An Exploration of Attitude towards Electronic Cigarettes among Smokers

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Declaration

I, Rakkhini Periasamy declare that this dissertation is a result of my own work. It is being submitted to fulfill the requirements of the MBA in Business Management at Dublin Business School. No part of the work described on this dissertation has been submitted in support of an application for a degree or qualification at this or any other college/university.

Further, all the work in this dissertation is entirely my own, except referenced in the text as a specific source and included in the bibliography.

Signed: Rakkhini Periasamy

Date: 22.08.2014
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Abstract:

Electronic cigarettes are an emerging phenomenon that is becoming increasingly popular with smokers worldwide. Awareness and use of electronic cigarettes have increased dramatically. As the popularity increases it is important to explore more about the characteristics, attitudes and beliefs of smokers.

The aim of this dissertation is to explore attitudes towards electronic cigarettes among smokers and to identify through primary research the linkage between attitudes and behavior. Considering an increase in demand and explosion of electronic cigarettes in the European market in the past four years, this study results will help electronic cigarette companies know more about their consumers and the study will also contribute to the research knowledge as this study will be one of the first studies that explores attitude of smokers towards electronic cigarettes.

The primary research was conducted using qualitative design through the use of focus groups. Two focus groups were conducted with electronic cigarette smokers and tobacco cigarette smokers. The findings of the study were analyzed and discussed with regards to objectives, sub-objectives and relevant literature. The findings revealed gaps in knowledge about the awareness, safety and efficacy of electronic cigarettes. Moreover the arguments were fueled with uncertainties regarding the long term use of electronic cigarettes and their regulations. Overall the users of electronic cigarettes displayed an extremely positive attitude. On the contrary the tobacco cigarette users had a mixed attitude of both positive and negative towards electronic cigarettes. Furthermore it was noted that there was a lack in long term proven studies for electronic cigarettes which was causing debates and high doubts about the product which resulted in a negative attitude in the minority.

Finally implications for further research include the attitudes of non-smokers and researching the topic with the use of questionnaires, observational studies and case studies is a recommendation for future research.

Authors keywords: Electronic cigarettes, attitudes, behavior, smoking
1 Introduction:

1.1 Research background:

Electronic cigarettes are one of today’s most discussed and controversial issues in social, psychological, tobacco control and public health (Theodore et al, 2012). Use of electronic cigarettes appears to be on the rise globally, but whether the product can be described as lower risk to tobacco remains an issue of argument for which research findings cannot resolve yet (Hitchman et al 2014).

Electronic cigarette are increasingly chosen by people trying to reduce smoking tobacco cigarettes (Polosa et al, 2013). Although the product has been proposed as a long term substitute for traditional smoking or as a tool for smoking cessation some researchers are opposing the use of nicotine because there are concerns about both safety and efficacy and about the potential risk of electronic cigarettes to play as promoters of smoking (Savant et al 2014). The need for quality standardization of these products so that they can be used as an effective replacement for tobacco cigarettes and regulations to make sure that electronic cigarettes are not advertised or promoted in a way that will not attract young people into nicotine addiction. Therefore a large number of studies have to be undertaken to determine the effectiveness of electronic cigarettes (Bridgman et al 2014).

However electronic cigarettes arise more questions regarding their widespread use and analyst emphasize on the lack of scientific knowledge regarding electronic cigarettes such as their safety for long-term use, their effectiveness as smoking cessation aids, their appeal to the youth, the effects of the electronic cigarette industry in the market, the effects of tobacco industry’s entry into the electronic cigarette market and the potential of electronic cigarettes to re-glamorizing smoking (Marketline 2013). Answers to these questions will have to come from a wide range of independent research.

Attitudes have a substantial influence on our behavior towards the product. They are the prime triggers that influence individual’s perception and decision making. However there are other
variables that influence behavior, perception and decision making of the consumer but attitudes play a central role (John et al 2009). Similarly there are various external and internal factors that influence attitude like experiences, childhood, peers, social media and advertising.

Since there is copious amount of literature on attitude towards smoking and tobacco cigarettes, this research proposes an exploration of attitudes towards electronic cigarettes among smokers. Furthermore not much of research has gone into the consumer’s behavior and attitude towards electronic cigarettes. The researcher will explore the consumers experience, perceptions, opinions, and decision making towards electronic cigarettes to understand what the product holds for the future. Being aware of the recent trend that electronic cigarette has bought into the marketplace the impact of this product on the consumer behavior is extensive (Lotstock and Tahan, 2014). Moreover electronic cigarettes are considered as the ultimate replacement for tobacco cigarettes. A comprehensive review of literature and a focus group analysis around attitudes, factors that influence attitudes and electronic cigarettes as a replacement for tobacco cigarettes will be discussed.

### 1.2 Rationale for research:

This research is based on smoker’s attitude towards electronic cigarettes. Throughout the literature the researcher will attempt to understand how consumers react and behave towards electronic cigarette and the effect they might have on the future of tobacco use and control globally. The researcher selected this topic because electronic cigarettes are one of todays most discussed and controversial issue in tobacco control and public health broadly. “Electronic cigarettes have been described as the tobacco world’s first truly “disruptive technology,” defined by the Harvard Business Review as “a new technology that unexpectedly displaces an established technology”(Thomas and Glynn, 2014, pp.165). Moreover without long term research into the product safety, efficacy and regulations this product is exploding in the marketplace this issue needs to be considered from a global perspective of business, and consumer perception this is the reason this research merits to be analyzed and investigated.
1.3 Research objectives:

Saunders et al (2009) defines research objectives as clear, specific statements that identify what the researcher wishes to accomplish as a result of doing the research. The following objectives will be the focus of the proposed research thesis. In order to achieve the stated aim of this project

Main objective:

- To explore the attitudes towards electronic cigarettes among smokers.

Sub-objectives:

- To define attitudes and behavior and identify the linkage between these two variables
- To analyze consumer attitude towards electronic cigarette as a replacement for tobacco cigarettes
- To determine the impact of cost factor on attitude towards electronic cigarettes
- To discover if electronic cigarettes perceived as less harmful than tobacco cigarettes has led to a more positive attitude among smokers.

1.4 Research question:

The research question is the most critical part of any research. It is essential to develop a research question that the researcher is interested in so that the researcher can completely focus on the research. Choosing the appropriate question is important, a question that is neither too broad nor too narrow. Research questions that are ‘just right’ are those that are just right for the investigation at the given time, in the given setting (Clough and Nutbrown, 2002).

Research question:

- What are smoker’s attitudes towards electronic cigarettes?

Sub-questions:

- Is electronic cigarette a replacement for traditional cigarette?
Has the cost effectiveness over regular cigarettes caused more people to use electronic cigarettes?
Are people switching over to electronic cigarettes considering their less harmful effects over tobacco?

In addition to the above questions, it is considered that questions will be developed and recorded during the focus group analysis based on discussions among smokers and regular smokers of tobacco who smoke electronic cigarettes and the perception of the consumer evaluated.

1.5 Researcher suitability

The researcher holds a degree in bachelor of dental surgery from Meenakshi University in Chennai in India and has two years of experience working for a chain of dental clinics and various NGO’s for tobacco cessation and control programs. The researcher is currently undertaking the MBA program in Dublin Business School and will utilize the knowledge obtained in the course modules, specifically the modules in Strategic Management, marketing management for the proposed research.

Having worked for two years in the dental hospital and various NGO’S, including roles of patient counselor, having direct interaction with patients to acquire knowledge and their habits of tobacco and to motivate them to find an healthier alternative to tobacco smoking or to quit the habit was a long term process. The researcher has a good level of understanding and interest in the proposed topic. This will be combined with the knowledge and research skills gained from the MBA program.

1.6 Recipient for this research

The proposed research thesis will be submitted as part of the curriculum of Masters in Business Administration program at Dublin Business School in Association with Liverpool John Moore’s University. The principal recipient of the proposed dissertation will be Dublin Business School and Liverpool John Moore’s University.
As the proposed this research is intended to perform a qualitative analysis of focus groups containing 8-10 people to explore their attitudes and perception towards electronic cigarettes and to facilitate discussion on electronic cigarettes among the focus group to gain understanding on the attitudes of the consumer. Hence, it is proposed to make a recording of the discussion using a recording device for future research purpose and analysis.

2 Literature Review:

2.1 Introduction:

The purpose of the literature review is to answer the research questions of this dissertation by critically analysis, discussing and evaluating the main terms appearing in the research questions and objectives. The first sub-objective in chapter 1.3 will be answered through literature review. For this purpose the researcher will define attitudes and behavior, analyze their functions and identify a linkage between these two variables in chapter 2.2-2.5. Secondly consumer attitude towards behavior models will be discussed in chapter 2.6 in order to understand what they mean through theories from different researchers with different approaches and how this links to the beliefs, opinion and perception of the consumer attitudes. Given that the project emphasizes attitudes towards electronic cigarette among smokers, the review will discuss about awareness of electronic cigarettes by focusing on electronic cigarette as a replacement to tobacco cigarettes, followed by the overview of the electronic cigarette industry, its growth and regulations. Finally, the researcher will analyze the various factors influencing the attitudes towards electronic cigarettes and consumer’s behavior towards it. The literature review will be concluded and limitations will be discussed.

2.2 Attitudes:
Among all the psychological characteristics, attitudes are the most conspicuous. Attitudes reveal themselves because they have a quality of being positive or negative. But Shiffman and Kanuk (2007) argue that there can be another aspect of human behavior which is opinion. Consequently, one leads to judgment of another and more often the “two concepts become coterminous” (Shiffman and Kanuk. 2007). It would not be unreasonable to conclude that attitudes have a positive and negative quality and such a quality might be translated into some form of behavior. However, Ali Bassam and Mahmoud (2013) argue that the “abstract construct” of an attitude cannot be measured directly. Therefore it is necessary to find out adequate “indicators” of attitudes. Most methods of attitude measurement are based on the assumption that attitudes can be measured by “opinion, or belief statement” (Steluta and Popescu, 2013).

2.3 Defining attitudes:

Olson and Zanna (1993); Mario and haddock (2012 pp.- 115) noted that “despite the long history of research on attitudes, there is no universal agreed-upon definition” what most theorist agree however that the definition of attitude should have two components

(i) Attitudes are evaluative that people use to make decisions
(ii) Attitudes are the way people behave towards an object; strong feeling that is hard to remove.

“Attitudes are usually represented as being positive or negative, favorable or unfavorable to an object, idea, or other entity” (Foxall, R et al 1998; Ali Bassam Mahmoud, 2013 pp. 36-43) This definition of attitude allows for one's evaluation of attitude towards an object to vary from extremely negative to extremely positive, but admits that people can also be ‘conflicted or ambivalent’ towards an object meaning that they might at different times express both positive and negative attitude toward the same object. This has led to some discussion of whether individual can hold multiple attitudes toward the same object. (Ali Bassam Mahmoud, 2013)
Attitude was defined in (1935) by Allaport ; Steluta and Popescu, (2013, pp.60) as “the mental process by which an individual – based on past experiences and information stored – organizes his perceptions, beliefs and feelings about a particular object and orients his future behavior.”

Most Psychologists and sociologists believe that there are three components to attitude

- A cognitive component: A consumer’s thoughts, beliefs and ideas about the product
- An effective component: A consumer’s emotions and feelings about a particular product or brand
- A conative component: Tendency of the individual to behave and act in a certain manner towards an object.

The idea of attitudes as states of readiness is shown by this definition stated by (Riley1996 and Williams, 2014 pp. -70-79) “a predisposed response to situations, objects, people, and other self-defined areas of life. It has both a perpetual and an affective component. The latter produces a direction in the attitude positive or negative. This in turn can influence the perceptual element.”

Unlike the first definition, this one draws out elements of feeling and evaluation attached to attitude and invests them with the power to influence how we see things. (Williams, 2014)

According to Kotler (2009) “attitude ‘economizes on energy and thought’” they are not easily changeable and lead one to behave in a fairly consistent way towards anything in life. Furthermore, attitude puts people into a frame of mind about liking and disliking things. Bearing these in mind, industries often fit their products “into the existing attitudes rather than to try to change attitudes” (Kotler, 2009, pp. 249)

According to (Perloff, 2003, pp.139) “attitudes are learned, enduring, global and typically emotional and are strongly linked with behavior.” One behaves acts or thinks according to the situation in which one is exposed and according to the knowledge and habits that one has acquired throughout childhood and education. Nothing can change the thoughts acquired.

The key charters of attitude are focus and fixity. In other words, attitude tends to be focused on “object, person, groups, specific behavior, and particular ideas”. (Steluta and Popescu, 2013, pp.60) They can also become fairly fixed over a period of time. Attitudes are closely related to
feelings. Attitude is believed to “live in groups” in some aspects of human behavior they are in a ‘coherent’ way within the self.

Olson and Zanna (1993;) Mario and haddock (2012) have argued that the utility of the whole attitude concept rests on the assumption that attitude predict behaviors. Social attitudes can then be seen as predictors of behavior and changing an attitude is seen as a way of modifying behavior.

**Summary:**

From the above stated definitions in this chapter it is clear and evident that there is no definite definition of attitude that has been stated but (Tomaz and Vesna, 2014) argue that, a distinct and complex definition of attitude is evolving within the literature. A ‘mental readiness to respond and correlate relational consistency’ between attitude and behavior is controversial and is in need of further study and analysis. (Tomaz and Vesna, 2014, pp. 64-65).

### 2.4 Attitude functions:

According to Maier (1965); Maio (2012,pp.78) “attitudes determine meanings, reconcile contradiction, organize facts and select facts”

Many theorists agree with this definition since, Individuals hold attitude for various reasons, these reasons are important to the market when a new product is launched. The function of this attitude helps people make a decision on buying and using a product, hence it is important to know how attitude functions as it will have a telling effect when it comes to making decisions.

But katz, (1960); smith, (1956); haddock (2012, pp.139) psychologist argue that there are four functions to attitude:

- The knowledge function: Gives people the ability to organize information about an object or a thing.
The utilitarian function: Consumers assess a given product or a device and its utility in order to set right their attitude towards that product or device.

The ego-defensive function: Exists in attitudes that serve to protect an individual’s self-esteem.

The value-expression function: Attitude of consumer may express self-concept and opinions about a product

Attitude is about how one behaves or reacts towards ideas, opinion, and product. In many cases attitude can act as a tiger for consumption or purchase behavior. In that way attitude can be defined as a ‘predictor for behavior’ since it predicts certain type of behavior. (Williams, 2014) Despite recent advance in research on attitude functions, key problems still limit progress in understanding attitude functions. One of these problems is the limitation to measure attitude functions. (Steluta and Popescu, 2013)

2.5 Attitudes and behavior:

Attitudes clearly occupy a central position in research on consumer behavior. A clear and demonstrative link between attitude and behavior is not found. (Jie et al 2009)

Among the processes that define consumer behavior, attitude is the one that presents the greatest stability over time. “Attitudes are the result of affective processes and knowledge that create the predisposition to act on convictions.”(Friedkin, 2010, pp.196-213 ) They are an important factor influencing consumer behavior. Some researchers define attitude as a ‘latent dimension’ of consumer behavior. (Terry et al 2008).

Ajzen and Fishbein, (1977); Friedkin, 2010 argued that attitudes are better predictors of behavior. But how attitudes predict behavior is not known but (Jie et al 2009) states that attitude can predict behavior depending on:

- The domain of behavior
- The function of attitude
- The strength of the attitude
The person and situation

Holland et al (2002) agrees with (Jie et al 2009) since Holland et al (2002) noted in his findings that attitude strength followed by the attitude function is a crucial factor in determining a link between attitude and behavior.

2.6 Consumer attitude towards behavior models:

Attitude is often seen as a primary process of consumer behavior. Attitudes influence the consumer on a large. Although there is a demonstrative link between attitude and behavior some researchers claim that attitudes can result from what the consumer has learnt over a period of time about the product, and its effects which can influence the consumer’s attitude on the decisions he/she makes in various stages in the process to purchase an economic good. (Gruber and Schlegelmilch, 2014,) Another school of thought exists where researchers thinks that the consumer’s attitudes are related to their beliefs and perceptions. (Lee, 2009)

In order to illustrate consumer attitude- behavior relations in this chapter the researcher will review theories and consumer attitude towards behavior models:

2.6.1 The theory of reasoned action:

The theory states that a predictor of a person’s behavior is their intention. M. Fishbein and I. Ajzen, (1975); Csillag et al (2012) extended this model by adding three more components to it including behavior, expectancy of what other people might think and “subjective norm” individual beliefs on others views.

The following figure 1 below demonstrates the theory.
Figure 1: Theory of reasoned action;


Fishbein’s (1980); Csillag et al (2012, pp. 546-564) this theory “is based on the integration of the separate evaluations of the salient belief’s, weighted by the strength of each belief, to create an overall evaluations or attitude” while the theory of reasoned action did a ‘commendable job’ in predicting behavior, it became clear that the individuals action will also be influenced by what they feel they can perform the relevant behavior. Fishbein; and Csillag et al (2012) noted that behavioral criteria have almost never been as much subjected to the same previous and rigorous analysis. He argued that such analysis is required to understand the relation between attitudes and behavior. Attitude is fixed with thoughts, behavior and actions. Fishbein’s model (1980); Csillag et al (2012, pp.546-564) Individuals can acquire either beliefs through the direct experience with the product or information from media, internet, advertisement, friends and experiences. (Siegler et al, 2012) noted that this way of evaluating approaches and opinions towards the product influences individuals regarding adoption of attitudes and behavior. Moreover individual’s beliefs define individual’s attitudes towards that object. In that (Southey, 2011) believes that facts, beliefs and intentions compose attitude towards a product.
Bagozzi and Warshow (1990) Steluta, & Popescu,( 2013) argued that though Fishbeins models are frequently tested model of attitude -behavior relations it lacked the objective behavior which is an important component of consumer behavior and hence proposed the trying to consume model which will be discussed later in the chapter.

2.6.2 The theory of planned behavior:

According to this model proposed by Ajzen (1985); Steluta, & Popescu,( 2013) perceived behavioral control is determined by control belief’s. It is an extension of the previous theory discussed in this chapter. This theory states that perceived behavioral control influences behavior in two ways

- Direct effect on behavioral intentions
- Perceived behavioral control direct effect on behavior

What this theory emphasizes most is the influence of intention on behavior. The stronger the intention to engage in a behavior, the more likely it is to occur.

The following figure 2 below demonstrates the theory.

![Theory of planned behavior diagram]

Figure 2: Theory of planned behavior;

Briefly according to the theory of planned action human action is guided by three kinds of considerations; behavioral beliefs, beliefs about expectations of others which is normative beliefs, and control beliefs. According to Ajzen (1985); Steluta, & Popescu, (2013) attitudes and beliefs influence one’s behavior. Therefore intention is the most important determinant of behavior. Intentions in turn are determined by an individual’s attitude towards behavior which is an individual’s overall evaluation of the performing behavior. Furthermore according to theory of planned action one’s self-reported behavior is strongly influenced by ones intentions. Finally given a sufficient degree of control over behavior individuals are expected to carry out their intentions when the opportunity arises. “Intention is thus assumed to be immediate antecedent of behavior” (Ajzen(1985); Steluta, & Popescu,( 2013 pp-66)

2.6.3 The mode model theory:

Russell Fazio (1990); Steluta, & Popescu,( 2013 pp-68) stated that the theory of planned action did not provide the appropriate framework. It lacked the component of spontaneous action which is important in consumer behavior and hence proposed the mode model theory. According to Russell Fazio (1990); Steluta, & Popescu,(2013, pp-68) “MODE refers to Motivation and Opportunity as determents of behavior” it is best characterized as ‘dual- process’ model in which if individuals have sufficient motivation and opportunity, they may base their behavior on a deliberative consideration of their attitudes and other available information. Steluta, & Popescu, (2013) stated that it is clear that attitude accessibility plays an important role in understanding the effects of attitude on spontaneous behavior, this important category of behavior is not explained by any of the other models of attitude behavior relations.

2.6.4 The trying to consume model:

The theory of reasoned action is a widely used framework to understand attitude-behavior relations and to help predict behavior based on attitudes with “subjective norms and intentions”. However empirical research has found that the model does not hold good when applied to
behavioral goals. Consequently many attempts have been made to expand and modify the existing model to increase its explanatory power. One such model is the trying to consume model proposed by Bagozzi and Warshow (1990); Steluta, & Popescu,( 2013)

As mentioned earlier Bagozzi and Warshow (1990); Steluta, & Popescu,( 2013) challenge the Fishbein’s model of reasoned action by stating that the consumers goals play a vital role in behavior the resultant framework will thus encompass goals in addition to reasoned behavior. The theory of trying to consume replaces actual behavior with trying to behave in a certain manner.

The following figure 3 below demonstrates the theory.

![Figure 3: Trying to consume model; Source: Shiffman et al, 2007; Steluta, & Popescu, (2013, pp.68)](image)

According to this model by (Bagozzi and Warshow (1990) the model involves five distinctive components

- Planning and mental effort
- Script
• Instrumental acts
• Physical effort
• commitment

According to the model planning and mental effort represent operational intentions the individual forms with respect to “pursuit of the goal” (Bagozzi and Warshow 1990, pp-226). The script represents a mechanism of monitoring and controlling activities one might need in “pursuit of the goal” (Bagozzi and Warshow 1990, pp-226). Third the instrument acts incorporates various activities directed towards the goal. Fourth the physical effort is the most important part which is the consumer trying and finally the goal. This theory incorporates both mental planning and physical activity of trying

2.6.5 The ABC Model of attitude:

The ABC model of attitude has three distinctive components. (Solomon et al, 2006) In order to measure how attitudes are processed these three components are required to make an accurate link between attitude and behavior. The components are

• Affect
• Behavior
• Cognition
• Affect component

Affect component refers to the way a consumer feels about an attitude object. Behavior component involves the persons intention to do something regard to an attitude object and that intention does not always result in an actual behavior. Cognitive component refers to the beliefs a consumer has about an attitude object. (Solomon et al, 2006) These three components have an effect on attitudes which is explained in the figure 4 below.
The model emphasizes the interrelationship among knowing, feeling and doing. Consumer’s attitude towards a product cannot be determined by simply identifying their beliefs about it. All the three components of attitude are important but their relative importance will vary depending on a consumer’s level of motivation with regard to the attitude object, depending on their use of the electronic cigarettes. (Solomon et al, 2006)

**Summary:**

Through the discussion of various models it is significant that behavior and attitude can be influence by both external factors ad internal factors which is the consumer’s themselves.

In terms of external variables the consumers using electronic cigarettes have a positive or negative belief, opinion and information about the product which they have obtained through external sources like social media, advertising, internet, friends, family, at the work place even public opinion. These factors will be responsible for driving a positive or negative attitude.
towards smoking electronic cigarettes. The theory of reasoned action and planned behavior interpreted the external variables.

In terms of the internal factor which is the consumer themselves. This approach emphasizes on the fact that consumers learn about the product personally, from their experience with using the product. Also their habits from childhood and education can influence their attitudes. The ABC model interpreted the consumer behavior or the internal factor.

2.7 Introduction to Electronic Cigarettes:

The electronic cigarettes are known by various names such as smokeless cigarettes, e-cigs and are been referred to as electronic nicotine delivery systems (World Health Organization, 2009). In 2000, a Chinese pharmacist named Hon Lik invented the modern electronic cigarette, or e-cigarette (Manzoli et al, 2013). While produced mainly in china electronic cigarette use has rapidly proliferated worldwide. In the simplest form an electronic cigarette is a cartridge filled with a nicotine solution or non-nicotine solution and is battery powering a coil that heats the solution into vapor that may be inhaled orally in a manner in which conventional cigarettes are smoked. (Wagener et al, 2012) Typically it looks like a regular cigarette except the tip embedded with a light emitting diode often glows blue instead of red. It is often promoted as a safer alternative to regular cigarettes and marketed as a smoking cessation aid. (Maron, 2014,)

Electronic cigarette may be less harmful than conventional cigarette since they do not burn tobacco and therefore do not deliver the numerous chemicals and toxins found in conventional cigarette smoke (McDonald, 2013,) They have been advertised as a smoking cessation device, a healthier alternative to traditional cigarettes. In spite of these apparently attractive features, very little is known about the health benefits and risks of electronic cigarette (Jennifer Trueland , 2013).

The use of electronic cigarettes has exponentially increased in the past four years since 2009 (Brad et al, 2013) around the world. Google searches for ‘electronic cigarettes’ have increased by “5000% over the past 2 years since 2011, and 21% of UK smokers and 40 % of U.S” (Lotstock,
and Tahan, 2014). Many smokers reported using electronic cigarettes as an aid to quit smoking or to ‘smoke’ in smoke-free places and indoors. Long term smokers see it as a healthier alternative to smoking tobacco cigarettes. On the other hand a study conducted by Etter and Bullen (2011) found that “79 % of electronic cigarette smokers feared that they might relapse to smoking if they stopped using the e-cigarette.” (Etter and Bullen, 2011, pp.104-107).

A survey released by (Polosa et al.,2013) showed that 80% of the people who use electronic cigarettes do so to quit smoking and they see it as less harmful and healthier replacement for traditional cigarettes. But According to Fagan et al, (2013) the electronic cigarettes are a subject of ongoing debate due to the fact that electronic cigarettes lack quality control, it tends to deliver inconsistent levels of nicotine which at higher doses can be lethal, and may not be entirely free of toxins or carcinogens. (Jennifer Trueland, 2013,).

Moreover, the FDA is concerned that e-cigarette use may facilitate tobacco use initiation and increased nicotine addiction among youths and young adults. What has been started as a safer alternative could become an addiction by itself (Choi Kelvin et al, 2013), Much so that the debate has been “fueled by uncertainties” regarding the benefits of electronic cigarettes and its long term effects (Jordan Paradise, 2014) moreover the liberty to smoke electronic cigarettes in public places and logic seems to agree that it is a lot better than inhaling tobacco (Pokhrel et al, 2013).

Although the product has been proposed as a long term substitute for traditional smoking or as a tool for smoking cessation many oppose the recreational use of nicotine because of their safety and efficacy concerns, and about the potential risk of electronic cigarettes to play as a promoters of smoking for never or ex-smokers. (Maron, 2014,) In fact the sale of electronic cigarettes market is subjected to limitations in many countries and it is forbidden in several others. This arouse question of safety, efficacy and health concerns of electronic cigarettes. (McDonald, 2013)

However there is significant quantity of literature but limited number of studies (Annice, 2013) have been undertaken to evaluate the attitudes of smokers towards electronic cigarettes and assess factors that influence them. The scope of these studies was limited to the public health risks. Overall electronic cigarettes are very welcomed into the market and their growth rates have
been astounding this call for regulations and long term study on safety and efficacy of these products.

2.8 Replacement for Tobacco cigarettes:

Tobacco smoking is a global pandemic, affecting more than “1.2 billion” people around the world, which also poses substantial health burdens and costs. Tobacco Smoking is the single most important cause of mortality in the world (Sumner et al 2014) Hence the world health organization and the food and drug administration are considering electronic cigarettes to be a much safer and healthier replacement product to tobacco cigarettes (Brose et al, 2014)

In a research that was undertaken, by (Cummins et al 2013) found out that most current smokers reported that electronic cigarette helped them to reduce smoking tobacco cigarettes and most former smokers said it helped them quit smoking. Most ever users said it was easy to abstain from smoking while using electronic cigarettes and that most users were willing to recommend it to a friend with high degree of satisfaction. Electronic cigarettes are perceived by smokers as satisfactory, useful, and efficacious (Adkins et al 2014). On the other hand a good number of smokers did not like electronic cigarettes and felt the urge to smoke tobacco cigarette while using electronic cigarette. (Cummins et al 2013).
This graph above in figure 5 shows the percentage of people in the USA smoking electronic cigarette, in the year 2010 only 5% of the people were smoking them with a gradual increase in the following years in 2014 the percentage has gone up to 20% from 5% in 2010. This explains the changing of attitude of the people towards electronic cigarettes in the past four.” Furthermore, 2014 estimates suggest the market will be worth over $2bn.”(Marketline, 2014)

Figure 5: percentage of electronic cigarette smokers

Source: (Marketline, 2014 pp -20)
Figure 6: Usage and interest in electronic cigarettes by age


From figure 6 above shows electronic cigarette use was found commonly in the age group between 20-55, although this is a wide range the users of age group between 20-25 are not regular users, it is the older age group between 25-55 who most frequently use electronic cigarettes (Hajek et al 2013). Electronic cigarettes are being used by both males and females, although the male ratio is higher than that of females smoking electronic cigarettes. It was found that age groups between 35-55 years old used or considered electronic cigarettes as a replacement for tobacco and as a healthier alternative to tobacco (Hajek et al 2013). According to Gervais et al (2013) Electronic cigarettes were used largely by former smokers than current smokers of tobacco cigarettes as an aid to quit smoking, to avoid relapse and to deal with withdrawal symptoms, much of the people use electronic cigarettes as a replacement therapy. Despite The lack of firm evidence regarding safety or effectiveness, electronic cigarettes appear to have become cessation aid of choice for some smokers who appear to show a relatively higher motivation to quit smoking (Bayer et al, 2014). Thus it is appropriate to develop long term research to provide adequate data.

A study conducted by Emily, (2013) shows the usage and interest towards electronic cigarette by age, among people who would be interested in quitting smoking. As seen in the graph below 33
% of the people have tried or are interested to quit smoking as per the study. The age group 45-54 was found to be the age group that most likely will be interested in using electronic cigarette to quit smoking.

Electronic cigarettes in smoke-free places were considered one of the reasons for people who smoke tobacco cigarettes to have tried electronic cigarettes so that they could smoke indoors and that they were perceived to be less toxic however the safety and toxicity of electronic cigarette is questionable with very few longitudinal studies yet to be undertaken. (McNeill et al, 2013)

Another profound reason to have smoked or tried electronic cigarettes is their cost effectiveness over tobacco cigarettes.

In the USA a daily user spent “$33 per month” on an average for electronic cigarettes which is much cheaper than smoking one pack of tobacco cigarettes a day which costs “$150- 200 a month” (Cummins et al 2013) This is also substantially cheaper than smoking cessation medications which the recommended dose would cost the same as tobacco cigarettes for a month. Thus an important reason for the popularity for electronic cigarettes is most probably their price (Trumbo, and Harper, 2013).

The food and drug administration maintained that most electronic cigarettes lack quality control; tend to deliver inconsistent level of nicotine and may not be entirely toxin free (Fagerstrom and Bridgman, 2014). Moreover electronic cigarette use may facilitate tobacco use initiation and increased nicotine addiction (Foster et al 2014). However recently researchers have drawn attention to the promising aspects of electronic cigarettes as a cessation or harm reduction device. (Bayer et al, 2014)

Many questions remain unanswered as to, are electronic cigarettes safe, are they addictive, who uses them, why and how are they effective foe smoking cessation reduction (Adkins et al 2014) Also unanswered are the questions about their wider impact of are they used by young non-smokers, could they be a gateway to tobacco use or nicotine dependence, and could their use in public places undermine smoke-free laws (McNeill et al, 2013).

Summary:
The current attitude towards electronic cigarette from the above literature is that electronic cigarettes are seen as a healthier cost effective replacement for tobacco cigarettes. Despite the gaps in our knowledge, there are no reliable source of electronic cigarettes awareness, utilization, and safety or harm perceptions (Foster et al 2014) Whether electronic cigarette deserve consideration as a replacement for tobacco cigarettes is a subject of ongoing debate, with much of the debate being “fuelled by uncertainties” (Fagerstrom and Bridgman, 2014) regarding public health risks and benefits of electronic cigarette use.

2.9 Industry overview of electronic cigarette:

There is a high expectation that the electronic cigarette market may eventually come to replace the tobacco industry, (Marketline, 2014) providing a new area of growth for some parts of the industry. International tobacco companies are aware of the potential gains they could stand to make in this area and some of the largest have made moves to protect themselves from and invest in this emerging market. But some analysts argue that once regulations come into act this industry will be on the rocks. (Marketline, 2014)

The strict regulations of tobacco cigarette make it easier for the electronic cigarette market. (Mintel, 2014) Both the USA and UK markets completely exploded in 2013, moving from a potential area of growth to a real opportunity, and this growth does not look likely to stop any time soon if current regulation remains unaltered or at least moderate in comparison to tobacco regulation.(Marketline, 2014)

2.9.1 Market growth of electronic cigarette:

The electronic cigarette and the tobacco industry are inextricably linked as future electronic cigarette users are likely to be drawn directly from the tobacco industry. (Don Headly, 2013) The tobacco industry is facing a difficult time currently as governments continues to restrict their business with legislations and the growing electronic cigarette market pose a greater threat. This
is helping to boost the electronic cigarette market as consumers become put off by high costs. (Marketline, 2014) Although there is no current electronic cigarette market leader due to the newness, limited market research and long term regulations. New players are emerging and some of the big tobacco giants are not going to miss this big opportunity. (Shane MacGuill, 2013)

Although the cost and regulations make it easy for electronic cigarettes currently in the long run the industry is expected to be put through the same trail as the tobacco, it is very unlikely then if the cost and sales of electronic cigarettes will remain the same or the industry will debacle. (Mintel, 2014).

Graph showing booming growth of electronic cigarette and top three electronic cigarette markets in 2011 in (Appendix 3)

2.9.2 USA and UK markets:

2011:

In 2011 retail electronic cigarette sales in the “United States reached “$500 million,” according to some recent studies industrial experts say that the sales of electronic cigarette was expected to reach “$1 billion in 2013”. (Euromonitor, 2012)

2012:

The electronic cigarette market has been exploding over the past few years, reaching an estimated “$500 million during 2012 in USA an expected $1 billion by the end of 2013” and it is expected to achieve a similar growth in European countries. (Don Headly, 2013).

2013:

The e-cigarette market has grown from “$300 million in retail sales in the U.S. last year to an estimated $1.8 billion in 2013,” according to “Bonnie Herzog, senior analyst at Wells Fargo”. But much of their early success comes thanks to their near complete freedom from regulation. “Growth is exponential and there are no signs it’s slowing down” Katherine Devlin, president of London based Electronic cigarette Industry Trade Association told New York Times (WARC, 2013 pp. 4)
“Wells Fargo’s Herzog estimates electronic cigarettes retail sales in the U.S. could exceed $10 billion by 2017”, higher than the roughly 40% margins for conventional cigarettes today. The potential for this market is huge. (WARC, 2013 pp. 4)

This mass exploding of electronic cigarettes has taken place in the past four years it is only because they have been heavily supported in the media and advertising as a healthier alternative, internet sales, roles models smoking them, to add to this there is no tax and regulation to stop this industry from further growth.

2.9.3 China and electronic cigarette:

It all started here in China where they were first manufactured and sold, ‘still 95 % of the electronic cigarettes today are being produced in China. Although China being the largest producer the number of people smoking electronic cigarettes is much lower than the west. (Marketline, 2012) The reasons to this is unknown however some analyst say it could be because of the social stigma attached to it or the fact that people do not know much about electronic cigarettes effects in the long run. (Shane MacGuill, 2013) More over the culture differences across the world also seem to play a role in it since the majority of smokers in china are men and they have the habit of sharing a cigarette to smoke and this might not be possible with electronic cigarettes. (Marketline, 2012)

2.9.4 Tobacco companies in electronic cigarette market:

Big tobacco companies like British American Tobacco, Phillip, and Lorillard are eyeing this as a great opportunity for the future as they see the growth and potential of this new industry. (Marketline, 2014). The tobacco companies are starting to manufacture electronic cigarettes, as expensive lawsuits and regulations are impinging on their revenues considering this as an opportunity to make an alternative source for revenue and to diversify. However they do recognize the future threat and this time they are likely playing it safe. (Don Headly, 2013)
There is some speculation in the media as to why the big tobacco companies are getting involved in the electronic cigarette market. (Shane MacGuill, 2013) Some argue that the companies are doing so to prevent any further competition. Moreover with tight regulation of tobacco market and increased health awareness have decreased the sales volume of tobacco and new sources of revenue are being sort after. (Don Headly, 2013) The business case for these moves is to counter the negative element about tobacco in the society, media and the government regulations. (Marketline, 2013)

2.9.5 Regulations of electronic cigarettes:

One of the biggest problems the electronic cigarette industry will encounter in the future is the regulations. (Don Headly, 2013) The product is yet to be licensed by the food and drug administration in the USA and the medicines and healthcare regulatory in the UK. The industry remains in a state of high anxiety as to how it is going to be treated by the legislature particularly in the US accounting for probably just under half of world electronic cigarette sales; this could set the tone for the global industry. (Shane MacGuill, 2013)

Some studies conducted on electronic cigarettes did not prove the electronic cigarette liquids completely toxic free; most of the doctors do not give a banned advice on the product, according to some doctors inhaling the chemicals from e-liquid could be far worse than tobacco and fatal in the long term use. (Marketline, 2014) On the other hand some argue conversely that electronic cigarettes can be the ultimate alternative to tobacco it can be a life saver, even if it was not safe it wouldn’t be as harmful as tobacco smoking. Electronic cigarettes can break through if the products receive license. (Don Headly, 2013)

Summary:

There are high possibilities that the electronic cigarette market will be a big game changer and a globally renowned international industry. (Emily Krol, 2013) However not in its current state
says (Don Headly, 2013). The current products are too ‘niche’ and very many varieties and flavors to choose from it is not appealing to the mass audience. While the fact that consumers can mix their own electronic flavored liquids and choose from a wide range of designs does not mean that there is plenty of choice available to the consumers, it prevents an easier and simpler alternative from being produced that would appeal to less specialized markets and more to the mass markets. (Shane MacGuill, 2013)

From the above chapter it is clear that the electronic cigarette industry has had a tremendous growth in a short span of time. This has been possible only because of the factors responsible for installing a positive attitude towards electronic cigarettes creating much of its growth among consumers, factors responsible to have made an impact on the attitudes will be discussed below.

2.10 Factors influencing attitude towards electronic cigarettes:

2.10.1 Social media:

Internet

The internet has explicitly created a hype about electronic cigarettes, making it available for sale online and with the government not imposing strict legislation on electronic cigarettes, anyone can buy them online this means youngsters below the legal age of smoking are buying electronic cigarettes online and have indulged in smoking which is a serious amplifying issue caused by the internet sales of electronic cigarettes. (Shane MacGuill, 2013) But disagreeing to this some critics say that youngsters who want to try them will do so even if it is not sold on the internet. (Emily Krol, 2013) But some analysts argue that if not for the sale on the internet it wouldn’t give them an opportunity and accessibility to purchase electronic cigarettes. In the past four years electronic cigarettes have flooded the internet to such an extent that they have being called internet cigarettes, since one can buy them online and have it shipped to their place. (Euromonitor, 2012). However Internet has been the rich source of knowledge where consumers are learning about this new product, their attitudes and behavior will be affected by information process in what they observe and learn.
The graph above in figure 7 is from a study conducted by Lotstock and Tahan (2014,) from this study it is clearly evident that the internet sales of cigarettes is the highest contributing to 29.9% of the total sales of electronic cigarettes. This shows people prefer buying electronic cigarettes online. The internet has had stupendous influence on instilling a positive attitude among people towards electronic cigarette.

2.10.2 Advertisement:

Electronic cigarettes are smoked by famous celebrities is likely to give the sector a further boost and advertised during the Super Bowl and the Oscars (Shane MacGuill, 2013) Electronic cigarette advertisements and the celebrities that frequent them have emphasized to be able to smoke them anywhere. Some distributors also advertise their products as ecofriendly as they do not emit secondary smoke. The accuracy of these claims is “unclear and contested” (Marketline, 2014)

On the contrary analyst argue that electronic cigarettes are doing just what the big tobacco industry did earlier they are glamorizing smoking with advertisement’s for a product whose safety and other factors are unknown and for which research is ongoing, advertisements are re-glamorizing the act of smoking (Marketline,2013)
Since advertisements have a major role in people's attitude building and behavior, it is important what is being given out in the advertisement. These advertisements are influencing individual's attitude towards electronic cigarettes and changing the behavior of the people towards the product. The fact on how these advertisements affect attitudes and in turn the individual's behavior is explained in the models below.

2.10.3 Modeling attitudes towards advertising:

To understand the impact of advertisement on human attitudes and behavior and the formation of consumer attitude towards certain products or brands, Lutz (1985); Shiffman (2007), defined attitude towards advertisements as “predisposition to respond in a favorable or unfavorable manner to a particular advertisement during a particular exposure occasion” this gave rise to a number of models and the perception of advertisement model is the most used. This model in figure 8 below explains the advertisement and the involvement of the consumer or viewer.

Figure 8: Modeling attitudes towards advertising. Source: (Uta, and Popescu, 2013, pp-70)
According to this model the consumer creates various feelings and judgments as a result of exposure to an advertisement. These feelings and judgment affects the consumer’s attitudes to the advertisement and his/her beliefs about the brand. Eventually the consumer’s attitude towards advertising and beliefs about the brand will influence the attitude towards the brand. Hence a strong relationship between attitude towards advertisement and the actual product use intention is formed. (Shiffman 2007),

2.10.4 Elaboration likelihood model:

In order to understand the shaping of attitudes towards advertisement the elaboration likelihood model was put forward by (Petty et al, 1983; Uta, and Popescu, 2013). According to this model “attitude formation or change depends on the nature and intensity of processing relevant information in a process that takes place in response to a persuasive content.”(Petty et al, 1983; Uta, and Popescu, 2013). The model is characterized in figure 9 below:

![Elaboration likelihood model](image)

Figure 9: Elaboration likelihood model. Source: (Uta, and Popescu, 2013, pp-71)

There are two routes discussed in elaboration likelihood model:
1. Central route: in this the consumer is actively engaged in the communication process as with a high degree of motivation and ability to receive, understand and evaluate the content in the advertisement, depending on the quality of the argument the “cognitive processing” takes place this can result in the advertisement transformation into positive or negative attitudes and persuasion is achieved. Attitudes become resistant and cannot be changed. (Petty et al, 1983; Uta, and Popescu, 2013)

2. Peripheral route: The consumer does not have the necessary motivation towards the advertisement and the ability to process them and is not willing to engage in “cognitive behavior”. Evaluating the information in the advertisement considering only the peripheral factors in which he/she can accept the advertisement or reject it. (Petty et al, 1983; Uta, and Popescu, 2013)

2.10.5 Peer Influence:

The influence of peers on attitudes towards smoking is well known, like advertising peer pressure in the form of groups or individuals exert influence over the evaluation, beliefs and behavior of another. The reason why this happens is because peers are considered comparison for “self- appraisal and a source of personal norms, attitudes, and values.” (Wanner et al 2009). It is wistful that more youngsters and children are often influenced by peer pressure into smoking at a very young age.

This influence of peer extending into smoking is often guided by perceptions, beliefs and behavior of the others. It is noted that influence of peer and parental influence in smoking is important in adolescents as they are more susceptible to peer influence than anyone else. (Reinhard et al, 2013)

The selection model and the socialization model explain peer-pressure attitude towards smoking.

2.10.6 Selection model:
This model explains that association with two components affiliation with peers and social preference leads to smoking at a very young age due to the strong influence of these two components on their behavior. (Botella et al, 2013). The figure 10 below explains the theory:

![Selection model](image)

**Figure 10: Selection model. Source:** (Botella et al 2013, pp-60)

2.10.7 Socialization model:

This model is a modification of selection model. In this model the link between disruptive behavior and smoking are interposed entirely by affiliation with disruptive peers and social preference. According to this model when there is rejection among peer due to not involving in certain activities eventually in order to compensate this pressure and rejection from peer and society the individual indulges in activates such as smoking. (Botella et al 2013). The figure 11 below demonstrates the theory.
The above mentioned factors have a strong influence on attitude towards electronic cigarettes. Studies show that smoking may be predicted by individual characteristics assessed early in life. Individuals may also be based on attitudinal influences towards a product. A person may or may not behave in ways that are constituent with their attitudes due to external factors like peer-pressure and social media. Hence behavior towards a certain product can also be triggered by external factors mentioned above in this chapter.

2.11 Conclusion:

(Preloaf, 2003) noted that attitude is a learned process which are strongly linked to behavior. Attitude is formed as a result of learning process, as a result of the influence of external and internal factors like social media, friends, family and experiences or through the use of a product. Once formed it is hard to be influenced and harder to be changed. This is made use of by big companies in selling their products through advertising, and social media. Thus attitude in turn influences decision making (Haddock, 2009). Although decision making in buying products and using them also involves perception, information, learning, motivation and actual behavior attitudes imply to play a central role in the process. The way people approach a product whether they like it or not whether they want to purchase or not is driven by the attitude process that influences their behavior through social pressures and other internal and external factors (Smith et al, 2008). Thus there is a clear and demonstrative link between attitude and behavior towards a
product. In order to understand and explore the views and attitude towards electronic cigarettes all the models presented in the literature review chapter offer different perspectives on attitude formation, change and impact on actual behavior.

Taken together, these data form the literature review, it demonstrate the need for further studies on electronic cigarettes and detailed health evaluations of their users so that appropriate regulations and ‘manufacturing practices’ are implemented to protect human health. Whether user experience and ‘device characteristics’ influence electronic cigarette nicotine delivery is uncertain (Trueland, 2013). Moreover people report buying electronic cigarettes to help quit smoking, to reduce cigarette consumption, to relive tobacco withdrawal symptoms, due to work place restrictions to smoke indoors, and to continue to have smoke experience with reduced health risks (Farsalinos et al, 2014). As a matter of fact electronic cigarette is becoming a “social phenomenon of global proportion”, this calls for research, legislation and product development (Pearson et al, 2012). While electronic cigarettes are forbidden in several countries, their sales are exploding in many others as seen in chapter 2.9. “The utility to induce traditional smoking reduction” or cessation are strongly needed and will be of at most importance to form the basis for electronic cigarettes, this may prove a promising solution for reduction of the health damages associated with conventional cigarettes (Trueland, 2013).

2.12 Limitations:

To date only 12 studies were started evaluating the acceptability, safety and efficacy of electronic cigarettes containing nicotine. Out of which 7 were completed and only 4 were published. There is no data available on long-term efficacy and safety and most importantly no ongoing study has been designed to collect data on hard outcomes over a long follow up (Reed, 2014).

Likewise there is very limited research and literature in specific areas of attitudes and behavior of the consumer towards electronic cigarettes. The author had to look into other fields like tobacco smoking to get information.
Absence of longitudinal research data on the product and unknown facts about its benefits and long term use arise questions in the minds of the consumer this calls for further research.

The vast majority of the literature relates to tobacco cigarettes and smoking since this is a recent trend and phenomenon there is a distinct absence of empirical research on attitude towards electronic cigarettes.

3. Methodology

3.1 Methodology Introduction

This chapter discusses the methodology used in order to answer the research questions. According to Saunders et al (2012) methodology is a review that provides amalgamation of existing knowledge on the research questions based on assessments of all relevant data that can be found. But Paivi and Anne, (2008) stated that research question represents breakdown of problems in the research to achieve an end result.

This research aims to explore attitudes towards electronic cigarettes among smokers and for this purpose the following research questions were considered necessary.

*Research question:*

- What are smoker’s attitudes towards electronic cigarettes?

*Sub-questions:*

- Is electronic cigarette a replacement for traditional cigarette?
- Has the cost effectiveness over regular cigarettes caused more people to use electronic cigarettes?
- Are people switching over to electronic cigarettes considering their less harmful effects over tobacco?
In order to answer the research questions effectively it is critical to define the research objectives. (Saunders et al, 2009)

*Main objective*

- To explore the attitudes towards electronic cigarettes among smokers.

*Sub-objectives:*

- To define attitudes and behavior and identify the linkage between these two variables
- To analyze consumer attitude towards electronic cigarette as a replacement for tobacco cigarettes
- To determine the impact of cost factor on attitude towards electronic cigarettes
- To discover if electronic cigarettes perceived as less harmful than tobacco cigarettes has led to a more positive attitude among smokers.

The first part of this chapter, the research design, will determine a general plan of how this research will go about answering the research question. Afterwards it will be discussed how the data collection process occurs and why focus group discussion method will be used as a research strategy to collect primary data. Moreover, the data analysis procedures are presented and the usage of approaches and instruments required for conducting the study are listed. Lastly limitations and obstacles of this research will be examined.

Methodology is defined by Saunders et al, (2009) as the way the knowledge is gained, how theories are generated and tested, and the relationship between theoretical perspectives and research problem. It refers to the procedural framework within the research is conducted. There are many ways by which the researcher can carry out their research. In order for the research to be reliable, valid and credible, the research will use the “Research Onion” framework (Saunders et al, 2012, pp.128) and will define area of the research method. In the figure 12 below shows the “Research Onion” framework.
3.2 Research Design

3.2.1 Research Philosophy

According to Saunders et al (2006) research philosophy selected by the researcher depending on the way the researcher thinks about the development of knowledge. The first layer of the onion represents philosophy in the figure above. Saunders et al (2009) stated that no one research philosophy is better than another. Different research approaches can be followed by the researcher depending on the questions the author needs to answer. Saunders et al (2009) also pointed out that research rarely falls into a specific approach. The author must carefully examine the research objectives in order to find a suitable research philosophy.
According to Saunders et al (2012), research philosophy refers to the development of knowledge and the nature of knowledge. They examine three ways of thinking about research philosophy: epistemology, ontology and axiology. Each contains important difference which influence the way in which the researcher will think about the research process.

Ontology is the nature of reality in which questions about general assumptions on the way the world functions (Saunders et al 2012). The two stand points of ontology are objectivism and subjectivism. Objectivism deals with realities independent of external social influences. On the other hand subjectivism deals with how the world is perceived by people and the way they think which may or may not change by time (Hair et al, 2003). Also subjectivism which according to Saunders et al (2009) in ontology allows the researcher to seek the knowledge and theories from social factors mainly those naturally associated with interpretivism.

Therefore the focus of the present research relies on exploring consumer attitudes and perception it is not a scientific experience and therefor does not involve the concept of objectivity hence it will rely on subjectivism.

As much of qualitative research focuses on how people as individual or as a group interpret social events, Interpretivism is an epistemology that acknowledges the differences between humans and their role in the society. Interpretivism is defined as the “the recognition that subjective meaning play a crucial role in the social actions” (Saunders et al 2009, pp-137). Hari et al (2003) pointed out that in contradiction to positivism which is based on objectivity; interpretivism relies on subjectivity that suggests the need to understand the true reality of the situation is at the heart of interpretivism. It has its origin in “phenomenology, constructivism and symbolic interactionism. Phenomenology refers to the manner in which people view the world around them. Eriksson and Kovalainen, (2008) suggested that as for symbolic interaction phenomenology invokes the permanent process of evaluating the social world by the individual.

Interpretivism is most suited for researches that assess subjective perceptions on performance, experiences and where the research is being conducted in the field to investigate human expectations. The challenge here will be to capture the subjective view of the world perceived by the participants and it is very appropriate for business research, organizational behavior, marketing and human resource management. This is the most suitable research philosophy for
this topic since the researcher is exploring attitudes, perceptions, expectations and the ways in which the consumer views the product. The views concerning electronic cigarettes will be subjective and the data will be interpreted.

3.2.2 Research Approach

The second layer of the onion is the research approach in which there are three approaches the deductive, inductive and abductive approach (Saunders et al 2012).

**Deductive approach:**

Saunders et al (2009) states that the deductive research approach involves developing a theory that is subjected to a rigorous test. Researchers thought path goes from the specific to general and a hypothesis is formed. The current research cannot be based on this approach as it begins with deducing hypothesis which leads to testing the hypothesis and then examining the specific outcome. This cannot be applied to exploratory studies which are more subjective.

**Inductive approach:**

According to Saunders et al (2012) Inductive research involves moving from individual observations to statements of general patterns. It is concerned with examining the context in which the findings took place where the researcher plays an active part in the research. In contrast to deductive approach the inductive approach is based on subjectivity or thought which turns a simple observation into a general theory Hair et al, (2003) adds that inductive approach is about gaining an understanding of the meanings people attach to events and allows a more flexible structure or research to occur.

Eriksson and Kovalainen, (2008) argued that unlike deductive approach there is no verification of theory but a building of one through observation and exploration of a phenomenon.
research approach most suited for this research is inductive approach, since the objective of this research is to explore attitudes of smokers towards electronic cigarettes which involve logical reasoning and the conclusion is based on observations.

*Abductive approach:*

The abductive approach is a combination of both inductive and deductive approaches. Saunders et al (2012) stated that this theory is derived from the conclusion and a set of premises that is considered enough to explain the conclusion is outlined. Furthermore the conclusions are tested by the premise which is derived from them. This method is not suitable for this research since this is not to determine smokers attitudes based on an already know fact.

The table 1 below explains the differences between the three approaches:

<table>
<thead>
<tr>
<th>Logic</th>
<th>Deduction</th>
<th>Induction</th>
<th>Abduction</th>
</tr>
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<tbody>
<tr>
<td>In a deductive inference,</td>
<td>In an inductive inference, known premises are used to generate testable</td>
<td>In an inductive inference, known premises are used to generate testable</td>
<td>In an abductive inference, known</td>
</tr>
<tr>
<td>when the premises are</td>
<td>conclusions</td>
<td>conclusions</td>
<td>premises are used to generate testable conclusions</td>
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<tr>
<td>true, the conclusion</td>
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<td>must also be true</td>
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<table>
<thead>
<tr>
<th>Generalisability</th>
<th>Generalising from the general to the specific</th>
<th>Generalising from the specific to the general</th>
<th>Generalising from the interactions between the specific and the general</th>
</tr>
</thead>
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| Use of data                | Data collection is used to evaluate propositions or hypotheses related to | Data collection is used to explore a phenomenon, identify themes and     | Data collection is used to explore a phenomenon, identify themes and     |
|----------------------------| an existing theory                                                      | patterns and create a conceptual framework                              | patterns and create a conceptual framework                              |
|----------------------------|                                                                          |                                                                          |                                                                          |

| Theory                     | Theory falsification or verification                                     | Theory generation and building                                           | Theory generation or modification; incorporating existing theory         |
|----------------------------|                                                                         |                                                                          |   where appropriate, to build new theory or modify existing theory      |

*Table 1: Research Approaches; Source (Saunders et al, 2012,pp-144)*

3.2.3 Research Strategy
The research strategy represents the third layer of the research onion. The research strategy is critical and has to be chosen according to a set of variables such as the research questions and objectives or the time allocated to the research. According to Saunders et al (2009), the choice or research strategy should be guided by the research question, the objectives, research philosophy, time, facts obtained from primary research and other resources.

After comparing and considering different strategies the researcher has decided that the survey strategy is the best suited for this research. Survey strategy gives the researcher more control over the research process which allows to show different parameters. This control over the research gives versatility and this also compliments the research philosophy and research approach. The survey strategy is consistent with this research as it is widely used to assess attitudes and characteristics of a wide range of subjects, and therefore popular with consumer or end-user studies and tends to be used for descriptive and exploratory purposes.

Hair et al (2003) tell us that this strategy uses questions like “what, who, where, how much, how many” which are essential to answer the research questions. This strategy also allows the researcher to collect data and other valuable information in a limited time span; moreover the data can be collected with minimum cost as well, although the analyzing of the data is time consuming it is unlikely to be as wide ranging as the data collected using other strategy methods.

3.2.4 Research choice:

Research choice represents the fourth layer of the research onion.

In conducting primary research a key issue is whether to use qualitative or quantitative methods or a mixed method of a combination of both. Quantitative and qualitative methods are not exclusive but complementary tools for conducting research. Saunders et al (2012) cited that no one method is better than the other or more useful it depends on the specific research in question and suitability. According to Hair et al (2003) qualitative research refers to the meaning, while quantitate research refers to a measure of it.

Figure 13 below shows the different methods in choice of doing research
The researcher for this study has opted to use qualitative analysis which according to Saunders et al, (2012) is a mono method approach.

**Qualitative:**

The research method of choice for this research is qualitative method. This design choice is associated with interpretive philosophy and inductive approach. Eriksson and Kovalainen, (2008) stated that this method of research is used to identify and refine research problems. The collection of data is not standardized as in the case of quantitative approach. As this research is dealing with smokers attitudes it is not possible to assume anything because qualitative methods are less structured and the researcher is more likely to obtain unexpected information through exploratory type of study. Hair et al (2003) suggest that qualitative research is useful for exploring the emotional nature of attitudes, motivations and decision-making. Moreover qualitative research is used for documenting the psycho graphic profiles of consumers.

According to Saunders et al (2012) there are various methods of qualitative research used they are as follows

- In depth interviews
- Focus groups
- Interviews
- Mini groups
- Accompanied interviews
- Reconvened groups
- Workshops

For this research study the research of choice is focus group as stated in this chapter earlier it is the most suited choice for exploratory studies.

**Quantitative:**

Quantitative research is associated with positivism and deductive approach in which it uses a very structured data collection technique unlike qualitative approach. Quantitative approach is more effective while doing large number of samples to reduce data that are statistically reliable. Quantitative approach is designed to ensure objectivity and reliability. It incorporates the statistical element designed to quantify the target group. Conclusions drawn from quantitative data are limited by parameters of the data (Cooper and Schindler, 2008).

Differences between qualitative and quantitative approach that helped the researcher rationalize the choice for qualitative study in the table 2 below.
Quantitative analysis | Qualitative analysis
---|---
- Data is standardized and well structured | - Data is non-standardized and semi-structured or unstructured
- Objective | - Subjective
- Closed minded | - Open minded questions e.g. focus group
- Restricted | - Flexible
- Research driven | - Respondent driven
- Meaning is derived from numbers | - Meaning is expressed through words
- Statistical analysis using charts and statistics. | - Organizing non numerical data rich in meaning

Table 2: Research Choice

3.2.5 Time horizon:

Time horizon is the fifth layer of the research onion. There are two categories of time horizons. They are longitudinal and cross sectional. For this research the best suited is cross-sectional as the aim of this research is to capture attitudes of the consumers at a given point in time.

Cross-sectional:

According to Saunders et al (2009) cross-sectional studies are carried out in a stipulated point in time. In most descriptive studies the data are collected in a single point in time and analyzed. These types of studies provide cross-sectional data. Hair et al (2003) pointed out that the key elements to these studies are Data must be collected form more than one case, data collected on the variables are collected more or less simultaneously, to detect the variation there must be a
systematic and standardized method, and it is only possible to examine relationships between variables. This type of study is more useful for short term research. The aim of this study is to capture the attitude of the smokers at a given time so it is therefore a cross-sectional study.

**Longitudinal:**

Longitudinal studies collect data and events that occur over a time, it is more commonly used in doctoral studies. Unlike cross sectional studies the data for longitudinal studies has to be collected from the same sample in multiple points in time (Eriksson and Kovalainen, 2008). Saunders et al (2012) suggest that longitudinal studies are characterized by the study of change and development in the study subject. Due to time constrains the master studies do not lend to this category of longitudinal study.

Since this research was carried out in a particular time and phenomenon, the time horizon for this research will be cross-sectional rather than longitudinal as the objectives of this study are to explore attitudes of smokers towards electronic cigarettes, the focus group for this research purpose was carried out in a given time and date.

In table 3 below summarizes the research design with the researcher choices of methods opted for this study.

<table>
<thead>
<tr>
<th>Research design</th>
<th>methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research philosophy</td>
<td>Interpretivism and subjectivism</td>
</tr>
<tr>
<td>Research approach</td>
<td>Inductive approach</td>
</tr>
<tr>
<td>Research strategy</td>
<td>Survey strategy</td>
</tr>
<tr>
<td>Research choice</td>
<td>Qualitative study</td>
</tr>
<tr>
<td>Time horizon</td>
<td>Cross-section</td>
</tr>
</tbody>
</table>

*Table 3: Research Design*
3.3 Sampling method:

According to Saunders et al (2012) sampling is another vital aspect of research it is used to identify and obtain participants. Sampling allows the researcher to collect accurate and helpful information. It is an alternative to census, it helps providing a manageable size to collect the data from.

Figure 14 below showing different sampling methods.

![Sampling methods diagram]

**Figure 14: Sampling Methods. Source : (Saunders et al 2012, pp- 261)**

Important concepts of sampling are population, sample and unit, very often sample and population are confused with one another. (Saunders et al, 2009)

- Population: the group of people the researcher is interested in
- Sample: A small subset of this group used for research
- Unit: An individual in the population or sample.
According to Joseph et al (2003, pp. 209) there are several steps when selecting a sample for research, each of these steps are important and essential in the sampling process. They are as follows

- Defining the target population
- Choosing the sample framework
- Selecting sampling method
- Determining the sample size
- Implementing the sample plan

3.3.1 Target population

Saunders et al (2006) stated that the population is a set of cases from which a sample is taken. According to Cooper and Schindler (2008) the population is a total collection of elements about which the researcher wishes to make assumptions an element is the subject on which the measurements are being taken. The aim and the objective of the research are critical in defining the target population.

The population for the focus group under study was divided into two groups.

*Group: 1*

The population for this group was candidates from Ireland who are smoking electronic cigarettes for the past six months or more and who were previous smokers of tobacco cigarettes between the age group of 27-55 years old, with the ratio of men being higher than women. The reasons for choosing this age group and with a higher ratio due to the reason that most smokers who used electronic cigarettes were in this age group and had a male predilection according to the secondary data analysis done through literature review (Etter and Bullen, 2011). Focus group one took place on 19/07/2014 from 11:00 am -12:30 pm.

*Group 2:*
The population for this group were candidates from Ireland who in the past three years have been smoking regular tobacco cigarettes who consumed on average at least minimum 3 cigarettes per day and who at some point have tried smoking electronic cigarettes or who in the future would be interested to do so. Age group between 25-50, with equal ratio of males and females were selected for this group. Focus group two took place on 01/08/2014 from 11:00 am -12:00pm

The focus group had to contain a minimum of five and a maximum of ten not more or less according to Eriksson and Kovalainen, (2008). Group one had seven participants and group two had six participants. Candidates who are able to speak fluent English and self-identified as smokers were included in the focus group. Hence the focus group will be mixed in the nature for the simple reason to explore and gain more out of the discussion which can be achieved through a mixed group due to different viewpoints and experiences put forward.

3.3.2 Sample frame:

Sampling frame is essential as it provide information on the target population. Since this research is using the quota method of sampling, this technique does not require a sample frame. In fact this is the only technique that does not require a sample frame as the population used can be large (Saunders et al, 2012).

3.3.3 Sampling method:

A number of factors are to be considered while selecting a sampling method such as nature of the study, objectives of the research, budget, and time. There are two main styles of sampling probability and non-probability sampling (Hair et al, 2003).

Probability sampling:

Probability sampling is associated with survey type of strategy. In this technique the researcher will estimate statistically the characteristic of the sample to the whole population. There are different methods used which are as follows given by Hair et al, (2003)

- Simple random sampling
- Stratified sampling
- Systemic sampling
- Cluster sampling
- Multi-stage sampling

This method of sampling is more suited for quantitative study where the target size of the population is large and it is more generalized. Hence for this research non-probability is the sampling method of choice.

**Non-probability sampling:**

In this method the sample is selected according to the convenience or assess to the participants unlike probability where the sample is selected according to logic of probability. It is commonly used with qualitative analysis. Cooper and Schindler, (2008) It is difficult to draw conclusions about the population often occurs when probability sampling is not possible and in exploratory research. Hence this method is the sampling method of choice since the study objective is exploratory in nature. Types of non-probability sampling are given by Hair et al, (2003) which are

- Quota sampling
- Judgment sampling
- Convenience sampling
- Snowball or referral sampling

The type of non-probability sampling used for this research is quota sampling. This is similar to stratified random sampling. The population is divided into strata and the researcher selects a pre-defined quota of each group and it is entirely non-random. It differs from stratified sampling in that selection of elements is done on a convenience basis (Hair et al, 2003) In addition in quota sampling the researcher specifies the characteristics of the elements to be selected and sampling is proportionate to each stratum in the total sample. The choice of quota sampling was due to the ability to overcome likely variations between groups in the focus group. (Saunders et al, 2012)
The advantages of this method of sampling over probability sampling methods are they are cost effective and can be set up quickly. This is the only method that does not require a sampling frame. The sample population is large (Saunders et al, 2012).

3.3.4 Determining sample size:

Sampling size is used with quantitative studies in that when determining the size of the population for the survey is required. Since this research focuses on qualitative analysis using quota sampling technique determining the size is not used (Saunders et al, 2012).

3.3.5 Implementing the sampling plan:

It is difficult to study every unit of the population, sampling is useful when the target population is large and the data is difficult to obtain. To avoid bias and to ensure the sample is representative of the target population are some of the issues in sampling to be avoided. Once the details of the sampling plan have been made and agreed upon the researcher implements the sampling plan (Hair et al, 2003).

3.4 Data collection methods:

The core of the research onion is data collection. The data collection method is a very important phase in the methodology because the tools used to collect the data and the manner in which the research is conducted is the factors upon which the research data stands (Saunders et al, 2012). There are two ways in which data was collected for this research one is secondary data collection and primary data collection. For the purpose of this research the researcher will use combination of both primary and secondary data to address the research questions and objectives.

3.4.1 Secondary data collection:
Secondary data is the information that already exists in the form of publications, books, and electronic media (Saunders et al, 2012). The secondary data collected was reviewed, critically analyzed and presented in chapter 3 of literature review. Secondary data collection helps the researcher to generate and refine research ideas. Moreover the concepts, theories, arguments or empirical research findings reported was consistent with the aim of the study, providing critical analysis of the key literature that relates to the research question. Table 4 below shows the different methods by which data can be collected.

![Diagram of Secondary data collection methods]

Table 4: Data Collection. Source: (Saunders et al, 2012, pp.307)

The secondary qualitative data used for this research has been sourced from academic journals on business source complete, emerald management electronic journals, EBSCO data base, books, and EBSCO host. Additionally market reports were sourced using global market information database-euromonitor, mintel reports, WARC.com and marketline advantage: marketline. All the sources of secondary data have been referenced in the bibliography section of this research.
3.4.2 Primary data collection:

The term primary data relates to new information that is collected directly by the researcher. The value of the primary data is that it can lead to new insights and greater confidence in the outcomes of the research, whereas secondary data allows the researcher to build on what has been done before (Saunders et al, 2012). As previously established this research will use a mono method of research which is qualitative study. Figure 15 shows the different methods by which qualitative data can be collected.

Qualitative data collection:

Figure 15 shows the different methods by which qualitative data can be collected.

Focus groups are the most widely used exploratory interview techniques. Focus groups according to Esterby sith et al (2008); Jankowicz (2005) are particularly useful for discovering consumer’s views and attitudes. Stewart et al. (2007) Cited that a focus group is a data collection procedure in the form of a carefully planned group discussion among about ten people plus a moderator and observer, in order to obtain “diverse ideas and perceptions on a topic of interest in
a relaxed permissive environment that fosters the expression of different points of view with no pressure of consensus” (Eriksson and Kovalainen, 2008)

Cooper and Schindler, (2008) pointed out that Focus group discussions provide a window into consumer’s perceptions, behavior and needs. The most extensive use of focus group is in the consumer research market. Furthermore Esterby sith et al (2008); Jankowicz (2005) suggested that focus groups are increasingly valuable when exploring how viewpoints are constructed and how they are expressed.

Focus group for this research will be of utmost importance and will provide richness in information concerning the subject. They allow for synergy among participants and can cause insights to emerge that otherwise might have remained hidden. Focus groups are the best tool used for exploratory studies (Stewart et al. 2007).

Advantages and disadvantages of focus groups shown in the table 5 below

<table>
<thead>
<tr>
<th>Advantages of focus group</th>
<th>Disadvantages of focus group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows to explore the topic as collective</td>
<td>Discussion can be dominated by few individuals in the group</td>
</tr>
<tr>
<td>Provides representation of diverse opinions and ideas</td>
<td>The information generated has limited generalizability to the whole population</td>
</tr>
<tr>
<td>Low cost and efficient way to generate information on the research topic.</td>
<td>Individual behavior is subject to group influence.</td>
</tr>
<tr>
<td>Provides information from people who can provide actual insights about conditions and situations</td>
<td>Less control over data</td>
</tr>
<tr>
<td>Comparatively easy to construct</td>
<td>Uncertainty about the accuracy of the participants contribution</td>
</tr>
<tr>
<td>Provides opportunity to observe immediate reaction to the research questions</td>
<td>Susceptible to facilitator bias which can undermine the validity and reliability of the findings.</td>
</tr>
</tbody>
</table>

**Table 5: Focus group**
The researcher will conduct focus group in order to gather data relating to opinions and feelings of the population sample under study. The main purpose of the focus group is to answer the research questions and fulfill the aims of the research objectives. For this purpose the focus group will aid rebound all the possible thoughts and attitudes on the research topic and allow the researcher to go in depth and pose open ended questions. Cooper and Schindler, (2008) stated that the focus group that is more homogenous tends to promote more intense discussion and interactions.

3.5 Planning and conducting focus groups:

The researcher will follow the methods for planning and conducting focus group stated by Malhotra (2010). They are as follows

- Clarify the research problems and objectives
- Clarify the role of focus groups in fulfilling these objectives
- Specify the issue to be developed in the focus group
- Specify the target type of respondents to make up the groups
- Specify the location to conduct the focus group
- Recruit group members
- Run an experimental group
- Conduct the focus group
- Analyze the data and report the findings

The researcher will be the moderator or facilitator of the discussion, and will request permission from both the focus group attendees to audio record and take notes of the entire discussion. All the participants were asked to sign an informed consent before the start of the focus group discussion for ethical reasons and confidentiality. The informed consent can be viewed in (Appendix 1)

The focus group discussion guide and the script of the focus group 1 and 2 can be viewed in (Appendix 2). The focus group was started with a general opening question to break the ice get
the participants talking, make them feel at ease and also get the moderator acquainted with the participants. The key questions followed will address the research objectives aimed at exploring the attitudes towards electronic cigarettes.

### 3.5.1 Focus groups:

The focus groups were divided into two groups. The first group was the group that had participants that smoked electronic cigarettes and the second group had participants who smoked tobacco cigarettes.

**Group 1:**

This focus group consisted of candidates who smoked electronic cigarettes for the past six months or more. It consisted of four males and three females, with the total of seven members. The people were from Ireland with different backgrounds and total strangers to one another. The candidates were aged between 27-55 years. The focus group discussion took place on the 19/07/2014 from 11:00 am to 12:30 pm with a ten minutes break in between and the venue was in lecture room 2.9 in castle house second floor in Dublin business school. Invariably all the seven participants who took part in this focus group discussion were previous smokers of tobacco cigarettes.

**Group 2:**

This focus group consisted of participants who smoked tobacco cigarettes for at least three or more than three years, smoking a minimum of three cigarettes a day. There were three male participants and three female participants so a total of six participants for this group. Age group between 25-50 years was present. Cooper and Schindler, (2008) stated that the group that is more homogenous tends to promote more intense discussion for this reason the people for this focus group were from different countries but living or staying in Ireland with different backgrounds but not total strangers to each other. The focus group discussion was conducted on the 01/08/2014 from 11:00 am – 12:00 pm with no break in between as the participants did not want a break. The venue for this focus group was in lecture room 3.7 on the third floor in castle
house in Dublin business school. All but two of the participants in this focus group had tried smoking electronic cigarette at least once.

The focus groups are a great way of enhancing exploratory studies in a way that they aid in gathering rich and valuable information concerning attitudes, perceptions, expectations, overall opinions and degree of satisfaction, these are the elements that are vital to this research. In this regards the focus group discussion guide and focus group script have been set to increase the effectiveness of the focus group (Eriksson and Kovalainen, 2008).

### 3.6 Data analysis:

Once the focus groups are carried out, the researcher will start analyzing the data and interpreting the results. Qualitative data can be analyzed through the use of conceptualization. According to Saunders et al (2007 pp-497) qualitative data can analyzed effectively using the following points:

- Categorization enables to run the data into different groups in order to emphasize what could be useful for the interpretation of the results.
  
  Figure 16 below shows different methods of categorizing primary data

![Figure 16: Data categories](source: Saunders et al (2012-pp 558))
- Unitizing data is collecting secondary data to match the findings
- Recognizing relationship is making linkages between information gathered in different categories

In carrying out qualitative data analysis the researcher will follow Miles and Huberman (2002) methods which is by following the three procedures mentioned below

- Data reduction
- Data display
- Conclusion drawing and verification

For the purpose of transcribing, categorizing and unitization of the qualitative data, the researcher has made use of qualitative analysis software Nvivo 9.

3.7 Research Ethics

Research ethics is ensuring the design of the research methodology is sound and morally defensible to all those involved (Saunders et al 2006). However focusing on the data collection element Saunders et al (2009), states that although the participant has given permission on the information provided by the researcher, if this information will be changed it will be considered as unethical behavior. The participant must have the option to withdraw at any point of time during the discussion which must be respected by the researcher (Saunders et. al., 2006).

Objectivity is another ethical issue which can be considered. This relates to the collecting data in an accurate and precise way that will not compromise the data and also recording the data without excess subjectivity (Saunders et. al., 2009).

Ethical issues mainly arise during participant’s discussion of the issues together in a focus group. Issues of confidentiality, anonymity, privacy and copyright are raised when data is collected analyzed and reported. Moreover, individuals have a right to privacy and should not feel pressurized or coerced into participating for the focus group discussion research (Saunders et al, 2012). In order to avoid these ethical matters it is important for this research assessment of the
focus group participants to have the right to withdraw or decline from the focus group. (Saunders et al, 2012).

Any questions identifying individual’s personnel issues, race, culture and religious issues in the focus group discussion should be avoided and generalized and topic oriented discussion to be focused on. In addition, anonymity should be guaranteed. These discussed ethical issues of the research will be taken into serious considerations when conducting the discussion.

3.8 Limitations:

Secondary research:

The limitations for secondary research were discussed in chapter 2.12

Primary research:

The researcher does not have much experience in conducting a focus group although has been to one in the recent past. The researcher is the moderator for both the focus groups, the moderator must counteract with the problem of bias. Limitations of this form of primary research could arise from a low response rate from certain participants; group settings may be intimidating for certain individuals. Individual opinion can be distorted by group influence. It is time consuming. Getting all the eight to ten people at the same time and place may present a problem. To overcome these difficulties the participants should be given very clear information of what is expected from the discussion.

The interviewer should facilitate discussion in such a way that all participants get an opportunity to voice their views. Informing the participants well in advance can avoid participants from absenting themselves for discussion. Four to five extra participants should be available so that if one or two of the participants do not turn up for the discussion it will not affect the study process.

Furthermore subject error and observer bias are two of the risks that would compromise reliability. Objective selection of relevant data could have a great impact on the validity of the
4 Data analysis and findings:

4.1 Introduction:

Saunders et al (2012) describes data analysis as a set of methods and techniques that can be used to obtain information and insights from the data. This chapter presents the data analysis and findings. The aim of this research was to explore attitudes towards electronic cigarettes among smokers, in an effort to find answers to the research objectives.

The data was collected through two focus groups as discussed in the methodology chapter 3.5. Group 1: Candidates who smoke electronic cigarettes; Group 2: Candidates who smoke tobacco cigarettes.

4.2 Analysis of primary Qualitative data:

In carrying out qualitative data analysis the researcher will follow Miles and Huberman (2002) methods. According to Miles and Huberman (2002) there are three concurrent flows of activities they are:

- Data reduction
- Data display
- Conclusion drawing and verification

Data reduction:
This refers to the process of reducing organizing, summarizing and paraphrasing the data to be able to draw conclusions and verify them.

*Data display:*

Data display was the second major activity the researcher carried out which involved taking the reduced data and displaying it in an organized and compressed way so that it is easier to draw conclusions. Miles and Huberman (2002, pp-56) stated that good data displayed are “a major avenue” to valid qualitative analysis. This is a continual process to be carried out throughout data collection. In displaying the data the researcher managed to further reduce the data so that conclusions were drawn.

*Conclusion drawing and verification:*

This was the final activity in data analysis carried out by the researcher. This was carried out by combining sub-categories, themes and explanations through cross tabulation. At this stage the researcher was able to derive meaning from data and to arrive at conclusions which were verified by examining their validity through referencing the existing notes.

4.2.1 Theme 1: Background:

Demographic data show that the participants from one focus group that smoked electronic cigarettes were predominantly males; this was due to the fact that the number of males smoking electronic cigarettes was higher than the number of females smoking electronic cigarettes in chapter 2.8. As Hajek et al (2013) stated, hence the ratio of males were higher than the females in this group. Their age ranging from 27-55 years old since in chapter 2.8, Hajek et al (2013) noted that age group ranging 33-55 years more likely used electronic cigarette than other age groups. Most of the participants in group one have been using electronic cigarettes for the past one year and the others for a period of six months. All of the participants were or some of
them are still using tobacco cigarettes. Three of the participants were chronic tobacco smokers for the past thirty three years and smoked on an average of thirty two cigarettes per day.

However in the second focus group which had candidates who smoked tobacco cigarettes the number of males and females taking part were equal, with a younger age range of 25-40 years. Most of the attendees were using tobacco cigarettes for more than ten years with an exception of two participants who were smoking for a period of less than ten years. They smoked on an average of 4-5 cigarettes per day. Invariably all the participants in this group with the exception of one had tried smoking electronic cigarette. One of the participants uses electronic cigarettes occasionally when allowed to smoke indoors in the pubs.

**Theme 2: Knowledge of electronic cigarettes:**

Participants who regularly used electronic cigarettes had a high level of awareness but participants who rarely used or never used electronic cigarettes had a low level of awareness. The internet, social media, friends and advertising were the means by which the participants were exposed to electronic cigarettes. Although being exposed to electronic cigarettes through these various sources only few participants had the working knowledge of it for the rest they had a vague idea of how electronic cigarettes were manufactured and marketed but very less did they know about the technicalities. Some participants pointed out that although they have been in the market for ten years there is very little discussed about the different types of products and brands available and there are no big players in the industry. Most of the participants who were using it had an idea about the liquids and the chemicals used in it but for the others it was a mystery.

**Theme 3: Reasons for using electronic cigarettes:**

The responses for the reasons for using electronic cigarettes and for those who have tried out smoking electronic cigarettes were mixed. Some participants stated that electronic cigarettes were less harmful than tobacco and for them they were looked upon as healthier alternative “I
guarantee I am more healthy now at least my lungs they are breathing oxygen finally!” which motivated them to start smoking electronic cigarettes. As for the older members in the group who were retired it was the impact of cost, “for me it is cost and cost only” electronic cigarettes being less expensive than tobacco cigarettes was the logic that provoked them to start smoking electronic cigarettes so that they can cut down on the expenses, for most others they viewed it as a substitute or as a replacement for tobacco cigarettes which prompted them to start using electronic, and for few others who wanted to or have tried to quit smoking responded that electronic cigarettes was a potential aid to help them move away from the negatives of tobacco and completely quit smoking tobacco cigarettes “I have tried patches, lasers, hypnosis, chewing gum etc. nothing worked for me but electronic cigarettes did the job”. However for the younger age group it was the regulations that allowed them to smoke indoors “Being allowed to smoke indoors is so cool” that triggered them to use electronic cigarettes.

**Theme 4: Healthier alternative/less harmful**

The attendees who used electronic cigarettes emphasized on the fact that electronic cigarettes were less harmful than tobacco. The participants noticed from his/her experiences that they were coughing less frequently and they were able to walk better without getting tired “All I can see is benefits don’t know if I am deluding myself but I can walk better”. One of the candidates in the group who was asthmatic noticed an improvement in her lung function, she said her lungs are better now and this has helped her overall improvement. Two others noticed that there were no more stains on their teeth and their dentist complimented them also mentioning that the blood supply to the teeth has come back to normal. Another participant reported that it helped her wean off from the antibiotics she used for cough and the steroids that she was using in winter. “It is a blessing to me to not having to take steroids anymore and those disgustingly tasting cough medicines”. Another less harmful aspect that the participants pointed out when using electronic cigarette was that they were able to substitute it with no tar which is very harmful in tobacco cigarettes. There was a significant positive attitude toward electronic cigarettes considering their much celebrated health benefits among users of electronic cigarettes. On the other hand the attendees who are not using electronic cigarettes currently said that it is not a proven fact that
they are less harmful and a healthier alternative. Some participants agreed with the others on this fact that only short term studies have been conducted regarding the safety and many countries have banned the product regarding the safety hence it is uncertain if it is less harmful and if it can be a healthier alternative as claimed.

**Theme 5: Economic benefits:**

Cost was the most significant factor for people who were not financially sound and who have retired. However among electronic cigarette users there was a mixed review on the attitude towards cost. Some of the users said that cost was the prime reason they started using electronic cigarette and one of the participant demonstrated how much she had saved which is as follows

“19.20 euros was her per day expense for tobacco cigarette, so per week it would be 134.40 euros and per annum it was costing her 6988.80 euros. While on the other hand electronic cigarettes were working out a lot cheaper 4.22 euros per day, so only 29.59 euros per month and annually 1538.80 euros. Hence she was saving 5450.00 euros by using electronic cigarettes”

Some of the others did not feel cost was a significant reason, they felt it would be a matter of concern for heavy smokers since the regulations are increasing the cost of tobacco in that senior it would make a big difference but not otherwise. Some participants argued that electronic cigarettes are less expensive now that there is no regulation on the product they felt once the product would undergo regulations like tobacco then the cost will become one of the significant factors. But from this review overall cost is a factor.

**Theme 6: Regulations:**

The most apparent fact about electronic cigarette for some users was that electronic cigarettes were being allowed by the regulations to be used indoors, in social places, at work places, pubs and restaurants also in colleges and universities. For some of the users being able to smoke
indoors was a leading factor to be using electronic cigarettes over the others. One of the participants remarked “I smoke in my class in the university that is the coolest thing ever”. Some of the participants felt being able to smoke at work place was a good thing it helps distress the work pressure and saves time by not going out to light a cigarette. In addition to that few participants noted that since there were no regulations on the manufacturing of these products they have been made very colorful and attractive and are appealing to a lot of people who would then want to try it. Eventually regulations have had an impact on smoker’s attitudes.

Theme 7: Replacement product for tobacco:

Participants were very determined and enthusiastic for this particular question. The answers received were very mixed with different perspectives and opinions considered. A women in the group said “Electronic cigarettes came like a blessing in disguise when all else failed for me” The women in the group who were currently using electronic cigarettes mentioned that they were not embarrassed anymore to smoke in social gatherings and they are no more worried about passive smoking and affecting the people around them, but with tobacco cigarette that was their biggest concern so they think this can be the best replacement for tobacco cigarettes. For one of the women particularly it was the cleanliness in the house with electronic cigarettes “I had to paint my cream colored wall orange” because of the smoke from the tobacco that turned the house dirty, it is no more necessary with electronic cigarettes.

Some participants said that the most amazing fact about electronic cigarette was being able to adjust the nicotine level “I was at dosage level eighteen of nicotine when I started now at level five of and soon to zero” and claimed from their experience that it is not as addictive as tobacco cigarette, and pointed out that even if it was addictive “it won’t kill you like tobacco” it is easier to cut down on nicotine which is not possible with tobacco if one was planning to reduce smoking. Some participant argued that addiction is there in everything not just with smoking “chocolate is an addiction sugar kills so this one is much better it does not kill” hence strongly vouched for electronic cigarette as a replacement for tobacco cigarettes. Some others stated that to stop smoking tobacco cigarettes one has to distract themselves and they found electronic
cigarettes to be the best distraction since they are less harmful, less addictive, and less expensive than all other methods like patches, lasers etc. and has amazing combination of flavors “what more does one want”

Few others agreed with most other participants notifying that electronic cigarettes are only getting better they have an amazing combination of flavors which tobacco cigarettes cannot offer so it is definitely a replacement for tobacco cigarettes. Other participants mentioned the ease of buying it online “not having to walk four miles for a cigarette” and there is no stigma attached to smoking electronic cigarettes will add on to the above mentioned factors in encouraging electronic cigarettes as a replacement for tobacco cigarettes.

On the contrary a bunch of participants strongly disagreed with the fact that electronic cigarette can be a replacement for tobacco cigarettes. Some of the participants mentioned that smoking electronic cigarettes made them want to smoke tobacco cigarettes more as they were missing the feel, “unless one is determined and strong minded it is not possible”. Few others stated in their experience electronic cigarettes tasted bad and are way stronger than tobacco cigarettes for them. And another point was that they missed rolling tobacco cigarettes by hand and smoking. Hence some participants disprove that it can replace tobacco cigarettes. Overall speaking there was a very mixed perception towards this theme; however the participants arguing for electronic cigarettes as a replacement for tobacco cigarettes overpowered the discussion.

5 Discussions:

This chapter will discuss the findings of the data analysis from chapter 4 and answer the research objectives by discussing the findings of primary and secondary research.

The overall aim of the primary research was to explore the attitudes of the smokers towards electronic cigarettes. Therefore smoker’s perception of the current attitudes and opinions towards the use of electronic cigarettes was investigated using the focus group. Overall the findings indicate that older age group of smokers who are currently smoking electronic cigarettes have a more positive attitude and an increased level of awareness towards electronic cigarettes. Moreover they consider the less harmful effects of electronic cigarettes, the health benefits, cost
effectiveness and the unregulated nature of electronic cigarettes to have an edge over tobacco cigarettes.

However with the tobacco smokers electronic cigarettes does not appeal the same due to uncertainties regarding the health benefits and the less harmfulness, it was argued that although logically it seems to be a healthier alternative it’s not been around for long and since it lacks longitudinal studies it’s hard to say that it is for sure less harmful or healthier alternative. Besides they are not looked upon as an aid to quit smoking as much as it is a substitute for smoking. Furthermore with such uncertainties it cannot replace tobacco cigarettes. On the other hand the users of electronic cigarettes consider it as a boom in all aspects to tobacco and claim this product can change the future of tobacco cigarettes.

From the data analyzed in theme 1 and 2 in chapter 4.2.1 it was found that the key factors which were responsible for smoker’s knowledge, awareness and use of electronic cigarettes were internet, friends and advertising. These factors coincided with the factors that influenced attitude towards electronic cigarettes discussed in the secondary research in chapter 2.10 in that a study conducted by Lotstock and Tahan (2014,) clearly showed that internet sales of electronic cigarettes was the highest contributing 30%. And moreover Google searches for ‘electronic cigarettes’ have increased by ‘5000% over the past 2 years since 2011 Lotstock and Tahan (2014,) which means consumers are accessing the internet to learn more about the product to explore its benefits.

In addition to the internet, advertising is one of the most significant factors influencing attitudes towards electronic cigarettes. As explained through modeling attitudes towards advertisement Lutz(1985); Shiffman(2007), and elaboration likelihood models in chapter 2.10.4. (Petty et al, 1983; Uta, and Popescu, 2013) advertisement has had a major role in shaping attitudes towards the product. According to the modeling attitudes towards advertisement and the data analyzed it is evident that exposure to advertisement creates various feelings and judgment towards electronic cigarettes which eventually will influence the attitudes towards the product. It is feared that advertising is coming back just like the way it was done for tobacco cigarettes and it might re-glamorize smoking.
On the other hand it was found that advertisements did not have much of an affect as friends, this is explained in the elaboration likelihood model (Botella et al 2013) in the peripheral route which states that consumer is not motivated by the advertisement there is low degree of involvement because there is low degree of information processing which does not affect attitudes. Besides advertising another important, rather worrying factor is peer influence in case of smoking. Peer influence rates in smoking are very high (Botella et al 2013) as it was found the trigger to start using electronic cigarettes came from friends and people around them which are discussed in chapter 2.10.7 the socialization model points out those individuals indulge in activities such as smoking to avoid rejection from peer and society. (Botella et al 2013) On the contrary peer influence was not seen in the older age group towards smoking.

In theme four as analyzed in chapter 4.2.1 overall it was noticed that there are significant health benefits of electronic cigarettes among users and this in turn has instilled a positive attitude towards electronic cigarettes. This is interpreted by the theory of reasoned action model and findings in chapter 2.6.1 and chapter 2.8 of literature review. In this the individuals have acquired beliefs and attitudes through direct experience with the product and information which in turn has created a positive attitude towards electronic cigarettes (M. Fishbein and I. Ajzen, 1975; Csillag et al 2012)

But a with significant majority it was found that the smokers are determined to use electronic cigarettes which coincides with the theory of planned behavior, where there is a determined planned action to use electronic cigarettes (Ajzen1985; Steluta, & Popescu, 2013). However a minority of smokers belonged to the knowing, feeling and doing process of behavior stated in the ABC model of attitude in chapter 2.6.5 in which the smokers based their beliefs on the information gathered about the health benefits of the product, which influence their attitude towards smoking and eventually engaging them in using electronic cigarettes. (Solomon et al, 2006)

Despite these health benefits experienced by users, prior research and data collected contends that whatever has been said has a lot of uncertainties it’s not proven by any long term study that these products are definitely safer and less harmful. (Choi Kelvin et al, 2013). Considering both the sides of the issue including potential health benefits it is argued that health benefits have
instilled a positive attitude towards electronic cigarettes, fueled with uncertainties and unproven facts which can change the attitude when investigated and facts are proven.

Moving on to discuss themes five and six in chapter 4.2.1, similar to health benefits, cost has contrived a vital impact (Trumbo, and Harper, 2013) for heavy smokers of tobacco cigarettes who smoke on an average of two packs per day unlike for chronic smokers cost effectiveness did not appeal and have an influence on the attitude towards electronic cigarette for light smokers of tobacco who smoked less than one pack of cigarette per day. It was pointed out that since the product was not regulated electronic cigarettes are less expensive once the laws are enforced like similar to the tobacco cigarettes then the impact of cost will be the reverse.

Overall cost was a factor to have influenced attitudes but considering the regulations should come into play by increasing the product cost then it will put chronic smokers on a quandary. However there are many arguments in aspect of the regulations towards electronic cigarettes studies were cited in chapter 2.9 (Don Headly, 2013) and theme 6 in chapter 4.2 data analysis support these arguments.

Moreover if regulations will banned indoor smoking or withdraw electronic cigarettes like few of the countries are doing currently banning electronic cigarettes, if so what would happen to the current state of smokers who have used electronic cigarettes as an aid to quit smoking, (Don Headly, 2013) as current evidence from chapter 4.2 suggest that electronic cigarette users have tried and failed to quit smoking with multiple therapies, it would seem misguided to ask people to discontinue the approach that is working in favor of an approach that has already been ineffective for them. Hence regulations have contrived a mixed attitude towards electronic cigarettes.

On the topic of replacement of tobacco cigarettes with electronic cigarettes analyzed in chapter 4.2 and in chapter 2.8 in this context it was discovered that smokers who have used electronic cigarettes for a period of year or six months have a strong consideration for electronic cigarette as a replacement for tobacco cigarettes which coincides with the findings in chapter 2.8. moreover it was taken into consideration that tobacco smokers though did not have the experience, knowledge and awareness of electronic cigarettes and remarked that there are mysteries surrounding electronic cigarettes but when given the opportunity they have smoked
electronic cigarettes this clearly indicates the mode model theory of attitudes (Russell Fazio 1990; Steluta, & Popescu, 2013) discussed in chapter 2.6 which states that given the motivation and opportunity they would behave in a certain way which is spontaneous behavior.

Another theory holds well in this context as well the theory of customer trying to consume model (Bagozzi and Warshow, 1990) discussed in chapter 2.6 which means actual behavior is something else which is replaced by intention to smoke. Furthermore a significant majority of the users mentioned that with the countless benefits of electronic cigarettes as seen in chapter 4.2 from users they have a very strong positive attitude towards electronic cigarettes and argue that they will be the future of tobacco and replace tobacco cigarettes by instilling a positive attitude towards the product.

Despite all the beneficial factors smokers of tobacco contend that one should not ignore the uncertainties surrounding electronic cigarettes regarding regulations, cost, safety, and efficacy and health benefits. It is hard at this point in time to declare that electronic cigarettes will replace tobacco cigarettes, since electronic cigarettes have not been around for long and with minimum research undertaken it is uncertain that they will be a replacement product. However overall they have caused a change in attitude and behavior towards smoking.

6 Conclusions:

The aim of this dissertation was to explore the attitudes towards electronic cigarettes among smokers. For this purpose objective and sub-objectives were established in chapter 3.1, for sub-objective 1 a correlation between attitudes and behavior was established in the theoretical analysis in chapter 2.4, 2.5, and 2.6 which examined and defined attitudes and behavior, identifying functional linkage between the two variables.

The first sub-objective was satisfied through combined findings of primary and secondary research in chapter 2.8 and 4.2 it was evident that consumer attitude towards electronic cigarettes as a replacement was supported by users of electronic cigarettes who had a positive attitude
towards electronic cigarettes through the various benefits they experienced from using the product. However this argument was fueled with uncertainties and failed to appeal to tobacco smokers as a replacement for tobacco in the near future. The attitude of the tobacco smokers towards electronic cigarette were varied in which case more longitudinal studies were required to fulfill the gaps in the knowledge regarding their safety, efficacy and long term use.

The impact of cost effectiveness of electronic cigarettes over tobacco cigarettes was a significant factor in determining a positive attitude towards electronic cigarettes for chronic tobacco smokers. On the contrary for majority cost did not have a telling effect on their attitude. Furthermore among electronic cigarette smokers there was a mixed attitude towards cost of electronic cigarettes. Besides the regulations for electronic cigarettes have not been imposed, if they should make it any expensive than tobacco cigarettes then the attitude towards electronic cigarettes will change. This change will affect the smokers who are in a financial crisis and those chronic smokers who are retired and using electronic cigarettes as an aid to help them quit smoking tobacco. Their attitudes may not be positive if this change takes place.

Overall electronic cigarettes are being perceived as less harmful over tobacco cigarettes. It is evident from chapter 4.2 that users experience health benefits with electronic cigarettes over tobacco cigarettes with reduced cough, no stains on their teeth and many others. This has led to a positive attitude towards electronic cigarettes among smokers. As for the occasional smokers there is a constant fear of the unknown facts about electronic cigarettes regarding their safety and benefits. The health benefits are not proven yet, but logically it seems less harmful as there is no tar and no smoke let out only vapor. Although it is considered less harmful there is no data that proving it less harmful, there are many uncertainties as the product has not been around for long. These unknown facts about electronic cigarettes are creating a very mixed attitude towards electronic cigarettes.

In sum this research indicates that social media, advertising, peers influence are not sole determining factors that influence attitude towards electronic cigarettes user experience, beliefs, benefits, regulation, awareness, knowledge and technicalities, cost and reasoning are also equally important factors when considering attitude towards electronic cigarettes. Finally it was found that there is a mixed attitude towards electronic cigarette in terms of their health benefits, cost, and regulations and as a replacement for tobacco cigarettes. Positive attitude prevails among long
term users of electronic cigarette. However among occasional users and indoor smokers much of uncertainties dwells. And as for others who are not satisfied with the current product because they are too niche have a mixed attitude towards electronic cigarettes.

### 7 Limitations

There are certain limitations to this study. Some of the limitations are due to the nature of the study and some were noted during the execution phase.

The generalization of the results of the study to explore attitudes only among smokers and only in Ireland was undertaken. Larger studies can be conducted with more focus groups with age and gender to increase sample size since this was a mixed group. The study can be extended further to non-smokers and other countries to get more information. Secondly subject error and researcher bias will affect the reliability of interpreted data in focus group studies hence a quantitative study can be undertaken.

Further not all participants contributed equally in the group potentially feeling shy in a new environment. To avoid this bias a longer time frame would have allowed conducting individual interviews in addition to focus groups. The researcher having no experience in conducting a focus group and having to do one is an experience for the researcher. Moreover differences in culture, language, values and beliefs influence communication styles. Hence the data can be subjected to bias. The population for the focus group consisted of seven members in each group this population is not enough to generalize the data. Hence sample size can be increased by having a larger focus group.

It would be more beneficial to conduct this study over a period of time with a longitudinal time horizon. These are cross-sectional time frame of study which allows data to be collected in a point in time. Attitudes are varying and they change over time hence they should be explored over a longer period of time frame. Finally this study analyzed self-reported beliefs opinions and
attitudes towards electronic cigarettes. With a larger time frame will allow gathering observational data of actual behavior prior to developing a focus group.

**8 Recommendations**

- Implications for further research include the attitudes of non-smokers and researching the topic with the use of questionnaires, observational studies and case studies.
- Larger studies with more focus groups and quantitate analysis to collect empirical data.
- Exploring attitudes of smokers in other countries and doing a comparison with this study.
- Electronic cigarettes should be regulated and marketed in a way like other smoking cessation products not as a product by itself in competition with tobacco cigarettes.

**9 Reflections on Learning and Skill Development**

**9.1 Learning styles:**

This section outlines the approach to learning process developed during the MBA program particularly in the dissertation phase. This first section will evaluate the reflections on learning of the researcher using academic literature theories. Secondly it will be explained how the acquired knowledge from the MBA program can be used for future application. The next section of this chapter will analyze the skills developed in the MBA program at Dublin Business School and finally concluding with researchers is learning experience in the dissertation phase.

At the beginning of the first semester in the personal and professional management class learning styles test from Honey and Mumford (1982); learning styles (2009) was undertaken as a part of the course curriculum. The test results revealed a strong preference for theorist and a stronger preference for pragmatist. Both of the styles the researcher discovered were true in a way that the researcher was a logical thinker who also acts rational and prefers to be practical, realistic and straight forward.
However soon after working on the dissertation the researcher undertook an online of the same test, this time the results were slightly different in that the researcher now had a strong preference for reflector. The reflector is one who collects data extensively, which might result in longer research and postpones the formulation of conclusion for as long as possible. (learning styles, 2009) The researcher has experienced this throughout the dissertation phase especially in the literature review chapter. Realizing this learning style earlier would have helped speed up the process of dissertation completion but none the less the dissertation has helped discover this learning style the researcher possesses. Therefor the researcher has a strong preference for three learning styles.

9.2 Self-Appraisal:

The course MBA program in Business Management provided great learning in multiple business areas such as project management, business strategy, marketing, finance and International Management. The course personal and professional development thought me about my own skill set, strengths and weaknesses and prepared me for interviews and public speaking which improved my abilities to reflect my own abilities and to gain trust in them as well to give me knowledge needed in a professional environment. However I disagree with the learning effects of having only assignments as academic exam in the semesters because I only focused on the courses assignments and less on listening, on acquiring and learning the knowledge transferred to use via lessons, I still think the assignments taught me knowledge and researching skills which are valuable for my later career. Besides having assignments, activity based learning and field work will enhance knowledge and experience gained.

The additional knowledge acquired while preparing for and writing the dissertation allowed me to get deeper understanding and additional insights in specific areas of marketing overall I found that the research has broadened my knowledge in specific areas like marketing, and business strategy. The secondary research undertaken helped me in comparing and understanding the current point of views of perception of consumer attitudes and how this affects the market and product. The primary research undertaken not only broadened my knowledge on marketing and
physiology, but also taught me how to conduct focus group study, how to overcome the disappointments when participants do not reply or turn up for the focus group. Additionally, the dissertation showed me new perspectives to my topic and helped improving my knowledge on focus groups and the usage of the website Nvivo for analyzing data.

### 9.3 Research Skills

The MBA program and dissertation has helped developing skills required for my future career. The following skills were identified to be formed during my study in Dublin Business School.

#### 9.3.1 Research and Analytical Skills

This is my first encounter with business subjects with a background in dentistry the initial period was very tough for me until I learned the way of doing it or the business way. The subjects were so new they put a lot of pressure on me, the rational thinking of as many solutions as possible was hard at the start. Although the medium of learning was in English in my undergraduate the vocabulary was entirely different and the research methods, I have never been exposed to this style before.

I therefore acquired skills in my research capability, getting to know many business data basis for research I haven’t had the chance to use in my undergraduate, which made my papers much more professional and learning and using the Harvard referencing Style for my papers, referencing standard used worldwide. Moreover, using English for my assignments improved my English writing skills and presentation held during classes improved my oral English skill. However one of the biggest challenges and one of the incisive learning experiences to me was the dissertation. The process of selecting the research topic, submerging into the academic literature of an unknown subject, choosing and designing the research methodology, have constituted an extraordinary learning experience. Not only had my decision making skills improved by dissertation for choosing the literature, the topic or the ways of analysis, but also
my people skills improved in conducting the focus group and this helped me acquire confidence in my overall research.

9.3.2 Problem solving skills:

My study was focused on electronic cigarettes a very new topic where very minimal research has been published although I had exposure to similar studies with tobacco in my undergraduate this was entirely different from them. The main problem I faced in this research was trying to keep the health factor since background in dentistry out of my mind and focus on the market outlook. To overcome this problem I had to keenly focus on articles and data on the marketing front, various sources and databases helped increase the chance of finding relevant articles and studies.

Another problem that was taken into account was the accessibility of participants and the time when the focus group study was taking place. Because the study was done in summer one of the busiest seasons for holidaying getting hold of the participants was difficult. One of the focus groups had to be cancelled and conducted on a later date as the participants went away on holidays. This delayed the process of data collection. To compensate this extra working hours and additional effort was put in to stay within the planned time table.

As experienced with my assignments in the course work earlier I understood it is important to have balance in literature. This means to be open minded and objective not only use sources that support the way of your thinking. An objective and unbiased point of view has to be presented in the literature review. I tried to achieve this through extensive research, multiple data base and actively searching for the availability of articles that present a different point of view.

9.3.3 Team work skills:

The group of people joining in classes and working in team assignments with me during the MBA program was highly diverse coming from all over the world. Spending time with them, I
learned about their culture, and differences in their styles to work on assignments as well as their way of appreciation, time management and communication. Furthermore at least two assignments each semester were done in group work, my ability to work in teams increased through the experiences that I have obtained. The ability to negotiate, solve conflicts in groups and to have a sense of ownership were developed through the constant exchange with my team members which will also help me dealing with international team works in a professional environment in my future career.

9.3.4 Planning and stress management skills:

To take the MBA program in Dublin Business School required planning the stay in a foreign country which required planning the plane tickets, the accommodation as well as all administrative processes like insurances, getting a public services card and managing my finances. These experiences not only improved my planning skill but let me grow in my personal management. Independence and self-confidence were the result of my stay at the Dublin Business School for which I am grateful and this experience will be helpful in my future study in a forgiven country. Furthermore, the immense stress during the second semester developed and improved my stress handling skills. I was therefore well prepared for this dissertation for which I wasn’t consequently as stressed.

9.4 Future application:

The experience and learning of undertaking the MBA and writing a dissertation had an influence on skills and knowledge that I regard as important in today’s work environment. These critical skills include strategic and analytical thinking and self-management.

Furthermore my research skills have improved and developed further. Communication skills through focus group discussion and following a research plan are some of the skills that were developed during this research which will be very useful for my professional and private life.
9.5 Conclusion:

Overall the MBA program was valuable and helped me acquire knowledge and skills needed for my personal and professional growth and development. It helped me gain more confidence in myself. The personal experience of undertaking the MBA and writing the dissertation was challenging but very valuable and rewarding at the end. I am looking forward to a new learning adventure in the future, be it my career or higher education. The successful completion of my dissertation concluded by learning experience at Dublin Business School which will remain a valuable asset in my career and future.
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Appendices

Appendix 1: Informed consent

INFORMED CONSENT

You agree to participate in a panel discussion moderated by Dr. Rakkhini Periasamy. The purpose of this focus group is to explore people’s attitude towards electronic cigarettes through a friendly and informal discussion. All research conducted by Dublin Business School students is done for the purpose of meeting course requirements. All and any study responses are used for this purpose only. Your contributions will be shared with others in the group as well as the facilitator. Although the discussion will be recorded, your answers will remain anonymous and your name will not be mentioned in the master's thesis. There is no right or wrong answers to questions, so feel free to speak your mind out at all times. I want to hear as many ways and I want to hear everyone talking. I hope to be true even if your answers are not in agreement with the group. Out of respect for each other, please speak each in turn and the participants' responses to remain confidential. The information obtained will be treated with the strictest sensitivity and are anonymous. To this end, please do not write your details on this booklet. You may withdraw from participation at any time.

I have read and understood this information and I fully agree to participate in this Focus group discussion under the above conditions.

Signed: ___________________________________________

Date: _______________

Venue: Dublin Business School – Castle House

Thank you for your cooperation.

I am available at rakkhini18@gmail.com if you have any further questions or queries.
Appendix 2: The script for focus groups 1 and 2

The focus group will take place in Dublin business school in castle house room 2.9 and 3.6 on 19th July and 1st of August between 11:00 am – 12:00 pm. The moderator will arrive half an hour early to make the initial preparations inside the lecture room.

At the arrival of the participants the moderator will thank them for coming to the study and hand over the consent from. The participants are all asked to read and sign the form. Once all the participants have arrived the focus group will commence. The participants are informed verbally as well that the entire discussion will be audio recorded for study purpose only.

At the beginning of a focus group, it is helpful to let everyone know about some ways to make the group proceed smoothly and respectfully for all participants. The following are some recommended guidelines or “ground rules” that help establish the group norms: (Omni 2014,)

- Only one person talks at a time.
- Confidentiality is assured. “What is shared in the room stays in the room.”
- It is important for the moderator to hear everyone’s ideas and opinions.
- There is no right or wrong answers to questions just ideas, experiences and opinions, which are all valuable.
- It is important for us to hear all sides of an issue both the positive and the negative.
- It is important for women’s and men’s ideas to be equally represented and respected.

After this the moderator will start with the focus group questions as follows:

To break the ice introductory question

Have you’ll been holidaying much this summer?

Opening questions:

1. How did you come to know about electronic cigarettes?
2. How long have you been smoking electronic cigarettes?
3. How long have you been smoking tobacco cigarettes?
4. What is your level of awareness about electronic cigarettes?
5. Reasons for using electronic cigarettes/ Group 2: This question was rephrased as have you tried smoking electronic cigarettes if yes why if no would you try in the future?

Key questions:

6. In your opinion do you think they are less harmful than tobacco and why?
7. In your opinion will it be a replacement for tobacco?
8. How does the cost factor impact on your usage/ opinion of electronic cigarettes?
9. What is your opinion about indoor smoking and the regulations that are allowing to do so?
10. Will electronic cigarettes re-glamorize smoking?
11. What do you most like about electronic cigarettes/ perceived advantage?
12. What do you dislike about it/ disadvantage of it?
13. What is your attitude/perception about the product?

Once the last question is discussed the moderator will end the discussion by telling “Thank you for your time”

Appendix 3:

Graph showing booming growth of electronic cigarette and top three electronic cigarette markets in 2011
Figure 17: Booming growth of electronic cigarette and top three electronic cigarette markets in 2011;

source: (Marketline, 2012)