with an interest in calories and the fast-food industry, they then forwarded to the questionnaires onto people with similar interests.

Furthermore, as a positivist approach, there is a need for the author to remain neutral and detached from the research study and the data collection to therefore avoiding any bias towards to the findings (Crotty, 1998).

All the data collected produced from the questionnaire and interviews were not analysed until the end date.

3.11. Ethical Issues

With constant primary research being conducted its import to be aware of the ethics behind research activities (Driscoll and Brizee, 1995). Therefore when researching, the researcher will comply with the ethics guidelines and the university ethics approval form, Appendix I. All participants of the questionnaires and interviews will have given their permissions to take part, and the participant will be kept anonymous.

All the questions will be designed as to not cause any emotional harm to the subject; consequently, any sensitive or difficult questions will be avoided. Objectivity vs. subjectivity will be avoided within the research, helping to prevent personal biases to the research topic and make the findings fair and validated (Bell and Waters, 2014).

3.12. Limitations

A limitation towards this study could be the sample size. A small sample size produces issues around creating a significant relationship between the data set. Therefore, the larger the sample size provides increased accuracy when presenting the results. Consequently, if the research were to be produced again, the sample size would be increase potentially
leaving the questionnaires out for longer and conducted more interviews (Research Methodology, 2017).

3.13. Chapter Overview

In summary, to conduct good research, you need a combination of both quantitative and qualitative methods. One method is not superior to another, and both have their recognised strengths and weaknesses (Carr, 1994, pg. 17). The forms of data collection were outlined with details on the sample size as well as an outline of the questionnaire and interview questions. Forms of data analysis were outlined alongside ethical issues, reliabilities, validity and limitations addressed.
Chapter 4
4. Results And Discussions

4.1. Introduction

As outlined within chapter 3 the author has taken a mixed methods approach towards the research question, conducting primary research through the use of questionnaires and interviews and well as evaluating the McDonald’s case study results. This chapter will illustrate the finding produced from the primary research and discuss the outcome towards the research question, identifying key finding within the result. The study results are separated into qualitative and quantitative research methods results. The results are then analysed and discussed using both systematic and thematic analysis and finally concluding relating the finding back to the study aims, objectives and hypotheses.

4.2. Case Study

The quantitative data that was produced aimed at McDonald’s in order to compare the researchers finding against the result found within the case study.

Before the introduction of calorie labelling within McDonald’s, trials were conducted in 125 of McDonald’s outlets (McDonald’s, 2011). McDonald's conducted their research from October 2009 to March 2010, eight years ago. This prompting the researcher to study the subject again as the findings are not as reliable due to advancements in technology and awareness of calories changed.

The trials involved “2,000 customer interviews and eye tracking technology, to understand how people absorb menu information when choosing food and placing their order” (McDonald’s,2011).

McDonald’s research showed that “eight in ten customers believe all companies should display simple, visible calorie information” (McDonald’s,2011). Fewer than one in five (17%) stating "that calories on menu boards would make them think more about what they are eating" (McDonald’s,2011). In addition 35% "Regularly read the nutritional information on food packaging" (McDonald’s,2011) with only 34% of people being aware of their daily calorie intake (McDonald’s,2011).
Furthermore, McDonald's conducted two separate pieces of research with UK consumers to understand whether "people believe calorie information should be provided" (McDonald’s, 2011). The first research method conducted information based on nutritional information (McDonald’s, 2011) and the second “analysed customer response to the McDonald’s trial of placing calories on menu boards” (McDonald’s, 2011).

Looking at the findings produced by the case study and the researchers own primary researcher, although the research was not aimed primarily at McDonald's consumers 42.03% of the participants that took part said their favourite fast food chain was McDonald's. This was the majority vote out of the options suggesting that 42.03% of the participants are McDonalds consumers. Alongside this 3/4 of the interviewees said McDonald's was their favourite fast food chain.

Although the sample size in the case study was more extensive than the sample size of this study, the results still suggest that only 2.9% of participants would be influenced by calories on a menu. Although this figure only looks at participants who said they were ‘extremely likely to’. If we combined the result from the participants who said they were ‘extremely likely to’, ‘moderately likely to’ and ‘slightly likely to’ the percentage of participants that would consider calories on menus is 34.7%. This could, therefore, suggest that over the last eight years more consumers have become aware of calories and would now consider them when selecting a meal choice.

Alternatively when cross-tabulating question 7 and 10 (Figure 24) it suggested that participants that went to McDonald's were unlikely to base a meal on calories. Therefore suggest that although the awareness around calories has increased the consumers of McDonald's still aren't influenced when selecting a meal, this would consequently support McDonalds low figure of 17%.

Looking at nutritional labelling on packages wasn’t a directly question asked to the sample but it was clear to see that participants felt that nutrition was more important when looking at meals over calories, with figure 13 demonstrating that 68.12% of participants voted nutrition over calories. The information produced by the interviews also strongly
suggested that nutrition was more appropriate with participant A, B, C and D all picking nutrition over calories.

4.3. Quantitative Research Results

Questionnaires used for collecting the quantitative research for the study. The questionnaires were distributed online to participants 18+, the questions asked were designed to fulfil the primary research aims and objectives to recognise if calorie labelling, when presented on menus in the fast food industry, would have an impact on customer decision-making. The following result from each question will be illustrated through the use of graphs and charts, with each question being evaluated and discussed. Some questions will be reviewed in depth using cross-tabulation analyses the relationship between the two variables helping to null or prove the research hypotheses. Refer to Appendix J to see the full data summary sheet from the questionnaire.

The first two questions on the questionnaires verified if the participant was over the age of 18 and accept the study they were participating in and will not be used for data analysis.

Figure 5: Participant gender
Question one asked participants gender to discover whether gender would have an impact on the recognition of calories. The author wanted to establish if there was a clear correlation between gender and calorie awareness. In order to establish this, the result from this question will be cross-Tabulation with question 9. Figure 5 shows the proportion of males to females in lower; according to Walden (2002), the gender of the researcher can impact the gender of the participants. This is evident from the findings of this question, with a female researcher it’s clear to see a high number of females have taken part (73.91%) considerably higher than the male proportion of participants (26.09%).

**Figure 6: Age Range**

The age range of the participants helps to identify the target market of the fast food industry and whether the age of the participants has an impact on purchasing decision when calories are displayed on menus. The age of the participants will be cross-tabulation with question 9 to establish a correlation between age and calorie awareness.

The distribution of the questionnaire was through a social media platform as well as direct communication with participants. This has consequently meant that due to the researcher age and the form of distribution being social media, the majority of participants of
this study are between the ages of 18-35. Figure 7 outlines that the majority of users of social media are between the ages of 16-34 (Statista, 2014) therefore explaining why 86.96% of participants are within the lower age bracket.

Figure 7: Social media Users

Participant occupation (figure 8) was designed to gain an understanding on whether calorie awareness was influenced by the participant’s occupation. This question will be cross tabulation with question 9 to gain an understanding of the impact occupation has on calorie awareness. Figure 8 shows there are a high number of students over the other categories, potentially making it hard to get a direct correlation.

Figure 8: Participant Occupation

(Statista, 2014)
Question 6 (figure 9) asked participants how often they eat out at fast-food restaurants; this outlined the popularity of eating out at fast-food restaurants. The results displayed in figure 9 indicate that just under half of the participants (43.48%) ate out at fast food restaurants. To truly identify the fast food target market this question will be cross-tabulation with gender, age and occupation. The result from this study also show that the high frequency of participants attending fast-food outlets makes them a reliable source when identifying consumer behaviour in relation to calorie labelling on menus.

Figure 10: Favourite Fast-Food restaurants
For the case study, some questions within the questionnaire were focused on McDonald's. Looking at the finding in figure 10 the majority of participants classed McDonald's as their favourite restaurant therefore by cross-tabulation the finding from this questions and question 10, can identify if McDonald's users are influenced by calories on menus. Cross Tabulating this question with question 10, could help identify if by seeing the calories on menus it would influence the consumer behaviour.

**Figure 11: When selecting a meal at a fast food chain does calories influence the consumer**

Figure 11 identifies whether displaying calories on menus influences consumers purchasing decision. The findings found that 28 of the participants (40.58%) said they were extremely unlikely to take calories into account when selecting a meal in a fast-food restaurant. Although with the majority of participants reporting that calories would not influence their purchasing decision its interesting to see the results from the following question, question 10 (figure 12) saw a split reaction from the participants. The outcome of these result supported Belluz, 2017 view of calorie labelling who stated that consumers "who are already calorie-conscious do pay attention to labels, but those who aren't don't" (Belluz, 2017).
Figure 12 changing meal choices based on calories

Question 10 (figure 12) asked participants if the number of calories was shown on their original meal choice would they consider picking an item with fewer calories instead, this produced a split result of probably yes (26.09%) and probably no (26.09). The author recognised that the combined finding from question 10 (figure 12) and question 9 (figure 11) shows there is a positive impact on consumer behaviour. Identifying that although initially there was no direct correlation between calories and fast food choices the result from question 10 highlight that if the consumer knew the calorie value of their menu choice the majority of participants would change their choice. This supports the findings from Roberto et al., 2010 study, which concluded that when consumers are, presented with calories and calorie information they choice a lower calories meal.

Question 11 asked the participants if they would ever base a meal choice from a fast food restaurant on calories and why. This question allowed the participants to provide their own personal thoughts regarding calorie labelling on menus within the fast food restaurants. This question was included within the questionnaire as the author felt that it enabled them to gain a wide range of opinions on the topic also allowing the author to analyse the broad
Figure 13: Nutrition VS Calories

Figure 13 above shows that when participants were asked what information they thought would be more relevant, (68%) of participants believed nutritional value on menus would be more important than calories. Therefore begging the question, would it better to remove calorie labelling and replace it with nutritional content, as this might mean consumer pay more attention to what they are eating? Although this cannot give a direct answer to the question, the matter of calories over nutrition will be looked at further within the qualitative research section of the study.
Participants were asked if after being made aware of calories would they now consider them when purchasing in a fast-food restaurant. This has created very close result between slightly likely (15) and extremely unlikely (16). This question can be cross-tabulated with question 9 by cross-tabulating, the two questions the author can gain an understanding of whether increased information around calorie labelling has influenced participants purchasing decisions.

4.3.1.1. Cross Tabulation Of Questions

As previously outlined within the methodology the questions produced through the questionnaire will be cross-tabulated against each other to determine if the variable have any relationship which intern can help determine a conclusion on the hypotheses.
Figure 15: Cross Tabulation 1

![Cross Tabulation 1](image)

Figure 15 shows the cross-tabulation result of gender, age and occupation being compared with participant's calorie awareness when selecting meals. This cross tabulation can help identify the outcome of H2 and whether the hypothesis is null.
Figure 16: Gender VS Calorie choice

Figure 16 demonstrates the cross-tabulation of gender and their reaction to calories when selecting a meal in a fast food restaurant. The graph shows the women have a varied opinion towards calories but the overall outcome is extremely unlikely which is the same as the males. This, therefore, concludes that gender does not influence the awareness of calories when selecting a meal within a fast-food restaurant.

Figure 17: Age VS Calorie choice
Secondly, the relationship between age and calorie influence when selecting a meal in a fast food restaurant has been cross tabulated (figure 17). Figure 17 suggests that participants between the ages of 18-35 have a mostly varied view across the board with no significant correlation. Whereas participants between 36-50 would not consider calories at all. This is contrasting to 50+ which suggests that a few of the participants are more calorie conscious with only one suggesting they were extremely unlikely to base there meal on calories.

Finally to determine whether H1 is null or alternative a cross tabulation between occupation and participants reaction to calories when selecting a meal in a fast food restaurant has been conducted and portrayed within a bar chart.

**Figure 18: Occupation VS Calorie choice**

![Bar chart showing the relationship between occupation and calorie consciousness](image)

Figure 18 demonstrates that student are not influenced by calories on menus with the majority of them stating they are extremely unlikely to look at calories when selecting a meal in a fast food restaurant whereas those participants that were retired reported they were moderately likely to consider calories. For the participants either employed full time and part time these as a split between extremely unlikely and slightly likely. Therefore, suggesting the different stages in life has a small influence on consumer behaviour towards calories. This would fit with the finding from figure 18 which suggested the older participants are more calorie conscious unlike the younger participants.
In conclusion, the results produced from the cross tabulation suggesting there is no relationship between age, gender and occupation proving the hypothesis 2 null. Although this is a small sample size and the proportion of males to females is not equal therefore the research of these variables would possibly need to be retested to confirm the outcome of the hypothesis.

4.3.1.1.2. Question 6 – Question 3,4,5

Figure 19: Cross Tabulation 2

To identify the target market of the fast food industry question 6 asked participants how often they eat at fast restaurants will be cross-tabulated with age, gender and occupation, demonstrated in figure 19. By cross-tabulating the variable it helps identify how the target market is. This then enables the researcher to specify whether calorie labelling is targeting the right group or people.
The results suggest that males visit fast food outlets more than woman; with male participants saying they would visit a fast food restaurant more than once a week with some women stated they would never visit a fast food restaurant. The highest result for these categories were females visiting fast food restaurants once a month, therefore showing although some would never visit a fast restaurant there are still a significant proportion of participants that would regularly.

Figure 21: Age Vs. Number of visits to a fast food restaurants
Figure 21 suggests that the lower age brackets 18-35 are more likely to visit fast-food restaurants over the older categories of 36-50 and 50+. Indicating that fast food outlets target market would be the younger ages. Figure 17 demonstrated by labelling calories within the fast food industry theoretically this would not have an impact on consumer purchasing as the finding suggest that consumers between the age of 18-35 were less likely to base there meal choice on calories. Consequently, by the FDA and MHRA introducing calories on menus to reduce excessive weight gain (FDA, 2016) they are aiming it at an industry sector with a target market which isn't taking any notice of the information.

Figure 22 takes into consideration the participants occupation, helping confirm the target market of the industry which intern can support the previous finding from figure 21.

**Figure 22: Occupation Vs. Number of visits to a fast food restaurants**

Figure 22 shows the highest visitors are students which fits with the results produced from the figure 21. The demographic of student-produced by the primary research can be verified by the results produced by YouGov demographic of students (Figure 23) suggesting students fit into the lower age categories.
4.3.1.3. Question 7 – Question 10

Figure 23: Student Demographics

Figure 24: Cross Tabulation 3

The cross-tabulation of question 7 and 10 the results suggest that McDonald’s consumer would not change their meal choice based on calories with 12 of the participants saying they were extremely unlikely to. The results produced from figure 24 were used earlier in the study to establish if the McDonalds study had the same findings.
4.3.1.1.5. Question 9 – Question 13

**Figure 25: Cross Tabulation 4**

Figure 25 shows the cross-tabulation of question 9 and question 13. The combination of the result from these questions can determine whether by educating the consumers on calories before choosing a meal would impact their purchasing decision.

**Figure 26: Consumer purchasing decision towards calories before and after being aware**

Figure 26 suggests that participants were less likely to look at calories before the questionnaire with the majority of the sample voting extremely unlikely in blue. Although
the result do confirm that after the participant were educated around calories and made aware of calories, this reduced the number of participants saying they were extremely unlikely to consider calories. It also produced more responses to extremely likely and slightly likely. This supports the finding produced by Harnack et al., 2013 who’s research also found that purchasing decisions changed after being educated on food labelling first (Harnack et al., 2013).

4.4. Quantitative Results Summary

The research object for the quantitative research was to explore how consumers purchasing decisions are affected by calorie labelling on menus. Three hypotheses were also in place, which helped clarify the research objectives and provide a more in-depth response to the overall research question. The responses from the participants produced through the questionnaires have been successful in determining the outcome of the objective and hypotheses. The results indicate that calorie labelling on menus influences consumer purchasing decisions but had more impact when consumers are educated on calories before purchasing, therefore supporting the objective and proves H1. H2 was proven null with the results suggesting not relationship between age, gender and occupation in regards to calories on menus.

Overall the primary research collected has enabled the researcher to reinforce some of the findings produced by the literature review. In order to further promote the aims, objectives and hypotheses the second half of the chapter will discuss the finding of the qualitative research as well as including an analysis of the open ended question (question 11) produced by the questionnaire. The answers generated by the qualitative data and open-ended questionnaire questions will provide the author with a more in-depth understanding of the consumer perspective on the topic area.

4.5. Qualitative Research Results

As previously outlined within the methodology section the author conducted four semi-structured interviews and will analyse them using thematic analysis. The result from the qualitative and quantitative data will be triangulated in order to highlight the outcome of the results.
An example of the interview question are included in Appendix H along with the transcripts produced from the interviews in Appendix K, L, M and N. All the participants of this study will be anonymous as requested through the consent forms, obliging with any ethical issues.

4.5.1. Key Themes

Appendix O outlines the key themes to the reader, which has been acknowledged by the researcher in regards to the finding of their qualitative research.

4.5.1.1. Awareness

Awareness around calories labelling was touched upon within the literature review with the author recognising that a lack of education around the subject has meant the FDA has introduced the calorie labelling law. With the increase in technology making access to information easier, it’s made sharing awareness around calorie labelling a lot easier (Contento, 2007). Although increase access towards this information has still meant a growing rate of overweight/obsess consumers, with the statistics reporting 58% of women and 68% of men were overweight/obsess in 2015 (NH, 2017). Consequently, the author has conducted primary research to gather information on where consumers feel they have a good awareness of calories and the daily recommendation, as well as the benefits of being aware of calories and nutritional content of food choices.

From the results produced by the quantitative data earlier within the study, it was clear to see that participants didn’t consider calories when selecting a meal choice. These findings were then backed up by participant A stating that “I’ve never actually noticed calories before on menus therefore never considered taking them into account when selecting a meal” (participant A). This demonstrated a lack of awareness around calories and begged the question if consumers were made more aware of calories and educated around calories would this change their opinion when selecting a meal. The participant then went onto say when asked the question by the researcher “after discussing calorie labelling within the fast food industry would it make you more aware now? Would you base your decision more so on calories now you understand they are on the menus?” participant A responded saying “now I’ve been told they are on menus when selecting a meal next time in a fast food restaurant I might be more conscious of my calorie intake” (Participant A) confirming that if
the participant were made more aware of calories this would slightly influence their purchasing decisions. Not only does this support Harnack et al., 2013 research it also supports the results found in the quantitative research.

4.5.1.2. Influencing Factors On Consumer Behaviour

The study aim is to establish whether calorie labelling on menus within the fast food industry impacts consumer decision-making. Therefore the research has looked at several influencing factors towards consumer behaviour and their attitudes towards calories labelling. Within the quantitative research, three variables were compared against consumers view on calories these were age, gender and occupation. Although the finding from these results did not conclude a direct correlation, the author feels by using qualitative data they can gain an in-depth view of these influencing factors.

Looking closely at the age of the participants interviewed is it clear they have a variety opinion towards calories and their influence when displayed on menus. The introduction of calorie labelling on menus and the importance of calories was backed up by participant C within the 50+ category explaining that “based on my age I am always conscious of how many calories I’m in taking, in order to keep on top of weight gain and its good to understand what your putting into your body and how much” (Participant C). This saw a different option by participant B within the 18-35 category who stated "Personally I don't look at calories when purchasing a meal from a fast food restaurant so for me being aware of calories isn't important, but then if I were on a diet or watching my weight, maybe it would be something I would consider. I will be honest I'm fairly young, I gym a lot, so when I have the odd fast food meal I'm not choosing to be healthy" (Participant B). The researcher then asked participant B ‘as you get older then and potentially less active would you start to consider calories' participant B stated that "although I will try to stay active I know as you get older your life tends to get busier meaning I will probably have to watch my diet more, so based on this I probably would” (Participant B)

Looking at both these participants who fall into different age categories it would suggest that age does influence consumer-purchasing decisions. Participant B stating although he does not take calories into consideration he probably would, as he get older and his lifestyle changes.
Although the quantitative research suggested, there was no connection between age or occupation and calories. The qualitative results would imply that when consumers get older and the lifestyle changes they are more conscious of calories with the responses from participant C and B supporting this. Consequently suggesting that although H2 was proven null by the quantitative research, in fact, the qualitative research suggests otherwise, making the H2 inconclusive with more research needing to be conducted.

4.5.1.3. Affect Of The Calorie Labelling Law

The literature review highlighted that the FDA and MHRA brought in the introduction of calorie labelling helping to increase healthy eating within restaurants and educate the consumer on the food they consumed. The scheme primarily focuses around calories, but the researcher wanted to establish if nutrition would be better displayed on menus over calories, as it would identify the different levels of fat, sugar and salt, maybe creating more of an impact on consumers. Therefore the research asked the interviewees ‘would you consider nutrition more important than calories’ the responses from the participants were;

"Nutritional value would be more valuable as I feel it is important to have a balanced diet" (Participant A)

“I would consider nutritional value more as you have an overall image, instead of just seeing on things you have a combination of a few for example sugar, salt. So if you were diabetic you would need to know these things” (Participant D)

“I would probably say nutrition as it nice to know how much salt or fat is in a product over how many calories it contains, especially in fast food restaurant where you know most of the food isn’t healthy” (Participant C).

The responses strongly suggest that nutritional value would be more important over calories, the results produced by the quantitative data also confirmed that 68.12% of participant felt that nutritional value was more important over calories.

It’s interesting to note that when participants were asked ‘which one would you think would be more beneficial on menus within the fast food industry calories or nutrition’ participant A and C actually stated calories would be better on menus within fast food
restaurants. Participant C said “Probably calories but I would like to know the nutritional value as I would like to know if its high in fat, as I would pick a meal with more calories if the product had less fat” (Participant C) demonstrating that if there was a combination of both calories and nutrition this might have more effective.

Therefore would it be more beneficial for the consumer if fast food restaurants displayed both calories and nutrition giving consumers the ability to compare the two. This idea was supported by all the participant who said by having both available to see they would compare the two (Participant A, B, C, D) participant C even suggested that "if the low-calorie option were still full of fat I would pick a product with higher calories but lower in fat" (Participant C).

The responses from the qualitative data indicates although FDA and MHRA intentions of educating consumers on healthy eating, they may need a combination of calories and nutrition to increase the impact on consumers. The responses also demonstrated that H3: When calories are presented on menus it influences consumer-purchasing decisions to choose lower calorie options would be null as consumers would only do this if nutrition was also present on the menus.

4.5.1.4. Fast-Food Restaurants

The theme of this research is the fast-food industry and calorie labelling within it. As previously stated within the study the fast food industry is renowned for their high energy density and glycaemic loads (Rosenheck, 2008) therefore not considered a healthy dining option. Therefore will calorie labelling have an impact on consumers dinning in these environments, within the quantitative data question 11 required the participants to provide their option on whether they would ever base a meal choice from a fast food restaurant on calories and there reasoning why.

The responses from the participants shown in Appendix P suggest that if they are going to a fast food restaurant, they already know the food will be unhealthy therefore high in calories so don't believe its important to base a meal on calories. This therefore identifies that the needs of consumers within fast food restaurants are different to those dinning in non-quick service restaurants. Suggesting maybe a better way to promote healthier eating
wouldn't be through calories with section 4.4.1.3 suggestion of nutrition would be more useful.

Therefore with these responses in mind does the fast food industry have a different obligation to its consumers, unlike other restaurants as consumers are looking for a different outcome.

4.6. Qualitative Research Summary

The purpose of the qualitative research was to back up the findings produced by the quantitative research and whether the hypotheses were null or proven. It is clear to see the qualitative research has provided the research with an in-depth view on consumer's perspective around calorie labelling on menus within the fast-food industry. The author has used direct quote from the interviews to emphasise the views of the participants to the reader.

Taking into consideration the four main themes produced by the qualitative research the results produced support H1 that when calories are presented on menus with fast-food restaurants it will influence consumer-purchasing decisions it also supports the H2 which was previously proven null by the quantitative research. Due to the mixed outcome of H2, the research is unable to come to a concluded decision on H2. Therefore, further research on this topic would need to be carried out. H3 had findings that supported the hypotheses although due to the sample size this is not entirely reliable and further research around H3 would need to be carried out.

4.7. Chapter Summary

Looking at the qualitative and quantitative research alongside the use of a case study, it is clear to see the by using a triangulation approach the author has raised themes around the subject area which have been discussed concerning previous theory and counter argued any issues.

As stated through the hypotheses and the objectives the author has recognised the different influences affecting consumer purchasing decisions and established to what extent
calorie labelling impact has on purchasing decisions. Hypotheses 1, 2 and 3 have also been explored and the research drawing conclusions on whether the hypotheses are proven, null or need further research.

The results form the qualitative research has identified the key themes around the topic area awareness, influencing factors on consumer behaviour, effect of the calorie labelling law and fast food restaurants.

The results will be further summarised and discussed in the conclusion (chapter 5), the following chapter will determine the statues of the hypotheses and whether the research aims and objectives were achieved. As well as providing a summary of the research results, recommendations will be highlighted for further study. It will also outline any limitations and the level of contribution the study has.
Chapter 5
5. Conclusion

5.1. Introduction

The conclusion has been divided into six main summary areas, helping to evaluate the research findings. The research hypotheses will be discussed alongside the original research aims and objectives. A summary of the research findings will then be bullet pointed to create a clear representation of the findings to the reader. The chapter will finish by looking at the research limitation and providing recommendations towards any further researcher around this topic area.

5.2. Hypothesis’s

The hypotheses in chapter 1 have been concluded as follows.

H1 concluded proven, supported by both the qualitative and quantitative research, which suggested that although participants did not take a tremendous amount of notice on the calories initially when educated about calories before purchasing this did influence their decision. These findings were also supported by theory produced within the literature review (Chapter 2).

H2 was proven inconclusive with further research needed. Although the quantitative research showed no correlation between age, gender and occupation to calories, the qualitative research suggested there was a slight correlation with the responses from participants suggesting that as they have got older they became more aware of calories and therefore more influenced by them when purchasing.

H3 was inconclusive. The results of the qualitative research suggested that they would consider a lower calories meal if calories were labelling on the menus but this would be more effective if nutrition were also displayed on the menu. The results from the quantitative research suggested that 26.09% of participants consider picking a lower calorie option but were equally matched with participants saying they would not. Therefore the researcher would suggest this hypothesis would need further research in order to confirm the outcome as the researcher feels the hypotheses is neither null or proven.
5.3. Aims and Objectives

This section will determine whether the research aims and objectives were achieved. The objectives set to achieve the aim were:

1. To critically evaluate the literature on purchasing decisions, consumer buying and calorie labelling within the fast food industry – this was completed through the literature review using a combination of different sources.

2. To analyse the impact compulsory calorie labelling is having on consumer purchasing decisions within fast food restaurants – This was met through the results produced by qualitative and quantitative research, asking participants about calorie labelling in the fast food industry. A case study on McDonald's also identified the impact calorie labelling has on consumers.

3. To explore how customers purchasing decisions are affected by calorie labelling on menus – this was met through the qualitative and quantitative research result, which established whether consumer-purchasing decisions were affected, by calorie labelling as well as highlighting the different influences impacting decision making around calories on menus.

4. To draw conclusions on to what extent calorie labelling impacts purchasing decisions within the fast food industry – Successfully achieved through the findings of all the data collection. With conclusions draw on the extent calorie-labelling impacts purchasing decisions within the fast food industry within the conclusion chapter.

The research aim was to evaluate the impacts on customer decision-making when calorie labelling is presented on menus in the fast food industry. The aim was successfully met by achieving the research objectives.
5.4. Summary Of Project Results

This section provides a brief overview of the results;

- With nations as a whole trying to reduce the obesity level and increase weight gains the new introduction of calorie labelling in restaurants has been brought in. Initially being displayed in Canada and the USA the trend has now become visible in the UK with large fast food chains having to display calories on their menus.

- The results showed that 40.58% of consumers are not conscious of calories with only 2.9% being calorie conscious showing a lack of awareness by consumers around calories.

- The result suggested that gender did not influence consumers purchasing decisions with the quantitative data suggesting students were less likely to be calorie conscious over retired participants. The qualitative results also suggested that the older the participant become the more calorie conscious they were although this suggestion was not supported by the quantitative data providing no correlation between age and calorie awareness.

- Displaying calories on the menu did not initially influence the consumer’s decision. Once educated about calories the calorie labelling influenced food choice indicating that displaying calories does prompt consumers to choose a more appropriate meal, fulfilling the FDA and MHRA purpose of educating consumers on calories. This could be argued that it does not necessarily work unless the consumer is aware of calories before purchasing. The results show that a majority of fast food consumers are not.

- The finding also established that consumers of fast food are not necessarily looking for a healthy option, therefore, wouldn't consider calories. Bringing to attention whether calories are the right form of information to display. Participants also said they would be more influenced to change there meal if both calorie and nutrition were displayed, suggesting this would be more beneficial for fast food chains.
5.5. Limitations

This section provides any limitations that could have impacted the success of the research project.

- A significant amount of the questionnaire participants were female between the ages of 18-36 therefore limiting the result of the research from other demographics. The researcher has acknowledged that by having an increased number of male respondents and older participants, this could have significantly changed the result within the quantitative data.

- The researcher only conducted four interviews with three of the participants being within the 50+ category. This therefore meant the qualitative data wasn’t representative of a large sample group. The research feels that conducting focus group, one for each age category would have been more beneficial.

5.6. Recommendation And Further Research

The limitations of the study have been recognised by the researcher and through the suggested recommendations from the author can identify how further research could benefit the overall knowledge of this topic area.

- Discover if displaying nutritional content, for example, fat, sugar and salt would a have a more significant impact on consumer purchasing decisions within fast food restaurants.

- Look at a combination of different fast food outlets to establish whether the type of food produced would impact consumer-purchasing decisions.

This study has demonstrated the need for further research in the following areas;

- Does the calorie labelling development have a positive or negative effect on the fast food industry? Looking at this issue from a business perspective, not just a customer perspective.
Would nutritional value be more influential on consumers than calories, would providing the fat level provide more shocking to consumers than the number of calories

5.7. Contribution of study

On reflection, the findings towards the study prove conclusive that consumers are influenced by calories on menus, although these findings only show a small impact on consumers. Due to the sample size, the researcher would suggest a larger sample size would be needed, and an equal ratio of males to females would provide a better conclusion. The study has indicated that over the last eight years consumers have become more aware of calories but feel that additional information such as nutritional content would be more beneficial within fast food outlets.

5.8. Summary

In summary, the author feels the dissertation has been successful in fulfilling the research aims and objectives initially outlined for this project. The results have been clearly outlined and the findings related back to the research aims and objectives. The limitations have been acknowledged by the research with further recommendations in relations to this topic area provided.

The primary aims of this research have been successfully achieved with the author also acknowledging the surrounding influences of calorie labelling on consumer purchasing.
Chapter 6
Appendix A: The Theory of Buyer Behaviour

Howard first developed the original model in 1963, this then received further development in 1969 by Howard and Sheth who created the “Theory of Buyer Behaviour”. The aim of the theorists was to create a comprehensive model which could be used to display a wide range of different purchasing scenarios (Bray, 2008).

Howard and Sheth, 1969 ‘The Theory of buyer behaviour” (Seborro, 2011)

The model above displays the theory of buyer behaviour model, breaking the different areas into three main sections Inputs, Hypothetical constructs and outputs

**Inputs**

The input variables related to the environmental stimuli that consumers can be affected by, this is broken down into three different sections

- Significative stimuli – the element of the product or brands presented to the buyer (Loudon and Della Bitta 1993),
- Symbolic Stimuli- Refers to the way the marketers present the product of brands through advertising having an indirect effect on consumers (Foxall 1990) (Howard and Sheth 1969).
Social stimuli – “the influence of family and other peer and reference groups” (Bray, 2008, pg. 11).

Each one of these stimuli “stimuli is internalised by the consumer before they affect the decision process” (Bray, 2008, pg. 11).

**Hypothetical constructs (Perceptual and learning constructs)**

Perceptual and learning constructs have been combined into one group the hypothetical constructs.

Perceptual constructs –The way in which individuals perceive the information from the inputs and there responses, this accounts for “stimulus ambiguity and perceptual bias” (Seborro, 2011).

Learning Constructs – this “deals with the stages from the buyer motives to his satisfaction in a buying situation” (Seborro, 2011). The buyer motives look take into account the buyers intention’s ranging from either general or specific goals, the buyer intentions can also be affected by precious attitudes towards brands (Seborro, 2011).

**Outputs**

Finally the five different outputs are the models buyer’s observable responses to the models inputs. The five outputs are arranged in order of attentions to consumer purchase (Seborro, 2011).

Attention – initial interest in the product and the buyers informational intake (Bray, 2008).

Brand Comprehension and attitude - the evaluation of satisfying potential of the brand (Seborro, 2011).

Intention – a verbal statement of which brand the consumer prefers influenced by brand comprehension and attitude.

Purchase – the act of buying and the sequential result of attention.
This model has therefore identified “specific influences of the exogenous variables upon various hypothetical constructs” (Bray, 2008, pg.12). In terms of this model in relation to calories on menus and consumer purchasing decisions, the model clearly identifies that a range of inputs influences consumers for example price and quality. Although it doesn’t directly include health the quality of the food products could term whether the food it healthy or not it does highlight that consumers are conscious of external factors before point of purchase. Therefore by adding additional information on calories it could be an additional input for consumer before purchasing.
Appendix B: Consumer Decision Model

Many of the elements within the consumer decision model are similar to those within the theory of buyer behaviour model. The model is structured around a seven-point decision process; “need recognition followed by a search of information both internally and externally, the evaluation of alternatives, purchase, post purchase reflection and finally, divestment” (Bray, 2008, pg. 15). The model is split into two main facts firstly the “stimuli is received and processed by the consumer in conjunction with memories of previous experiences” (Bray, 2008, pg.15) and secondly “external variables in the form of either environmental influences or individual differences” (Bray, 2008, pg. 15-16).

Engel, Kollat, and Blackwell, 1968 "Consumer Decision Model" (Pereira, 2017)

The model is entered when the need to recognise when the consumers has acknowledged the differences between their current state and there more desirable alternative. This

This process of change is “is driven by an interaction between processed stimuli inputs and environmental and individual variables” (Bray, 2008, pg. 16). After this need has been
accepted the consumer then looks for information through the use of the consumer's own memory bank from previous experience and external influences (Bray, 2008).

The model helps explain both situations relating to extended problem solving and limited problem solving. This shows that in relations to calorie labelling, consumers use their existing knowledge before purchasing as well as additions information before confirming their decision. This therefore shows by adding calories to menus and providing the additions information this could influence consumer-purchasing decisions.
Appendix C: The Theory of Reasoned Action TRA

Is it said that behaviour and behaviour intentions are approximately equal, derived from the combinations of both the consumer’s attitudes towards buying and the subjective norms on behaviour. This theory acknowledges that the through subjective norms “the power of other people in influencing behaviour” (Bray, 2008, pg. 21).

“The Theory of Reasoned Action” (Fishbein and Ajzen 1975) (Research Gate, 2015)

The model identifies that consumers are influenced by other people so over time and the increase awareness of calories, could start to have an increased affect on consumer purchasing.
### Appendix D: Advantages and Disadvantages Quantitative research

<table>
<thead>
<tr>
<th><strong>Advantages</strong></th>
<th><strong>Disadvantages</strong></th>
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<tbody>
<tr>
<td>“The relationship between an independent and dependent variable is studied in detail” (Jones, 2017) meaning the researcher is more objectives about the results.</td>
<td>Requires a large sample size as &quot;The larger the sample of people, the more statistically accurate the outputs will be&quot; (HRF, 2014).</td>
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<tr>
<td>It can be used to “test hypotheses in experiments because of its ability to measure data using statistics” (Jones, 2017).</td>
<td>&quot;Poor knowledge of the application of statistical analysis may negatively affect analysis and subsequent interpretation&quot; (Black, 1999).</td>
</tr>
<tr>
<td>It is a fast method of data collection which can be easily analysed and a short space of time along with the &quot;the use of statistically valid random models; a survey can immediately be generalized to the whole residents&quot; (McLeod, 2008)</td>
<td>&quot;They do not allow participants to explain their choices or the meaning of the questions may have for those participants&quot; (McLeod, 2008).</td>
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### Appendix E: Advantages and disadvantages Qualitative Research

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tr>
<td>“Gives the researcher freedom to let the study unfold more naturally”</td>
<td>“The researcher of a study using qualitative research is heavily involved in the process, which gives the researcher a subjective view of the study and its participants” (Jones, 2017).</td>
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<td>(Jones, 2017)</td>
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<tr>
<td>“The researcher gains more detailed and rich data in the form of comprehensive written descriptions or visual evidence”</td>
<td>“The researcher interprets the research according to his or her own biased view, which skews the data gathered” (Jones, 2017).</td>
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<tr>
<td>(Jones, 2017)</td>
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<tr>
<td>&quot;Good at simplifying and managing data without destroying complexity and context&quot; (Atieno, 2009, pg. 16)</td>
<td>&quot;That their findings cannot be extended to wider populations with the same degree of certainty that quantitative analyses can&quot; (Atieno, 2009, pg. 17)</td>
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Appendix F: Example Questionnaire

The Impact Calorie Labelling on menus in fast food restaurants has on consumer purchasing decisions

The purpose of this research project is to collect primary information in relation to the impacts on customer decision-making when calorie labelling is presented on menus in the fast food industry. This data will form part of an international project involving the impact Calorie Labelling on menus in fast food restaurants has on consumer purchasing decisions. If you would prefer not to take part in the project then I thank you for your time and you need not complete the questionnaire. If you are happy to participate in this project please can you complete the questionnaire. All information given will be treated confidentially.

Q2
I confirm I am over the age of 18
☐ Confirm

Q3
Gender
☐ Male
☐ Female

Q4
Age group
☐ 18-35
☐ 36-50
☐ 50+

Q5
Occupation
☐ Employed full time
☐ Employed part time
☐ Unemployed looking for work
☐ Unemployed not looking for work
☐ Retired
☐ Student
Q6
How often do you eat out at a fast food restaurant?

- More than once a week
- Once a week
- Once a month
- More than once a month
- Never

Q7
What’s your favourite fast-food restaurant?

- McDonald's
- Subway
- KFC
- Burger King
- Other

Q8
Which Fast Food chain would you say is healthier?

- McDonald's
- Subway

Q9
When selecting a meal at a fast food chain do you look at calories?

- Extremely likely
- Moderately likely
- Slightly likely
- Neither likely nor unlikely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely
Q10
If you saw how many calories were in your original meal choice would you consider picking an item with fewer calories instead?

☐ Definitely yes
☐ Probably yes
☐ Might or might not
☐ Probably not
☐ Definitely not

Q11
Would you ever base a meal choice from a fast food restaurant on calories? and Why?

Q12
When looking at a menu what information do you think is relevant?

☐ Calories
☐ Nutrition
☐ Neither

Q13
How likely are you now to look at calories when purchasing in a fast food restaurant?

☐ Extremely likely
☐ Moderately likely
☐ Slightly likely
☐ Neither likely nor unlikely
☐ Slightly unlikely
☐ Moderately unlikely
☐ Extremely unlikely
### Appendix G: Interview Question Template

<table>
<thead>
<tr>
<th>Order of semi structured Interview</th>
<th>Discussed</th>
</tr>
</thead>
</table>
| 1) Ask respondent approval to use recording systems  
Ask respondent to sign and acknowledge consent form |           |
| 2) Ask Background questions  
Confirm information about;  
• Name of participant  
• Participant age  
• Occupation |           |
| 3) Discuss industry  
• Have you had many experiences with fast food restaurants?  
• Is there a specific fast food chain you visit?  
• What attracts you to eating at a fast food restaurant? |           |
| 4) Discuss about Calories and what they are  
Probes  
• Have you ever noticed calories on menus in fast food restaurants?  
• Do you think knowing about calories is useful when purchasing in a fast food restaurant?  
• When making your purchasing decisions would you consider calories?  
• Knowing the different calories in products would this sway to you choose a product with lower calories? |           |
| 5) Discuss the Awareness of calorie labelling  
• Do you think being aware of what calories is important?  
• After discussing calorie labelling within the fast food industry would you be more aware of it now? |           |
<p>| 6) Calories VS Nutrition |           |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>What would you consider more valuable when choosing a meal calories or nutritional content?</td>
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<td>Based on your answer why do you think this?</td>
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<tr>
<td>Which one do you think would be more beneficial on menus within the fast food industry?</td>
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<tr>
<td>After discussing both calories and nutritional value would this persuade your decision making in fast food restaurants in the future?</td>
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Appendix H: Ethics Form

DEVOLED ETHICS APPROVAL APPLICATION SUMMARY

Student Name: Georgina McDonald  Student Number: ST20093380
Module Name: Dissertation  Module Number: HLT6009
Programme Name: Events Management  Supervisor Name: Diana James

To be completed by student and supervisor before submission to Ethics Approval Panel

<table>
<thead>
<tr>
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<th>Yes</th>
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<th>Yes</th>
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<td>Application for ethics approval</td>
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<tr>
<td>Participant information sheet</td>
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<td>Participant consent form</td>
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<td>Pilot interview/s</td>
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<td>Pilot questionnaire/s</td>
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<tr>
<td>Letter/s to participating organisation/s</td>
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<tr>
<td>Confirmation of interviewee participation</td>
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First Submission [ ]  Resubmission [ ]

Date: 14/12/17

For use by the devolved ethics approval panel:

Panel Members  Name  Signature

Module leader, Chair:  

Supervisor:  

CSM Ethics Committee Representative:  

Date: 14/12/17  Date of Reassessment:

Outcome:

Project Approved [ ]  Reference number issued: 2016053605.

Chair’s Action [ ]

Application not Approved [ ]

Comments for projects not fully approved:

The original to be retained by the supervisor and a copy given to the student and module leader.

In the case of a resubmission being required this original form should be submitted with the resubmission not a new, blank, one.

Page 1
CARDIFF METROPOLITAN UNIVERSITY
APPLICATION FOR ETHICS APPROVAL

When undertaking a research or enterprise project, Cardiff Met staff and students are obliged to complete this form in order that the ethics implications of that project may be considered.

If the project requires ethics approval from an external agency (e.g., NHS), you will not need to seek additional ethics approval from Cardiff Met. You should however complete Part One of this form and attach a copy of your ethics letter(s) of approval in order that your School has a record of the project.

The document Ethics application guidance notes will help you complete this form. It is available from the Cardiff Met website. The School or Unit in which you are based may also have produced some guidance documents, please consult your supervisor or School Ethics Coordinator.

Once you have completed the form, sign the declaration and forward to the appropriate person(s) in your School or Unit.

Participant recruitment or data collection MUST NOT commence until ethics approval has been obtained.
PART ONE

<table>
<thead>
<tr>
<th>Name of applicant:</th>
<th>Georgina McDonald</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor (if student project):</td>
<td>Diana James</td>
</tr>
<tr>
<td>School / Unit:</td>
<td>Management</td>
</tr>
<tr>
<td>Student number (if applicable):</td>
<td>ST20093380</td>
</tr>
<tr>
<td>Programme enrolled on (if applicable):</td>
<td>Event management</td>
</tr>
<tr>
<td>Project Title:</td>
<td>“The Impact Calorie Labelling on menus in fast food restaurants has on consumer purchasing decisions.”</td>
</tr>
<tr>
<td>Expected start date of data collection:</td>
<td>15/12/2017</td>
</tr>
<tr>
<td>Approximate duration of data collection:</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Funding Body (if applicable):</td>
<td>N/A</td>
</tr>
<tr>
<td>Other researcher(s) working on the project:</td>
<td>N/A</td>
</tr>
<tr>
<td>Will the study involve NHS patients or staff?</td>
<td>No</td>
</tr>
<tr>
<td>Will the study involve human samples and/or human cell lines?</td>
<td>NO</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Does your project fall entirely within one of the following categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper based, involving only documents in the public domain</td>
</tr>
<tr>
<td>Laboratory based, not involving human participants or human tissue samples</td>
</tr>
<tr>
<td>Practice based not involving human participants (eg curatorial, practice audit)</td>
</tr>
<tr>
<td>Compulsory projects in professional practice (eg Initial Teacher Education)</td>
</tr>
<tr>
<td>A project for which external approval has been obtained (e.g., NHS)</td>
</tr>
</tbody>
</table>

If you have answered YES to any of these questions, expand on your answer in the non-technical summary. No further information regarding your project is required.

If you have answered NO to all of these questions, you must complete Part 2 of this form.

In no more than 150 words, give a non-technical summary of the project

This project will look at the impact calorie labelling has on fast food restaurants and consumer purchasing decisions. It will also look at calorie labelling and do we take them into consideration when purchasing. It will evaluate the new law brought in meaning major chain restaurants have to use calorie labelling in their menus and the impacts this could
have on the restaurant and consumer purchasing decisions. By the end of the project the reader will have an understanding on what calories are and why they are used as well as seeing the impact calories labelling has on consumer purchasing as well as the fast food industry. All this research will be done through interviews, questionnaires and secondary research into this chosen topic area.
what calories are and why they are used as well as seeing the impact calories labelling has on consumer purchasing as well as the fast food industry. All this research will be done through interviews, questionnaires and secondary research into this chosen topic area.

**DECLARATION:**
I confirm that this project conforms with the Cardiff Met Research Governance Framework

I confirm that I will abide by the Cardiff Met requirements regarding confidentiality and anonymity when conducting this project.

**STUDENTS:** I confirm that I will not disclose any information about this project without the prior approval of my supervisor.

<table>
<thead>
<tr>
<th>Signature of the applicant:</th>
<th>Date:</th>
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</thead>
<tbody>
<tr>
<td>George M.</td>
<td>7/12/17</td>
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**FOR STUDENT PROJECTS ONLY**

<table>
<thead>
<tr>
<th>Name of supervisor:</th>
<th>Date:</th>
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<tbody>
<tr>
<td>Diana James</td>
<td>4/12/17</td>
</tr>
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<th>Signature of supervisor:</th>
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<tr>
<td>James M.</td>
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**Research Ethics Committee use only**

<table>
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<tr>
<th>Decision reached:</th>
<th>Project approved</th>
<th>Project approved in principle</th>
<th>Decision deferred</th>
<th>Project not approved</th>
<th>Project rejected</th>
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<table>
<thead>
<tr>
<th>Project reference number:</th>
<th>20168053605</th>
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</table>

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shireen Carlisle</td>
<td>14/10/17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlisle</td>
</tr>
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Details of any conditions upon which approval is dependant:

Click here to enter text.
PART TWO

A RESEARCH DESIGN

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Will you be using an approved protocol in your project?</td>
<td>NO</td>
</tr>
<tr>
<td>A2 If yes, please state the name and code of the approved protocol to be used1</td>
<td>N/A</td>
</tr>
<tr>
<td>A3 Describe the research design to be used in your project</td>
<td></td>
</tr>
</tbody>
</table>

This Project will require first hand a primary research with a mixture of qualitative and quantitative research. This information is require to get a full understanding on peoples' opinions on calorie labelling and if it has an effect on peoples purchasing decisions in restaurants.

The sample that will be looked at are:
- 18-35 mixed male and female
- 36-50 mixed male and female
- 50+ mixed male and female

Recruitment of participants will be online and face to face.

The research carried out will be in the form of an interview and questionnaire. I have chosen these two forms of data collection because questionnaires can give me a large amount of qualitative data and questionnaires can give me the quantitative data need to come up with a conclusion on the chosen topic.

Online questionnaire:

Sample: 18-35, 36-50, 50+

The questionnaire will be created online through Qualtrics, distributed will be through this site as well as questionnaires as well as the use of Facebook. I’ve decided to use these two forms of distribution and through Social media (facebook) I have a lot of friends in both the categories I’m choosing to look at meaning I can get a large sample.

The questionnaire will be sent out on the 1st January 2018 and will be available for two weeks. I’m looking to collect between 70-100 questionnaires within this time period. I have chosen to conduct between 70-100 questionnaires as I feel this gives me a good amount of data that can provide me with some strong results.

All the data collected will be anonymous and kept in a locked cupboard, with the only access being from Georgina McDonald. The entire data collect will then be converted into

1 An Approved Protocol is one which has been approved by Cardiff Met to be used under supervision of designated members of staff; a list of approved protocols can be found on the Cardiff Met website here
charts and graphs for analysing through the use qualtrics.

**Semi structured interview:**

Sample: 18-35, 36-50, 50 +

Participants: between 8-10 interviews split between Males and Females. I have chosen this sample size as between this and the questionnaires; I will have a lot of data that I can compare. The interviews add a slightly more in-depth view on the chosen topic area helping me to read a firmer conclusion. The interviews will be conducted from the week beginning the 1st January until the 15th January.

Analysis: Once all the data has been collected manuscript of the interviews will be created and the data will be analysed through thematic analysis.

Consent: Before participants take part in the interviews consent forms will be completed

<table>
<thead>
<tr>
<th>A4 Will the project involve deceptive or covert research?</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>A5 If yes, give a rationale for the use of deceptive or covert research</td>
<td>Please read the CSM Ethics Guidelines for guidance if yes.</td>
</tr>
<tr>
<td>A6 Will the project have security sensitive implications?</td>
<td>NO</td>
</tr>
<tr>
<td>A7 If yes, please explain what they are and the measures that are proposed to address them</td>
<td>This is likely to only affect some students undertaking research on Data Security. If you think this applies to you discuss with your supervisor</td>
</tr>
</tbody>
</table>

**B PREVIOUS EXPERIENCE**

<table>
<thead>
<tr>
<th>B1 What previous experience of research involving human participants relevant to this project do you have?</th>
<th>Click here to enter text.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2 Student project only</td>
<td>What previous experience of research involving human participants relevant to this project does your supervisor have?</td>
</tr>
<tr>
<td>My supervisor has six years experience of supervising similar projects.</td>
<td></td>
</tr>
</tbody>
</table>

**C POTENTIAL RISKS**

<table>
<thead>
<tr>
<th>C1 What potential risks do you foresee?</th>
<th>Ricks to Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Might not find the literature</td>
<td></td>
</tr>
<tr>
<td>May not have participants to take part in the interviews</td>
<td></td>
</tr>
<tr>
<td>Arranging interviews could be difficult, creating inconvenience for the interviewees.</td>
<td></td>
</tr>
<tr>
<td>Not collecting enough data</td>
<td></td>
</tr>
<tr>
<td>Ricks to Participants</td>
<td></td>
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<td>---------------------------------------</td>
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<tr>
<td>Finding questions offence</td>
<td></td>
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<tr>
<td>Not feeling confortable answering the questions</td>
<td></td>
</tr>
<tr>
<td>Confidentiality</td>
<td></td>
</tr>
</tbody>
</table>

C2 How will you deal with the potential risks?
**Participant**

The researcher will be in a safe environment with the agreement of the organisers, and be sensitive when approaching potential participants.

A consent form and project description will be attached to the questionnaires for participants to read to ensure all questions are suitable and appropriate to ask participant.

The participants will be notified that they have the right to withdraw their data at any time.

The questionnaires will state terms of participation and confidentiality on the header. Completion of the questionnaire is taken as consent and will be stated on the header. If participants do not wish to contribute then they need not complete the questionnaire.

Participants information sheet and consent form will be sent to the interviewee to ensure they are aware of the topics up for discussion.

The participant will have the right to withdraw their data at any point without penalty.

**Researcher**

These will be arranging in advanced at a location confirmed by the researcher and participants. The researcher will take their mobile phone with them to the interview.

Consent for the interviews will be gained via a participant consent form, which will be signed before the interview. Interviews times will be arranged in advance at a time and place convenient for the interviewees. The researchers’ whereabouts will be known to a third person.

Email/s confirming that key people have agreed to be interviewed are attached

All raw data will be held on a secure password protected external hard drive and paper copies will be kept in a locked cupboard. Access to the raw data will be restricted to the researcher.
PARTICIPANT INFORMATION SHEET

Calorie labelling on menus within fast food restaurants

Cardiff Metropolitan University Protocol Number:

Project summary
The purpose of this research project is to evaluate the impacts on customer decision-making when calorie labelling is presented on menus in the fast food industry.

Why have you been asked to participate?
You have been asked to participate because you fit the profile of the population being studied; that is you are between the ages of 20-50.

Your participation is entirely voluntary and you may withdraw at any time.

Project risks
The research involves the completion of an interview which will be recorded for later analysis. We are not seeking to collect any sensitive data on you; this study is only concerned with whether your food choice in fast food chains is influenced by calories.

We do not think that there are any significant risks associated with this study. However, if you do feel that any of the questions are inappropriate then you can stop at any time. Furthermore, you can change your mind and withdraw from the study at any time – we will completely respect your decision. You are also able to contact Georgina McDonald st20093380@outlook.cardiffmet.ac.uk with any questions regarding further information about the project.

How we protect your privacy
All the information you provide will be held in confidence. We have taken careful steps to make sure that you cannot be directly identified from the information given by you. Your personal details (e.g. signature on the consent form) will be kept in a secure location by the research team. When we have finished the study and analysed all the information, the documentation used to gather the raw data will be destroyed except your signed consent form which will be held securely for 5 years. The recordings of the interview will also be held in a secure and confidential environment during the study and destroyed after 5 years.

YOU WILL BE OFFERED A COPY OF THIS INFORMATION SHEET TO KEEP

Cardiff Metropolitan University
Ethics Committee
PARTICIPANT CONSENT FORM

Cardiff Metropolitan University Ethics Reference Number: 2016D053605
Participant name or Study ID Number: st20093380
Title of Project: The Impact Calorie Labelling on menus in fast food restaurants has on consumer purchasing decisions.”
Name of Researcher: Georgina McDonald

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. [ ]

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. [ ]

3. I agree to take part in the above study. [ ]

4. I agree to the interview [ ] Yes No

5. I agree to the use of anonymised quotes in publications [ ] [ ]

6. I agree to the allow the use of voice recordings during the interviews Yes No

( ) ( )

Signature of Participant ______________________ Date ________________

Name of person taking consent ______________________ Date ________________

Signature of person taking consent ______________________

*When completed, 1 copy for participant & 1 copy for researcher site file*
School of Management, Cardiff Metropolitan University

The Impact Calorie Labelling on menus in fast food restaurants has on consumer purchasing decisions

This project has received the approval of Cardiff School of Managements’ Ethics Committee, Cardiff Metropolitan University

I understand that my participation in this project will involve completing a questionnaire about calorie labelling on menus within the fast food industry, which will take approximately 5-10 minutes of my time.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason or I can discuss my concerns with Georgina McDonald st20093380@cardiffmet.ac.uk.

I understand that any identifying information provided by me will be held confidentially, such that only the PI (Georgina McDonald) can trace this information back to me individually.

I understand that my data will be stored on password protected computers, ammonised after completion of the survey and that no one will be able to trace my information back to me. The raw data will be retained for five years when it will be deleted/destroyed.

If you are 18 years of age or over, understand the statement above and freely consent to participate in this study please tick the consent box to proceed.

☐ Consent box

Thank you very much for helping us with this project and participating in the research
Appendix I: Data Summary Sheet

Q2
I confirm I am over the age of 18
☐ Confirm – 69

Q3
Gender
☐ Male - 18
☐ Female - 51

Q4
Age group
☐ 18-35 – 60
☐ 36-50 -2
☐ 50+ -7

Q5
Occupation
☐ Employed full time -18
☐ Employed part time 5
☐ Unemployed looking for work -1
☐ Unemployed not looking for work -0
☐ Retired -2
☐ Student -43

Q6
How often do you eat out at a fast food restaurant?
☐ More than once a week -3
☐ Once a week -17
☐ Once a month -30
☐ More than once a month – 16
☐ Never - 4
Q7
What’s your favourite fast-food restaurant?
- McDonald's -29
- Subway -14
- KFC -10
- Burger King -7
- Other -9

Q8
Which Fast Food chain would you say is healthier?
- McDonald's -7
- Subway -62

Q9
When selecting a meal at a fast food chain do you look at calories?
- Extremely likely -2
- Moderately likely -10
- Slightly likely -12
- Neither likely nor unlikely -5
- Slightly unlikely -4
- Moderately unlikely -8
- Extremely unlikely -28

Q10
If you saw how many calories were in your original meal choice would you consider picking an item with fewer calories instead?
- Definitely yes - 8
- Probably yes -18
- Might or might not -17
- Probably not -18
Q11
Would you ever base a meal choice from a fast food restaurant on calories? and Why?

Q12
When looking at a menu what information do you think is relevant?
- Calories - 7
- Nutrition - 47
- Neither - 15

Q13
How likely are you now to look at calories when purchasing in a fast food restaurant?
- Extremely likely - 7
- Moderately likely - 9
- Slightly likely - 15
- Neither likely nor unlikely - 8
- Slightly unlikely - 4
- Moderately unlikely - 10
- Extremely unlikely - 16
Appendix J: Interview Participant A

1) Ask respondent approval to use recording systems
Ask respondent to sign and acknowledge consent form?
    Accepted

2) Ask Background questions
Name of participant?
    Participant A
Participant age?
    52
Occupation?
    Software engineer
Have you had many experiences with fast food restaurants?
    Yes
Is there a specific fast food chain you visit?
    KFC
What attracts you to eating at a fast food restaurant?
    The food choice and Convenient
Have you ever noticed calories on menus in fast food restaurants?
    No I haven’t
Do you think knowing about calories is useful when purchasing in a fast food restaurant?
    Yes I do
When making your purchasing decisions would you consider calories?
    I’ve never actually noticed calories before on menus therefore never considered taking them into account when selecting a meal
Knowing the different calories in products would this sway to you choose a product with lower calories?
    If I saw them it would change my choice
Do you think being aware of what calories is important?
    Yes I do
After discussing calorie labelling within the fast food industry would you be more aware of it now knowing its on the menus?
Now I’ve been told they are on menus when selecting a meal next time in a fast food restaurant I might be more conscious of my calorie intake

6) Calories VS Nutrition
What would you consider more valuable when choosing a meal calories or nutritional content?

Nutritional value would be more valuable as I feel it is important to have a balanced diet

Which one do you think would be more beneficial on menus within the fast food industry calories or nutrition?

Calories

After discussing both calories and nutritional value would this persuade your decision making in fast food restaurants in the future?

When I am in supermarkets or picking a sandwich I tend to look at the traffic light system, it easy to understand the different colours are visual and its meaning full. I think this would work well in the fast food industry as its easy to understand and you already know the food isn’t good, but it would be nice to understand how bad it is for you nutritionally based on the fast food industry calories would sway my decision.
Appendix K: Interview Participant B

1) Ask respondent approval to use recording systems
   Ask respondent to sign and acknowledge consent form

2) Ask Background questions
   Confirm information about;
   Name of participant?
   Participant B
   Participant age?
   24
   Occupation?
   Aviation's buyer

3) Discuss industry
   Have you had many experiences with fast food restaurants?
   Yes I go regularly
   Is there a specific fast food chain you visit?
   McDonalds and Burger king
   What attracts you to eating at a fast food restaurant?
   Easy and I like the food

4) Discuss about Calories and what they are
   Have you ever noticed calories on menus in fast food restaurants?
   No
   Do you think knowing about calories is useful when purchasing in a fast food restaurant?
   Not really as its not something I look at
   When making your purchasing decisions would you consider calories?
   No not in a fast-food restaurant
   Knowing the different calories in products would this sway to you choose a product with lower calories?
   I would look at them but I probably wouldn't change my option

5) Discuss the Awareness of calorie labelling
   Do you think being aware of what calories is important?
   Personally I don’t look at calories when purchasing a meal from a fast food restaurant so for me being aware of calories isn't important, but then if I were on a
diet or watching my weight, maybe it would be something I would consider. I will be honest I'm fairly young, I gym a lot, so when I have the odd fast food meal I'm not choosing to be healthy

As you get older then and potentially less active would you start to consider calories?
Although I will try to stay active I know, as you get older your life tends to get busier meaning I will probably have to watch my diet more, so based on this I probably would

After discussing calorie labelling within the fast food industry would you be more aware of it now?
Yes I would

6) Calories VS Nutrition
What would you consider more valuable when choosing a meal calories or nutritional content?

Nutrition

Based on your answer why do you think this?
It offers more valuable information over calories making it easier yo understand if its good or bad

Which one do you think would be more beneficial on menus within the fast food industry?
Probably calories because you already know the food is bad it would just be interesting to know how bad

After discussing both calories and nutritional value would this persuade your decision making in fast food restaurants in the future?
Possible not right now
Appendix L: Interview Participant C

1) Ask respondent approval to use recording systems
Ask respondent to sign and acknowledge consent form
   Accept

2) Ask Background questions
Confirm information about;
Name of participant?
   Participant C
Participant age?
   58
Occupation?
   Price credit controller – part time

3) Discuss industry
Have you had many experiences with fast food restaurants?
   Yes
Is there a specific fast food chain you visit?
   McDonalds burger king
What attracts you to eating at a fast food restaurant?
   Quick and easy food

4) Discuss about Calories and what they are
Probes
Have you ever noticed calories on menus in fast food restaurants?
   Yes
Do you think knowing about calories is useful when purchasing in a fast food restaurant?
And why
   Yes because I look at the calories before purchasing
When making your purchasing decisions would you consider calories?
   Yes based on my age I am always conscious of how many calories I’m in taking in order to keep on top of weight gain and good to understand what your putting into your body and how much
Knowing the different calories in products would this sway to you choose a product with lower calories?

Yes it would, as I am calorie conscious

5) Discuss the Awareness of calorie labelling

Do you think being aware of what calories is important?

For me it is

After discussing calorie labelling within the fast food industry would you be more aware of it now?

Yes if someone told me it would make me aware and I would look

6) Calories VS Nutrition

What would you consider more valuable when choosing a meal calories or nutritional content? And why

I would probably say nutrition as it nice to know how much salt or fat is in a product over how many calories it contains, especially in fast food restaurant where you know most of the food isn’t healthy

Which one do you think would be more beneficial on menus within the fast food industry?

Probably calories but I would like to know the nutritional value as I would like to know if its high in fat, as I feel I would better having more calories if the product had less fat

After discussing both calories and nutritional value would this persuade your decision making in fast food restaurants in the future?

If the low-calorie option were still full of fat I would think I could have a product with is higher calories but lower in fat
Appendix M: Interview Participant D

1) Ask respondent approval to use recording systems
Ask respondent to sign and acknowledge consent form
   Accepted

2) Ask Background questions
Confirm information about;
Name of participant?
   Participant D
Participant age?
   53
Occupation?
   Part time sales staff

3) Discuss industry
Have you had many experiences with fast food restaurants?
   Yes
Is there a specific fast food chain you visit?
   Subway
What attracts you to eating at a fast food restaurant?
   I think its healthier than McDonalds and I can choose my filling
Discuss about Calories and what they are
Have you ever noticed calories on menus in fast food restaurants?
   Yes but only recently
Do you think knowing about calories is useful when purchasing in a fast food restaurant?
   Yes I think so
When making your purchasing decisions would you consider calories?
   Yes now I’ve seen them
Knowing the different calories in products would this sway to you choose a product with lower calories?
   Yes

4) Discuss the Awareness of calorie labelling
Do you think being aware of what calories is important?
Yes because if you’re trying to maintain your weight or monitor what you’re consuming, it’s easier to keep track.

After discussing calorie labelling within the fast food industry, would you be more aware of it now?

Yes

5) Calories VS Nutrition

What would you consider more valuable when choosing a meal—calories or nutritional content?

I would consider nutritional value more as you have an overall image, instead of just seeing on things you have a combination of a few for example sugar, salt. So if you were diabetic, you would need to know these things.

Based on your answer, why do you think this?

Because you gain an overall understanding of everything.

Which one do you think would be more beneficial on menus within the fast food industry?

Nutritional

After discussing both calories and nutritional value, would this persuade your decision-making in fast food restaurants in the future?

Yes, I think I would because I would like to know how much is in what...
## Appendix N: Key Themes

<table>
<thead>
<tr>
<th>Key theme</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness</strong></td>
<td>Lack of awareness from consumers around calories and nutrition and its importance</td>
</tr>
<tr>
<td><strong>Influencing factors on consumer behaviour</strong></td>
<td>What are the current factors that influence consumer behaviour towards food choices</td>
</tr>
<tr>
<td><strong>Affect of the Calorie Labelling Law</strong></td>
<td>Does the new law of calories on menus influence consumers to become healthier</td>
</tr>
<tr>
<td><strong>Fast food Restaurants</strong></td>
<td>Do fast food chains have different obligations towards their consumers, due to the type of food offered? Would nutritional value be more valuable to consumers over calories?</td>
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</tbody>
</table>
Appendix O: Question 11 Responses

Q11 - Would you ever base a meal choice from a fast food restaurant on calories? And Why?

- No - fast food is generally known for being bad so I wouldn’t base my decision on it
- Yes, so I can eat more at other times in the day and so I don’t get too fat!
- Probably not, if I’m go to a fast food restaurant its normally after a night out when I’m not thinking about calories/diet
- Nah
- Not particularly
- No because you’re going to a fast food restaurant to eat bay
- Yes - some food is ridiculous
- No
- No - fast food is a treat, calories are taken into account with daily diet
- Yes because I would feel guilty if I had a higher calorie meal
- No, its all bad
- No. I would not be there if i was counting calories
- No, because I view eating in a fast food restaurant as a treat, and therefore why not go all out...
- No, I would only go to a fast food restaurant on a cheat day
- Yes if I was making a conscious effort to reduce my calorie intake
- No
- Yes, diet.
- Maybe
- No, as all fast food is bad for you.
- No because it’s a cheat meal
- If I was really watching what I was eating I would base what I ate on the calories in the food
- No because if I am going to a fast food restaurant, I know their is likely to be high calories in my meal anyway.
- No because I know I’m being unhealthy
- No
- No
- No because when I eat out I am treating myself, so I don’t look at the calorie intake
- Rarely because when committing to eating out at a fast food restaurant, I have already accepted this is not going to be a healthy meal and so calories are less significant on my choices unlike eating at a normal restaurant where there would be a choice of healthier options
- To be healthy
- No matter if I’m trying to be healthy or not its good to know what your consuming and how much
- not really as a very rarely go, so when i do its one off
- No, I’m not watching concerned about my weight
- No, because if I'm going to eat fast food I've already committed to being unhealthy.
- Yes, if I am trying to be healthier
- No, if I am going to a fast food restaurant i usually expect it to be high in calories, if i wanted healthy I would eat at home or go somewhere else.
- No
- Depends on the excess of calories in the food based on the average consumption one should have one a daily basis
- Due to mental health
- Yes, that way I no my calorie intake would not be to high for the day
- To safe guard my heart
- No - more likely to choose based on fat/sugar content.
- No
- Depends on what the calorific difference is- if there are 2 things I want then I would chose the one with fewer calories because fewer calories generally
- means it is better for you in fast food restaurants (or as I understand it anyway)
- Yes. Less fattening
- No
- Yes to be healthy and lose weight
- Probably not as when I eat at a fast food restaurant it is a treat as I eat healthy throughout the week
- No, i don't often eat fast food. So when I do eat fast food, I'll eat as many calories as I want
- Dieting but using this meal as a once a week cheat meal
  - No
- No, if I am eating at a fast food restaurant I am expecting it to be unhealthy and there
  so calories are not an important consideration in that moment
  - No
- No, because if I'm eating fast food I know it's unhealthy
  - No
- No
  - Not usually
  - No, because I know it’s bad for me so having it irregularly doesn’t bother me.
  - Yes, because I like to loosely watch how many calories I eat as not to gain weight
  - No, I never look at calories
  - No, If I wanted to eat healthily then I would not choose a fast food chain.
  - No I wouldn't, as everything in fast food restaurants are very unhealthy, and if I were
  that concerned I wouldn't chose to eat there.
  - Yes, if I was dieting or counting calories
  - No
  - Yes, I am very health conscious and would feel less guilty choosing something with
  fewer calories
  - No, because it’s never been something I care about
  - No because I don’t eat there because I want to be healthy
  - No
  - Nope
Appendix P: Turnitin Receipt
Chapter 7
8. References


Difference Between (2011) *Difference Between McDonald’s and Subway* [online]


Federal Register (2014) *Food Labeling; Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments* [online] Available at


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