CHAPTER 1

Introduction

This chapter starts with problem background section that provides an overview on the importance of consumers’ culture for the success of innovation. The next section is the problems formulation that briefly describes the question which this research intends to answer. This will be followed by the purpose of the study section that indicates the goal of this research is to provide a better understanding and guidance on the impact of culture on the success of new products. Then, it will be a section on the limitations of this study. The next section is terminology where some of the most frequently used terminologies are defined. The last section is deposition which contains a brief summary of the contents of the chapters 1-6 of this thesis.

1.1. Problems background

In today’s economy many corporations are expanding their business to various countries across the world. Although this globalization offers tremendous business opportunities, it also presents some challenges. One of the main challenges that corporations often encounter, as they globalize, is diversity in cultures across the globe. The law, regulations, and societies in each country are influenced by the culture of that country. Therefore understanding and consideration of various cultures is becoming essential for the success of multi-national corporations. Manager of such companies need to be aware of different cultures and the potential impact that can have on the success of their new products.¹

Companies often experience a rate of failure of about 40 percent for some of their new products. As a result many studies are conducted in order to identify the root cause of these failures in order to avoid them and to obtain a better rate of success. Some studies suggest that the main reasons for high rate of failures of a new product are either the fact that there is no need for the product or if there is a need, the new product does not meet those needs. Both of these go back to the importance of good understanding of the consumer’s culture, their needs, the status of the competitive products, and a good assessment of the value that a new product gives the consumers as compared to the costs, etc.²

Marketers who have a good understanding of the environment and the customers’ culture may choose to introduce their new product first to a selected group of people. These are the customers who are more open to try new products. By introduction of the new product to this group, marketers will determine the initial success or failure of their product. This information then can be used for improvement of the new product or to devise a better marketing strategy. It is imperative for the global companies to have a good understanding of the consumer culture and the impact it may have on the consumers respond to innovation. The international marketers should take the consumers’ culture and its influence on the innovativeness into the consideration when devising their marketing strategies.

Randlesome suggests a combination of the national culture and the state of commercial development of each country shape and construct the business culture of that country. The understanding of impact of national cultures on the consumers’ response to innovation is increasingly become important for the globalize corporations. The consumers’ response to innovation in various countries could be different due to differences in national cultures of those countries. Innovation is received in different ways by consumers from different cultures.

According to Swift, companies need to have a close contact with their customers and gain a good understanding of their culture in order to provide them with proper information on their innovation. It is essential for the corporations to inform the customers and keep them interested in their products. Newell suggests customers from various cultures and backgrounds may have different behaviors towards innovation and global corporations should take the consumers’ culture into the consideration.


Some researchers who studied the impact of culture on the diffusion rate of new products have concluded that culture plays a significant role in the diffusion process of innovations\textsuperscript{10}. On the other hand, other investigators who conducted research in this area reported that they could not find a clear relationship between culture and the diffusion process of new products\textsuperscript{11}.

According to Hofstede\textsuperscript{12} the social role of men and women in various cultures can be different. As a result in some cultures males and females, due to their different social roles and status, may respond to innovation in different ways. Dwyer\textsuperscript{13} et al reported that gender plays a role in diffusion process of innovation and males are more open to try new products than their female counterparts.

Most researchers\textsuperscript{14, 15, and 16}, who have studied the impact of culture on diffusion process of innovation, have conducted their studies on consumers from European or Asia pacific countries. The literature search indicated no research have been conducted to compare the responses of the Middle-eastern and European consumers to new products. This was one of the reasons that the author decided to study the impact of national culture on adoption of innovation in the two countries of Sweden and Iran. The significant cultural differences between these two countries make them ideal to study the impact of consumers’ culture on the diffusion of innovation. In today’s global economy, it is vital for corporations in both Sweden and Iran to find new markets and to increase their market share in the international market. The results of this study may aid these corporations to achieve their goals.


\textsuperscript{15} V. Kumar and T. Krishnan: Multinational diffusion models; An alternative framework, Marketing Science, vol 21 Issue 3, 2002.

1.2. Problems formulation

The focus of this study is to address the following question:

- What is the impact of national culture on the diffusion process of innovation especially in Sweden and Iran?

1.3. Purpose of my study

The purpose of this research is to help managers, innovators and international marketers to understand the impact of the consumers’ culture on the diffusion process of innovation.

1.4. Limitation

There are some limitation that one can realistically experience in studying the impact of culture on the success of marketing of the new products in two countries like Sweden and Iran. The first limitation is lack of a full understanding of Swedish culture by the author. Although efforts will be made to enhance the familiarization with this culture, nonetheless it can be considered as a limitation for this research.

The next limitation could be the fact that culture might be different from person to person. Although it is planned to focus on the consumers’ national culture, the difference between individual cultures of the samples may still be considered as a potential limitation.
1.5. Terminology

This section provides definition for some of the terminologies that are frequently used in this thesis.

**Culture:** The totality of humans’ socially transmitted behavior patterns including ways of thinking and believes, feeling and reacting, arts, institutions, and all other products of human intellectual and artistic activities \(^{17}\).

**International marketing:** This is the process through which corporations present and sell their products or services in international markets. The international marketing is separated from national marketing due to the fact that they are targeted for customers with different culture. Often culture, laws, and overall environment for international marketing is different form those for national one \(^{18}\).

**Globalization:** The process of cross-border economical, social, cultural and technological exchanges \(^{19}\).

**Innovation:** The goods and or services that consumers perceive to be new \(^{20}\).

**Diffusion of innovation:** The process of spreading the new products throughout the population \(^{21}\).

**Consumer:** The person who needs products or services provided by companies and organizations and is willing to pay for them. The extended definition of customer also includes the companies and organizations that buy other corporations, products and services \(^{22}\).

**Innovativeness:** The degree to which individuals or societies are open and willing to adopt new products and services in their early days of introduction in to the market \(^{23}\).


1.6. Disposition

In this section a summary of the content of the various chapters of this thesis is provided as follows:

Chapter 1- Introduction: In this chapter a summary of the problem background and problem formulation is provided. Then the purpose of this study is stated followed by its imitation. This is followed by the terminology section in which key terms are defined.

Chapter 2 – Theoretical method: This chapter provides the reason for choosing this topic as well as the potential preconception that the author might have regarding this topic. A summary of the scientific attitude, scientific method, method of research, perspective, process research, and collection sources are discussed.

Chapter 3 – Theoretical framework: This chapter starts with innovation section in which innovation and diffusion of innovation are described. The next section involves culture and it various layers. The following two sections provide brief background about Sweden and Iran, respectively. The next section compares the characteristics of national culture of these two countries. The following section discusses the hypotheses that are formulated by author to be evaluated in this research. The final section discusses the previous research studies in this area.

Chapter 4 - Preparing the empirical study: This chapter contains sections on research tools, questionnaire, the principle of preparing the questionnaire, the main parts of the questionnaire, how to prepare the questions, the order of the questions, the primary use and evaluation of the questionnaire, cluster sampling, and pros and cons of the cluster sampling approach. It discusses the statistical tools and methods followed by a section on the reliability and validity of measurement tool used in this research.

Chapter 5 – Analysis and interpretation of data: In this chapter first descriptions of the Swedish and Iranian participants in this study are provided. Then summaries of the statistical analysis of the responses are presented. This follows by interpretation and detailed discussion of the obtained data including the testing of the hypotheses.

Chapter 6 – Discussion and conclusion: In this chapter key findings are discussed and compared against the hypotheses set forward in the theoretical framework. The success of this research to evaluate the hypotheses is demonstrated. It is concluded that national culture plays a significant role on the diffusion process of innovation. Implication of this research for international marketers, and managers of global corporations is discussed. This is followed by the recommendation for future researchers in this field.
CHAPTER 2

Theoretical method

In this chapter the choice of subject, preconception, scientific attitude, scientific method, method of research, perspective, research process, and collection sources are discussed.

2.1. Choice of subject

Choosing the subject of a research can be challenging. The authors typically choose the topic based on their interest, experience, academic knowledge, and career goals. The other criteria for selection of the research topic could be the importance of the subject and the need for answering questions and to find solutions for unmet challenges on that topic.

The topic for this thesis is chosen due to its increasing importance in today’s global economy. Most of the businesses are either global or on their way to globalization. These organizations that conduct business in various countries need to be fully aware of the impact that the culture of those countries can have on the success of their business. They need to familiarize themselves with the culture of various countries and take them into the account in order to increase the chance of success for their business.24

The author of this thesis conducted an extended literature search and read many articles on the globalization phenomenon and the importance of consumers’ culture on the success of new products in the market. As a result the author came to the idea that the impact of national culture on the adoption of new products is a fascinating area that requires further research and understanding. The author believes research in this area would greatly benefit the global businesses and marketers. The topic for this thesis has not been chosen or worked on by any other student in the past. The following paragraphs further describe the author’s ideas in this field which based on those the author identified the need for research on the area of the impact of national culture on the diffusion of innovations.

The atmosphere of the international trade is increasingly changing. The globalization is removing the national boarders and today companies are competing in an international market. The corporations need to adjust their activities and strategies in order to stay competitive in this global trade. Global organizations need to have two important principles in their agenda in order to stay competitive and successful. First, steady innovation to expand to new markets. Second, taking consumers’ culture in different countries into the account. The consumer’s culture can have a substantial impact on the success of innovation in global markets.

Strong pipeline and steady flow of innovation are essential for any organization to stay competitive globally. However, innovations may not have an equal chance of success in various markets. Innovations may readily be accepted in some markets but may not be as successful in others. This is due to the fact that consumers in some countries are more open towards innovations than consumers in the other countries. In other words consumers from different cultures respond in different ways to the introduction of new products.

The previous paragraphs described the rational behind the decision to select the topic of the impact of national culture on the diffusion process of innovation for this thesis.

2.2. Preconception

Researchers like other individuals have their own preconception on various topics based on their cultural background, education, and experience. Researchers’ frame of reference formed by their background influences their way of thinking and reacting towards the studied objects, interpreting results, and reaching conclusions. Investigators’ cultural values lay the foundation for their way of evaluating and weighing various factors, for example what they consider as important or not important, good or bad, right or wrong, etc.

It is therefore very important, that at the beginning of the study, to identify the researcher’ potential preconceptions and to be aware how they could impact the results of the study. This clarification may help to refine the impacted results of the study.

In this study one potential preconception that the author might have could be based on the theoretical knowledge gained in the courses studied during this master program. The other potential preconception could be due to the author’s cultural background and in-depth knowledge of the Iranian culture that might unconsciously impact some aspects of the study. For these reason author have made a concerted effort to eliminate this possibility by being strictly data driven and to make all the assumptions and data interpretation based on the data and independent of the author personal opinion.
2.3. Scientific attitude

Generally research proposals have defined goals and investigators are aiming to develop knowledge in order to address certain issues and problems. Research philosophy depends on the goal of the research and the nature of the problems that the researcher is focusing on and trying to resolve\textsuperscript{25}. Clear and well understood research philosophies will aide the investigator to employ appropriate methods and strategies. It helps the researchers to avoid useless work and instead, use the previous experience and adapt the right methodologies\textsuperscript{26}.

Hermeneutics and positivism are the two main approaches that deal with views on knowledge and reality. Hermeneutists is based on subjectivity and considers the preconceptions of the researcher as important tools that can be used in the interpretation process of the study. In this approach usually, the goal of study is to obtain an in-depth knowledge and understanding of the subject. As a result, in hermeneutic style, generalization is not made nor it is considered to be important. One of the main theories of the hermeneutic approach suggests that in order to achieve a good understanding of an issue, one first needs to understand the components of that issue. On the other hand, understanding of the whole issue is needed in order to obtain a good understanding of the various components of that issue. This important theory of the hermeneutic approach is called hermeneutic circle\textsuperscript{27}. The positivism style of research philosophy involves the measurable scientific knowledge such as those generated by physical and natural scientists. However, positivism philosophy can also involve the social studies which are focused on the observable social realities. This is due to the fact that the observable social realities can be considered somehow measurable similar to the data and the results produced by the physical and natural scientists\textsuperscript{28}.

The research philosophy of this thesis is to understand the impact of national culture on the diffusion process of innovation. The aim is to help managers, innovators and international marketers to understand the impact of the consumers’ culture on the diffusion process of innovation. It is anticipated this understanding will help these mangers and marketers to devise efficient and successful strategies for the introductions of their new products in various countries with different national cultures.


\textsuperscript{27} F. Crossan: Research philosophy “Towards an understanding”, Nurse Researcher, vol 11 issue 1, 2003.

This thesis is based on positivism philosophy because it is using theories of innovation and culture as well as measurable observed social realities. The results obtained will be in the form of numerical data and will be processed by the quantitative and statistical methods which emphasize positivism view. The author based on academic background, literature, personal knowledge and experience have formulated several hypotheses on the relationship of the national culture and the diffusion process of innovation, particularly in two countries of Sweden and Iran. An empirical test (survey) on observable social realities is conducted and the results are processed using quantitative and statistical methods.

2.4. Scientific method

There are two broad approaches that researchers often use to conduct their studies. One of these is the deductive method and the other one is inductive method.

In the deductive approach a hypothesis exists and researcher conduct observations and experiments to generate data. The results obtained based on these data is then used to see if the hypothesis can be supported or not. The deductive approach focuses on explaining the relationship between variables using the quantitative data as well as scientific principles. The inductive approach involves the development of a hypothesis based on qualitative data obtained through specific observations and events. This scientific method is usually chosen when the subject of the study does not fit within any existing theory. In other words there has not been enough research conducted on these issues in order to construct a meaningful theory. Therefore this approach often used to develop a hypothesis based on the qualitative data obtained. It should be noted that in some cases it is also possible for the researchers to use a combination of deductive and inductive approaches. This combined approach is referred to as adductive approach.


This thesis utilizes the deductive method. It starts with hypotheses formulated by the author. These hypotheses are focused on relationship between national culture and adoption of new products as well as imitation. The role of gender on adoption of innovation and on imitation is also studied. An empirical test on observable social realities in the form of survey is utilized. This survey is conducted to observe how people from different culture and gender respond to introduction of new product. A relatively large number of responses obtained are then analyzed using quantitative and statistical methods. The results are then utilized to evaluate the hypotheses laid out by the author.

2.5. Method of research

There are two common methods of research namely quantitative and qualitative.

The quantitative research typically consists of a stated hypothesis, data generation, data analysis often using statistical tools, and evaluation of stated hypothesis. This method uses deductive approach to establish trends and facts that enable researcher to make prediction and to test the existing hypothesis. In quantitative method of research the object of study has an existence of its own which is entirely independent of the Researcher. This type of perspective is known as positivism.

The qualitative research involves the interpretation of non-numerical data such as observations and interviews to arrive at a hypothesis. In this type of research the object does not have an independent meaning and it may have different meaning in the view of different people. This type of research has a non-positivist perspective.

This thesis uses the quantitative method of research. It aims to achieve an objective of reality and it emphasizes on the positivistic view. The study will focus on the numerical data and will utilize the statistical methods. The author has formulated several hypotheses. Based on these hypotheses targeted questions are devised which will be answered by samples who participate in this study. The responses obtained are then analyzed using statistical tools. Finally, the results are used to evaluate the author’s stated hypotheses.


2.6. Perspective

It is important for researchers to define the perspective that they want to view the material of their study early in the research process. This will enable the investigator to better manage their research material, process data, conduct analysis, and draw conclusions. If the perspective is not established early on, the researchers are running against the risk that their study may take all possible directions. This can lead to scattered results and undesired conclusion.

Attraction of customers is one of the most important strategies of the managers of various corporations. These managers need to focus on innovation and introduction of new products in order to attract more customers and to increase their companies’ sales and profits. The main strategy for attraction of potential customers is based on innovation and familiarity with customers’ behavior and cultures.

This research is aimed to help managers, innovators and international marketers to understand the impact of the consumers’ culture on the success of innovation. It provides a better understanding of the cultural differences and their potential impact on the marketing of new products in the two countries of Sweden and Iran. The result of this study will provide guidance for the international marketers who plan to engage in transactions and exchanges in various countries and in particular in the two countries of Sweden and Iran. It will help these marketers with the important cultural characteristics that they need to consider when they are devising their marketing strategies. The result of this research will help global corporations to decide to which market they first introduce their new products. The results of this thesis may also help the global marketers to devise more efficient advertising strategies while they are considering the consumers’ national culture.

This study is conducted from the perspective of managers. It focuses on the impact of culture on consumer’s use of innovation in Sweden and Iran through the eyes of managers.

2.7. Research Process

The research process in this study consists of the theoretical framework, empirical section, data analysis and interpretation of results, followed by the discussion and conclusion.

It is important to construct a theoretical framework at the beginning of each study in order to obtain a clear understanding of the various areas of that study. The theoretical framework then provides sufficient information to conduct the quantitative research.

The theoretical framework for this thesis consists of four sections. The first one is about innovation and diffusion of new products. The second section is about culture and Hostede’s cultural dimensions including power distance, individualism and collectivism,
masculinity and femininity, uncertainty avoidance and long term-short term orientation. The third section is about Sweden and Iran including a brief comparison of cultural characteristics of these two countries. The fourth section focuses on the hypotheses formulated by the author.

After developing the theoretical framework, the empirical study will be conducted. This study will use the quantitative method of questionnaire in both Sweden and Iran to collect the necessary data.

Finally, the obtained data from empirical studies will be analyzed using the appropriate software. The results then are used to evaluate the stated hypotheses and to draw conclusions.

2.8. Collection sources

Generally, there are two types of research information sources. The first one is primary source and the second one is the secondary source.

The primary sources refer to studies and primary writings of a researcher or a person who witness a real event. This could include a research report such as a thesis, a summary statement made by a witness, and a technical report on experimental and empirical studies. The secondary source involves the previous theoretical and empirical reports. This includes books, research articles, and cyclopaedia. The secondary sources provide a general background for the study. The primary and secondary sources both are used in various studies however, the emphasis is generally on the primary sources 40.

This study utilizes both primary and secondary sources. The primary sources are samples from Swedish and Iranian populations. The secondary sources are obtained from databases and library resources of the Umea University and Tehran University.

CHAPTER 3

Theoretical framework

This chapter starts with innovation section in which innovation and diffusion of innovation are described. The next section involves culture and its various levels. The following two sections provide brief background about Sweden and Iran, respectively. The next section compares the characteristics of national culture of these two countries. The following section discusses the hypotheses that are formulated by the author to be evaluated in this research. The final section discusses the previous research studies in this area.

The theoretical framework is the conceptual foundation that is used to explain and discuss subjects which are studied and analyzed in this thesis. It includes theories and findings obtained from previous research studies by different authors. Researchers need to have a thorough understanding of the studied concepts before conducting proper research. This can only be achieved by having a good theoretical framework in place prior to the start of the study. In other words, the theoretical framework needs to be well developed and established before the empirical studies and follow up analysis are conducted.

This thesis is focused on the impact of national culture on the diffusion process of innovation. For this reason, the theoretical background of innovation, the diffusion process of innovation, culture and particularly national culture are discussed in the following section in order to familiarize readers with these concepts. Since the impact of national culture on the diffusion process of innovation in two countries of Sweden and Iran are studied, a brief background on these two countries is provided. The national cultures of these countries are compared using Hofstede’s cultural dimension model. This is due to the fact that Hofstede has conducted the most in-depth research in the area of national culture as compared to other researchers. He studied the national culture of 66 various countries while other investigators in the field typically limit their studies to 4-6 countries.

3.1. Innovation

Innovation can be described as an overall process of transformation of an invention into a profitable commercial product.\textsuperscript{41} Invention refers to something unique such as a new method, formula, devise, or process which is developed from various studies and experimentations. Inventions are often patentable.\textsuperscript{42}


Innovation refers to products or services which are perceived to be new by consumers\textsuperscript{43}. Unlike public, many new products’ experts consider both goods and services as new product. This is due to the fact that most of the things in the market have both tangible and intangible components. For example a fax machine which is tangible is somehow providing service and therefore can also be considered intangible\textsuperscript{44}.

3.1.1. The basic new products process

Corporations need to have an effective new product process in order to control the costs and the time taken to develop a new product. The new product process will also help organization to look on product development as an investment rather than a risk. When we examine companies that succeed in developing product (Sony and GE) we find that these companies have one thing in common, the development is divided into five phases in sequence\textsuperscript{45}. These phases are described below and also are depicted in Figure 3.1.

Phase 1: Opportunity Identification and Selection

The first phase is to assess the needs of the new products based on ongoing business operations, customer feedback (from previous product), changes in marketing strategy and new needs in the marketplace. Usually, marketing researches will evaluate, validate and rank these factors to identify and select product candidates. Afterward, a preliminary strategic statement will be prepared to guide future activities.

Phase 2: Concept Generation

When potential products are identified and selected, it is critical to involve customers early on to assess high potential opportunity with these potential products. It is critical at this phase to collect several new product concepts that fit the opportunity and create new ones if necessary to capture the best option/opportunity.

Phase 3: Concept/Project Evaluation

Evaluate new products concepts based on technical, marketing and financial criteria. These concepts will be ranked accordingly and two or three concepts will be selected for further development. To ensure that adequate resource is allocated, in this phase, tentative project, development and product life cycle plans need to be agreed and authorized.


Phase 4: Development

Once the full development processes and deliverables are specified, it is important to undertake prototype design, test and validate against protocols. Also, in this phase, the scale up production for market testing and product launch also needs to be finalized. To ensure product success in the market, strategy, tactics and launch details for marketing plan needs to be addressed. Finally, the business plan needs to be approved to finalize issues such as customer service, packaging and branding.

Phase 5: Launch

In this final phase, the launch program needs to be constructed according to the goals and objectives set in phase 3 (product life cycle plan). In the launch program, product distribution and sale of the new product need to be set up along with customer feedback for future product improvement/opportunity.

![Figure 3.1: The new product innovation process (C. Crawford and A. Di Benedetto, 2003, p26)](image)

### 3.1.2. Diffusion of Innovation

In today’s highly competitive environment, innovation has become essential to survive the race. Every significant issue of our time, like health, environment, energy, education, etc., is increasingly shaped by the flow of technical innovation. In fact, the quality of global life and the standard of local living have come to be mostly defined by the spreading and diffusion of innovation. Innovation is what customers, people and
companies adopt. Innovation isn't about crafting brilliant ideas that change minds; it is about the distribution of usable product that changes behavior. A four-tier paradigm called Awareness-Trial-Availability-Repeat (ATAR) is commonly used to measure the efforts that take the person or firm from a state of ignorance about a new product to the point of product adoption.\(^{46}\)

Diffusion of innovation is basically the process of spreading a new product or idea through a population. Much has been made of the profound effect of the “tipping point”, the point at which a trend catches fire and innovation can be spreading exponentially through the population. The idea suggests that change can be promoted rather easily in a social system through a domino effect. The tipping point idea finds its origins in diffusion theory, which is a set of generalizations regarding the typical spread of innovations within a social system.\(^{47}\) Obviously, the success of the diffusion of innovations depends on product characteristics.\(^{48}\) It has been shown that five product characteristics determine how quickly a new product will be received by the end users.\(^{49}\)

1. **Advantage**: How superior is the innovation to the product or other problem-solving methods it was designed to compete against?

2. **Compatibility**: How well does it fit with current product usage and end-users’ activities? Whether little adjustment is required or major changes are required?

3. **Complexity**: Would it be easy for consumers to understand and embrace the innovation’s basic idea?

4. **Divisibility** (also called trial ability): Would it be easy for consumers to purchase and use on a trial bases? For example, foods and beverages are quite divisible, but new homes and word processing system are much less so.

5. **Communicability** (also called operability): How easy the innovation can be displayed and exposed to the public so that it can be evaluated by the potential consumers? For example, the communicability for cars is high. Since they can be easily seen and evaluated by users once they are exhibited in public. Personal hygiene products, on the other hand, has low communicability as they may not be easily displayed and seen in the public.


An innovation can be scored on these five factors in order to evaluate the likelihood of its success. The scoring of innovation on the above mentioned factors can be done using personal judgment as well as the results obtained from market testing during earlier phases of the development. Then based on this evaluation the proper launch plans can be developed. The next thing to consider is the degree to which early users actively or passively encourage others to adopt a new product. The adopters of any new innovation or idea can be categorized as innovators, early adopters, early majority, late majority and laggards. The natural pattern of spreading innovation starts with innovators who are the first 5-10 percent of adopters of the new product followed by the next 10-15 percent of the end users called early adopters. For this reason most marketing strategists tend to focus on these two groups of customers. It is believed that once the early users have adopted the innovation, they will readily spread it to other groups of consumers. Each adopter’s willingness and ability to adopt an innovation would depend on many factors including their awareness, interest, evaluation, trial, and adoption. As our communication networks become denser through technological advances, the diffusion process is happening faster and faster.

Marketing researchers share the view that the consumers’ innovativeness will determine the likelihood of them adopting a new product at a specific stage of its diffusion. For this reason the personality and character of the innovators have been closely studied. It has been found that generally, the innovators are open-minded, creative, extroverts, liberal, and able to deal with uncertainty. They are often doing well financially and are not overly concerned about the price of the new products. Innovators usually have extended access and exposure to the media and as a result they are more informed about innovations. They often are in the need of the new product and use it to a larger degree as compared to others.


3.2. Culture

Hofstede believes that each person belongs to various groups of people. For this reason each person carries different layers of conceptual and mental programs as follows:

- National culture which depends on the culture of the country that each individual is from.
- Regional and local culture including various languages, moral and religious believes.
- Gender culture.
- Generation culture that separates children from their parents and grand parents’ generations.
- Social status based on education, profession, and people’s job.
- Organizational culture which reflects the fact that people who work in a company usually adopt the culture of that corporation ⁵⁴.

Parsons believes that the world consists of social, physical and cultural parts which relate to human in different ways. The cultural part includes symbols, traditions, believes, and values that lay the foundation for individual character and personality ⁵⁵.

Hofstede believes that there are four different cultural levels. These levels are symbols, heroes and distinguished people, rituals, and values as shown in Figure 3.2 below.

![Figure 3.2: Levels of culture from Hofstede’s point of view (Hofstede 2001 p11)](image)

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In this model the last level contains symbols. This level consists of words (language), gestures, pictures, cultural objects, clothing, flags, etc. which have special meanings for people from each culture. In this level of culture new phenomenon may be adopted and the old ones may be abandoned. The next level is about heroes. These are people who are admired in society and who shape the behavioral model of a culture. Heroes could be imaginary people or real people who are dead or alive. The next level involves the rituals. These are social activities like religious gatherings and practices which are essential and important in a given culture. The three levels of symbols, heroes, and rituals are categorized as practices. These practices are understood only by people from each culture. The most inner level is about values. These are interests, tendencies and preferences which define and explain good and bad, beautiful and ugly, natural and unnatural, normal and abnormal, rational and irrational, etc.  

3.2.1. Definition of culture

Culture can be defined as the sum of ‘humans’ socially transmitted behavior patterns including ways of thinking and beliefs, feeling and reacting, arts, institutions, and all other products of human intellectual and artistic activities. Culture is what people learned, gathered and experienced from their own environment and not something they have inherited in their genes. The essential core of culture consists of traditional ideas and especially their attached values.

According to Lewis, culture is a shared system of meanings for common feelings, believes, and values among a group of people. It provides guidelines on how to perceive the world. Although individuals may have their own views of various things, culture keeps these individuals together and provides harmonized views.


57. M. Parker: Organizational Culture and Identity, Saga 2000.

Schein\textsuperscript{59} stated that culture involves the understanding and practical activities rather than superficial models. It is transferred from one generation to the next in a continuous manner.

Hoecklin\textsuperscript{60} points out that culture is not about right and wrong. It’s not about inherited and individual behavior. Instead culture is about groups and their collective shared values and meanings within the groups.

Hofstede\textsuperscript{61} believes that:

- Culture often deals with generality.
- Culture generally is created throughout a long period of time and links to the past.
- Culture involves human logy.
- Culture is made by society
- Culture can not be changed easily.
- Culture’s change is a very slow process.

### 3.2.2. Business Culture

People who live in a country often share common culture such as language, customs, symbols, tradition, etc. In addition to common national culture, individuals in each country will have their own personalities which are reflective of their individual background and experiences. For instance, people in the same country may have been raised differently. This can lead to differences in other levels of culture like organizational and professional level\textsuperscript{62}.

According to Hofstede\textsuperscript{63} business culture can be defined as the type of work and behaviors of corporations in response to the market. Randlesome\textsuperscript{64} suggests not only the national culture but also the state of commercial development shape the business culture of a country. The national culture has direct impact on the business culture. In addition, the market’s characteristics and commercial activities in each country will have determining effect on the business culture and corporations’ behavior of that country.


\textsuperscript{61} G. Hofstede, B. Neuijen, and G. Sanders: Measuring organizational culture; A qualitative and quantitative study across twenty cases, Administrative Science Quarterly, Vol.35 No.2 , 1990.


\textsuperscript{63} G. Hofstede: Cultures and Organization Software in Mind, McGraw Hill, 1991.

3.2.3. National culture

Hofstede\textsuperscript{65} conducted an extensive studies on the difference of cultures in various countries. He developed a four-cultural dimension model including power distance, individualism – collectivism, masculinity – femininity, and uncertainty avoidance. Later in response to some critics that claimed most of his research focused on IBM and European culture, Hofstede introduced a fifth dimension namely long term – short term orientation. The various dimensions of Hofstede’s cultural model are briefly described below:

1 Power Distance Dimension

The power distance dimension is regarding the distribution of power in a society. It measures the extent to which different cultures accept inequalities. Hofstede\textsuperscript{66} divides various countries into low and high power distance countries. Hofstede demonstrated that in high power distance cultures, power is more concentrated and the powerless people tend to accept this as a fact. Less powerful people accept power relations that are more autocratic and paternalistic. Subordinates acknowledge the power of others simply based on where they are situated in certain formal, hierarchical positions \textsuperscript{67}. On the other hand, low power distance cultures (e.g. Austria, Denmark) expect and accept power relations that are more consultative or democratic. People relate to one another more as equals regardless of formal positions. Subordinates are more comfortable with and demand the right to contribute to and critique the decision making of those in power \textsuperscript{68}. Consumers from low power distance cultures have more tendencies to adopt new product as compared with consumers from high power distance cultures.

According to Hofstede some of the characteristics of low power and high power societies can be summarized as shown in the table 3.1 below.

\begin{table}[h]
\centering
\caption{Characteristics of Low and High Power Distance Societies}
\begin{tabular}{|c|c|}
\hline
Low Power Distance & High Power Distance \\
\hline
Subordinates are more comfortable with and demand the right to contribute to and critique the decision making of those in power. & Subordinates acknowledge the power of others simply based on where they are situated in certain formal, hierarchical positions. \\
Consumers from low power distance cultures have more tendencies to adopt new product as compared with consumers from high power distance cultures. & Consumers from high power distance cultures expect and accept power relations that are more consultative or democratic.
\hline
\end{tabular}
\end{table}


\textsuperscript{67} G. Hofstede: Culture’s Consequences; Comparing Values, Behaviors, Institutions, and Organizations across Nations. Intl.Saga Publications. 2001.

\textsuperscript{68} G. Hofstede: Cultures and Organization Software in Mind, McGraw Hill, 1991.
Table 3.1: Summary of the characteristics of low power and high power societies (Hofstede 1997 p 107-108)

<table>
<thead>
<tr>
<th>Low power system</th>
<th>High power system</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Non centralized decision making or disperse centers for decision making</td>
<td>• A centralized decision making</td>
</tr>
<tr>
<td>• Flat organization and disperse center of power</td>
<td>• A higharchial organization and structure</td>
</tr>
<tr>
<td>• A relative small number of people who oversee people’s activities</td>
<td>• A relative high number of people oversee people’s activities</td>
</tr>
<tr>
<td>• The organizational higharchy is due to various roles and is mainly created to simplify and make the job easier</td>
<td>• The organizational higharchy is a reflection of the fact that people on the top have a much higher power than those in the bottom</td>
</tr>
<tr>
<td>• Leaders use a democratic and supportive approach</td>
<td>• Leaders are powerful and make decisions based on what they believe is best for their society</td>
</tr>
<tr>
<td>• Leaders share their experience with population and consult them frequently.</td>
<td>• Leaders make decisions and usually do not consult the population.</td>
</tr>
<tr>
<td>• The relationship between leaders and population is based on objectives and actions and performance.</td>
<td>• The relationship between leaders and population is based on emotions.</td>
</tr>
<tr>
<td>• There is a well established system of check and balance in order to protect people’s rights</td>
<td>• There is no established system of check and balance to protect people’s rights</td>
</tr>
<tr>
<td>• Innovation by individuals is encouraged.</td>
<td>• Innovation needs to be supported by the higharchial system</td>
</tr>
<tr>
<td>• Leaders are not allowed to abuse their power and take personal advantage from their positions</td>
<td>• Special advantages for high level roles in society is expected and normal</td>
</tr>
<tr>
<td>• The system is transparent and all people have access to information</td>
<td>• The higharchial system control the flow of information and limited information is available to the public.</td>
</tr>
</tbody>
</table>
2 Individualism – Collectivism Dimension

Individualism is contrasted with collectivism, and refers to the extent to which people are expected to stand up for themselves, or alternatively act predominantly as a member of a group or organization. Latin American cultures rank the lowest in this category, while the U.S.A. is one of the most individualistic cultures. On the other hand, collectivism is a term used to describe any moral, political, or social outlook, which emphasizes on the human interdependence and the importance of a collective, rather than the importance of separate individuals. Collectivists focus on community and society, and seek to give priority to group goals over individual goals. It reflects the way people live together and it has many implications for values and behavior. Midgley suggested that innovativeness is related to the degree to which consumers are willing to demonstrate new behaviors independently. Innovativeness can be viewed positively in individualistic societies while may be considered as a negative behavior in the collectivistic societies. Consumers from individualism cultures have more tendencies to adopt new products as compared with consumer from collectivism cultures.

According to Hofstede some of the characteristics of individualism and collectivism societies can be summarized as shown in the table 3.2 below.

---


Table 3.2: Summary of the characteristics of individualism and collectivism societies (Hofstede 1997 P: 230-237)

<table>
<thead>
<tr>
<th></th>
<th>Individualism</th>
<th>Collectivism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>People support themselves and their immediate family</td>
<td>People support their extended family, tribe and society</td>
</tr>
<tr>
<td></td>
<td>People’s identity is based on their own personality and character</td>
<td>People’s identity is based on their social network</td>
</tr>
<tr>
<td></td>
<td>People can speak about their thoughts</td>
<td>People harmonize with the group and speak of their personal views in a lesser degree</td>
</tr>
<tr>
<td></td>
<td>Limited personal communications</td>
<td>Personal communications is more common</td>
</tr>
<tr>
<td></td>
<td>Education is primarily for learning</td>
<td>Education is primarily for learning how to do the job</td>
</tr>
<tr>
<td></td>
<td>Task oriented and objectives and duties are prior to relationships</td>
<td>Relationships have priority over objectives</td>
</tr>
<tr>
<td></td>
<td>Priority of personal interests over the groups, interests</td>
<td>Priority of the groups, interests over the personal interests</td>
</tr>
<tr>
<td></td>
<td>Focus on private life</td>
<td>The personal life of individuals is influenced by group and society</td>
</tr>
<tr>
<td></td>
<td>Focus on the individual independence and security</td>
<td>Group and society generally defines and determines roles and responsibilities</td>
</tr>
</tbody>
</table>


3 Masculinity – Femininity Dimension

This dimension refers to the value placed on traditionally male or female values. Masculine cultures value competitiveness, assertiveness, ambition, and the accumulation of wealth and material possessions, whereas feminine cultures place more value on relationships and quality of life. Japan is considered by Hofstede to be the most masculine culture and Sweden the most feminine. The U.S. is moderately masculine, while in the UK, females are masculine and males are feminine. The societies with a more dominant masculine culture are mainly focused on scientific, technological, and financial success. Therefore, the people in the masculinity cultures are considered to be more open to innovation. Consumers from masculinity cultures have more tendencies to adopt new products as compared with consumers from femininity cultures.

According to Hofstede some of the characteristics of masculinity and femininity societies can be summarized as shown in the table 3.3 below.

---


Table 3.3: Summary of the characteristics of masculinity and femininity societies (Hofstede 1997 p108)

<table>
<thead>
<tr>
<th>Masculinity</th>
<th>Femininity</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Attraction, tendency, and interests towards the strengths and power</td>
<td>• Attraction, tendency, and interests towards the weak people</td>
</tr>
<tr>
<td>• More focus on males</td>
<td>• Considers male and female as equal</td>
</tr>
<tr>
<td>• Live to work</td>
<td>• Work to live</td>
</tr>
<tr>
<td>• Emphasize on competition</td>
<td>• Emphasize on team work and equality</td>
</tr>
<tr>
<td>• Emphasize on wealth and financial matters</td>
<td>• Emphasize on people and environment and their protection</td>
</tr>
<tr>
<td>• Emphasize on speed, power, and status</td>
<td>• Emphasize on simplicity and considers childhood as a beautiful phenomenon</td>
</tr>
<tr>
<td>• High motivation for promotion</td>
<td>• High motivation for helping and serving others</td>
</tr>
<tr>
<td>• Consider a separate and unchangeable roles for males and females</td>
<td>• Believe that roles for males and females are determined based on given situation</td>
</tr>
<tr>
<td>• Focus on independence of individuals</td>
<td>• Focus on interdependency of people to each other</td>
</tr>
<tr>
<td>• Focus on performance and achievements in professional life</td>
<td>• Emphasize on the quality of the professional life.</td>
</tr>
<tr>
<td>• Transfer the conflicts and their resolution to outside of group and organization</td>
<td>• Resolution of conflicts based on dialogue and reaching agreements</td>
</tr>
<tr>
<td>• The best person is considered as reference and bench mark for others</td>
<td>• The average person is considered as reference and bench mark for others</td>
</tr>
</tbody>
</table>
4 Uncertainty Avoidance Dimension

This dimension reflects the extent to which a society attempts to cope with anxiety by minimizing uncertainty\textsuperscript{74}. Cultures that score high in uncertainty avoidance prefer rules (e.g. about religion and food) and structured circumstances, and employees tend to remain longer with their present employer. Mediterranean cultures and Japan rank the highest in this category. Cultures that score low in uncertainty avoidance prefer to change the regulations that are not followed by the majority of people, and employees tend to change their job more frequently (e.g. USA). Consumers from weak uncertainty avoidance cultures have more tendencies to adopt new products as compared with consumers from strong uncertainty avoidance cultures\textsuperscript{75}.

According to Hofstede some of the characteristics of the low and high uncertainty avoidance societies can be summarized as shown in the table 3.4 below.


Table 3.4: Summary of the characteristics of low and high uncertainty avoidance societies (Hofstede 1997 p125)

<table>
<thead>
<tr>
<th>Low uncertainty avoidance</th>
<th>High uncertainty avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Considering the existence of uncertainty as a part of normal life</td>
<td>• Considering the uncertainty as a threat</td>
</tr>
<tr>
<td>• Low level of stress</td>
<td>• High level of stress</td>
</tr>
<tr>
<td>• People are motivated and excited by risk</td>
<td>• People are motivated and excited by respect, security, and sense of belonging</td>
</tr>
<tr>
<td>• Not threaten by deviation from the current status</td>
<td>• Consider the deviation from the status quo as a threat</td>
</tr>
<tr>
<td>• Not afraid by risks in their affairs</td>
<td>• Afraid by risks in their affairs</td>
</tr>
<tr>
<td>• Respect for the public views and including them in actions and practices</td>
<td>• Emphasize on skills and specialties.</td>
</tr>
<tr>
<td>• Changing the regulations that are not followed by the majority of people</td>
<td>• Find people guilty if they do not follow regulations</td>
</tr>
<tr>
<td>• Constructive competition</td>
<td>• Confrontation in competition and therefore, the need to avoid competition and reach agreements.</td>
</tr>
<tr>
<td>• High consideration for the relative cultural values</td>
<td>• High consideration for the absolute cultural values</td>
</tr>
<tr>
<td>• Time is considered as only a framework for a given situation</td>
<td>• Time is gold</td>
</tr>
</tbody>
</table>
5. Long term – Short term Orientation

The fifth cultural dimension that Hofstede introduced is long term and short term orientation. He believes this dimension has origin in eastern mentality and is shaped by Confucius. Hofstede considers this fifth dimension as the main reason for the cultural differences between west and east. The long term cultures focus on the future while the short term cultures concentrate on the past and the present.\(^\text{76}\)

In the long term dimension the relationships are based on the absolute values. According to Confucius the stability of a society is based on the unequal relationships between people. Family is the representative of all social organizations. Good treatment of people does not mean sacrificing the self interests. The education, acquiring skills, hard work, avoiding wastefulness, patience and determination are considered among the desired behaviors and characteristics. In the short term dimension respect for traditions, face-saving, and fulfilling social duties are considered among the desired behaviors.\(^\text{77}\) Consumers from short-term orientation cultures have more tendencies to adopt new products as compared with consumers from long-term orientation cultures.

According to Hofstede some of the characteristics of long term – short term orientation can be summarized as shown in the table 3.5 below.


Table 3.5: Summary of the characteristics of long term – short term orientation (Hofstede 2001 p360-366)

<table>
<thead>
<tr>
<th>Short term</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quick results are expected</td>
<td>• Emphasize on determination and hard work.</td>
</tr>
<tr>
<td>• The status of individuals is not important in relationships</td>
<td>• The status of individuals is important in relationships</td>
</tr>
<tr>
<td>• Face-saving is not common</td>
<td>• Face-saving is common</td>
</tr>
<tr>
<td>• Respect for traditions</td>
<td>• Adjustment of traditions with new conditions</td>
</tr>
<tr>
<td>• Focus is on past and present</td>
<td>• Focus is on the future</td>
</tr>
<tr>
<td>• Emphasize is on short term results</td>
<td>• Emphasize is on long term results</td>
</tr>
<tr>
<td>• The work and family environments are clearly separated</td>
<td>• The work and family environments are coordinated.</td>
</tr>
<tr>
<td>• Social and economical benefits are based on individual’s abilities</td>
<td>• Emphasize on a more equal social and economical benefits for all people regardless of individual abilities.</td>
</tr>
<tr>
<td>• Believe in absolute good or bad</td>
<td>• Believe in relative good or bad</td>
</tr>
</tbody>
</table>
3.3. Sweden

Sweden is the largest Scandinavian country and has a population of over nine million people. It occupies the greater part of the Scandinavian Peninsula, which it shares with Norway. Sweden has played a significant role in the history of northern Europe.

The population of Sweden consists of Swedes, Finns, and Sami ethnic groups. Most of its population are Christian with some Jewish, Buddhist, and Muslim minorities.

Sweden is a well developed country which has advanced industries and economy. It exports a large number of industrial products to various countries around the world. The standard of living in Sweden is high. This country possesses an extensive social-welfare that has been a model for those of other European countries.⁷⁸

3.4. Iran

Iran is the 18th largest country in the world and is located in southwestern part of Asia. It is about size of the United Kingdom, France, Spain and Germany combined and has a population of over seventy million people. This country is south of the Caspian Sea and north of the Persian Gulf and share borders with Iraq, Turkey, Azerbaijan, Turkmenistan, Armenia, Afghanistan, and Pakistan.

Iran was known as Persia until 1935 when its name was changed from Persia to Iran. It has an old civilization and a long history. The population of Iran consists of various ethnic groups like Persians, Kurds, Turks, Lors, Baluchies, etc. Most of its population is Muslim with small minorities of Christians, Jewish, and Zoroastrians.

Iran is considered a developing country with growing industries. It has an important role in the world economy due to its large reserves of petroleum and natural gas.⁷⁹ Iran has the second largest reserves of both oils and natural gas in the world.

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⁷⁸. www.yahoo.com, world, Sweden

⁷⁹. www.yahoo.com, world, Iran
3.5. National cultures of Sweden and Iran

The cultural characteristics of two countries of Sweden and Iran are summarized in table 3.6 below. These two cultures are categorized based on Hofstede’s cultural dimension model.

Table 3.6. A summary of the cultural characteristics of two countries of Sweden and Iran based on Hofstede’s cultural dimension model

<table>
<thead>
<tr>
<th>Swedish culture is mostly:</th>
<th>Iranian culture is mostly:</th>
</tr>
</thead>
<tbody>
<tr>
<td>low power distance</td>
<td>high power distance</td>
</tr>
<tr>
<td>individualistic</td>
<td>collective</td>
</tr>
<tr>
<td>short term orientation</td>
<td>long term orientation</td>
</tr>
<tr>
<td>weak uncertainty avoidance</td>
<td>strong uncertainty avoidance</td>
</tr>
<tr>
<td>feminine</td>
<td>masculine</td>
</tr>
</tbody>
</table>

As shown in this table there is significant differences between the national cultures of Sweden and Iran. These cultural differences make the population of these two countries ideal samples for this research. As indicated in chapter 1 section 1.2 the primary focus of this research is to study the impact of national culture on diffusion process of innovation.
3.6. Hypotheses

The author based on academic background, literature, theoretical background provided in previous sections of this chapter, personal knowledge and experience has formulated the following hypotheses to be studied in this thesis:

H1: There is a relationship between national culture and consumers’ tendencies to adopt new products

H2: There is not any relationship between national culture and consumers’ tendencies to adopt new products

H3: There is a relationship between national culture and consumers’ tendencies to imitate

H4: There is not any relationship between national culture and consumers’ tendencies to imitate

This study also intends to evaluate the influence of gender on the consumers’ tendencies to adopt innovation as well as to imitate. As a result the following four additional hypotheses are also devised to be studied in this thesis:

H5: There is a relationship between gender and tendency to adopt new products.

H6: There is not any relationship between gender and tendency to adopt new products.

H7: There is a relationship between gender and tendency to imitate.

H8: There is not any relationship between gender and tendency to imitate.
3.7. Previous studies

There has been limited research performed by other investigators on this subject. A summary of what some of the other researchers have studies in this area is listed below.

Takada and Jain were among the first researchers who investigated the effect of culture on the diffusion of products between different nations. They concluded that the cultural differences between countries could lead to a different rate of diffusion in various countries \(^{80}\).

Van Everdingen and Yvonne investigated the effect of national culture on the adoption rate of innovation in various countries. In this study they used the Hofstede’s and Hall’s cultural dimensions on country adoption rates. They concluded that national culture can have a significant impact on the country’s adoption rates \(^{81}\). Some researchers who studied the consumer’s behavior found that the acceptance level of innovations in various countries is different \(^{82}\). Other studies attributed the difference response to innovation in different countries to cultural differences between those countries \(^{83}\).

Spolaro Enrico and Wacziarg Romain suggested that environmental and cultural barriers can have a major effect on the diffusion of innovations in various countries \(^{84}\).

Kumer, Ganesh and Echambadi studied the impact of culture variables on the diffusion process. In this research they compared the results of five product categories (VCRs, microwave ovens, cellular phones, home computers and Delayers) in 14 European countries. In conclusion, they were not able to identify culture as a variable that affects diffusion process \(^{85}\).

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Sangeeta Singh studied the role of consumers’ culture dimensions on their adoption of innovation in France and Germany. He used the Hofstede’s culture dimension in this study. The results showed that certain dimension of culture play a key role in the consumers respond to innovation. The study suggested that small power distance, weak uncertainty avoidance and masculinity lead to innovativeness.\(^\text{86}\).

Sean Dwyer, Hani Mesak and Maxwell investigated the potential role of the national culture on the diffusion of innovation between various nations. They studied the diffusion of seven technological innovations in 13 European countries using Hofstede’s culture dimension. The result showed a clear relationship between the national culture and the innovation diffusion rate. They concluded that individualism has negative impact on the diffusion rate of a technological product innovation while the masculinity and the power distance are positively related to the diffusion rate of technological product innovation.\(^\text{87}\).


CHAPTER 4

Empirical study

This chapter contains sections on research tools, questionnaire, the principle of preparing the questionnaire, the main parts of the questionnaire, how to prepare the questions, the order of the questions, the primary use and evaluation of the questionnaire, cluster sampling, and pros and cons of the cluster sampling approach. This chapter also contain a section on the statistical tools and methods followed by a section on the reliability and validity of measurement tool used in this research.

In this thesis a questionnaire is used to obtain data on how consumers from different culture respond to innovation. For this reason a questionnaire is prepared to collect the needed data. The details of preparation of this questionnaire are discussed in section 4.1 of this chapter. The obtained data are then processed and analyzed using statistical tools. These statistical tools are discussed in the section 4.2 of this chapter. The results are then used to evaluate the hypotheses formulated by the author in section 3.6 of chapter 3.

4.1. Research tools

Researchers often need various resources such as budget, facilities and tools to conduct their studies. In this study various books and journal articles are used to gather the needed information. In the empirical section a questionnaire tool is utilized. Study samples are chosen from two cities of Stockholm and Tehran. The innovativeness of samples in these cities with different cultures is examined using the questionnaire. The obtained responses and data are processed and analyzed using SPSS (statistical package for social sciences). This statistical software is used for processing of the data and also for calculating and executing statistical tests such as student t-test and F-test.

4.1.1. Questionnaire

Questionnaire is one of the most common research tools to collect data and information. Generally, it consists of a series of questions that study samples directly provide answers to them. Using questionnaire, investigators can learn about the knowledge, interests, views, believes, previous and present experience of studied samples.

Although the questionnaire method is a very useful tool for the researchers, it has its own limitations. One of these limitations is due to the fact that samples in some cultures may not provide the most accurate responses. Another limitation could be caused by samples used in this method which are often only a small portion of the whole population and therefore the responses may not be an accurate representation of the views of the entire population.

The intended samples for this study composed of 200 people between ages 18 and 40 from capital cities of Sweden and Iran. It is assumed that 200 people are representing several million populations of each of these countries. It is also assumed that ages 18-40 are representative of all ages and people of capitals of each country represent the people of the entire country. Obviously these assumptions impose some limitations on this study.

In this study a questionnaire which consists of two sections is used. The first section contains three questions regarding the nationality, gender, and age of samples. These factors are classified as nominal in statistical terms. In these types of questions the respondent provides only one answer. There is no priority relationship between the answers. In other words, each answer has the same rank as other answers and no answer has any priority over other one. For example one gender would not have any priority over another gender. These types of questions are independent variables. In this research the role of nationality (national culture) and gender on the adoption of innovation is studied. The impact of age is not studied. The age of participant is recorded only for information purposes. The range of age 18-40 is chosen primarily due the fact that it is anticipated most people in this age group are familiar with English language and it would be easier for them to complete the questionnaire in English.

The second section includes fifteen questions. These questions are categorized as ordinal in statistical terms. The respondents are selecting one respond from four available responses. These four available responses are agree, somewhat agree, somewhat disagree, and disagree. These types of responses can be ranked and prioritized. Each response is given a certain score which is different from the score of the other responses. For example, the response of agree will have the score of 4, the response of somewhat agree will have the score of 3, the response of somewhat disagree will have a score of 2, and the response of disagree will have the lowest score of 1. These types of questions are dependent variables.

These questions are aimed to understand the impact of national culture on the adoption of innovation and also on imitation. The consumers’ adoption and also consumers’ imitation are considered dependent variables according to statistical theories. These questions are also devised to evaluate the role of gender on the adoption of innovation and on imitation.

4.1.1.1. The principle of preparing of the questionnaire

The following principles should be considered in preparation of questionnaires\textsuperscript{90}.

- Questions in the questionnaire should be devised based on subject and goals of the study.
- The questionnaire should be interesting to the samples in order to draw their attention to the questions.
- While the questionnaire should provide the data and information that researcher needs, it should be as brief as possible.
- The questionnaire should include a brief instruction on how it should be completed accurately.

The above mentioned principles are followed for the preparation of the questionnaire in this study.

The questions 1-7 of the questionnaire used in this study are listed below. These questions are aimed to evaluate the tendency of the customers to adopt innovation. These questions are also used to evaluate the role of gender on adoption of new products.

1. You like to be the first among your friends who uses a new product and brand.

2. You usually like your friends and family imitate you for choosing and buying new product.

3. When you see a new product, you like to buy it because you often like to try a variety of the products.

4. You usually like to buy and try new foods and drinks.

5. You are often curious to use and try new products.

6. You are usually curious to try food and drinks with new taste and flavor.

7. When you see a new brand in the market, you are not afraid of buying it and giving it a try.

The questions 8-15 of the questionnaire used in this study are listed below. These questions are devised in order to evaluate the tendency of the customers from different culture to imitate. These questions are also used to evaluate the role of gender on imitation.

\textsuperscript{90} M. Cohen, and N. Nagel: An Introduction to Logic and Scientific Method, Harcourt, 1934.
8. You often identify with people who purchase the same products and brands as you do.

9. You think of yourself as a consumer who can be loyal to certain brands.

10. You rarely buy brands that you are not sure how well they perform.

11. You achieve a sense of belonging by buying the same product and brand that other people buy.

12. When you see a new product in the market, you like to wait and let others to try it first before you buy it.

13. You often like to buy products that most people buy and use them.

14. You prefer to use new products after other people have already tried them.

15. You usually like to try a specific brand and you often do not like to try new brands.

In some cultures like Iranian culture, some people may be hesitant to express their views openly due to the face-saving considerations. For this reason some of the questions are repeated in different forms to ensure the needed responses are obtained.

The responses obtained in two countries of Sweden and Iran will be analyzed. The results will be used to evaluate the impact of culture on adoption of new product as well as on the imitation. The responses will also be used to evaluate the role of gender on the adoption of innovation and on imitation. These results will be used to examine the hypotheses stated in the section 3.6 of the chapter 3 of this thesis.

4.1.1.2. The main parts of the questionnaire

A questionnaire should generally contain the following parts91.

- Cover letter: The cover letter provides a brief background on the goals of the research and the data and information that researcher plans to collect. It should motivate the samples to answer all the questions as accurate as possible. The cover letter should emphasize on the importance of the answers and their significance to the success of the study. It should make clear that the answers will be used only for the purpose of the study in hand and will not be shared with others nor will they be used for any other purposes.

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• Instruction: In this section the researcher explains how the samples should answer the questions. In other words the instruction section prepares the sample for the answering the questions. The following three points should be kept in mind for preparation of the instruction part of the questionnaire:

1. Describe the different types of questions and explain how to answer them.

2. Emphasize on the fact that the samples should be careful in answering questions in order to ensure the accuracy of responses.

3. The instruction part of the questionnaire should be brief and easily understandable by the samples. A long and complicated instruction may lead to confusion of the samples and may lead to inaccurate responses.

• Types of the questions of the questionnaire: First, the research parameters are identified. Then, based on these parameters, the investigator will decide which kind of the questions to use. There are two types of questions namely close-ended questions and open-ended questions.

1. Close-ended questions: In this type of question, a series of answers are provided and samples will quickly choose their correct answer among them.

2. Open-ended questions: In this type of question, samples will provide answers of their own. The answers could include a few words or several sentences. Generally this type of question is used to gather the views of samples in a specific area.

In this study a cover letter is prepared following the recommendations above. The cover letter explains the subject and the goals of this research. It emphasizes that samples should take care to provide accurate answers to all questions. The cover letter also points out that the accuracy of responses is very important for the results and success of this research. It makes it clear that the responses will be used only for the purposes of this research and will not be shared with others nor they will be used for other purposes. The questionnaire used in this study utilizes the close-ended questions and provides multiple answers so that the samples can choose one of answers as their correct answer. It also provides instructions for samples on how to answer the questions.

4.1.1.3. How to prepare the questions

The following points should be considered for the preparation of the questions in the questionnaire.

---

• All questions should be precise, clear, and easily understandable

• Pointed questions should be avoided as they may lead to biased answers by the samples.

• Long and complicated questions should be avoided. These types of questions could be difficult to understand and may take samples a relatively long time to read and to understand them.

• Multiple questions combined as one question should be avoided. Because these kind of question are difficult to answer and samples may agree with one aspect of the question and disagree with other aspect.

• Questions which are stated in negative way should be avoided since the samples may unknowingly oversee the negative words. In special cases that researcher need to use negative question, the negative words should be underlined and written in large fonts to avoid any mistakes.

• Avoid direct questions that may sensitize the samples and cause resistance.

• Avoid unrealistic questions that samples may not know the answers.

All of the above mentioned points have been considered in the preparation of the questions of the questionnaire used in this study.

4.1.1.4. The order of the questions

The following two important principles should be considered for the order of the questions:

• The first and early questions should be interesting so that they encourage the samples to answer the following questions

• The order of questions should be from easiest questions to more complicated ones. The questions that samples may not be too willing to answer should be kept towards the end.

The order of the questions in the questionnaire should be ordered in a logical way and questions which are related to the same subject should be kept together and follow each other.

In this research the above principles are followed and the questions of the questionnaire are presented in an orderly fashion.

4.1.1.5. Primary use and evaluation of the questionnaire

It is important to conduct a pilot study on the use of the questionnaire. Typically a very small number of samples are chosen as early users of the questionnaire. The feedback of this group will be used to identify the potential shortcomings of the questionnaire. Then the questionnaire is adjusted if needed in order to address these potential issues 94.

In this research two groups were identified to conduct the early evaluation of the questionnaire. A group of 10 people in each city of Stockholm and Tehran were given the questionnaire to respond. These people were asked for their feedback in particular if they easily understand the questions. The feedback obtained showed that the questionnaire used in this study can be easily understood and followed by the samples.

4.1.1.6. Cluster and Convenience sampling

Since it may be impractical to obtain the views of all people in the society, often people are categorized in small groups and clusters. Then samples from each cluster are chosen. This method of sampling is used in this study. First, samples are clustered in term of the city where they live. Then, samples in each city are categorized in terms of their age in three groups of 18-20, 21-30, and 31-40 95. The convenience method of sampling is also used in this thesis and all participants voluntarily respond to the questionnaire.

4.1.1.6.1. Pros and cons of the cluster sampling

The main advantage of the cluster sampling is the fact that it enables the investigators to study a large population by using small number of samples. However, as the number of clusters are increased the accuracy of the sampling and results may decrease 96. In this study only two clusters of city of living and age are used. Therefore there is no risk on the accuracy of the results due to clustering.

4.2. Statistical tools

The collected responses from samples in both Sweden and Iran will be analyzed using the SPSS. This statistical tool also performs statistical analysis including Null hypothesis, student t-test and F-test.


4.2.1. SPSS (statistical package for social sciences)

The responses provided by all samples will be analyzed using the SPSS 11.5 software package (SPSS, Inc., Chicago, IL). The responses that samples have provided to questionnaire will be given to SPSS. In addition, the following information will be entered into this statistical software:

- Responses to questions 1-3 of the section A of questionnaire, which relate to nationality, gender and age group, are nominal and no score is assigned to them.
- Responses to questions 1-15 of the section B of the questionnaire are ordinal and are scored as: agree = 4, somewhat agree = 3, somewhat disagree = 2, and disagree = 1.
- Responses to questions 1-7 of the section B of the questionnaire are related to adoption of new products.
- Responses to questions 8-15 of the section B of the questionnaire are related to imitation.
- The questions 1-3 in section A in questionnaire are independent variables.
- The questions 1-15 in sections B in questionnaire are dependent variables.

The SSPS will use these data and provides valuable statistical information such as the mean for adoption and imitation by respondents. This software also calculates important statistical parameters such as F-test, t-test, and statistical significance associated with these parameters.

4.2.2. Null hypothesis

The null hypothesis proposes something initially presumed true. It is rejected only when it becomes evidently false. That is, when the researcher has a certain degree of confidence (usually 95%) that the data do not support the null hypothesis. For example if we want to compare certain variable in two populations, the null hypothesis would be the mean for that variable for these two populations is the same.

\[ H_0 : \mu_1 = \mu_2 \]

Where:

- \( H_0 = \) the null hypothesis
- \( \mu_1 = \) the mean of population 1
- \( \mu_2 = \) the mean of population 2.
A t-test can be conducted to determine if the means of these two populations are the same or different. If the mean proven to be the same, the Null hypothesis is not rejected. If the mean were different according to t-test, then the Null hypothesis is rejected in favor of an alternative hypothesis.  

\[ H_1 : \mu_1 \neq \mu_2 \]

### 4.2.3. T- test

This test is used for comparison of the means of two populations. If the statistical significance for t (probability) is larger than the acceptable probability (often 0.05) the means of the two populations can be considered equal. In this thesis the acceptable probability is considered as 0.05. This probability is equally divided between the right tail and left tail of distribution curve (two tailed).

T- Test is used to confirm or reject the Null hypothesis. If the statistical significance of t (calculated by SSPS) is larger than 0.05, the Null hypothesis is not rejected. On the other hand, if the statistical significance of t is smaller than 0.05, then the Null hypothesis will be rejected in favor of an alternative hypothesis.

### 4.2.4. F-test

This test is used for comparison of the variances of two populations. If the statistical significance for F (probability) is larger than the acceptable probability (often 0.05) the variances of the two populations can be considered equal. In this thesis the acceptable probability is considered to be 0.05.

### 4.3. Reliability and validity of measurement tool

The main tools used in this study were questionnaire, books and journals, and SPSS statistical software. Obviously the books and journals are reliable and valid. The SPSS software is well established, validated, reliable and commonly used by various researchers. The reliability and validity of the questionnaire used in this study is discussed in the sections 4.3.1 and 4.3.2, respectively. These are the attributes that every questionnaire must possess.

---


4.3.1. Reliability

Reliability of a tool can be defined as the degree to which the results of repeated test conducted under similar conditions are similar. In other words, it means that the tool can be applied in different cases and similar results in all the cases will be generated.

There are various methods for the calculation of reliability of tools including Cronbach alpha coefficient method. This method is commonly applied for calculating the reliability of measurement tools such as questionnaires or tests which measure different characteristics. For the Cronbach alpha coefficient calculation, initially variance number of each sub-collection of question and total variance are computed and then by using the following formula the alpha coefficient is calculated.

\[
\alpha = \left(\frac{j}{j-1}\right)(1 - \frac{\sum S^2_j}{S^2})
\]

In this formula, \(\alpha\) is test validity estimation; \(j\) is number of test questions; \(S^2_j\) is sub-collection variance of \(j\), and \(S^2\) is total test variance\(^{100}\). A tool that has alpha Cronbach more than 0.7 is considered reliable.

The reliability of the questionnaire used in this study was calculated by Cronbach alpha coefficient method using the SPSS software. The \(\alpha\) results obtained for samples used in the pilot study in Sweden (10 samples) and Iran (10 samples) were 0.78 and 0.75, respectively. These results indicate that the questionnaire used in this research is reliable since the calculated \(\alpha\) values are larger than minimum required level of 0.7 for reliability.

4.3.2. Validity

The concept of validity defines to what extent the measurement tool includes the proposed features and hence is appropriate for the intended study. The validity of a measurement tool will determine the exactness and reliability of the accumulated data.

There are various methods for determination of the validity of questionnaires including the content validity method. This method is used to study the ingredients and content of the questionnaire. If the questions contain specialties and expertise that the researchers would have planned to test them, the tests possess content validity. Therefore, the content validity is structural specialty of the measurement tool, which it should be considered at the time of devising the questionnaire... The content validity method usually is determined by experts in the proposed study subject.

\(^{100}\text{L. Cronback and P. Suppes: Research for Tomorrow’s Schools; Discipline Inquiry for Education, 1969.}\)
The content validity method was used to determine the validity of the questionnaire used in this research. The questions of the questionnaire were carefully devised so that their responses can provide the necessary information for this study. The validity of the questions and questionnaire as a whole was established by using books, journals and by consultation with research advisor and other experts in the filed of this study.
CHAPTER 5

Data analysis and Interpretation

In this chapter first descriptions of the Swedish and Iranian participants in this study are provided. Then summaries of the statistical analysis of the responses are presented. This follows by interpretation and detailed discussion of the obtained data including the testing of the hypotheses.

5.1. Description of the respondents to questionnaire

A total of 400 people in two countries of Sweden and Iran participated in this research. A survey in the form of questionnaire was conducted to obtain information on the nationality, gender, and age of the respondents as described in the following paragraphs, tables and figures.

5.1.1. Nationality of respondents

As shown in table 5.1 the 400 respondents were equally distributed between the two countries of Sweden and Iran. In each of these two countries 200 people participated in the survey and answered the questions of the questionnaire. These respondents were well balanced across genders as well as three age groups of 18-20, 21-30, and 31-40.

Table 5.1. Descriptive statistics for to all of respondents

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish</td>
<td>200</td>
<td>50.0</td>
</tr>
<tr>
<td>Iranian</td>
<td>200</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100.0</td>
</tr>
</tbody>
</table>

5.1.2. Gender of respondents

The gender distribution of Iranian samples is described in table 5.2. As demonstrated in this table 44% of Iranian respondents were male and the remaining 56% were female.
Table 5.2. Descriptive statistics for gender distribution of the Iranian respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>88</td>
<td>44.0</td>
</tr>
<tr>
<td>Female</td>
<td>112</td>
<td>56.0</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The gender distribution of Swedish samples is described in table 5.3. As shown in this table, 198 participants responded to the gender question and 2 of respondents did not reveal their gender in the questionnaire. The gender composition of the 198 who responded to gender question was 46% male and 53% female.

Table 5.3. Descriptive statistics for gender distribution of the Swedish respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>92</td>
<td>46.0</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>53.0</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

5.1.3. Age of respondents

The age group composition of the Iranian who participated in survey is summarized in the table 5.4 below. As shown 43% of respondents were between 31-40 year old, 50% were between 21-30 year old, and the remaining 7% were in 18-20 year old group.

Table 5.4. Age group distribution of the Iranian respondents

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-- 40</td>
<td>86</td>
<td>43.0</td>
</tr>
<tr>
<td>21-- 30</td>
<td>100</td>
<td>50.0</td>
</tr>
<tr>
<td>18-- 20</td>
<td>14</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The age group composition of the Swedish respondents is summarized in the table 5.5 below. As demonstrated 35% of respondents were between 31-40 year old, 36% were between 21-30 year old, and 29% were between 18-20 year old.
Table 5.5. Age group distribution of the Swedish respondents

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>31--40</td>
<td>70</td>
<td>35.0</td>
</tr>
<tr>
<td>21--30</td>
<td>72</td>
<td>36.0</td>
</tr>
<tr>
<td>18--20</td>
<td>58</td>
<td>29.0</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As discussed in section 4.1.1. Of chapter 4, the age of participant is recorded only for information purposes.

5.2. Responses and analysis of data

The collected responses from samples in both Sweden and Iran were processed and analyzed by SPSS. As described in section 4.2.1, this software based on responses and their scores calculated the statistical parameters such as mean, standard deviation, and error in the standard deviation for each of variables (adoption and imitation). These data were further analyzed using statistical approaches including Null hypothesis, student t-test, and F-test.

5.2.1. Comparison of Swedish and Iranian cultures with regard to adoption of new products

As discussed in section 4.1.1.1 of chapter 4, the questions 1-7 of the questionnaire were aimed to evaluate the tendency of the customers from different culture to adopt innovation. A summary of group statistics for responses to these questions by Swedish and Iranian samples is shown in table 5.6.

Table 5.6. Summary of group statistics for responses to questions 1-7 regarding adoption of new products by samples in both Sweden and Iran

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nationality</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption</td>
<td>Swedish</td>
<td>200</td>
<td>2.8136</td>
<td>1.00679</td>
<td>0.07119</td>
</tr>
<tr>
<td></td>
<td>Iranian</td>
<td>200</td>
<td>2.4098</td>
<td>0.95710</td>
<td>0.06768</td>
</tr>
</tbody>
</table>

As shown in table 5.6 the mean of adoption of new products for Swedish samples
is larger than the mean of the adoption of new products for Iranian samples. This can also be seen in the figure 5.1 below.

**Figure 5.1. Comparison of the mean of adoption of new products for Swedish and Iranian samples**

![Adoption of new products](image)

As indicated in section 3.6 in chapter 3, two of the hypotheses which this research intends to evaluate are around the influence of the national culture on the tendency to adopt new products. Therefore a Null hypothesis can be designed as shown below to study the role of national culture of two countries of Sweden and Iran on the adoption of new product. In the equations below, $\mu_1$ represents Swedish samples and $\mu_2$ represents the Iranian samples.

$H_0 : \mu_1 = \mu_2$
There is no significant difference between tendency to adopt new product in Swedish and Iranian culture.

$H_1 : \mu_1 \neq \mu_2$
There is a significant difference between tendency to adopt new product in Swedish and Iranian culture.

The statistical test data to evaluate these hypotheses are summarized in table 5.7.
Table 5.7. Statistical data for comparison of the Swedish and Iranian respondents with regard to adoption of new products

<table>
<thead>
<tr>
<th></th>
<th>Independent Samples Test</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Levene’s Test for Equality of Variances</td>
<td>t-test for Equality of Means</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Adoption</td>
<td>Equal variances assumed</td>
<td>0.137</td>
<td>0.711</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>4.111</td>
<td>396.985</td>
</tr>
</tbody>
</table>

In this table F is the value for f-test which is used to determine if the variances of the two populations are equal or not. The letter t represents the value obtained form the t test. The abbreviated word of sig stands for statistical significance. The abbreviated word of Df represents the degree of freedom (N-2).

As shown in this table, significance of F is 0.711 which is larger than the threshold for statistical significance of 0.05. Therefore one can conclude that the assumption of equality of variances of both populations is correct \( \sigma_1 = \sigma_2 \).

As shown in this table the significant of t is 0.00 which is smaller than the threshold for statistical significant of 0.05. Therefore the Null hypothesis \( H_0 \) is rejected. In other words there is a significant difference between Swedish and Iranian cultures with regard to adoption of new products. In table 5.7 also both upper and lower limits of confidence intervals are positive. As a result \( \mu_1 - \mu_2 > 0 \) which means with 95 percent confidence one can conclude that adoption of new products in Swedish culture is more than adoption of new products in the Iranian culture.

These results indicate that there is a relationship between national culture and consumers’ tendencies to adopt new products. Therefore the hypothesis \( H_1 \) formulated by author is not rejected and the hypothesis \( H_2 \) suggested in this study is rejected.

\( H_1 \): There is a relationship between national culture and consumers’ tendencies to adopt new products

\( H_2 \): There is not any relationship between national culture and consumers’ tendencies to adopt new products
5.2.2. Comparison of Swedish and Iranian cultures with regard to Imitation

As discussed in section 4.1.1.1 of chapter 4, the questions 8-15 of the questionnaire were aimed to evaluate the tendency of the customers from different culture to imitate. A summary of group statistics for responses to these questions by Swedish and Iranian samples is shown in table 5.8.

Table 5.8. Summary of group statistics for responses to questions 8-15 regarding tendency to imitate by samples in both Sweden and Iran

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nationality</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imitation</td>
<td>Swedish</td>
<td>200</td>
<td>2.0243</td>
<td>1.02423</td>
<td>0.07242</td>
</tr>
<tr>
<td></td>
<td>Iranian</td>
<td>196</td>
<td>2.6344</td>
<td>0.88447</td>
<td>0.06318</td>
</tr>
</tbody>
</table>

As shown in table 5.8 the mean of imitation for Iranian samples is larger than the mean of the imitation for Swedish samples. This can also be seen in the figure 5.2 below.

Figure 5.2. Comparison of the mean of imitation for Swedish and Iranian samples

![Comparison of the mean of imitation for Swedish and Iranian samples](image)

As indicated in section 3.6 in chapter 3, two of the hypotheses which this research intends to evaluate are around the influence of the national culture on the tendency to imitate. Therefore a Null hypothesis can be designed as shown below to study the role of
national culture of two countries of Sweden and Iran on imitation. In the equations below, $\mu_1$ represents Swedish samples and $\mu_2$ represents the Iranian samples.

$H_0 : \mu_1 = \mu_2$
There is no significant difference between tendency to imitate in Swedish and Iranian culture.

$H_1 : \mu_1 \neq \mu_2$
There is a significant difference between tendency to imitate in Swedish and Iranian culture.

The statistical test data to evaluate these hypotheses are summarized in table 5.9.

Table 5.9. Statistical data for comparison of the Swedish and Iranian respondents with regard to imitation

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.12</td>
<td>0.146</td>
<td>-6.33</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>387.879</td>
<td>0.00</td>
<td>-6.34</td>
</tr>
</tbody>
</table>

As shown in this table, significance of F is 0.146 which is larger than the threshold for statistical significant of 0.05. Therefore one can conclude that the assumption of equality of variances of both populations is correct $\sigma_1 = \sigma_2$.

As shown in this table, the significant of t is 0.00 which is smaller than the threshold for statistical significance of 0.05. Therefore the Null hypothesis $H_0$ is rejected. In other words, there is a significant difference between Swedish and Iranian cultures with regard to imitation. In table 5.9 also both upper and lower limits of confidence intervals are negative. As a result $\mu_1 - \mu_2 < 0$ which means with 95 percent confidence one can conclude that imitation in Swedish culture is less than imitation in the Iranian culture.

These results indicate that there is a relationship between national culture and consumers’ tendencies to imitate. Therefore the hypothesis $H_3$ formulated by the author is not rejected and the hypothesis $H_4$ of this thesis is rejected.

$H_3$: There is a relationship between national culture and consumers’ tendencies to imitate
H4: There is not any relationship between national culture and consumers’ tendencies to imitate

5.2.3. Comparison of tendency of the Iranian males and females with regard to adoption of new products

In this section the responses of Iranian males and females to questions 1-7 of the questionnaire are analyzed in order to evaluate the role of gender on adoption of new products in Iran. A summary of group statistics for responses to these questions by Iranian males and female samples is shown in table 5.10.

Table 5.10. Summary of group statistics for responses to questions 1-7 regarding adoption of new products by Iranian males and females

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption</td>
<td>Iranian males</td>
<td>88</td>
<td>2.7591</td>
<td>0.94748</td>
<td>0.10100</td>
</tr>
<tr>
<td></td>
<td>Iranian females</td>
<td>112</td>
<td>2.1353</td>
<td>0.87516</td>
<td>0.08269</td>
</tr>
</tbody>
</table>

As shown in table 5.10 the mean of adoption of new products for Iranian males is larger than the mean of the adoption of new products for Iranian females. This can also be seen in the figure 5.3 below.
As indicated in section 3.6 in chapter 3, two of the hypotheses which this research intends to evaluate are around the influence of the gender on the tendency to adopt new products. Therefore a Null hypothesis can be designed as shown below to study the tendency of Iranian males and females to adopt new products. In the equations below, $\mu_1$ represents the Iranian male and $\mu_2$ represents Iranian female samples.

$H_0 : \mu_1 = \mu_2$
There is a no significant difference between tendency to adopt new products by Iranian males and females.

$H_1 : \mu_1 \neq \mu_2$
There is a significant difference between tendency to adopt new products by Iranian males and females.
The statistical test data to evaluate these hypotheses are summarized in table 5.11.

**Table 5.11. Statistical data for comparison of the Iranian male and female respondents with regard to adoption of new products**

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>Levine’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Adoption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td>6.842</td>
<td>0.010</td>
</tr>
<tr>
<td>not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.779</td>
<td>0.000</td>
</tr>
</tbody>
</table>

As shown in this table, significance of F is 0.010 which is smaller than the threshold for statistical significance of 0.05. Therefore one can conclude that the assumption of equality of variances of both populations is not correct $\sigma_1 \neq \sigma_2$.

As shown in this table the significant of t is 0.00 which is less than the threshold for statistical significance of 0.05. Therefore the Null hypothesis $H_0$ is rejected. In other words there is a significant difference between Iranian males and females with regard to adoption of new products. In table 5.11 also both upper and lower limits of confidence intervals are positive. As a result $\mu_1 - \mu_2 > 0$ which means with 95 percent confidence one can conclude that Iranian males have higher tendency to adopt new products as compared to Iranian females.

These results indicate that there is a relationship between gender and tendency to adopt new products. Therefore, the hypothesis $H_5$ in this thesis is not rejected and the hypothesis $H_6$ of this study is rejected.

$H_5$: There is a relationship between gender and tendency to adopt new products.

$H_6$: There is not any relationship between gender and tendency to adopt new products.
5.2.4. Comparison of tendency of the Iranian males and females to imitate

In this section the responses of Iranian males and females to questions 8-15 of the questionnaire are analyzed in order to evaluate the role of gender on imitation in Iran. A summary of group statistics for responses to these questions by Iranian male and female samples is shown in table 5.12.

Table 5.12. Summary of group statistics for responses to questions 8-15 regarding imitation by Iranian males and females

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imitation</td>
<td>Iranian males</td>
<td>84</td>
<td>2.3153</td>
<td>0.87663</td>
<td>0.09565</td>
</tr>
<tr>
<td></td>
<td>Iranian females</td>
<td>112</td>
<td>2.8737</td>
<td>0.81536</td>
<td>0.07704</td>
</tr>
</tbody>
</table>

As shown in table 5.12 the mean of imitation for Iranian females is larger than the mean of imitation for Iranian males. This can also be seen in the figure 5.4 below.

Figure 5.4. Comparison of the imitation for Iranian males and females

As indicated in section 3.6 in chapter 3, two of the hypotheses which this research intends to evaluate are around the influence of the gender on imitation. Therefore a Null hypothesis can be designed as shown below to study the tendency of Iranian males and females to imitate. In the equations below, \( \mu_1 \) represents the Iranian male and \( \mu_2 \) represents Iranian female samples.
$H_0 : \mu_1 = \mu_2$
There is no significant difference between tendency to imitate by Iranian males and females.

$H_1 : \mu_1 \neq \mu_2$
There is a significant difference between tendency to imitate by Iranian males and females.

The statistical test data to evaluate these hypotheses are summarized in table 5.13.

**Table 5.13. Statistical data for comparison of the Iranian male and female respondents with regard to imitation**

<table>
<thead>
<tr>
<th></th>
<th>Independent Samples Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Levene’s Test for Equality of Variances</td>
</tr>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Imitation</td>
<td>Equal variances assumed</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>

As shown in this table, significance of F is 0.042 which is smaller than the threshold for statistical significance of 0.05. Therefore one can conclude that the assumption of equality of variances of both populations is not correct $\sigma_1 \neq \sigma_2$.

As shown in this table the significant of t is 0.00 which is smaller than the threshold for statistical significance of 0.05. Therefore the Null hypothesis $H_0$ is rejected. In other words there is a significant difference between Iranian males and females with regard to imitation. In table 5.13 also both upper and lower limits of confidence intervals are negative. As a result $\mu_1 - \mu_2 < 0$ which means with 95 percent confidence one can conclude that Iranian females have higher tendency to imitate as compared to Iranian males.

These results indicate that there is a relationship between gender and tendency to imitate. Therefore the hypothesis $H_7$ formulated by the author is not rejected and the hypothesis $H_8$ of this thesis is rejected.

$H_7$: There is a relationship between gender and tendency to imitate.
H8: There is not any relationship between gender and tendency to imitate.

5.2.5. Comparison of tendency of the Swedish males and females with regard to adoption of new products

In this section the responses of Swedish males and females to questions 1-7 of the questionnaire are analyzed in order to evaluate the role of gender on adoption of new products in Sweden. A summary of group statistics for responses to these questions by Swedish males and female samples is shown in table 5.14.

Table 5.14. Summary of group statistics for responses to questions 1-7 regarding adoption of new products by Swedish males and females

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption</td>
<td>Male</td>
<td>92</td>
<td>3.1553</td>
<td>0.79403</td>
<td>0.08278</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>106</td>
<td>2.5054</td>
<td>1.08132</td>
<td>0.10503</td>
</tr>
</tbody>
</table>

As shown in table 5.14 the mean of adoption of new products for Swedish males is larger than the mean of the adoption of new products for Swedish females. This can also be seen in the figure 5.5 below.

Figure 5.5. Comparison of the mean of adoption of new products for Swedish males and females

As indicated in section 3.6 in chapter 3, two of the hypotheses which this research intends to evaluate are around the influence of the gender on the tendency to adopt new products. Therefore a Null hypothesis can be designed as shown below to study the
tendency of Swedish males and females to adopt new products. In the equations below, \( \mu_1 \) represents the Swedish male and \( \mu_2 \) represents Swedish female samples.

\[ H_0 : \mu_1 = \mu_2 \]

There is no significant difference between tendency to adopt new products by Swedish males and females.

\[ H_1 : \mu_1 \neq \mu_2 \]

There is a significant difference between tendency to adopt new products by Swedish males and females.

The statistical test data to evaluate these hypotheses are summarized in table 5.15.

**Table 5.15. Statistical data for comparison of the Swedish male and female respondents with regard to adoption of new products**

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Adoption</td>
<td>Equal variances assumed</td>
<td>46.185</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>4.860</td>
<td>190.952</td>
</tr>
</tbody>
</table>

As shown in this table, significance of F is 0.00 which is smaller than the threshold for statistical significance of 0.05. Therefore one can conclude that the assumption of equality of variances of both populations is not correct \( \sigma_1 \neq \sigma_2 \).

As shown in this table the significant of t is 0.00 which is smaller than the threshold for statistical significance of 0.05. Therefore the Null hypothesis \( H_0 \) is rejected. In other words there is a significant difference between Swedish males and females with regard to adoption of new products. In table 5.15 also both upper and lower limits of confidence intervals are positive. As a result \( \mu_1 - \mu_2 > 0 \) which means with 95 percent confidence one can conclude that Swedish males have higher tendency to adopt new products as compared to Swedish females.
These results show that there is a relationship between gender and tendency to adopt new products. Therefore, the hypothesis H5 in this thesis is not rejected and the hypothesis H6 of this study is rejected.

H5: There is a relationship between the gender and tendency to adopt new products.

H6: There is not any relationship between the gender and tendency to adopt new products.

5.2.6. Comparison of tendency of the Swedish males and females to imitate

In this section the responses of Swedish males and females to questions 8-15 of the questionnaire are analyzed in order to evaluate the role of gender on imitation in Sweden. A summary of group statistics for responses to these questions by Swedish male and female samples is shown in table 5.16.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imitation</td>
<td>Male</td>
<td>92</td>
<td>1.6403</td>
<td>0.75170</td>
<td>0.07837</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>106</td>
<td>2.3699</td>
<td>1.11383</td>
<td>0.10818</td>
</tr>
</tbody>
</table>

As shown in table 5.16 the mean of imitation for Swedish females is larger than the mean of imitation for Swedish males. This can also be seen in the figure 5.6 below.
As indicated in section 3.6 in chapter 3, two of the hypotheses which this research intends to evaluate are around the influence of the gender on imitation. Therefore a Null hypothesis can be designed as shown below to study the tendency of Swedish males and females to imitate. In the equations below, $\mu_1$ represents the Swedish male and $\mu_2$ represents Swedish female samples.

$H_0 : \mu_1 = \mu_2$
There is no significant difference between tendency to imitate by Swedish males and females.

$H_1 : \mu_1 \neq \mu_2$
There is a significant difference between tendency to imitate by Swedish males and females.

The statistical test data to evaluate these hypotheses are summarized in table 5.17.
Table 5.17. Statistical data for comparison of the Swedish male and female respondents with regard to imitation

<table>
<thead>
<tr>
<th>Imitation</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>71.707</td>
<td>0.000</td>
<td>-5.319</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-5.462</td>
<td>185.253</td>
<td>0.000</td>
</tr>
</tbody>
</table>

As shown in this table, significance of F is 0.00 which is smaller than the threshold for statistical significance of 0.05. Therefore one can conclude that the assumption of equality of variances of both populations is not correct $\sigma_1 \neq \sigma_2$.

As shown in this table the significant of t is 0.00 which is smaller than the threshold for statistical significance of 0.05. Therefore the Null hypothesis $H_0$ is rejected. In other words there is a significant difference between Swedish males and females with regard to imitation. In table 5.17 also both upper and lower limits of confidence intervals are negative. As a result $\mu_1 - \mu_2 < 0$ which means with 95 percent confidence one can conclude that Swedish females have higher tendency to imitate as compared to Swedish males.

These results indicate that there is a relationship between gender and tendency to imitate. Therefore the hypothesis $H_7$ formulated by the author is not rejected and the hypothesis $H_8$ of this thesis is rejected.

$H_7$: There is a relationship between gender and tendency to imitate.

$H_8$: There is not any relationship between gender and tendency to imitate.
CHAPTER 6
Discussion and conclusion

In this chapter key findings are discussed and compared against the hypotheses set forward in the theoretical framework. It is shown that based on the results obtained four of the hypotheses of this research are not rejected and the remaining four are rejected. It is concluded that national culture has a significant impact on the adoption of innovation. Next, the implication of this research for international marketers, and managers of global corporations is discussed. This is followed by the recommendations for future researchers in this field.

6.1. Key Findings and comparison

The goal of this research was to study the impact of national culture on the diffusion process of innovation. In the theoretical framework chapter (chapter 3), the national culture of the two countries of Sweden and Iran were compared using Hofstede’s five cultural dimensions model. It was shown that there are significant differences between the various cultural dimensions of these two countries. A questionnaire designed to evaluate the tendency to adopt new products and to imitate was completed by 200 people in each of two respective countries. These participants were well distributed across different genders and age groups. The responses obtained were analyzed to evaluate the impact of culture on adoption of innovation as well as on imitation. In addition, the role of gender on the adoption of new product as well as on imitation was investigated.

The analysis of the data obtained in this study clearly indicates that national culture plays a significant role on the diffusion process of innovation. These results show that the tendency to adopt new products in the Swedish culture is higher than that in the Iranian culture. In other words one can conclude that the tendency to adopt new products in countries with low power distance, low uncertainty avoidance, individualistic, and short term orientation culture is higher than in countries with high power distance, high uncertainty avoidance, collective, and long term orientation culture.

The results of this research also demonstrate that gender also plays an important role in the adoption of new products. These results indicate that the tendency to adopt new product by males in both Sweden and Iran is higher than the tendency to adopt new products by their female counter parts. In other words in both feminine and masculine cultures males have more tendencies to adopt new products than females.
The analysis of the data obtained in this study indicates that national culture plays a significant role on the degree of imitation. These results show that the tendency to imitate in Iranian culture is higher than the tendency to imitate in Swedish culture. In other words the tendency to imitate in countries with high power distance, high uncertainty avoidance, collective, and long term orientation culture is higher than the tendency to imitate in countries with low power distance, low uncertainty avoidance, individualistic, and short term orientation culture.

In addition, the results of this research show that gender also plays an important role in the degree of imitation. These results suggest that the tendency to imitate by females in both Sweden and Iran is higher than the tendency to imitate by their male counter parts. In other words in both feminine and masculine cultures females have more tendencies to imitate than males.

According to Dwyer et al and other researchers, consumers in masculine culture have higher tendencies to adopt innovation and lower tendencies to imitate as compared with consumers in feminine culture. However, the results of this study indicate that Swedish customers who are from a more feminine culture have higher tendencies to adopt new products and lower tendencies to imitate than the Iranian consumers who have a more masculine culture. These observations are due to the fact that Swedish culture beside being more feminine is also low power distance, low uncertainty avoidance, individualistic, and short term orientation. These results indicate that the impact of the combination of low power distance, low uncertainty avoidance, individualistic, and short term orientation overcome the impact of the femininity and therefore the Swedish culture as a whole has higher tendency to adopt new products and lower tendency to imitate. On the other hand, although the Iranian culture is more masculine, it is also high power distance, high uncertainty avoidance, and collective and long term orientation culture. The results obtained show that the impact of the combination of high power distance, high uncertainty avoidance, collective, and long term orientation is stronger than the impact of masculinity alone and as a result the Iranian culture as a whole has higher tendency to imitate and lower tendency to adopt new products.

The results obtained in this research clearly indicate that national culture has a significant role in the diffusion of innovation. The customers of two countries of Sweden and Iran with a contrast culture demonstrated that they respond to innovation in different ways. Based on the results of this study all of the eight hypotheses, formulated in theoretical framework section of this thesis (chapter 3), were clearly evaluated. Four of these hypotheses were not rejected and the remaining four were rejected.

The results of this research are in agreement with previous reported findings by Takada et al, Van Everdingen et.al, Sangeeta Singh et al, and Waczaring. As indicated in section 3.7 of this thesis, these investigators also concluded that national culture has a significant role on the diffusion process of innovation. On the other hand, the results of this research are in contrast with findings by other researchers such as Kumar et al who could not find a clear relationship between the national culture and the consumers’ tendencies to adopt new products.

6.2. Recommendation for further study

In this study a limited number of samples from only two countries were examined. Only 200 samples in each of Sweden and Iran were used to study the role of national culture on the adoption of innovation. It is recommended that further research be conducted on larger number of samples across several countries.

This research did not study the impact of the price of new products and also the impact of the income of consumers on the adoption of innovation. These are areas which deserve to be studied by future researchers in the field.

The samples used in this study were between the ages of 18-40. It is recommended further studies be conducted on consumers across a wider age-range.
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**Journal Articles**


**Internet**


www.yahoo.com, world, Sweden

www.yahoo.com, world, Iran
APPENDICES

Appendix A. Cover letter

Dear Sir or Madam

I am a graduate student in the Business School of the Umea University in Sweden. My research project is focused on the impact of national culture on the consumers’ use of new products. Please note the new product refers to new goods and services. As part of my research I need to learn and study how consumers in two cities of Stockholm and Tehran respond to new products. For this reason 200 people between ages 18 and 40 in each of these two cities are invited to complete the attached questionnaire.

This questionnaire consists of two parts. The first part contains 3 questions and the second part includes 15 questions. You are asked to kindly respond to all of these 18 questions. Please keep in mind that your responses to these questions are very important for the accuracy of results and for the success of this study. Please answer all of the questions and make sure your answers are accurate. Your responses will be used only for the purpose of this study and will not be shared with others nor will be used for any other purposes.

Many thanks for your participation and assistance in this research.
Appendix B. Questionnaire

**Instructions for answering the general questions:** This section consists of 3 questions. There are multiple answers to each question. Please choose only one answer. Please mark the blank box on the left hand side of your selected answer.

### A. General Question

1. What is your nationality?
   - [ ] Swedish
   - [ ] Iranian

2. What is your gender?
   - [ ] Male
   - [ ] Female

3. Which of the following age groups you belong to?
   - [ ] 18-20
   - [ ] 21-30
   - [ ] 31-40
Instructions for answering the Scale measuring questions: This section consists of 15 questions. There are four answers to each question. Please choose only one answer. Please mark the blank box on the left hand side of your selected answer.

B. Scale Measuring

1. You like to be the first among your friends who uses a new product and brand.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

2. You usually like your friends and family imitate you for choosing and buying new product.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

3. When you see a new product, you like to buy it because you often like to try a variety of the products.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

4. You usually like to buy and try new foods and drinks.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

5. You are often curious to use and try new products.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

6. You are usually curious to try on food and drinks with new taste and flavor.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

7. When you see a new brand in the market, you are not afraid of buying it and giving it a try.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

8. You often identify with people who purchase the same products and brands as you do.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

9. You think of yourself as a consumer who can be loyal to certain brands.
   □ Agree □ somewhat agree □ somewhat disagree □ Disagree

10. You rarely buy brands that you are not sure how well they perform.
    □ Agree □ somewhat agree □ somewhat disagree □ Disagree

11. You achieve a sense of belonging by buying the same product and brand that other people buy.
    □ Agree □ somewhat agree □ somewhat disagree □ Disagree
12. When you see a new product in the market, you like to wait and let others to try it first before you buy it.
□ Agree   □ somewhat agree   □ somewhat disagree   □ Disagree

13. You often like to buy products that most people buy and use them.
□ Agree   □ somewhat agree   □ somewhat disagree   □ Disagree

14. You prefer to use new products after other people have already tried them.
□ Agree   □ somewhat agree   □ somewhat disagree   □ Disagree

15. You usually like to try a specific brand and you often do not like to try new brands.
□ Agree   □ somewhat agree   □ somewhat disagree   □ Disagree
The impact of national culture on the diffusion process of innovation

Master Thesis
Fall of 2007

Author: Zohreh Sadeghkhani
Supervisor: Dr. Claes Goran Larsson

School of Business
The Umea University
TO MY MOTHER, WITH LOVE AND APPRECIATION
ACKNOWLEDGEMENT

I would like to express my sincere appreciation to my research advisor, Dr. Claes Goran Larsson, for his invaluable guidance and assistance throughout this study. I would also like to thank the faculty of the Business School of the Umea University for their excellent teaching that provided me with the knowledge which was very valuable for conducting this research.
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Abstract

The goal of this thesis was to study the impact of national culture on the diffusion process of innovation. The study was conducted on consumers in two countries of Sweden and Iran who have significant cultural differences based on Hofstede’s five cultural dimensions model. A questionnaire designed to evaluate the tendency to adopt new products and to imitate was completed by 200 people in each of two respective countries. These participants were well distributed across different genders and age groups. The responses obtained were analyzed to evaluate the impact of culture on adoption of innovation as well as on imitation. In addition, the role of gender on the adoption of new product as well as on imitation was investigated.

The analysis of the data obtained in this study clearly indicates that national culture plays a significant role on the diffusion process of innovation. These results show that the tendency to adopt new products in the Swedish culture is higher than that in the Iranian culture. In other words one can conclude that the tendency to adopt new products in countries with low power distance, low uncertainty avoidance, individualistic, and short term orientation culture is higher than in countries with high power distance, high uncertainty avoidance, collective, and long term orientation culture.

The results of this research also demonstrate that gender also plays an important role in the adoption of new products. These results indicate that the tendency to adopt new product by males in both Sweden and Iran is higher than the tendency to adopt new products by their female counter parts. In other words in both feminine and masculine cultures males have more tendencies to adopt new products than females.

The analysis of the data obtained in this study indicates that national culture plays a significant role on the degree of imitation. These results show that the tendency to imitate in Iranian culture is higher than in the Swedish culture. In other words the tendency to imitate in countries with high power distance, high uncertainty avoidance, collective, and long term orientation culture is higher than the tendency to imitate in countries with low power distance, low uncertainty avoidance, individualistic, and short term orientation culture.

In addition, the results of this research show that gender also plays an important role in the extent of imitation. These results suggest that the tendency to imitate by females in both Sweden and Iran is higher than the tendency to imitate by their male counter parts. In other words in both feminine and masculine cultures females have more tendencies to imitate than males.