5 METHODOLOGY

This chapter explains and justify the methodology used for conducting this research project. It begins with explaining the adopted research philosophy, research approach and design. Further, it explains the data collection method, sampling technique and sample size, data analysis method and data quality issues. Finally, this chapter acknowledges the limitations and ethical issues of the research.

5.1 Research Philosophy

―It is a capital mistake to theorize before one has data

Arthur Conan Doyle

The term research philosophy relates to the development of knowledge and its nature (Saunders et al 2009). While conducting a research, an understanding of the philosophical principles is important as it may influence the choice of research strategy in the development of new knowledge (Saunders et al. 2009). Selected research philosophy contains important assumptions about the way one looks at the world (Saunders et al. 2009) and it guides the process of the research (Hussey and Hussey 1997). According to Johnson and Clark (2006) while conducting a research it is important to be aware of the philosophical commitments we make through our choice of research strategy as it has significant impact not only on what we do but we understand what is we are investigating. The understanding of philosophical issues is useful in three different ways (Easterby-Smith et al 2009).
a) It helps to clarify research design;

b) It helps the researcher to recognise which design will work and which will not;

c) It may help the researcher identify and even create designs and also suggest how to adapt research designs according to constraints of different subjects or knowledge structures.

There are two main philosophies associated with development of knowledge in social science research i.e. Positivism and Interpretivism or Phenomenology (Saunders et al, 2003).

The doctrine of Positivism was first encapsulated by the French philosopher, Auguste Comte (1853), as he said —All good intellects have repeated, since Bacon’s time, that there can be no real knowledge but that which is based on observed facts. The statement comprises two important assumptions: first, an ontological assumption, that reality is external and objective and second, an epistemological assumption, that knowledge is only significant if it is based on observable facts of reality (Easterby-Smith et al 2009). The key idea underlying the doctrine of positivism is that social world exists externally and its properties should only be measured by objective methods rather than by inferring subjectively through sensation, reflection or intuition (Easterby-Smith et al 2009).

Positivist adopts the philosophical stance of the natural scientist (Saunders et al. 2009). According to Remenyi et al. (1998) Positivist work with an observable social reality that leads to resulting law like generalisations similar to those produced by the physical and natural scientist. This approach generates hypotheses that can be tested and that will thereby allow explanation of laws to be assessed (Bryman and Bell 2007). According to Aiken (1956) Positivism provides the best way for investigating human and social
behaviour originated due to metaphysical speculation. This approach allows the researcher to conduct the research in a value-free way, and stay impartial to the subject of the research (Saunders et al. 2009).

On the other hand, the term Interpretivism is derived from two intellectual traditions: phenomenology and symbolic interactionism. Phenomenology refers to the way we make sense of the world around us and Symbolic interactionism is a continual process of interpreting the social world around us (Saunders et al. 2009).

It relates to understanding the rich insights of complex subjectivity of the lived experience (Saunders et al. 2009). Interpretivism states that it is important for the researcher to understand differences between human behaviour as social actors (Saunders et al. 2009). The researcher adopts an empathetic stance under interpretivist philosophy (Saunders et al. 2009). It is important for the researcher to understand and view the research subject from their point of view. Since business situations are complex and unique, many authors argued that an interpretivist approach is highly appropriate in the case of business and management research particularly for organisational behaviour, marketing and human resource management (Saunders et al. 2009).

In consideration with above two mentioned philosophies, the author selects the positivism philosophy for the research. The decision is made in consideration with the research objectives i.e. examining the impact of celebrity endorsements on consumer buying behaviour. In order to achieve the intended aims and objectives of this research positivist approach seems to be most suitable for the research.
5.2 Research Approach

The aim behind conducting a research is to examine the existing theories, set up new theories or adding new knowledge to existing theories on the basis of latest findings (Saunders et al. 2009). Understanding of research approach is essential as it enables the researcher to focus and look at in-depth of the problem and make a decision on how to solve the problem, naming, and approaching the research topic (Saunders et al 2007). There are two kinds of research, namely deductive and inductive (Saunders, et al. 2009 and Hussey and Hussey 1997).

Deduction owes much to scientific research. It involves developing a theory and hypotheses (or hypotheses) and design a research strategy to test the hypotheses, which can be explained as relationships between cause and effect variables (Saunders et al. 2000). Deduction approach has several important characteristics. It aims to search and explain the causal relationship between variables. Another important characteristic is that concepts need to be operationalised in a way that enables facts to be measured quantitatively. It also dictates that the author should be independent of what is being observed in order to pursue the principle of scientific rigour. The final characteristic of deduction approach is generalisation (Saunders et al. 2009)

On the other hand, inductive approach involves a theory being developed on the basis of analysis of collected data (Saunders, et al 2000). According to Bryman (2001) Inductive approach begins with observations and thereafter conclusions are made that are sufficiently capable of explaining the research problem. Further Saunders et al (2003) states that inductive approach is concerned with the context in which events take place and theory are built subsequently under the light of research findings. An inductive approach seems to be less appropriate for this research because inductive approach is
more concerned with the cause for the situation rather than the result (Deploy and Gitlin 2004).

The logic of this study is deductive as the purpose of this study is to test the hypotheses, and draw conclusion on the basis of statistical analysis of the data with the ability to be generalised (Lee and Lings 2008). Moreover the application of deductive approach will help the researcher to explain the relationship between celebrity endorsement and consumer buying behaviour
5.3 Quantitative Versus Qualitative Research

Qualitative and quantitative are the two main approaches to conduct a research. The former involves collecting data that is mainly in the form of words, and the latter involves data which is either in the form or can be expressed in numbers (Easterby-Smith et al 2009). However this simplified distinction may lead to confusion because both of these methods may be used by both Positivist and Interpretivist epistemologies and can be supported by both nominalist and realist ontologies (Easterby-Smith et al 2009). In fact, many researchers have supported the idea of using multi-method approach in marketing research strategy as the combination of these two methods may lead to some interesting and exciting conclusions in a research study (Flick 2002 and Carson et al 2001).

Denzin and Lincoln (2005) referred Quantitative research as the —science that silences too many voices. The quantitative approach involves collecting numerical data and analysing it in a statistical manner by applying statistical tests (Hussey and Hussey, 1997). It follows rigorous methods and procedures which allow generalisation of the findings, to measure and analyse causal relationships between variables (Denzin and Lincoln 2000). Quantitative approach is a method concerned with logically and critically testing, verifying and identifying variables, in addition, it is objective and focuses on testing hypothesis and is very result orientated (Ghauri and Gounhaug, 2003). Quantitative research is conducted and validated by social survey and by experimental investigations to find out the fact and cause of social phenomena (Robson 1994).

Qualitative approach aims to discover the views, perception and opinions of groups or individuals through language and the main method to conduct this is in-depth interview (Easterby-Smith et al 2009). According to Robson (1993) qualitative data tends to be based on meanings communicated verbally, concerns with understanding behaviour from actor's out of his own experience. Walliman (2001) further stated that qualitative
research is more related with participant observation and unstructured in-depth interview in order to find out the feelings and motivation behind actions and attitudes. Qualitative research emphasises on subjective interpretation (Bryman, 2001) and facilitates effective and in-depth understanding of the research topic (Easterby-Smith et al. 2009). The qualitative research method provides a deeper understanding, knowledge and insight into a particular phenomenon, by providing answers to questions of how rather than what? (Miles and Huberman, 1994).

From the above discussion and considering research questions, the author decides to adapt the quantitative research. Quantitative approach would help the author to collect large amount of data to answer the research questions and further leading to generalisation. Further the use of quantitative method is justified if the area of research topic is large and when there is a need to deduce casual relations between variables (Gordon and Langmaid 1988).

**5.4 Research Purpose**

It is important to link research aims and objectives with the research philosophy and research design as it may help the researcher to find out answers to the research questions. Therefore, identification of research purpose is based on the success and direction of the research design (Saunders et al. 2009).

According to Saunders et al. (2009) and Jankowicz (2005) research methods can be classified under three types of research purposes: exploratory, descriptive and explanatory. According to Robson (2002) An exploratory study is a valuable means of finding out —what is happening; to seek new insights; to ask questions and to assess phenomena in a new light (Cited in Saunders et al. 2009, pp 139). It is particularly used if the researcher is uncertain and wishes to clarify the understanding about the nature of the
problem. Secondly, the objective of descriptive research is —to portray an accurate profile of persons, events or situations (Robson 2002, Cited in Saunders et al. 2009, pp 140). According to Gummesson (1991) it is the simplest form of science as it just involves observing and reporting other people’s findings. Finally, the studies that establish causal relationship between variables can be termed as explanatory research. It emphasises on studying a situation or a problem in order to explain the relationship between variables (Saunders et al. 2009).

This study aims to explore the impact of celebrity endorsements on consumer buying behaviour or their intention to purchase; therefore, the author has decided to undertake exploratory research.

5.5 Research Design

According to Robson (2002) Research design is a process that turns the research question into a research project (cited in Saunders et al. 2009). Ghauri and Gronhaug (2002) further defined research design as an overall plan for relating the conceptual research problem to relevant and practicable empirical research. Saunders et al. (2006) simplified the concept by stating that —Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Therefore, for this dissertation the author has justified the research design on the basis of research questions and objectives as well as by being consistent to the research philosophy as suggested by Saunders et al. (2009).

5.6 Research Strategy

Research strategy enables the researcher to answer the particular research questions and meet their objectives (Saunders et al. 2009). The choice of research strategy is guided by
the research questions and objectives, the extent of existing knowledge, the amount of time and other resources available as well as researchers own philosophical underpinnings (Saunders et al. 2009). Saunders et al. (2009) further revealed various type of research strategy approaches used in a management research i.e. experiment, survey, case study, action research, grounded theory, ethnography and archival research. According to Yin (2003) each of these strategies can be implemented for exploratory, descriptive and explanatory research. Further Robson (1993) stated that more than one method can be used by the researcher depending on the nature and number of research purpose(s).

Survey strategy is a popular and commonly used strategy in business and management research. It is usually associated with the deductive approach and it is most commonly used to answer who, what, where, how much and how many questions (Saunders et al. 2009). Accordingly, it is tend to be used for descriptive and exploratory research. Moreover, survey allows a researcher to collect a large amount of data from a sizeable population in a highly economical way (Saunders et al. 2009). Most importantly the data collected by using a questionnaire is standardised and allows easy comparison. Additionally this strategy is generally perceived as authoritative among people and is comparatively easy to explain and understand (Saunders et al. 2009). Therefore, for this research project the author aims to collect the data through a structured questionnaire in the form of a survey.

5.7 Data Collection

It is important for a researcher to collect all the necessary information and relevant data in order to be successful in achieving the desired aims and objectives of the research. According to Saunders et al., (2009) basically there are two data collection methods i.e. primary and secondary source of data. According to Collins and Hussey (2003)
Primary data is known as original data that is collected from the main source. Sources to collect primary data include observation, survey, questionnaire and personal interviews (Hussey and Hussey 1997). On the other hand, Secondary data involves collecting and analysing data which is already been collected by past researchers for some other purposes. It can be in the either form, raw data and published summaries (Saunders et al., 2003).

For this research the author has used structured questionnaire method as a source to obtain primary data. And for the secondary data the author has gained data from the relevant text books, journals, reports, articles and the internet.

5.7.1 Secondary Data

Secondary data includes textbooks, surveys, reports, newspapers, magazines, articles, video recordings etc. (Saunders et al. 2007). The extent of secondary data available provides the base for a strong literature review and secondary research analysis. The availability of the secondary data enhances the existing knowledge of the researcher and offers guidance for primary data collection (Creswell 2009). The appreciating and commendable work by many researchers on celebrity endorsements has helped me to analyse and build on the secondary data available and also work on the further research that adds value to my research topic. The author has various sources for collecting secondary data such as journals, text books, internet and electronic resources.

The collection and analysis of secondary data is time saving, cost efficient and provides a wider variety of options and findings (Ghauri and Gronhaug, 2003; Saunders, et al, 2007). However, its disadvantages cannot be neglected. The data is collected to serve different purposes to different studies. It means that the aims and objectives of the previous study might not match with the existing aims and objectives (Ghauri and
Gronhaug, 2005). Additionally the secondary data might not be accurate and updated as the data has been collected a few years ago that might not solve the purpose of existing research question (Saunders et al. 2000).

5.7.2 Primary Data

According to Saunders et al. (2007) Primary data involves the method which is collected specifically for the research project being undertaken. Jankowicz, (2005) further states that data collected through primary sources is more relevant and consistent with the set objectives to the study. Ghauri and Gronhaug (2002) asserts that only primary data can help answering the questions related to people’s attitudes, intentions and buying behaviour. The analysis of primary data is a central source for this study. Thus the author has adopted survey strategy using Self-administered questionnaire technique in order to collect primary data for this study.

The survey strategy allows the researcher to collect which can be analysed quantitatively using descriptive and inferential statistics. The data collected through survey strategy is easy to explain and understand (Saunders et al. 2009). Moreover, it can be used to suggest possible reasons for relationships between variables and to produce models of these relationships (Saunders et al. 2009).

5.7.3 Questionnaire

Within business and management research, the questionnaire is one of the most commonly used data collection technique within the survey strategy (Saunders et al. 2009). According to deVaus (2002) (cited in Saunders et al. 2009 pp. 360) generally questionnaire includes all the data collection techniques in which —each respondent is
asked to respond to the same set of questions in a predetermined order. Using questionnaire is an efficient way of collecting responses from a large number of people because every respondent is asked to respond to the same set of questions. Moreover it can avoid bias in data collection process (Saunders et al. 2009). As a result, questionnaire tends to be the most reasonable and appropriate method in collecting data from large number of people in order to fulfil the aims and objectives of the research study.

5.7.4 Questionnaire Design

In order to collect data, the author distributed Self-administered questionnaires to be completed by the respondents. This type of questionnaires are electronically administered through the internet or Intranet, posted or delivered by hand to respondents (Saunders et al. 2009). Conducting such questionnaires is easy, relatively cheaper than face to face surveys and allows an opportunity for a large number of people to be surveyed (Saunders et al. 2009). The questionnaire is designed in a way to empirically test the hypotheses developed in the previous chapter, impact of celebrity endorsement on consumer buying behaviour (purchase intention).

The questionnaire for the research is divided in four major sections. Sections A, deals with collecting the demographic data of the respondents for instance their age, gender, occupation etc. The rest of the three sections were aimed at collecting the data to prove each hypothesis. Section two comprises questions to explore and examine the current state of consumer perception about celebrity endorsements. Section three deals with evaluating the impact of each celebrity attribute on the purchase intention of consumers. Finally the section four is aimed at evaluating the overall impact of celebrity endorsements on consumer purchase intention. All the three sections were made coherent so that respondents can understand them easily and take the correct meaning of them. Moreover, the business jargons or complicated terms are made easy by providing a small
definition at the end of the questions. The author used 5 point likert scale for evaluating
the degree of agreement for each question. Likert scale questions are relatively easy to
complete (Robson 1993).

The author promised to keep the confidentiality of demographic profile of the
respondents. In order to get the high response rate the author pre contacted the friends
and colleagues through email, telephone, SMS etc.

5.7.5 Pilot Test

The purpose of the pilot test is to refine the questionnaire so that respondents don’t face
any problems answering the questions and to eliminate further problems in recoding the
data. Additionally it helps the author to check the reliability and validity of the data to be
collected (Saunders et al. 2009). Pilot test ensures that the collected data will be helpful
in answering the investigative question or research questions.

The number of people required to pilot test the questionnaire depends on research
questions, research objectives and size of research project. According to Fink (2003b) for
most student questionnaire the number for a pilot test is 10 (cited in Saunders et al. 2009).
Therefore the author conducted the pilot test by distributing the questionnaire to 20
respondents in Jims Campus. After completing the pilot test unclear and confusing
questions were revised and rectified accordingly. Small definitions were provided for the
jargons used in the questionnaire.
5.8 Sampling

Determining an appropriate research population and proper sampling procedure is an important aspect for a researcher in order to answer research questions. According to Jankowicz (2000) Sampling is a calculated choice of number of the people, representing a given population. Since, it is impossible for the author to survey the whole population due to time, money and access constraints it becomes important for the author to determine sampling size and sampling frame, in order to gather findings from the representative set of population.

![Diagram of Types of Sampling Techniques]

**Figure 6: Types of Sampling Techniques (Source: Saunders et al. 2009)**

According to Churchill (1995) sampling procedure can be divided into two parts namely probability and non-probability sampling. Saunders et al (2009) defined probability sampling as chance of each case being selected from the population is known and equal.
Probability is based on statistical study. Whereas, non-probability sampling is a case where sample has not been selected using the random selection method. It implies that some units are more likely to be selected than others in a given population (Bryman and Bell, 2003).

According to Aczel and Sounderpandian (2002) under probability sampling the chances of a sample being selected from a population is based on the principle of randomisation or chance. Hence probability sampling is more complex, time consuming and costly as compared to non-probability sampling (Saunders et al. 2003). For business and management studies, —the research questions, objectives and choice of research strategy may often use non-probability sampling (Saunders et al. 2007 pp. 170). There are many advantages of non-probability sampling: Non-probability sampling is relatively cheaper and is used when sampling frame is not available (Saunders et al. 2003). It is also useful in a research where the researcher wants to investigate the attitude and perceptions of people (Churchill 1995). Based on the above discussion, the author will use non-probability sampling for this research. The main argument for this is limited time and resources. Secondly, non-probability sampling is associated with recognising and questioning the respondents on the basis of their background and past experience (Jankowicz 2005).

5.8.1 Sampling Technique

The sampling technique used for this study is convenience sampling (or haphazard sampling). —It involves selecting haphazardly those cases that are easiest to obtain for your sample…….. the sample selection process is continued until your required sample size has been reached (Saunders et al. 2009 pp. 241). Under convenience sampling respondents are selected on the basis of proximity, ease of access and willingness to participate (Timothy 2005). It enables the researcher to gather information from the
targeted group of people easy and quickly. The author has selected convenience sampling for this research mainly on the basis of easy access to target population in India. The questionnaires were sent through email to the respondents in India i.e. authors friends, colleagues and relatives. The author has sent the questionnaire to Indian students studying in Bournemouth University and to friends through social networking website like Orkut, Facebook etc. as well.

5.8.2 Sampling Size

The issue of sample size for all non-probability sampling techniques (except quota sampling) is ambiguous and, there are no rules (Saunders et al. 2009). —generalisations being made to theory rather than about a population (Saunders et al. 2009 pp. 233). According to Patton (2002) Sample size depends on the research questions and objectives of the research and also the analytical skills of the author (cited in Saunders et al. 2009 pp. 235). Generally researchers don‘t restrict themselves to any specific sample size. Fortunately, Crimp and Wright (1995) offered some guidance by proposing that sample size anything larger than 30 and below 500 is appropriate for the research methods. For this research the author aims for a minimum of 101 samples, in accordance to the time limitation. For Respondents profile please refer to (Appendix 2)

5.9 Data Quality Issues

There are a number of data quality issues need to be considered while conducting a research. According to Saunders et al. (2009) the quality of research findings can be identified on the basis of reliability, validity and generalization. Emphasizing on research design: reliability and validity reduces the possibility of getting the findings wrong (Saunders et al. 2009).
5.9.1 Reliability

—Reliability refers to the extent to which your data collection techniques or analysis procedures will yield consistent findings (Saunders et al. 2009 pp. 156). Further, Cooper and Schindler (2003) stated that reliability involves supplying consistent findings. Reliability of the research refers to the ability of the research to generate same findings to the same questions if the research is repeated or conducted again (Hussey and Hussey 1997). According to Easterby-Smith et al (2008) Reliability of the research can be tested by posing the following three questions (Cited in Saunders et al. 2009):

- Do the measures produce the same findings on other occasions?
- Did other authors reached the same findings?
- Is there a transparency in the sense raw data was analysed?

Since this research is based on celebrity endorsements in Indian context. Moreover, the author has conducted a pilot test to reduce the confusions in the questionnaire and make it more meaningful for the respondents.

5.9.2 Validity

According to Hussey and Hussey (1997) Validity is concerned with —the extent to which the research findings accurately represent what is really happening in the situation. Reliability is concerned with the fact whether the findings are really about what they seem to be about (Saunders et al. 2009). Silverman (2000) made is more simple to define by stating that Validity is a synonym for truth. Furthermore Janskowicz (2000) revealed that validity deals with the accuracy of the measurements used for data collection and
analysis, the data is valid if other researcher can reach to the same conclusion using other methods.

The author has maintained the validity of the research by conducting a pilot test before conducting the main research in order to avoid any confusion and amendments were made thereafter. Moreover, the author has tried to explain each and every step during the research before arriving to the conclusion.

5.9.3 Generalizability

Generalisability can also be referred to as external validity (Saunders et al. 2009). It refers to the extent to which the research findings are generalisable: i.e. whether the findings are equally applicable to other research settings, for instance organisations (Saunders et al. 2009). Further Hussey and Hussey (1997) suggested that there is a relationship between sample population and research findings by stating that greater the sample size, greater the generalisability. Since different people have different ideas and views selecting smaller sample size might not represent the wider population. Moreover it is virtually impossible to sample the whole representative population. Additionally use of convenience sampling makes it more difficult to analyse sample as a whole population. However, in order to improve the generalisability of the research only relevant questions intended to examine the impact of celebrity endorsement on consumer behaviour (purchase decision) are being asked.

5.10 Data Analysis

The data collected through the online questionnaire will be analysed using the SPSS software. Author will use Descriptive Frequency analysis, Correlation analysis and
Regression tests in order to examine the relationship between constructs and test the hypotheses accordingly.

**Frequency Descriptive Analysis**

Descriptive frequency statistics is used to present quantitative data in a manageable form. It helps to represent large number of data in a simple and sensible way. It is basically used to assess the trend of demographic data (Mean, median, mode, standard deviation and percentage). Descriptive statistics include the numbers, tables, chart and graphs to describe, organise and summarise the data. Descriptive statistics help to summarise and support assertion of facts.

**Correlation Analysis**

Correlation is one the most important statistical analysis tool. It helps to describe the degree of relationship between two variables. Correlation determines the extent to which changes in the value of an attribute are associated with changes in another attribute. The author will use correlation analysis technique to measure the relationship between different attributes of celebrities and purchase intention and testing the hypotheses.

**Regression Analysis**

Regression analysis is used for modeling and analyzing several variables. It is used to examine the relationship between a dependent variable and one or more independent variables. In this research dependent variable is purchase intention and independent variables are the various attributes of celebrity endorsers. Correlation analysis will help the author to examine and understand how the value of dependent variable changes when
any one of the independent variable changes, while other variables are constant. For this research the author will use simple linear regression analysis.

5.11 Limitations of the Research

There are certain problems being faced by the author while conducting this research. One of the main issues associated with the research is gaining access to the data. Internet has undoubtedly made it even easier to access and collect the secondary data through e-journals, articles and other e-resources provided by the university. However, gaining physical access or entry (Gummesson 2000) in order to collect primary data can still be difficult. Respondents may not be prepared to contribute to the research due to lack of time and resources required. However the author has made pre-survey contact with the respondents through various channels (e-mail, telephone and social networking websites) in order to remove operational constraints.

Ethical challenge is one of the major concerns while conducting a research. Cooper and Schindler (2008 pp 34) defined ethics as the —norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others. For this research the author has ensured that the research design is both methodologically sound and morally defensible to respondents involved. The anonymity and confidentiality in terms of the answers is ensured at all times and the purpose of the research was made clear to the respondents beforehand.

Another big limitation to the research is the time; the author has to submit the research project before the specified deadline. While studying celebrity endorsements the author has come across many other interesting and challenging concepts. Due to scarcity of time the author has only focussed on the relevant literature contributing to the research topic. Nevertheless, the author has successfully reviewed and mentioned all the relevant information available up to date. Furthermore, other related and interesting concepts are
suggested for future research. Future research can be conducted on a broader scale on the basis of sex, disposable income and product categories.

5.12 Methodology Framework

![Methodological Framework](image)

Figure 7: Methodological Framework