

# [Research methodology, different types of philosophical](https://assignbuster.com/research-methodology-different-types-of-philosophical/)

Fischer (2004) states that research methodology is the study which raises all types of philosophical questions for the researchers to know and check the availability of their knowledge.

Saunders et al. (2007) states that, the research design will be the general plan of how to answer the research questions and it should contain:

Clear objectives derived from the research questions

It should specify sources from which data is collected

Consider the constraints that the researcher will have access to data, location time and money

Discussing ethical issues

Cooper and Schindler (2008) mentions that the research task is a sequential process involving clearly defined steps. They also state that despite the variation in steps involved, the idea of sequence is useful in developing a research and maintaining an order as the research progresses.

According to Teresa and William (1997), research methodology provides a systematic, planned approach to a research project and ensures that all aspects of the project are consistent with one another.

The method that has been used for this research is based on the research process ‘ onion’ as described by Saunders et al. (2007). The research goes through different layers of the research onion. The various layers are philosophies, approaches, strategies, choices, time horizons and techniques and procedures. This chapter is divided into three sections. The first section deals with the research methods that have been used for this dissertation. The second part deals with data collection methods. The last section deals with population and sampling.

## Research Onion- Adapted from Saunders et al. (2007)

## Research philosophy:

Saunders et al. (2007) mentions that research philosophy depends on the way you think about the development of knowledge. It is the first layer in the research onion proposed by them. According to them, there are three approaches to research philosophy. They are epistemology, ontology and axiology. Epistemology constitutes with the acceptable knowledge in the field of study; ontology is concerned with nature of reality where as axiology studies about the researcher’s value in all stage of research process.

They argue that the choice of philosophy depends on the research question posed and the researcher feels that the approach that has to be used is Epistemology. Jancowickz (2000) mentioned epistemology as personal theory of knowing and what researcher feels as knowledge, what he counts as evidence and proof and what he does not.

Saunders et al. (2007) mentioned that there are three epistemological positions namely, positivism, interpretivism, and realism.

Positivism: Saunders et al. (2007) mentions that if research philosophy reflects the principles of positivism, then we will probably adopt the philosophical stance of a natural scientist. According to Bryman & Bell (2007) positivism is an epistemological position that advocates the application of methods of natural sciences to study of social reality and beyond. Reilly (2006) defined positivism as a belief that only true knowledge is scientific in character, describing interrelationships between real and observable phenomena.

Interpretivism: This is a philosophy where researcher be critical of positivism and argue that rich insights, into complex world are lost if such complexity is reduced entirely to a series of law like generations. It also emphasises on the difference between conducting a research among people rather than tangible objects.

Realism: This is a philosophical approach which is based on that a reality exists that is independent of human thoughts and beliefs. It holds many thoughts from positivism and it scientifically questions ‘ what is’ regarded as acceptable knowledge. In realism, the approach assumes a scientific approach to the development of data and underpins the collection of data and understanding of those data. (Saunders et al., 2007, p105). There are two types of realism namely critical realism and direct realism. Direct realism is what the researcher experience through his senses represents the world accurately. In critical realism, what the researcher experiences are sensations and images of the things in the real world, but not the real thing.

## Research philosophy for this research:

Saunders et al. (2007) argues that usually a combination of positivism and interpretivism are generally used in the management of business research. However, the research philosophy varies according to research question. This research focuses on impact of sales promotions on impulse purchases. Various authors have discussed the phenomenon that happens and the researcher is trying to explore the consumer behaviour on impulse purchase. The philosophy that is used in this research is realism. For this the researcher uses acceptable knowledge in the field of impulse purchase and consumer behaviour to understand the impact of sales promotion on impulse purchase and consumer loyalty. The researcher collects and analyses data using acceptable knowledge for the purpose of answering the research question, so the research is more inclined towards realism.

## Research Approach:

Saunders et al. (2007) states that all research work involves theories and suggests the clarity of researcher’s theory at the beginning of the research could inform the research the approach taken in designing the research. They, suggest two types of research approach of reasoning. They are Inductive approach and Deductive approach.

## Inductive Approach:

In inductive approach, the researcher would collect the data and develop and theory with the result of data analysis. According to Saunders et al. (2007), the following are the features of inductive approach.

Gaining an understanding of meanings human attach to events

A close understanding of research context

A collection of qualitative data

A more flexible structure to permit changes of research emphasis as research progresses

A realisation that the researcher is part of the research process

Less concern with need to generalise

## Deductive approach:

Deductive approach method is the way of testing a theory. The researcher will develop a theory and suitable hypothesis. The research strategy is the developed to test the hypothesis that is developed.

Roboson (2002) suggests a five-stage model through which the deductive stage will progress:

Deduct a hypothesis from the theory

Express the hypothesis in operational terms

Test the hypothesis

Examine outcome of the inquiry

Modify theory in light of results

## Research Approach for this research:

The researcher has chosen the deductive approach over the inductive approach for this research. In deductive approach for this research, an initial stage presents a general hypothesis. This initial stage contains secondary data mentioned by various authors. This hypothesis is then tested using the data collection methods to answer the objectives.

## Research Strategy:

According to Saunders et al. (2007), seven different strategies can be used for a research. They are:

Experiment

Survey

Case study

Action research

Grounded theory

Ethnography

Archival research

The strategy that has to be used can be chosen depending on research questions and objectives, research time and other resources that are available. (Saunders et al., 2007) The most feasible solution for this dissertation is the survey method. The survey method is associated with deductive approach. It allows the collection of a large amount of data from sizeable population in highly economical way. Utilising the questionnaire, data can be standardised allowing easy compilation. It is also a cheap option for the researcher. The survey strategy also allows collecting quantitative data, which can be analysed using descriptive tactics. The survey strategy utilises the designing and piloting of data collection method to ensure a good response rate.

In the case of this dissertation, the researcher plans to distribute questionnaire among the customers and thus do the survey for this dissertation. This will be handed out by the researcher himself which adds to the cheapness of the survey. The researcher is also planning to do two mini focus group interviews among the customers. Looking at all these options, the researcher feels that conducting a survey will be the best way to collect data for this research.

## Research choice:

According to Saunders et al. (2007), the two main methods of data collection are quantitative data collection and qualitative data collection. Qualitative data that is used in research would be usually a non-numerical data. It has open-ended information. Example: Pictures or video clips. Quantitative data that is used in data would be numerical data consisting of graphs or statistics. It includes close-ended information such as attitude, behaviour of performance instruments. (John and Vicki, 2007).

Saunders et al. (2007, p 146)

Saunders et al. (2007) mentions that the researcher can use used both qualitative and quantitative data collection methods. This is known as mixed method of data collection. Both these could be done at the same time or one after the other, but the methods cannot be combined.

John and Vicki (2007) argue that the weakness of both quantitative and qualitative methods can be overcome by using both the methods. If we use mixed methods, different methods like interview and questionnaire can be used for the study. They also state that mixed method research provides more comprehensive evidence for studying a research question than using just one method of data analysis. This was also mentioned as the most practical method since the researcher is free to use all the methods to address the problem.

In the context of this research, the researcher used a combination of both quantitative and qualitative data techniques to find the data. The quantitative data is analysed with the help of questionnaires and the qualitative data is analysed with the help of interviews. The attitudes and impulse buying behaviour and perception of customers can be studied using the questionnaire surveys. For the qualitative data analysis, two mini focus groups consisting of three members each will be conducted by the researcher. The researcher will use the respondent’s observation and researcher’s observation to conclude his findings. In short, the researcher uses mixed method of data analysis to generalise the findings.

## Time Horizon:

According to Saunders et al. (2007), time horizons are needed for the research design independent of the research methodology used. There are two types of time horizons namely Longitudinal and Cross-sectional. Longitudinal studies are repeated over an extended period. Cross sectional studies are limited to a specific time frame. This research is also limited to a specific time frame and hence the cross sectional time horizon is used.

## Data Collection Methods:

There are two types of data involved with this research. The first one is primary data and the second type is secondary data. The secondary data contains the literature review, which is the view by various authors about the topic. The primary data which is collected to prove the hypothesis presented which is collected using secondary data. According to Saunders et al. (2007), the secondary data may not match the needs of new research; aggregations and definitions may also be unsuitable, there for to resolve this primary data has been employed to answer the nature of the problem and test the hypothesis. In other words, the secondary data is the data that is collected for some other purpose while the primary data is collected specifically for this research.

## Secondary data:

According to Saunders et al. (2007), the secondary data consists of both quantitative and qualitative data. It contains both raw data and published data. Bryman and Bell (2007) stated that it could provide an answer to the research question. They also mentioned about the benefits of collecting secondary data. It helps us structuring ideas, developing new concepts, widen new directions to data, sketch population and organise appropriate approach to the research.

Saunders et al. (2007) also mentions that the secondary data should be viewed with the same caution that we view the primary data. The researcher needs to make sure that it will be able to answer the research question and meet his objectives.

For this research, the researcher gathered the secondary data from journal articles and textbooks. The journals were electronically collected from the Emerald Insight (http://www. emeraldnisight. com) and Business source complete. The researcher also referred many books and magazines. Books provided the foundation for the topic and for the research methods. The journals helped to get an insight from various authors that discussed about this topic. Magazines helped to find the current situations related to the topic.

## Primary data:

Primary data is collected for the completion of this research. It is the data collected from the survey and we do not have any previous results for this data. There are two categories of data collection available. One of them is quantitative data collection and the second is the qualitative data collection.

## Qualitative data:

The data that is non-numerical and that cannot be quantified is known as qualitative data. Saunders et al. (2007) mentions that the use of interviews can help the researcher to gather valid and reliable data that are relevant to his/her research.

There interviews are mainly categorised into two namely standardised and Non-standardised interviews. Standardised interviews will have interview-administered questions where as the other one does not have that. Under non-standardised interviews, there are two categories. They are one-to-one and one-to-many. The one-to-one is further categorised into face-to-face, telephone and internet/intranet based interviews. The one-to-many interviews are of two kinds; group interviews and internet/intranet based group interviews. This kind of group interviews come under a category called focus group interviews.

(Saunders et al. (2007) p 313)

This research will be using the aid of focus group interviews. The focus group method is a form of group interview in which there are several participants, there is an emphasis on questioning on a tightly defined topic and the accent is upon interaction within the group and the joint construction of meaning. (Bryman and Bell, 2007) The main characteristic of this interview is, it involves more than one interviewee and typically contains four to twelve members. According to Cooper and Schindler (2001), the two advantages of using focus group interview are to get a depth understanding and it is a chance to observe reactions to the research question in an open-ended group setting.

For this research, the researcher conducts two mini focus group interviews. These interviews are used to increase the credibly of the research and to form a background for the questionnaire design. The critical analysis of the focus group interviews helped the researcher to critically analyse the sales promotion and its impact on impulse purchasing behaviour of the participants. The researcher was able to find two groups of respondents who were willing to give the focus group interview. These groups contained both male and female participants, with the age group between 15 and 30.

The interviewees were asked questions about the sales promotional activities in the store. They were also asked about the factors that affect them to buy things impulsively and if price promotions affect the impulse purchase. The mini focus interviews helped the researcher in questionnaire design by exploring the responses of sample population to analytically test the hypothesis using quantitative data. The response from the interviewees pulled out the conclusions that sales promotions play an important role in impulse buying behaviour of consumers.

## Quantitative data:

The quantitative data is analysed using survey method. For this research, the researcher uses, questionnaire for the survey method. Saunders et al. (2007) mentions that a questionnaire includes all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order. They also mention that it is one of the most widely used data collection within the survey strategy.

The questionnaires are used in the research as it permits prompt and honest responses from a respondent than interviews. This sort of response is required for extracting information such as personal information. The biasness that is likely to occur by the difference in phrasing questions to different respondents is also eliminated by using questionnaire. The convenience, availability of resources in terms of time and cost and ease of automating data entry makes questionnaire the best choice for quantitative data analysis.

According to Saunders et al. (2007), various factors affect choosing the questionnaire for a research. They are

The characteristics of the respondents to whom the researcher wish to collect the information.

Importance of reaching a particular person as respondent

Size of the sample required by the researcher for the analysis

Importance of the responders answers not being contaminated or distorted

The type of question that the researcher needs to collect the data

The number of questions that the researcher needs to ask to collect the data

There are two types of questionnaires namely self-administered questionnaire and interview administered questionnaire. Self-administered questionnaire is used in this research because of its advantage that it can be completed without the presence of the researcher. This is supported by Brace (2004) that the absence of the researcher makes the respondent to be honest and the respondent gets enough time to answer the questions.

One important thing that needs to be noted is the language used in the questionnaire. A simple language is usually preferred than using technical jargons. Bruce (2004) mentions that “ double barrelled questions and jargon must be avoided in order to reduce confusion among both parties”

Bryman and Bell (2007) mentions that piloting a questionnaire should be an integral part of the process. Piloting is the process by which the questionnaire is revised and tested until the researcher and clients are happy. It helps the researcher to improve the quality of questionnaire and its efficiency in assembling data. A pilot test was conducted among five MBA International students to validate the questionnaire. Based on their feedback, necessary amendments were made to the questions.

## Table 2: Questionnaire description:

Sl. no

Characteristics

Questions

1

Collects the demographic information from respondents

Q1, Q2, Q3

2

Identifies the shopping details like frequency and average spending

Q4, Q5

3.

Identifies the sales promotional activities in the store

Q6, Q7,

4

Identifies consumers’ impulse buying behaviour and factors

Q9, Q10, 11

5.

Identifies if price promotion affects impulse purchase

Q12, Q13, Q14, Q15

The researcher distributed the questionnaires in Tesco retail store, Parnell Street, Dublin-Ireland. The researcher ensured that the consumers got enough time to complete the questionnaire. This researcher did not give any hints to answer the questions and this helped the respondent to honestly answer the questions. The researcher used an online tool called Surveymonkey for the data analysis (www. surveymonkey. com). The response and the scales used are mentioned in the data analysis chapter

## Population and Sampling:

According to Cooper and Schindler (2008), a population is the total collection of elements about which we wish to make some inferences. They also mentioned that to draw the conclusion about the entire population, some of the elements of the population are to be selected and this process is called sampling.

Saunders et al. (2007) mentions sampling technique provides a range of methods that enable to reduce the amount of data that is needed for consideration. They further mention that this is an alternative to the census method. They provide alternative when;

It would be impractical for the researcher to survey the entire population

The budget constraints prevent researcher from surveying the entire population

The time constraints prevents the researcher from surveying the entire population

Results are needed quickly

Mayolor and Blackmon (2005), mentions that sampling frame facilitates, conclusion making about the social units that have been selecting units that are representative of the population.

Saunders et al. (2007) classifies the sampling techniques into probability sampling Non-probability sampling. In probability sampling, the probability of each case being selected from the population is the same for all cases, where as in non-probability sampling, the probability of case being selected is being unknown.

Cooper and Schindler (2008), argues that, if the non-probability sampling is feasible, if the total population for the study is unknown. In this case, the population are the customers of Tesco, Parnell Street, Dublin. Non-probability sampling is further divided into five types:

Quota Sampling

Purposive sampling

Snowball sampling

Self selection sampling

Convenience sampling

This research focuses on impact of sales promotion on impulse purchase and consumer loyalty. In this research, the quota sampling is found to be more appropriate for the sampling. Saunders et al., (2007) confirms that with the help of quota sampling, population could be divided into specific groups. This helps in calculating a quota for each group based on appropriate and obtainable data.

According to Barnett (1991), cited by Saunders et al. (2007), quota sampling is entirely non-random and is normally used for interview surveys. It is based on the premise that the sample will represent the population, as the variability in the sample for various quota variables is the same as that of the population.

For this research, the population is categorises into specific groups. Appropriate estimate from each group is prepared to distinguish the quota based on reliable data. Each interviewer will be analysed and the data will be collected from each quota. The data that is collected are then united to obtain a full sample. The researcher selected the quotas according to the age group and gender. The customers were selected by the respondent randomly first. The researcher then checked the respondent’s criteria of the age group and selected the people he wanted.

## Sampling Frame:

The frame elements in the population are called the sampling frame. Saunders et al. (2007) states that the larger the sample’s size, the lower the likely error in generalising to the population. Hence, suitable sample should be governed by:

The confidence required in the data

Margin of error that can be tolerated

Types of analysis that needs to be undertaken

Size of the total population

The sampling frame in this research includes the customers in the grocery section in Tesco, Parnell Street. The sampling size, frame and population are defined as follows:

Sampling Size: 100

Elements: Customers of Tesco, Parnell Street

Units: Grocery section in Tesco Parnell Street

Extents: Dublin, Ireland

Sampling Technique: Non-probability sampling (quota sampling)

Sampling Error: 5%

Time: May 2010-Aug-2010

The quotas and total sample size are given below:

AGE GROUP

MALE

FEMALE

15-30

25

25

31-50

15

15

51 and above

10

10

TOTAL POPULATION = 100

Time constraint was the main reason for the researcher to select a small population. The researcher ensured that the researcher were ensured ample time to complete the questionnaire. The researcher made sure that the questionnaire had a simple design with no technical jargons used which would have confused people otherwise. The researcher plans to distribute the questions to 100 people and expects a sampling error of 5%. Since it is a self-administered questionnaire, the researcher expects good response from the respondents.