The influence of national culture on entrepreneurial processes

The usage of causation and effectuation among Dutch and Polish student entrepreneurs

Master Thesis

To obtain the Master of Science degree at the University of Twente

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1. Management summary

This research focuses on the influence of a country's national culture on entrepreneurial processes among student entrepreneurs. The effectual theory of Sarasvathy (2001b) forms the basic theoretical foundation for this thesis. This theory states that, in contradiction to general thought, experienced entrepreneurs do not follow well-planned, future-oriented, market research based paths. These effectual entrepreneurs do not try to make predictions for the future, but rather focus on the present. Further, they are not focused on goals and competitors, but they make use of their means and relationships.

However, within this theory no consideration is paid to possible cultural influences on the use of either causation or effectuation, although scientific literature provides strong evidence of cultural influences on entrepreneurial processes. In order to research this cultural influence, it was necessary to develop a new intercultural theory, based on an extensive literature review. This theory links the concepts of the effectual and causal perspective with appropriate dimensions of several established intercultural theories.

In order to find out whether cultural differences influence the use of either an effectual or a causal perspective, 15 student entrepreneurs in Poland and 15 student entrepreneurs in the Netherlands are interviewed. The interview consisted of a business case and a questionnaire. The subjects were asked to think aloud continuously as they solved the business problems and made their decisions. Their think-aloud protocols were gathered on tape. These tapes were transcribed by using a coding scheme and the transcriptions were analyzed.

It turns out that, as hypothesized, the overall results show that Polish student entrepreneurs indeed make significantly more use of effectual reasoning in comparison to their Dutch colleagues. However, analyzing the results per dimension, it can be said the significance is proven for only one of the six hypotheses. This proven hypothesis says that the more a culture is focused on internal control, the more causation-oriented the entrepreneur will be.

The fact is that this thesis is a comparison between two countries. Since this thesis is part of a larger project, with identical studies conducted in different countries, the eventual results of all conducted and coded interviews have to be compared in order to accept or reject the hypotheses developed in this master thesis.

Finally, the more and more increasing complexity of the current business world, due to globalization and technology advances, seems to decrease the possibility to predict the future and could therefore be a reason which makes an effectual perspective more and more useful.

2. Foreword

My choice to travel for this master thesis to the Polish Republic is one made based upon so-called effectual reasoning. I looked at which foreign people I knew from earlier study periods abroad. Surprisingly many of them were living in the Polish students city Wroclaw. Further, I had a certain budget to spend. In this context Poland was attractive, since the country is not that expensive, even despite the decreasing euro. By contacting these acquaintances, I could get in touch with student entrepreneurs, which where the chosen research population within this thesis. I did not have a strict planning and I did not exactly know on forehand which students I was going to interview, but I was sure that by the contacts I had, I would be able to gather the required amount of interviews. This all together made my choice a decision based upon effectuation. And effectuation is the subject where this thesis is all about.

Effectuation, and its opposite causation, are relatively new approaches in the field of entrepreneurship. This is illustrated by the fact that effectuation does not have a comprehensive Dutch translation. Possibly one could translate it by the term 'effectuering'. However, in Dutch scientific entrepreneurial literature, this term is not even used one time, but only the English term. This clearly shows the newness of the theory of effectuation. However, in the native language of the region where the University of Twente is located, there is a certain saying which describes this concept fairly accurately: K.W.W, which is an abbreviation of *kiekn wat 't wødt* (we'll see how it turns out).

This master thesis marks the end of my study Business Administration at the University of Twente. My specialization is International Management and therefore it may be not surprising that there is a certain cross-bordering element within this assignment, as already mentioned, namely a comparison between Polish and Dutch student entrepreneurs. Due to the relatively small amount of Polish student entrepreneurs in the Netherlands, the undersigned flew across the former Iron Curtain and interviewed fifteen Polish student entrepreneurs in Wroclaw, the main city of southwestern Poland. The fact that Wroclaw is the main student city in Poland was a lucky coincidence. With this benefit I do not point at the large amount of cafes and discos, but rather at the fact that the city houses students from all over the country, which made it easier for me to get a varied sample.

3. Thesis Outline

3.1 Introduction of the thesis

Just like other people, entrepreneurs differ from each other. Some entrepreneurs work in a very structured way, whereas others trust more on their intuition and expertise. Because of the large variety in kinds of people who become an entrepreneur, it is doubtful whether you could distinguish one certain type of people as the one kind of entrepreneurs. Persistence might be an indispensable entrepreneurial trait, although this characteristic might be necessary for any person who wants to achieve something in a certain field of interest. Perhaps it is useful to take a look at a certain MBA in entrepreneurship. One could assume that this program develops necessary skills of potential entrepreneurs. For example, in this program are - in general - courses included as Financial Management and Managerial Accounting. Therefore, one might assume that a certain financial knowledge base is indispensable for entrepreneurs.

Now let's have a look at a quite successful entrepreneur: Sir Richard Branson, who founded the British branded venture capital conglomerate Virgin Group, employing, at the time being, 35.000 employees. The group consists of more than 400 companies around the world (www.virgin.com). There are groups who perform worse. An entrepreneur of this kind can be expected to have a certain level of financial knowledge. However, at a certain meeting with his board about the financial results, Branson raised his hand and asked what actually the difference was between the gross margin and net profit. A sudden silence filled the room. One of the most successful entrepreneurs worldwide would probably not pass a first year's exam in a MBA program Entrepreneurship.

Doesn't this example raise the question whether the taught skills at entrepreneurship classes worldwide are really indispensable for prospective entrepreneurs? One could argue that Branson is an exception, but without a lot of effort similar examples can be found, like in our own country Hennie van der Most. Quitting school at his 16th, this very successful entrepreneur even states that too much education decreases entrepreneurial potential. When somebody without even a very basic level of financial knowledge is able to develop a worldwide business, perhaps entrepreneurship requires different personal qualities or characteristics. The logically following question is whether these can be taught at school, questioning the usefulness of entrepreneurship education. Reitan (1997), for example, concludes that the education system appears to be unsuccessful in stimulating an entrepreneurial potential in young people.

However, the general thought at universities (and, as could be expected, at entrepreneurship consultancy companies) worldwide is that entrepreneurship indeed can be taught: Entrepreneurship is the fastest growing new field of study in American higher education. A study by the Kauffman Foundation in 2002 found that 61% of U.S.

colleges and universities have at least one course in entrepreneurship. It is possible to study entrepreneurship in certificates, associates, bachelors, masters, and PhD programs (Bygrave, 2003).

Furthermore, the above standing suggests that entrepreneurship is a topic which is increasing in importance and attention. The attention for entrepreneurship is related to the attention for the national economy, since entrepreneurship is a fundamental element of it. Every company, whether it is a multinational or a small vegetable store at the corner, is once founded by an entrepreneur. Therefore, entrepreneurship can be seen as the engine behind a country's economy. In the 1980s high unemployment and stagflation resulted in a renewed interest in the supply side of economics and in aspects determining economic growth. It is obvious that there is a certain relation between entrepreneurship and unemployment. When people do not have a job, some of them will try to create one, in order to get some food on the table for dinner. The 1980s have shown a reevaluation of the role of small firms and a renewed attention for entrepreneurship (Bygrave, 2003).

With Google Ngram Viewer it is possible to demonstrate easily the rising attention for entrepreneurship. This is in short how the program works: When a word is entered into Google Books Ngram Viewer, the program displays a graph showing how often a word has occurred in a corpus of books over the selected years. The percentage demonstrates the occurrence of the word 'entrepreneurship' as a percentage of the total amount of words in the selected corpus of books. Below is given a graph of the word 'entrepreneurship', showing a strong increasing trend starting after World War II.

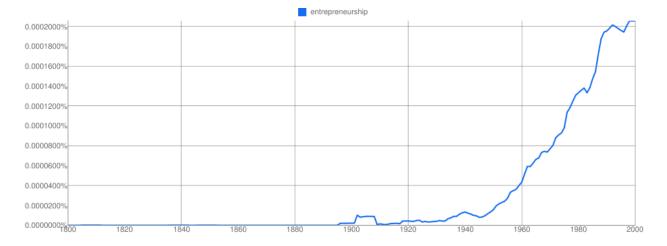


Figure 1: Attention for entrepreneurship

Having pointed out that entrepreneurship is a so-called trending topic; the subsequent question is what determines the relative amount of entrepreneurs within a country (as a percentage of the total amount of inhabitants). Obviously, one could think about lots of reasons to explain differences in entrepreneurial processes. For example, the above mentioned business education could be a distinguishing

determinant factor in entrepreneurship. Hopefully for persons teaching entrepreneurship, it is. Actually, finding predictive factors about entrepreneurship is seen as the so-called 'Holy Grail' of entrepreneurial research (Sarasvathy & Dew, 2005). And just like the Holy Grail, it seems that this distinctive set of predictive factors which determines entrepreneurship does not exist, as will be stressed later on.

A recent theory about the determinants entrepreneurship was developed by Sarasvathy (2001b), who came up with an alternative to the traditional causal view on entrepreneurship. According to causal reasoning, entrepreneurs first identify potential markets for a product and then devise marketing strategies to capture market share using the segmentation-targeting-positioning process (Kotler, 1991). Sarasvathy named her alternative view 'effectuation', which she defines as 'the process by which entrepreneurs in a pre-firm status identify, define and often create a new market for their idea, and also create a resource base and stakeholder network' (Sarasvathy, 1999). This alternative view raises the question which of these two strategies is followed by which entrepreneurs. In this assignment this question will be viewed through a cultural perspective. The reason for this cultural view will be motivated in the next section.

3.2 Purpose and scope of the research

The aim of this assignment is to find out whether starting entrepreneurs in different countries follow different entrepreneurial processes. The theoretical foundation in this assignment is the work of Sarasvathy (2001b) on the use of causation and effectuation among starting entrepreneurs. A detailed description of this theory will be given later on in the theoretical framework.

The assignment is explorative in that way that in this research the use of causation and effectuation will be viewed through a cultural perspective. The reason for this is the fact that Sarasvathy's theory does not take possible national cultural influences on causal or effectual entrepreneurial processes into account in her theories. But is there a reason to expect that a national culture would have an influence on this process? Well, as can be found in the literature review, extensive studies have concluded that a national culture at least influences entrepreneurship in general (although it is not clear which influence it exactly has). However, the question remains whether a nation's culture would also influence entrepreneurial processes.

Within this context the following example might be useful: Countries can mutually be compared on their orientation towards the future: either short term or long term oriented (Hofstede, 1991). For example, according to Hofstede (1991), Germany is more long term orientated than the Netherlands. Within a long term orientation, desired long term objectives are stated in advance. To achieve these purposes, a strict planning is required (Hofstede, 1991). Taking a look at Sarasvathy's theory of causation and effectuation (2001b), this characteristic fits well into the causal way of reasoning, where ends are known at the start and reached by careful planning. Following this line of reasoning, the hypothesis could be formulated that German

entrepreneurs could be expected to make more use of causation in comparison to their Dutch entrepreneurs. However, whether this presumed correlation between the cultural dimension long term orientation and the use of causation in reality exists, is a question which cannot be answered yet, which is simply due to the lack of studies in this field of research. That is the reason why this research is conducted. Therefore, in order to achieve the stated research goal, the central research question of this thesis is:

"To what extent can there be found a correlation between predefined cultural dimensions and the use of either causal or effectual processes in the development of an independent business venture among entrepreneurs?"

It has to be stated that the mentioned predefined cultural dimensions are outlined later on in this assignment.

3.3 EPIC-C project

This master thesis is part of the EPIC-C (Entrepreneurial Processes in a Cultural Context) research. The EPIC-C project is conducted in order to improve the understanding about the way new ventures are created. The founders of the project would like to know what happens in the venture creating process and to put this in an international perspective. This knowledge obviously could also be interesting for (potential) entrepreneurs themselves and other persons who are related in some way to entrepreneurship.

The EPIC-C project is conducted at the University of Twente (Enschede, The Netherlands) in combination with local partners. Participants of the project will interview foreign student entrepreneurs in 20 different countries. The research is started in July 2011. For the subsequent 2-6 months, appointments with local student entrepreneurs are made. By forging links between the variables, it is expected that the interviewed student entrepreneurs will work differently while following different decision making processes. The results of this particular thesis, combined with the outcomes and conclusions of other master students taking part into this research, hopefully will provide more insight into the question whether national culture plays a role in entrepreneurial processes.

3.4 Research relevance

In this section will be elaborated on the research relevance, which is already briefly discussed in the introduction. First the usefulness of more insight into the topic of entrepreneurship in general will be described. According to Reynolds and Curtin (2007), research in entrepreneurship is relevant for several reasons. First, entrepreneurs obviously play an important role in the creation of new markets. Second, job creation is positively influenced by entrepreneurship. According to the researchers, this influence is even larger than the effect of corporate business growth. Further, research has shown that new established business ventures have a higher labor productivity compared to existing and discontinuing businesses. Moreover, entrepreneurs play an important role in innovation. Research has shown that more than 50% of all innovations are made by small firms. The importance of innovation is

illustrated by C. Freeman's widely known quote 'not to innovate is to die.' Fifthly, numerous studies have found a modest positive relation between a region's economic growth and the level of new established firms. Finally, entrepreneurship can play a significant role in the integration of immigrants – a currently hot issue in the Netherlands – since immigrants can integrate themselves into a society by starting-up a business venture. In light of the above standing arguments, it can be said that entrepreneurship is a significant topic, especially with regard to a country's national economy. More insight about the processes entrepreneurs follow through while starting up a new business venture would therefore be valuable to (prospective) entrepreneurs, academia and policy makers.

Having pointed out the relevance of more knowledge about the topic of entrepreneurship in general, it is time to narrow the perspective and stress the usefulness of answering the main question. More insight into the question whether entrepreneurs within different cultures use different entrepreneurial processes is interesting because it reveals the appropriateness of different entrepreneurial strategies in different cultures. This answer might be useful for as well entrepreneurs themselves as for policy makers and educators in the entrepreneurial field. For example, entrepreneurial education could be adapted to the prevailing entrepreneurial process within a country. Further, the dominating entrepreneurial processes in a country are an important issue for foreign entrepreneurs who want to set up a business in a certain country.

3.5 Research strategy

The question is how to investigate which processes entrepreneurs follow. First of all has to be stated that the research strategy in this master thesis will be deductive, which means that based on certain theory hypotheses are formulated. Thereafter, observations, analyses and statistical conclusions will make clear whether these hypotheses can be accepted or rejected and which limitations the study includes.

In this assignment this will work as follows: First of all, after having stressed the research objective, question, relevance and strategy (Chapter 3), a literature review is conducted (Chapter 4), where relevant scientific articles and books about the study topics are analyzed and discussed. What is the search strategy for this literature review, in other words: How to select the right articles and books? This is an interesting question. For example, at out master thesis we were told by a guest lecturer that making use of Google Scholar for searching sources is absolutely not the right way. Then this teacher left the room and our standard teacher returned. He continued on the subject of searching sources and what did he do? Exactly, he opened Google Scholar. This example illustrates the fact that there is no consensus about how to find the best sources for a thesis. In the end, it depends on one's own judgment. It is easy for a researcher to choose those studies which are more in line with his approach and neglect controversial results. About some topics there is written a lot and one can choose the most acknowledged theories. Other fields of interest are more uncultivated. In this case you have to take all materials into account and analyze till

what extent they are useful for you. Both situations occur in this thesis, as will become clear later on.

This literature review is split up into a section about entrepreneurship and one about culture, followed by a subsequent part where these two concepts melt together, described as the cultural influence on entrepreneurship. The purpose of this literature review is to gather the necessary knowledge about cultural influences on entrepreneurial processes.

Based on the literature review hypotheses are developed and formulated (Chapter 5). Therefore cultural dimensions of different theories are analyzed on their possible relation with either causation or effectuation. One could think for example about the above mentioned example of the presumed relation between long term orientation and causation. Since no literature is written yet about the possible cultural influence on causation or effectuation, these hypotheses make a connection between on the one hand culture and on the other hand causation and effectuation.

Hypotheses are not that worthwhile until they are either accepted or rejected by statistical evidence, which is the sequential step in the process. Therefore, 15 high-educated Polish and Dutch student entrepreneurs were asked to go through a business case, wherefore they had to assess ten imaginary business problems during a so-called "think aloud session". How this experiment is conducted and how the results are measured is described in the section about methodology (Chapter 6). The case, which the subjects had to go through, is added in the attachments. The subjects were afterwards asked to fill out a standardized questionnaire.

The results of both the coded think aloud sessions and the questionnaires were statistically analyzed (Chapter 7). Based on these statistics certain conclusions could be derived (Chapter 8). Finally, the chosen research setting - the environment in which the research is carried out – has significant consequences for the experimental design, the type of collected data and the interpretation of the outcomes. This chosen setting involves obviously several limitations for the generalizability of the outcomes, which will be outlined in the section 'Limitations' further on.

4 Theoretical Framework

4.1 Outline

In this section the existing literature related to the main question will be reviewed, in order to give an accurate overview of the published scientific work in this particular area and to provide a solid background for the research paper's investigation, by gaining a necessary insight into the related study topics. Besides this, a literature review is useful in order to prevent the unwanted situation of duplication, because it makes no sense to research what already is researched.

The research question consists of two main constructs: culture and entrepreneurship. Therefore relevant existing literature about these topics is analyzed. First of all, scientific books and articles about entrepreneurship in general will be explored, since entrepreneurship is the core subject of this research, with a special focus on entrepreneurial processes. Later on, the phenomenon of culture will be discussed, concluded with a combination of these two study topics, namely the influence of culture on entrepreneurship. Finally, a conclusion will give a summarizing analysis of the temporary state of this field of research.

4.2 Entrepreneurship

4.2.1 Introduction of the concept of entrepreneurship

The Oxford Dictionary defines an entrepreneur as "a person who sets up a business or businesses, taking on financial risks in the hope of profit." According to Davis (1968), the term entrepreneurship usually designates the persons who own a firm. The attentive reader will notice a slight difference between these two definitions, since the owner of a firm is not necessarily the founder. However, the definition of Oxford Dictionary seems to be a little too limited. To illustrate this, the following example might help: Tom takes over the constructing company of his father. Over a couple of decades, he turns the small firm, employing 5 employees, into an international operating multinational with an average annual profit of €50 million. Wouldn't it be cruel to deprive Tom the title of entrepreneur? However, this difference in definition does not play a role in this master thesis, since the research is clearly focused at young student entrepreneurs who have recently established a business venture.

As already mentioned in the introduction, entrepreneurial activities are important, because they are an essential source of innovation (Schumpeter, 1934) and economic growth (Birley, 1987). The question is how differences in entrepreneurship can be explained. Early studies which were aimed at explaining differences in entrepreneurship activities mainly stress the importance of the state of the economy. Examples of economic variables predicting the level of entrepreneurship are prosperity, female labor share, labor income quota, unemployment and population density (Hofstede, 2004). Weber (1904) argues that differences in entrepreneurship

can be explained by cultural and religious factors. He proposes a link between economic growth and the rise of the Protestant work ethic. Weber suggests that there could be a relationship between the value system of Protestantism and economic growth. McClelland (1976) sees achievement motivation as the most important driving force of the entrepreneur. According to him, the economic growth of several societies between the sixteenth and twentieth centuries was largely determined by a high level of achievement motivation. Wiener (1981) proposes a link between the status of the entrepreneur and economic growth. He states that economic weakness can sometimes partly be explained by the low status of making money. In that case people rather do not choose a career in business. However, it does not seem that currently the art of making money is hindered by a low status, as can be concluded from the developments during the recent financial crisis in 2009, where purely on profit focused bankers played a dubious role.

4.2.3 Entrepreneurial processes

In the above standing introduction, factors are mentioned which influence a nation's level of entrepreneurship. But more important than influencing factors, is the driving forces behind entrepreneurship in general, in other words: How does entrepreneurship arises? To answer this question, first of all, one needs to analyze what actually is involved within the entrepreneurial process. Hisrich et al. (2005) argue that the entrepreneurial process can be characterized by different phases: identification and evaluation of the opportunity; development of the business plan; determination of the required resources and last but not least the management of the resulting business venture. Although these phases proceed progressively, no single stage is dealt with in isolation or is totally completed before work on other phases occurs. The entrepreneurial process is simply said the way people found a business, as shown in the figure below.

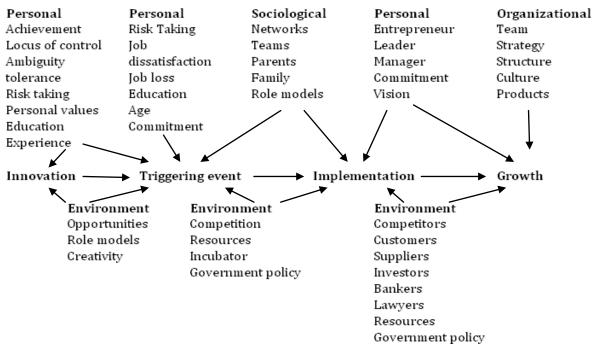


Figure 2: The entrepreneurial process (Source: Pearce & Robinson, 1986)

When founding new businesses, entrepreneurs make use of an opportunity, which is defined by the same Oxford Dictionary as "a time, juncture, or condition of things favorable to an end or purpose, or admitting of something being done or affected." This definition seems agreeable. The opportunity is the starting point of the entrepreneurial process. According to Venkataraman and Sarasvathy (2001), an entrepreneurial opportunity consists of the opportunity to create future economic artifacts and as such, involves a demand side, a supply side, and the means to bring them together. Without an opportunity, an entrepreneur cannot start a business and therefore the notion of opportunities is fast becoming a central theme in the field of entrepreneurship research. Entrepreneurship researchers have focused substantial attention on studying the nature of opportunity recognition— the development through which ideas for potentially profitable business ventures are recognized by certain persons (Baron & Ensley, 2006).

4.2.4 Discovery and creation theory

The first question which arises in this context is whether entrepreneurial opportunities simply already exist and can be picked out and exploited by alert entrepreneurs. Or is it the case that opportunities have to be created by entrepreneurs? Researchers tend to distinguish between these two perspectives; opportunities as existing before discovery and exploitation ('discovery theory'), and opportunities as created in social processes ('creation theory). Both perspectives are grounded in established economic traditions and have been elaborated over time by a certain amount of entrepreneurship scholars (Berglund, 2007).

As said, some researchers argue that opportunities simply exist and just have to be discovered. Because of the fact that certain individuals are cleverer in - or more aware of - recognizing and exploiting opportunities than other persons, exploiting these opportunities can be a source of economic profitability (Alvarez & Barney, 2007). An example of such an existing opportunity can be found in the California Gold Rush, which began in 1848. The gold was already in the ground and it was just waiting for some hard-working minors to be discovered.

On the other hand, several researchers argue that competitive imperfections in markets are not independent of entrepreneurial actions and characteristics. Assuming that opportunities have to be created instead of discovered could have significant implications for the actions of entrepreneurs. In that case, instead of searching for opportunities, entrepreneurs might engage in a learning process that eventually could lead to the formation of business opportunities. (Alvarez & Barney, 2007). The main characteristics of the two theories are outlined in the table below:

	Discovery theory	Creation theory
Nature of opportunities	Opportunities exist, independent of entrepreneurs. Applies a realist philosophy	Opportunities do not exist independent of entrepreneurs. Applies an evolutionary realist philosophy.
Nature of entrepreneurs	Differ in some important ways from nonentrepreneurs, ex ante.	May of may not differ from nonentrepreneurs, ex ante. Differences may emerge, ex post.
Nature of decision making context	Risky	Uncertain

Figure 3: Discovery & Creation Theory (Source: Alvarez & Barney, 2007)

4.2.5 Pattern recognition

Having pointed out how opportunities arise, the next question is why some people recognize them and others overlook them. A pattern recognition perspective suggests several reasons why specific individuals recognize opportunities that other persons overlook. According to Baron (2006), the pattern recognition perspective suggests that in opportunity recognition, active search plays an important role, which is also argued by Kaish and Gilad (1991), who suggest that 'the psychical volume of search is one distinguishing characteristic of entrepreneurial behavior.' Other aspects mentioned by Baron (2006) are alertness and prior knowledge. These three aspects operate together and may provide an important 'edge' to certain persons with regard to the identification of business opportunities.

As stated, according to Baron (2006), entrepreneurship is fostered by active search, alertness and prior knowledge of entrepreneurs. However, basically every willing individual can search actively for opportunities, can be alert and can develop entrepreneurial experience. Baron (2006) therefore logically concludes that current or would-be entrepreneurs can be trained to be better at recognizing opportunities.

But could therefore be concluded that every willing person could be or become an entrepreneur? This interesting question will be answered later on.

Baron & Ensley (2006) suggest that the basic cognitive process of pattern recognition may play a role in identifying new business opportunities. Entrepreneurs have developed cognitive frameworks through experience, which enables them to perceive connections between seemingly unrelated trends or events in the external environment. Experienced entrepreneurs acquire there cognitive frameworks by processes of learning processes that occur as they gain experience in starting new ventures. Experienced entrepreneurs are much more concerned with interests of important stakeholders. Therefore, experienced entrepreneurs think about opportunities in more pragmatic and sophisticated ways from a business-model point of view, than novice entrepreneurs.

Experience helps the entrepreneur to 'connect the dots' and to recognize opportunities that he or she can develop. The patterns they perceive suggest ideas for new business ventures. Relating this to the pattern recognition perspective, one could conclude that more experience leads to an improved cognitive framework, which in turn positively influences the aspects search, alertness and prior knowledge and therefore the opportunity identification in general. So, entrepreneurial experience is a main factor when starting up a new business venture.

4.2.6 Opportunity development

Opportunity recognition is the first phase of starting up a new business venture. As argued by Baron (2006) individuals can be trained to improve their opportunity recognition, but opportunity recognition is not the same as opportunity development. Isn't it remarkable that millions of persons are exposed to the same kind of changes and trends in the external world, but only a few of them recognize links between these changes and trends and use this opportunity recognition as a base for the foundation of new business ventures? In other words: Why do certain persons develop entrepreneurial opportunities and why others not? An obvious answer, which is also briefly discussed in the introduction part, is that personal characteristics distinguish entrepreneurs from non-entrepreneurs.

A lot of scientific work on entrepreneurship indeed argues that there are certain characteristics that make someone an entrepreneur and that entrepreneurs are different from non-entrepreneurs (Sarasvathy, 2009). The remainder of this paragraph will provide an overview of different research outcomes. Nicolaou et al. (2008) conclude that genetic factors account for a significant proportion of variance in which persons become an entrepreneur and these researchers stress the importance of considering genetic factors in explanations for why people engage in entrepreneurial activities. Shane (2003), for example, argues that entrepreneurship is more suitable for extraverts than introverts, since entrepreneurs have to interact with employees, investors and customers and sell them on the value of the business. Zhao & Seibert (2006) state that entrepreneurship is a better fit for persons who are open

to new experiences, since entrepreneurs need to explore new ideas and take innovative approaches and more appropriate for disagreeable people, since agreeable people are less probable to chase their own self-interest, drive hard bargains, or use other persons to achieve their own targets. Rauch & Frese (2007) argue that entrepreneurship is more appropriate for people who are emotionally stable, since entrepreneurs need to deal with challenges like hard work, considerable risks, pressure, social isolation, insecurity, and financial difficulties that go along with the foundation of a company. Finally, Delmar and Davidsson (2000) conclude that the variable that discriminated the most between nascent entrepreneurs and controls was the gender of the subject.

However, among researchers of entrepreneurship there exists no general consensus about the influence of personal characteristics on entrepreneurship, since a lot of outcomes of entrepreneurial studies are contradictory. During the last decade the psychological perspective on entrepreneurship has come under certain criticism (Carsrud and Krueger 1995). Several researchers suggest that psychology has been either badly utilized or has no utility at all in entrepreneurial studies (Carsrud et al. 1986; Carsrud and Johnson 1989). Read (2011) states that entrepreneurs and nonentrepreneurs cannot distinguished by a different set of personal characteristics. Further, he argues that it is hard to find a character trait that under all circumstances is beneficial for entrepreneurs, since experienced entrepreneurs do not have a consistent set of character traits. This opinion is shared by Sarasvathy (2009), who argues that there is not one kind of a person who can become an entrepreneur. or environments could require Different situations, businesses entrepreneurial qualities. Thomas & Mueller (2001) argue that entrepreneurs reflect the dominant values of their national culture, which implicates that in different cultures entrepreneurs share different characteristics. This view is particularly interesting for this research project, since entrepreneurial processes will be viewed through a cultural perspective.

Read (2011) further states that entrepreneurship is much more dependent on environmental characteristics. As also mentioned in the introduction of this chapter, long-standing research has indeed identified a broad range of environmental factors that influence entrepreneurship, e.g. demographics, wealth and the political environment (Shane, 2003). Furthermore, Sarasvathy (2009) argues that in general everybody can be an entrepreneur, which is in line with the article of Alvarez and Barnsley (2007), who argued that people can be trained to improve entrepreneurship. Saravathy (2009) sees entrepreneurship more as a way of looking at the world and solving problems. She states that everybody can learn to be a scientist. According to her, not everybody can be an Einstein, but everybody can learn to become more scientific. And in the same way she thinks everybody can become more entrepreneurial in their reasoning.

It is important to note that it is not said that personal characteristics could not have an influence on entrepreneurship. However, the point being made is that it is hard to distinguish a certain package of characteristics that distinguish them from non-

entrepreneurs, which is illustrated by the following example: Laziness is in general not a characteristic most people would subscribe to an entrepreneur. But now imagine the following: The hard-working Hendrik Streberink and the lazy Bennie Lauwbaant have to perform a certain task. Both are motivated, although in different ways: Whereas Hendrik is very motivated to complete the task, Bennie is very motivated to avoid the work which the task involves. Because of his dislike of the task, Bennie starts thinking about how to make the task less tiresome, which could result in a more efficient way of performing the task, whereas the disciplined Hendrik does not complain and keeps on doing the task in the same way. Laziness and efficiency both come from the desire to work less, so the most efficient people could be sometimes the ones most motivated in their laziness.

In conclusion can be stated that it is rather environmental circumstances than personal characteristics that can be seen as the main predicting factor for entrepreneurial activities. Therefore the question arises how entrepreneurs deal with these environmental circumstances. This, finally, leads to the concepts of causation and effectuation.

4.2.7 Causation & Effectuation

In contradiction to the effectual approach that is often used by experienced entrepreneurs, at most MBA programs potential entrepreneurs are taught causal reasoning – the progression from idea to financial projections, to market research, to business plan, to prototype, to financing, etc. That this causal approach is the leading way of reasoning is not that remarkable, when one thinks about the fact that the dominant Western culture is full up with cognitive maxims like "look before you leap" and "think before you act" (Lieberman, 2000).

Causal reasoning takes a particular effect as given and focuses on selecting between means to create that effect – one-to-many-mappings. The logic for using causation processes is: "To the extent that we can predict the future, we can control it." Causal rationality seeks to identify the optimal alternative to achieve the set target and comes to life through careful planning and subsequent execution (Sarasvathy, 2001b).

However, Sarasvathy (2010) states that more experienced entrepreneurs, in contradiction to novice entrepreneurs, start with analyzing who they are – their traits, tastes and abilities; what they know – their education, training, expertise and experience; and whom they know – their social and professional network. This view is shared by Read (2011), who argues that experienced entrepreneurs start with the things they have, cooperate with their partners and determine their affordable loss. This way of reasoning is known as effectuation. Sarasvathy (2001b, 2008) studied 27 expert entrepreneurs that had started one or more companies; remained a full-time founder/entrepreneur for 10 years or more; and participated in taking at least one company public. A quantitative analysis of these entrepreneurs' decision-making protocols showed that the vast majority of this sample relied on 'effectuation processes' when making decisions under uncertainty.

Effectual reasoning begins with a given set of means and allows objectives to emerge contingently over time from the varied imagination and diverse aspirations of the entrepreneurs and the people they interact with. Effectuation processes focus on the selection of possible effects that can be created with these means – one-to-many mappings. The logic for using effectuation processes is that to the extent the future can be controlled, it is not necessary to predict it. So, effectuation rests on the logic of control. To the extent that the future is shaped by human action, it is much more helpful to understand and work with the persons who are engaged in the decisions and actions that bring it into existence (Sarasvathy, 2001b). Rather than discover and exploit opportunities that pre-exist in the world, effectual entrepreneurs focus on creating opportunities from their mundane realities of their value systems and life (Sarasvathy, 2008). This statement fits well into the above explained creation theory.

The Zwarte Cross (Black Cross) started in 1997 as an illegal motor cross event, organized by the rock band Jovink & The Voederbietels, in a grassland near Doetinchem (The Netherlands). Everybody with a (kind of) motor cycle was allowed to race. Thereafter the band played a gig in a small tent. The intention of the cross was simple: having a good time with some friends. At that particular Sunday, these guys never could have imagined that fifteen years later the cross would have been transformed into the largest motor cross event in Europe and the biggest music festival in the Netherlands with an audience of 152.000 people (source: www.zwartecross.nl).

The above standing example of the Zwarte Cross is a typical example of a business venture developed by effectual reasoning. Because, as stated, effectuation starts with a self-analysis. The members of Jovink were, besides musicians in a rock and roll band, passionate motocross riders. By their experience in music performance they knew how to entertain people. Further, the band members knew a farmer who was willing to lend his grassland and they invited a lot of friends to join the cross event. The uniqueness of this event attracted many curious people. In the beginning, the band members had no idea how the event would develop over the years, but that was not important to them. They focused on the present.

So, what makes entrepreneurs entrepreneurial following effectual reasoning? Entrepreneurs are entrepreneurial, as distinguished from managerial or strategic, because they think effectually; they believe in a yet-to-be-made future that can significantly be influenced by actions of humans; and they realize that to the extent that this human action can control the future, they do not need to predict it (Sarasvathy, 2001b). According to Sarasvathy (2010) entrepreneurial success is not about talent, but about holding on. Entrepreneurs, who don't give up and learn from their failures, will become more experienced in the long term and therefore more successful. As said before, although there is no consensus about required entrepreneurial characteristics, persistence seems to be an indispensable entrepreneurial trait. This statement is nicely illustrated by a quotation of the former English prime minister Winston Churchill, who defined succes as the ability to go from failure to another with no loss of enthusiasm.

4.2.8 Effectuation and Causation compared

Sarasvathy developed six dimensions which distinguishes effectuation from causation: means-driven vs. ends-driven, control vs. prediction, affordable loss vs. expected returns, new vs. existing products and markets, cooperation vs. competition, and cyclicality vs. linearity. The table below provides an overview of these dimensions:

<u>Dimension</u>	Causation model	Effectuation model
Starting point	Ends are given	Means are given
Assumptions on future	Predictability means controllability	Controllability reduces need to predict
Predisposition towards risk	Expected return	Affordable loss
Appropriate for	Existing products and market	New products and markets
Attitude toward outside firms	Competition	Cooperation
Type of model	Linear	Cyclical

Figure 4: Causation and Effectuation model (Source: Kraaijenbrink, 2008)

An interesting comparison with the music industry can be made to illustrate the difference between causation and effectuation. Currently talent shows on TV, like 'The Voice of Holland', 'X-factor' and 'Idols', are very popular. Although this large popularity, it appears that the winners of these talent shows get lost in anonymity pretty quick after their glorious victory. For example, who remembers the winner of Idols 3? One might wonder what this has to do with causation and effectuation. Well, looking at the characteristics of both entrepreneurial processes, it appears that these talent shows have a lot in common with causal reasoning: The jury knows in advance the end goal of the show: Finding the best music talent. To achieve this, the jury members judge the participants on several criteria, in order to end up with the person with the expected talents. The show has a strict planning, starting with several auditions. In the subsequent rounds, participants compete with each other to reach the final. The participants perform existing songs; they don't come up with own songs. Therefore, the 'products' they deliver, can be regarded as already existing. Finally, the show uses a linear model; once a participant is rejected, he or she cannot come back. This all fits into the causal model. Just like in the 'normal' business world, it appears that these entrants in the music industry, who use causal processes, are not likely to be very successful.

According to Rolling Stone's list of 100 greatest artists of all time (http://www.rollingstone.com/music/lists/100-greatest-artists-of-all-time-19691231), The Rolling Stones and The Beatles can be called the greatest music bands ever. What can be said about their 'entrepreneurial' characteristics? First of all, what was there starting point? The Rolling Stones started playing American blues music, which was at that time not popular at all in Great Britain. Nevertheless, they liked to play that kind of music, which makes them rather means-driven than goal-driven. The Beatles too were more means-driven; they did not start playing together in order to

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become the best band ever – They started playing together since they all came from Liverpool. Paul McCartney didn't pick out George Harrisson after intensive selection processes; he just saw him playing guitar in the back of the bus. In their early years, the Rolling Stones could not have imagined their eventual success. For a couple of years, the band members lived in deep poverty with a very uncertain future. However, The Stones had a great passion for playing their music. The band members did not focus on expected return, but rather on affordable loss: They were happy when they earned enough with performing to pay the monthly rent. The main source of inspiration for as well The Beatles as the Stones was American rhythm and blues music. Along the way, both bands developed their own new music style. This style was partly developed by playing with, learning from and get inspired by other musicians. This focus on relationships is another effectual trait. Both bands came up with own, new 'products' (songs), which is again a characteristic that fits into the effectual model. Interestingly, later on the Rolling Stones developed a large, professionally managed organization that was and is based on causal reasoning, which could have been expected according to Sarasyathy's theory. In conclusion, it can be said that both bands can be characterized as effectual and not unsuccessful entrants. At first sight, it might look quite strange to analyze the music industry in this way, but it should not be forgotten that artists and bands perfectly fit into the earlier given definition of an entrepreneur.

Sarasvathy (2001b) comes up with some general differences between the both entrepreneurial processes. She proposes that pre-firms or very early-stage firms created through processes of effectuation, if they fail, will fail early and/or at lower levels of investment than those created by causation processes. Furthermore, Sarasyathy comes up with the proposition that successful early entrants in a new industry are more likely to have used effectuation processes than causation processes, just like the example above has shown. Successful early-stage firms are more likely to have focused on forming alliances and partnerships than on other types of competitive strategies. Effectual entrepreneurs have a tendency to distrust market research. But how could effectual entrepreneurs approach new markets and products if they do not know whether the customer has a need for it? Well, the answer is that the customer may not know that he needs it. For an example it may be useful to go back to the prehistory, to the time when the wheel was not invented yet. If one would have done market research among the Neanderthals about their needs, it is very unlikely that even one of them would respond as follows: "Well, a wheel might be useful!" This leads to the main point being made: People do not miss what they don't know.

Whereas causation focuses on expected return, effectuation focuses on affordable loss. While causal reasoning is dependent of competitive analyses, effectual reasoning is built upon strategic partnerships. Whereas causal reasoning urges the exploitation of pre-existing knowledge and prediction, effectual reasoning stresses the leveraging of contingencies (Sarasvathy, 2001b). It is important to stress that both causation and effectuation are important aspects of entrepreneurial and strategic decision making. (Venkatamaran & Sarasvathy, 2006). It is not the case that successful entrepreneurs

purely follow effectual processes. Of course they think about the future, about goals and about competitors. The point being made is the fact that most successful entrepreneurs prefer effectual reasoning over causal reasoning in the beginning stages of a new venture (Sarasvathy, 2001b).

A current perspective offers an interesting insight: The still ongoing economic crisis shows the impossibility to predict the future, since the economic specialists did not see it coming, although they study this field continuously. Interesting in this respect is the book written by the Libyan philosopher Nassim Nicholas Taleb (1960) titled 'De Zwarte Zwaan. De impact van het hoogst onwaarschijnlijke.' (2007) He stresses the importance of unexpected events, which occur regularly (like 9-11 and the terrorist attacks in Madrid), that make the future impossible to predict. And an unpredictable future is more appropriate for an effectual perspective. Another important point which this fact stresses is the fact that, in contradiction to the general thought in social science, almost no important discovery or new technology is a result of a goal-aimed planning. This argument strongly shows the inappropriateness of a causal perspective for new markets or products, which is in line with the theory of Sarasvathy. Therefore, the following concluding assumption can be made: causation follows effectuation.

4.3 Culture

4.3.1 Introduction of the concept of culture

As said, the main question of this research involves two constructs: entrepreneurship and culture. In this part will be elaborated on the second one. A long time ago, the Greek philosopher Aristoteles stated that every child is born as a 'tabula rasa' (an unscribed tablet), which means that persons are born without a built-in mental content. There is no general consensus about the truth of this proposition, since it is argued that certain characteristics are genetically predisposed. However, it is undoubted that culture plays an important role in the formation of the eventual individual and therefore also on the formation on the entrepreneur. The question which role it exactly plays will be answered later on.

Historically, the word culture is derived from the Latin word 'colere', which means 'to care for', or 'to cultivate'. Nowadays, the word 'culture' if often used loosely in everyday language (Dahl, 2004), so it is useful to come up with some definitions. Hofstede (1994, p.65) defines culture as "the collective programming of the mind which distinguishes the member of one group or category of people from another". Kroeber and Parsons (1958, p. 582) have a slightly different view and define culture as: "Patterns of values, ideas and other symbolic-meaningful systems as factors in the shaping of human behavior." In all cases, the idea of a common, yet distinctive, set of values held by a society with resulting behaviour and artefacts is essential to the basic idea of the phenomenon 'culture' (Dahl, 2004).

Culture can be analyzed on several levels. Ulijn and Weggeman (2001) distinguished the following levels of analysis: professional culture, branch culture and national culture. Since Polish student entrepreneurs are compared to Dutch student entrepreneurs, in this research the focus lays on national culture. Therefore, the aspect which distinguishes the two researched groups within this research is the nationality of the interviewed student entrepreneurs. A national culture should be viewed as a characteristic of a large number of people conditioned by similar background, education, and life experiences, instead of characteristics of individuals or a country (Doney et al, 1998).

4.3.2 Cultural values

According to Hofstede (1994; p. 13) cultural values represent "the deepest level of a culture. They are broad feelings, often unconscious and not open to discussion, about what is good and what is bad, clean or dirty, beautiful or ugly, rational or irrational, normal or abnormal, natural or paradoxical, decent or indecent." A culture can be characterized by the existing values within a society. Values are an attribute of individuals as well as of collectivities. Values can be defined as a broad tendency to prefer certain states of affairs over others. Values determine the subjective definition of rationality. Values can be characterized by intensity and direction. When people

hold a certain value, this indicates that the question involved consists a certain relevance for those people (intensity) and these people assess certain outcomes as positive and other outcomes as negative (direction) (Hofstede, 1980).

Cultural values can specify the level to which a society considers entrepreneurial behaviors, such as independent thinking and risk taking, as desirable. Cultures that value and reward such behavior promote a propensity to expand and introduce radical innovation, whereas cultures that reinforce conformity, group interests, and control over the future are not probable to show risk-taking and entrepreneurial behavior (e.g., Herbig & Miller, 1992; Herbig, 1994; Hofstede, 1980). Davidsson & Wiklund (1997) distinguish two general views for the relationship between entrepreneurial behavior and culture. The *aggregate psychological trait* explains entrepreneurial values, the amount of entrepreneurs will be higher. On the other hand, *social legitimation* assumes that differences in entrepreneurial activities are based upon variation in beliefs and values between the society and potential entrepreneurs.

4.3.3 Cultural dimensions

A significant amount of research has been done to identify salient value dimensions along which national cultures can be distinguished (Bond, 1988: Hofstede, 1983; Triandis, 1982; Schwartz, 1994; Smith, Dugan & Trompenaars, 1997). Especially interesting for this assignment are those intercultural theories which include dimensions that can be matched with the theory of causation and effectuation. As pointed out, the differences in reactions on the case and the questionnaire between the Dutch and Polish student entrepreneurs will be analyzed through a cultural perspective. This means that the question is whether certain dimensions of causation and effectuation are correlated with certain cultural dimensions. Since there exists no comprehensive intercultural theory which can be totally matched with the theory of causation and effectuation, useful cultural dimensions will be picked out of different intercultural theories. Below is given an overview of the chosen cultural dimensions. (In the attachment an overview of all the dimensions of the intercultural theories is added.) Since the aim of this assignment is to link the chosen cultural dimensions eventually to entrepreneurial processes, where possible these dimensions are put in the entrepreneurial context. These cultural dimensions will be later on used to develop hypotheses which link them to the separate characteristics of causation and effectuation.

4.3.3.1 Hofstede's Cultural Dimensions

Hofstede's work (1980) is probably the most popular work in the field of (national) cross-cultural research and Sivakumar and Nakata (2001) noted its current role as the dominant culture paradigm. Although Hofstede's research provides a somewhat general framework for analysis, the framework can be applied simply to many daily intercultural encounters. It is especially useful, as it decreases the complexities of culture and its interactions into five comparatively easily understood cultural

dimensions (Dahl, 2004). Although the cultural dimensions of Hofstede are widely used, they have been criticized for falling short of describing all important characteristics of a country's national culture (Van Everdingen, 2003). Furthermore, Van Rossem (2005) criticizes the fact that Hofstede neglects cultural differences within countries. Furthermore, Van Rossem argues that in Hofstedes approach a historical dimension is absent.

Hofstede (1980) gathered survey data between 1967 and 1973 from 116.000 employees of IBM in 40 countries. Based on these data he identified five cultural dimensions on which countries differ: power distance; uncertainty avoidance; individualism; masculinity and long-term orientation. The score on these dimensions indicate the fundamental values of a society, which forms the core of a national culture. Hofstede sees the beliefs and attitudes of the middle class as representative for the beliefs of the society as a whole. So, in fact Hofstede compares the cultural norms and values of the middle class of different countries. Below is given an overview of the chosen cultural dimension and the related scores of Poland and the Netherlands.

	The Netherlands	Poland
Individualism Index	80	60

Figure 5 Polish and Dutch scores on Hofstede's dimensions

4.3.3.1.1 Individualism Index

This dimension is defined as the comparison between collectivism and individualism. An individualistic society stands for a society in which the ties between individuals are loose: a person is expected to look after himself or herself and his or her immediate family only. Collectivism stands for a society in which people from birth onwards are integrated into strong, cohesive in-groups, which continue to protect them throughout their lifetime in exchange for unquestioning loyalty. The index reflects the extent to which persons prefer to take care of themselves and their immediate families, remaining emotionally dependant from groups, organizations, and/or collectivities. In most countries the behavior of an individual is determined by the society. In individualistic countries the family is a dominant factor (Hofstede, 1994).

A growing economy leads to a higher level of individualism within a country. However, a too high degree of individualism has a negative influence on a nation's economic growth. This negative influence also applies to a too high degree of collectivism (Hofstede, 1991). Further, there is a positive correlation between the level of individualism within a country and the amount of patents per capita (Shane, 1992). Studies cited by Acs (1992) conclude that there seems to be little correlation between a country's level of individualism and small business strength.

Founders of a company tent to have an individualistic orientation (MacGrath et al., 1992). Scheinberg and MacMillan (1986) conclude that most new entrepreneurs are driven by individualistic motives as wealth, personal development, independence, the need for approval and escape from unsatisfactory work. Huisman (1985) noticed personal development and the willingness to be a leader as key motives. Another study, conducted by Ray and Turpin (1990), showed that founders of startups were mostly driven by individualistic motives as a desire for creativity and self-actualization. On the other hand, collectivistic orientations can be related to preferences for firm-wide, social approaches to corporate venturing (Shane et al., 1995).

	Entrepreneurial functions		
	Leveraging resources		
Cultural orientations	Generaring variety	Internal	External
Individualism	Founders & founding Independent startups & innovations Early Ford & Aplle	Contingent teamwork Stretch throug joint effort Magna, HP	Pragmatic alliances Contractual links Corning Glass Works, AT&T
Collectivism	Corporate entrepreneurship & team innovation Innovation in large organization	The "clan" Low internal transaction costs	Relational ties Tight, long-run ties keiretuse
	3M, Canon, later Ford & Apple	Sony, Toya	Toyata, Matsushita

Figure 6: A Framework: Individualism, Collectivism and the Entrepreneurial Functions (Source: Tiessen, 1997)

Poland and the Netherlands can both be characterized as individualistic. However, on this dimension the Netherlands score higher than Poland (NL: 80, PL: 60). This implies that in the Netherlands there is a higher preference for a loosely-knit social basement in which individuals are expected to take care of themselves and their direct families only. Further, in the Netherlands the relation between the employer and employees is based on mutual benefits, employing and promotions are based purely on merit, offence leads to loss of self-esteem and guilt and management implies managing individuals. Although Poland can be characterized as individualistic, the Polish inhabitants need a hierarchical system, which can be seen as a contradiction. Because of this, the manager in Poland is advised to establish a second communication level, to have a direct contact with every person in the organization and to permit to give the impression that each employee within the organization is important.

4.3.3.2 Trompenaars & Hampden-Turner's Cultural Dimensions

These two scientists (1998) classified cultures based on behavioral and value patterns. Trompenaars and Hampden-Turner distinguish seven value dimensions. Some of these are almost identical to the above standing dimensions of Geert Hofstede. Interesting to note is the fact that Hofstede claimed that the theory of Trompenaars is not supported by his database. Trompenaar and Hampden-Turner (1998) based his

theories on a research which covered 15,000 people from various companies, across fifty countries. From the collected samples 75 per cent of the participants had management positions and 25 per cent covered secretarial positions. The table below shows the dominating aspects of each selected cultural dimension in as well the Netherlands as Poland, which is stressed in the section below.

Figure 7: Polish and Dutch scores on Trompena ars'

	The Netherlands	Poland
Judging people's behavior	Universalism	Particularism
Time management	Sequential	Synchronic
Control	Internal	External

dimensions

4.3.3.2.1 Judging people's behavior: Universalism vs. particularism

This dimension describes how people assess other people's behavior. Within universalistic societies there are certain absolute rules that apply to everyone. Universalistic people attach high value to the observance of rules, regardless the circumstances. Universalist nations tend to feel that general obligations and rules are a powerful foundation of moral reference. Therefore, universalistic people will not make differences between people from the narrow environment or the wider community. Universalists insist on following the rules; even when friends of them are involved. Universalists look for "the one best way" of handling fairly and equally in all situations. They believe that their principles are the right ones and they attempt to modify the attitudes of others to match. Using Hofstede's (1980) and Trompenaars (1998) intercultural dimensions, it is suggested that a culture that is universalistic will be characterized by autonomy, proactiveness, competitive aggressiveness, innovativeness, and risk taking. Further, Trompenaars argues that an universalistic approach influences structures and policies within a country. In universalistic countries there is a preference for consistent and uniform procedures.

On the other hand, particularistic people pay more attention to specific circumstances or personal backgrounds. Therefore, what is right in one situation may not be right in another. Person in particularistic societies treat family, friends and members of their in-group as good as possible. High attention is paid to personal feelings. Particularistic countries are those where particular situations and relationships have a higher value than universal norms and rules. Ties of certain relationships are more powerful than any abstract rule and the response of particularistic people depends on the situation and the people involved. Particularistic countries prefer to take each situation and relationship into account. In a particularistic country the relationship between employee and manager is characterized by commitment. Particularistic entrepreneurs act authoritarian in their decision-making style. Particularistic societies avoid rigid or standardized methods to manage across cultures. Particularists have a preference to

leave some space for adaptations which might occur in the future. For example, when markets got more individual and specific, the USA faced problems with their system of mass marketing and production. Particularly in competition with particularistic nations, like for example France, who are focused on customized and individual products (Tompenaars and Hampden-Turner, 1998).

As shown, this dimension can be used to compare as well countries as organizations. For example, Moon and Williams (2000) suggest that some cultures tend to be more universalistic (USA and Germany), whereas others are more particularistic (Venezuela and Gulf Countries). Further, based on this dimension, a distinction can be made between international corporations: On the one hand there are universal, global corporations, typically centralized in their home country and on the other hand there are particularistic, multinational corporations, with highly decentralized business units particular to their local cultures Trompenaars and Hampden-Turner (1998).

The universalistic or particularistic approach within a country influences the way of doing business. Universalist society focus normally more on rules than on relationships. For example, American employees compete hard for better work positions and to raise in the hierarchy and earn a higher income. Americans do this without caring for colleagues and the relationship with them. In comparison, in particularistic cultures like China, there is a strong focus on relationships. In case of working with/managing particularistic people, universalists should attempt to develop informal networks and create private understandings as well as they should try to look for fairness in doing business by treating and looking on cases each as a specific one (Trompenaars and Hampden-Turner, 1998).

Catholic countries, as Poland, have preserved values as particularism, that hinder capital accumulation and entrepreneurial behavior (Lipset, 1970). The combination of achievement (judging individuals by their ability and performance) and universalism has a positive influence on the industrialization in a country (Fleming, 1979). On the other hand, management may be more compatible with a particularistic ethic (Osborne and Gaebler, 1992).

Since people from the Netherlands are more universalistic, they focus more on rules, are more precise when defining contracts and tend to define worldwide standards for organizational policies and human resources practices. Within a particularistic country as Poland, the focus lays more on the maintenance of relationships; contracts can be adapted to satisfy new requirements in different situations and local variations of company and human resources strategies are created to adapt to different requirements.

4.3.3.2.2 Time management: Sequential vs. synchronic

This dimension refers to the question how people in different cultures manage their time. The basic question for this dimension is: "Do we do things one at a time or several things at once?" Within Sequential oriented cultures people follow strict schedules and prefer to conclude one item before continuing to the next one while

synchronous cultures do several things simultaneously and schedules are approximate. An example of a sequential time focused country is the USA or England, whereas, for example, Mexico and Italia can be titled as synchronic oriented (Trompenaars and Hampden-Turner, 1998). A sequential time focus may be more appropriate for small organizations and those which are in early stages of their life cycles, while huge organizations may benefit from a sequential use of time (Schien, 1985)

The entrepreneurial process requires that one passes through different stages in which one is more or less willing to share information, trust others and open up oneself to criticism. Whereas sequential technologies may be appropriate for reflective thinking and decision making (choice of legal structure, communication planning), entrepreneurs are at times more open to synchronous systems that increase emotional proximity and stimulate creative debate and thinking (e.g. opportunity recognition and idea generation) Within the idea development phase ideas iterate and flow, but necessarily in any set order or combination. This is in contrast to the sequential nature of formal development approaches (Evans and Volary, 2010).

Sequential oriented entrepreneurs plan actions in advance and any deviation is considered as disturbing. According to these sequential oriented persons, time should not be wasted (Hall, 1985). Synchronous oriented entrepreneurs direct their attention to events and elements in their environment, whereas sequential entrepreneurs are more focused on activities within their boundaries (Bluedorn, 1991). Further, synchronous entrepreneurs extensively change their attention between tasks (simultaneous or intermittent ask engagement), often in response to new issues or opportunities (Kotter, 1982). On the other hand, sequential entrepreneurs control attention by switching with techniques, such as quiet times and appointment schedules, in order to work on task lists in order (Griessman, 1994).

Because of their sequential time management, the Dutch view time as a series of passing events. Therefore, the Dutch tends to schedule tightly and do not like to be thrown off their schedule by unanticipated happenings. People have a preference to do just one activity at a time. The Polish have a stronger tendency for synchronic time management. Within synchronic time management the past, present and future are interrelated. Synchronic people follow various activities in parallel. Within synchronic cultures there is one final goal, but several ways to reach this. Polish people see time as flexible and intangible. They are more comfortable doing several activities at one time. Further, planning is more loosely.

4.3.3.2.3 Locus of control: Internal vs. external

This dimension distinguishes societies on the degree to which members believe they can exert control over their environment as opposed to believing that their environment control is. The basic question in this dimension is: "Do we control our environment or are we controlled by it?"

Research has shown various relationships between the locus of control within a company, either external or internal, and aspects as job satisfaction, entrepreneurship, work alienation, work satisfaction, management methods, work involvement and level of business activities (Rice, 1978). Excellent performance results are mostly achieved by internals (Anderson & Schneier, 1978). Further, several studies have pointed out that founders of new businesses have a greater internal locus of control than nonfounders (Ahmed, 1985; Begley & Boyd, 1987; Mescon & Monanari, 1981). Externals tend to be less satisfied with their work than their internal counterparts (Organ & Green, 1974; Pryer & Distefano, 1971). Further, internals seem to be more considerate managers (Pryer & Distefano, 1971) and more content in a participative work atmosphere (Mitchelle t al., 1975; Runyon, 1973). Whereas internals trust more in influential power forms, externals are more likely to coercive power (Goodstadt & Hjelle, 1973; Mitchell, Smyser, & Weed, 1975). Moreover, several studies come up with the conclusion that internals are less alienated from their job setting than externals. (Mitchell, 1975; Seeman, 1967; Wolfe, 1972). Finally, research suggests that internals are more task oriented and can better deal with stressful situations (Anderson, 1977; Anderson, Hellriegel, & Slocum, 1977; Lesage & Rice, 1979).

The Netherlands have a higher focus on internal control than Poland. This means that in the Netherlands the belief that the environment can be controlled is higher than in Poland. Therefore, the Dutch have a more mechanistic view of nature and while the Dutch believe that nature is complex it can be controlled by persons who make the effort and have the right knowledge and skills. On the other hand, in Poland an organization is more viewed as a product of the environment. (Trompenaars & Hampden-Turner, 1998). Therefore, the Polish have a more organic view of nature and rather than attempting to control nature the favored approach is to learn how to live in harmony with nature. Being an internal society, Polish have a more dominating attitude and are not that comfortable with changes.

4.3.3.3 GLOBE's Cultural Dimensions

The abbreviation GLOBE stands for Global Leadership and Organizational Behavior Effectiveness. The researchers of this cross-cultural study collected data from 17,300 middle managers in 951 organizations from 62 societies. In the GLOBE project, a multiple-method approach is taken by combining hypothesis-testing quantitative methodology using questionnaires with qualitative methodology emphasizing ethnographic interviews, focus groups and unobtrusive measures. After a literature review and two pilot studies, the research team identified nine cultural dimensions that would serve as the units of measurement (GLOBE, 1996). The dimensions developed within the GLOBE research program are partly in common with Hofstede and Trompenaars, like uncertainty avoidance, power distance and collectivism. The chosen dimensions are briefly stressed below, with additionally the values of the Netherlands and Poland and the implications of these. The GLOBE-study distinguishes dimensions on the criteria "as is" and "as should be", whereas "as is" represents the

actual practices which occur in a country and where "as should be" indicates the ideal, desirable values of the cultural dimension.

	The Netherlands	Poland
Future Orientation	4,61	3,11
Performance Orientation	4,32	3,89

Figure 8: Polish and Dutch scores on GLOBE's dimensions

4.3.3.3.1 Future Orientation

This is the degree to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future, and delaying gratification. To be precisely, future orientation is the degree to which a collectivity encourages and rewards future-oriented behaviors such as planning and delaying gratification. The dimension future orientation is derived from the work of Kluckhohn & Strodtbeck's (1961). In their study they come up with a past, present and future orientation, which focuses on the temporal mode of a society.

Entrepreneurs focus to a greater extent than other persons on the here-and-now and on future events. Entrepreneurs are therefore both now and future-oriented (Bird, 1988). Innovative or successful entrepreneurs tend to have a future orientation (Heunks, 1996). Entrepreneurs rather focus on future goals instead of focusing on current industry standards as their reference point, because of their future orientation (Bird, 1988). Further, entrepreneurs are focused on a vision for growth (Holt, 1992).

Entrepreneurs show tendencies toward both overconfidence and unfounded optimism (Busenitz and Barney, 1997). This overconfidence and unfounded optimism can be explained by the fact that entrepreneurs tend to focus on current situations while largely ignoring the results of previous, related situations which might serve to inform their assessments (Kahneman and Lovallo, 1994). Entrepreneurs often adopt an "as-if" orientation, talking and acting as if equivocal (i.e., uncertain) events are non-equivocal (i.e., certain to occur). Moreover, entrepreneurs act and urge others to act on the basis of future events which are, in fact, far from assured (Gartner, Bird and Starr, 1992).

Comparing the Netherlands to Poland, it appears that the future orientation in the Netherlands is significantly higher than in Poland. A future oriented country as the Netherlands can be associated with a higher propensity to save for the future and a longer thinking process in case of making decisions. Further, there is a higher emphasis on working for long-term success, organizations tend to be adaptive and flexible and material success and spiritual fulfillment are viewed as an integrated whole. A shorter oriented country as Poland is relatively less concerned with the future, is more focused on direct decisions, opportunistic behaviors and actions. The Polish have a higher tendency to spend now, instead of saving, to prefer soon

gratification, be inflexible and not adaptive and to view material success and spiritual fulfillment as separate, requiring trade-offs.

4.3.3.3.2 Performance Orientation

This dimension refers to the extent to which an organization or society encourages and rewards group members for performance improvement and excellence. The GLOBE researchers conclude that performance orientation "relates to the extent to which leaders set ambitious goals, communicate high expectations for their subordinates, build their subordinates' self-confidence, and intellectually challenge them". And their concluding remark is that people who value high performance seem to look to charismatic leaders who paint a picture of an ambitious and enticing future, but leave it to the people to build it. The performance orientation dimension is derived from McClelland's work (1961) on need for achievement.

Research suggests that performance orientation is closely related to economic variables (McClelland, 1976; Weber, 1930). Further, a strong performance orientation can be related to a high degree of new start-ups. (House et al., 2004). Cultures that score higher on performance orientation tend to value taking initiative, assertiveness and competitiveness, which are aspects stimulating entrepreneurship (Javidan, 2004). It appears intuitive that organizations which pursue policies of growth would be managed by entrepreneurs who show a high performance orientation (Carland and Carland, 1996). From a firm's perspective, a performance orientation is likely to result in short-term payoffs, such as increased sales, whereas a learning orientation is likely to improve skills and abilities that lead to improved long-term performance (Dweck and Leggett, 1988).

Entrepreneurs are more susceptible to the cultural influence of high performance orientation than managers. This could enlarge the positive difference in achievement motivation between entrepreneurs and managers (Brandstätter, 2011). Performance-oriented entrepreneurs are reluctant to increase personal goals across performance episodes. Even after completing a task successfully, performance-oriented individuals are not likely to elevate their goals for future performance (Button, Mathieu and Zajac, 1996). Performance orientated entrepreneurs are concerned with being judged able and showing evidence of ability by being successful (Ames and Archer 1988). Entrepreneurs with a high performance orientation attempt to demonstrate their superiority in competence towards subordinate employees (Janssen et al., 2004). Further, a high performance-orientation is associated with a low quality of leader-member exchange (Janssen and Van Yperen, 2004).

Analyzing the scores of the Netherlands and Poland, it appears that the performance orientation is higher in the Netherlands. This implicates that in the Netherlands, people value training, development, competitiveness and materialism, view formal feedback as necessary for performance improvement, value what one does more than who one is and expect direct, explicit communication. On the other hand, because of its lower score on the dimension, the Polish society has a stronger tendency towards

valuing societal and family relationships, valuing harmony with the environment, view formal feedback as judgmental and discomfiting, valuing who one is more than what one does and towards expecting indirect and subtle communication.

4.4 Business culture in Poland & The Netherlands

Comparing the Polish and Dutch student entrepreneurs is especially interesting because it is a comparison between the traditional 'West' and 'East', between a free market and former communism, between 'rich' and 'poor'. However, it has to be noted that the economic growth in Poland in 2012 is expected to be 4,2%, towards 1,3% in the Netherlands (EL&I, 2011). This figure indicates the still ongoing revival of the former communistic East-European countries, which started after the collision of the Iron Curtain in 1989. From a geographical perspective, only one country separates Poland from the Netherlands. However, as stated above, even neighbor countries could have big cultural differences.

4.4.1 Business Culture in Poland

Comparing the Polish scores on the earlier mentioned cultural dimensions of Hofstede with the average European scores, it appears that the masculinity and uncertainty avoidance are slightly higher than the European average, whereas the level of power distance and individualism hardly show a difference. Former communistic regimes could be expected to have a lower individualism index. However, this is not the case for Poland, despite the fact that the country has powerful social networks, including the Catholic Church and the Solidarity Trade Union (Roland, 2002). In general, the Polish values on Hofstede's cultural dimensions do not differ largely from the average European scores.

The relatively high level of uncertainty avoidance can possibly be explained by the history of the country, where communism played an important role. In communistic countries, with state planned systems, the top made all the decisions and the workers did not and could not take any initiative. Initiatives were not appreciated; they were even punished. Therefore, this could have led to a form of uncertainty avoidance. Pearce (1991) investigated responsibility avoidance in Hungary, which is a possible indicator of uncertainty avoidance. He found widespread avoidance of responsibility. Perlaki (1993) concluded the same, which he explained by the presence of bureaucratic systems in Central Europe characterized by rigid rules and considerable red-tape. These outcomes should be put into the context of 'old' organizational structures, where the majority of citizens were deprived of the possibility to make decisions. Similar observations may hold true for Poland. However, the difference between Poland and the average European scores is not that large, which could indicate a changing trend now the country is freed from the communistic regime.

Since Poland is a relatively poor country (with a GDP per capita of \$12,300, compared to \$47,172 in the Netherlands) people value wealth and material possessions more than in richer countries where these aspects are taken for granted. This could be na explanation for the high score on masculinity.

Another appealing aspect is the big difference in power distance between Poland and the Netherlands. Whereas the Netherlands have a value of only 38, Poland scores 68. This result is illustrated by the conclusions of Obloj and Thomos (1996), who researched the strategies of successful Polish firms. They conclude that there is a cultural gap between the top management and the employees. The top management is unmistakably in charge, manages the information flow and takes decisions. The top management does not involve employees in mission building exercises; teams are a rarity, consultants are used seldom and only for certain targets. The researchers go on to state that employee involvement in the development and even execution of strategies was restricted and contained. 'Therefore, while top management understands very well the complex and competitive world ... employees do not yet follow or understand and in some of those companies it begets frustration and a lack of goodwill among the rank and file, and middle management.'

After the Iron Curtain fell, Poland experienced a transition. A transition from a communistic to a free market economy is a large-scale transformation engineered from above, in which socialist countries move their bureaucratically coordinated economies toward a market model (Rona-Tas, 1994). Transformations such as private ownership of firms and abandoning of principles of guaranteed labor and full employment have radically influenced organizational strategies, forms and personnel management in Eastern Europe (Zinovieva, Ten Horn, & Roe, 1993). Poland, because of its head start during the 1980's, has better economic circumstances in comparison to many other East-European nations which started their economic transition later.

Changes introduced in Poland after the collapse of communism

The set of changes in Poland introduced in 1989-1990

- An austerity programma was introduced to fight the huge inflation of almost 900%.
- Interest rates were raised tenfold (to 120%).
- Polish currency was made internationally convertible.
- A privatization programma of Polish state-owned firms was started.
- Price controls were lifted.
- Almost a million new ventures were established.
- Subsidies for the state-owned firms were abandoned.
- Traditional export markets in Eastern Europe and especially Russia collapsed, and trade ties with these former communist countries were severed.

Figure 9 Transition implications Poland (source: Slay, 1994; Obloj & Thomas, 1996)

The postcommunist society with its new market economy created new roles to be fulfilled, new tasks to be mastered and created a demand for entrepreneurs. Forst (1996) concludes that the creation of entrepreneurs is fundamental to the entire process of transition. New small business ventures were the most important source of job creation in a lot of transitional economies and compensated layoffs resulting from the introduction of privatizations, strong budget constraints, and reorganization of state-owned firms. Jackson et al. (2005) demonstrate this for Poland. Johnson et al.

(2002) namely conclude that during the beginning years of the transition small business enterprises in Poland went into business sectors that had been dominated by national companies under socialism, such as services, consumer goods, light manufacturing and trade. The inefficiencies of these state organizations had shaped significant revenue potential for early entrants in these branches. This period is characterized but he rise of an entrepreneurial class which has not been experienced in this country before. Eventually, the steady entrance of ventures decreased revenue margins. Johnson et al. (2002) argue that rents reduced as competition rose in Poland, starting in 1995.

Poland had a strong pre-war tradition of private entrepreneurship. A substantial amount of entrepreneurs during the transition period originated from former entrepreneurial families that had either been self-employed in the second economy, or had occupied leading functions in national companies during the communistic era (Szelenyi, 1988). In a survey among 300 manufacturing small and medium enterprises in Poland undertaken in 1995, the argument 'family tradition' was the most common reason (42%) for starting up a company by entrepreneurs that commenced trading before 1981. However, this argument was hardly mentioned at all in ventures started after 1991 (just 4%) (Smallbone and Piasecki, 1996). A remarkable result about Polish entrepreneurship came out of a study about latent entrepreneurship across nations (Blanchflower et al.2001). The percentage of Polish people who preferred self-employment was 80%, which was the largest proportion of the 23 investigated nations. This means that more than three-quarter of Poland's citizens would like to manage their own business venture rather than being employed.

Small business ventures account for the majority of companies in Poland (Reed, 2001). More than 2 million small and medium sized business ventures were established in Poland in the 1990's. These ventures have generated over one half of Poland's economic output and account for over 30% of GDP (EL&I, 2011). To encourage entrepreneurial activities, Poland has implemented as well regulatory as legal transformations, including changes in the tax system, lowering labor costs and revising labor standards (Reed, 2001). Nasierowski & Mikula (1998) argue that the Polish society can be divided into people who show an entrepreneurial spirit and subject themselves to new ideas, and those who entrench themselves in large state-controlled organizations, expecting protection of the government.

4.4.2 Business culture in the Netherlands

Analyzing national culture as measured by the Hofstede dimensions, The Netherlands score high on individualism, low on power distance and masculinity and medium on uncertainty avoidance and long-term orientation (Hofstede, 1984).

As said, analyzing the scores on Hofstede's cultural dimensions, it appears that the Netherlands has a quite individualistic society. This involves that there is a high preference for a loosely-knit social framework in which individuals are expected to take care of themselves and their immediate families only. A further appealing aspect

is the score of 14 on the masculinity-index, so the Netherlands can be characterized as a feminine society. This fast is illustrated by the findings of Spencer et al. (2000) who state that small businesses in the Netherlands make use of "communicative processes of bargained consultation, dialogue and exchange of information, through which consensual agreements about cooperation on social problems among a plurality of partners are pursued."

The first strong sign of entrepreneurship in the Netherlands can be noticed in the so-called Golden Age. In the seventeenth century, conditions in the Northern Netherlands were highly contributing to a rise of entrepreneurship. Property rights were secure, the legal framework was advanced and the economy had been monetarized to a great extent. Markets for final goods and production factors were reasonably accessible. Social mobility was relatively high. The urbanization degree was far ahead of the rest of Europe, and in these cities demand conditions were favorable for economic expansion. Being a relatively small country, the Netherlands were strongly dependent on export, which did not change over the years. Nowadays the most important export categories are: Tele communication, office and electrical machinery, road vehicles, furniture and accessories (Ormrod, 2003).

Hoogenboom and De Jong (1993) concluded that interest and sympathy for entrepreneurship in the Netherlands has varied over time. Since the beginning of the 1980s, a better environment for entrepreneurship has prevailed in the Dutch society and according to the researchers this can be attributed to three main developments: high unemployment; a process of restructuring in industry, which led to a more enterprising spirit; and a great number of technological advances, which had subsequent repercussions for product and market innovations. Waasdorp (2002) argues that Dutch economic policies until the 1990s were rather aimed at larger companies than smaller ones. Then policies which favored SMEs, by simplifying business procedures and lowering costs to establish firms, were implemented. The eventual transformation in attitudes towards entrepreneurship was reflected in the considerable raise in the amount of business venture during the period of 1991 till 2001 (GEM, 2010). More recently, government support in The Netherlands has widened to focus on the student sector as fertile ground to stimulate young persons with entrepreneurial attitudes (Prince, 2002). In addition to support a number of business plan competitions, including Livewire and Mini-ondernemingen, the Dutch Ministry of Economic Affairs actively encourages entrepreneurship within universities.

According to Prince (2002), the birth rate of new business start-ups in The Netherlands is around 7 per cent per year (as a percentage of the total amount of business ventures), with 10 per cent of the Dutch labor force classified as entrepreneurs. Van Uxem and Bais (1996) concluded that about the half of almost 2000 beginning Dutch entrepreneurs mentioned dissatisfaction with their previous work as an important motivation to start their own business, although some pull factors were mentioned even more frequently. Over 85% of people in the Netherlands have a positive perception about entrepreneurship as a career. At the same time,

media attention is just above average and status perceptions are lower than average. Although the Netherlands show a high rate of approval of entrepreneurship as a career, yet only 4% of the Dutch adult population (early-stage entrepreneurs and established business owners excluded) expects to start a business within the next three years. The Netherlands is an example of a country where there is much support for entrepreneurship but where the job market is also favorable. In the Netherlands only about half of all early-stage entrepreneurs see their business as a full-time occupation (GEM, 2010).

Hofstede (1993) describes the basic management principle in The Netherlands to be a need for agreement among all stakeholders, neither predetermined by a contractual link, nor by class differences, but based on an open-ended exchange of opinions and a balancing of interests. Further, he states that leadership within businesses in The Netherlands assumes a certain degree of modesty. The Dutch attach meaning to being involved by their superior about decisions, liberty to adopt their own approach to the job, contributing to the success of the company, developing opportunities, fully using their strengths and abilities and helping other persons.

In a research on favored characteristics for leaders, a Dutch sample emphasized the meaning of characteristics such as communication skills, reliability and inspirational behavior. Besides these, in order to be a good manager, he or she would need vision, a long-term orientation, persuasiveness, courage, and diplomacy (Koopman, Den Hartog, Van Muijen, Thierry, & Wilderom, 1996).

Visionary and inspirational dimensions of leadership are assumed to be "universals" in the earlier mentioned GLOBE study and were found to be significant for Dutch leaders in the above mentioned study by Koopman et al. (1996). Research illustrates that transformational or inspirational leadership is indeed apparent in The Netherlands (Den Hartog, Van Muijen, & Koopman, 1997). An emphasis on the significance of these dimensions for exceptional leadership could therefore be expected for the Dutch student entrepreneurs.

4.4.3 Business culture Poland & the Netherlands compared

Regarding the practices (societal culture "as is") between Poland and the Netherlands, large differences in values are particularly found on GLOBE's future orientation (Dutch score higher); Hofstede's power distance (Dutch score lower); uncertainty avoidance (Dutch score higher); and individualism/collectivism (Dutch are less collectivistic). On the value dimensions, it can be said that the differences for power distance and individualism point into the same direction as the practices.

Interesting to note is the fact that the score for uncertainty avoidance is upturned for the value dimension. This means that the Polish managers score a lot higher on uncertainty avoidance "as should be" whereas they scored lower than the Dutch managers on uncertainty avoidance "as is". Analyzing the "top three" leadership dimensions in both rankings shows that a Polish outstanding leader shows visionary

qualities, has outstanding administrative capacities and behaves in a diplomatic way. On the other hand, in the Netherlands the general opinion is that an outstanding leader needs integrity, shows inspirational behavior and has also so-called visionary qualities.

Further can be noticed that, with regard to the absolute differences, the Polish managers score significantly higher than the Dutch managers on administrative skills, diplomatic behavior status consciousness, individualistic behavior, face saving, risk avoiding, the autocratic style, and isolationistic behavior. The Dutch score substantially higher on a preference for integrity, inspiration, and a humane style of managing.

4.5 Literature Review Conclusion

The literature review resulted in some interesting findings. Although it is a widely studied field of interest, there exists no consensus in the scientific world about common characteristics of entrepreneurs. However, persistence seems to be essential, although this is probably the case for everybody who wants to achieve something in a particular field of interest. As recent research suggests, the reason for the existence and development of entrepreneurship can probably rather be found by studying the processes entrepreneurs go through and the environments they are interacting with, instead of looking for distinguishing personal circumstances or characteristics.

The fact that in practice experienced entrepreneurs rather make use of effectuation instead of causation has significant implications. For example, entrepreneurship classes worldwide are based upon the principles of causation. Therefore, the question which arises from this literature review is which education actually should be taught to the entrepreneurship student. As said, Baron (2006) argues that potential entrepreneurs can be trained to be better at recognizing opportunities. However, this opportunity recognition is dependent on the cognitive framework of an entrepreneur, which is developed by experience. One might wonder whether this experience can be taught at school.

How paradoxical would it be if further academic entrepreneurial research would point out that entrepreneurship is in fact best learned in practice? This could be the deathblow for entrepreneurial teaching. The fact that researchers often come up with contradictory results about the influence of culture on entrepreneurship, makes clear that in this field there is still a lot of space for investigation. Hopefully, this research will provide a bit more insight into the cultural influence on entrepreneurial processes.

Finally, the comparison between the Polish and Dutch entrepreneurial culture shows that there are, as expected, significant cultural differences between these two nations, which is also made clear by the additional comparison in entrepreneurial culture. These significant differences are not that surprising, taking in mind the complete different histories of both countries, as shortly explained in the section above.

This literature review forms the fundament for the subsequent step in this assignment: developing hypotheses about the expected usage of causal and effectual processes among the student entrepreneurs in as well Poland as the Netherlands.

5. Hypotheses

5.1 Hypotheses Outline

In order to come up with conclusions about the cultural influence on entrepreneurial processes there has to be made a link between the concepts of causation and effectuation on the one hand and culture on the other hand, as argued above. There can be found numerous studies about the effect of culture on entrepreneurship. However, for this thesis, the influence of culture on entrepreneurial processes (in this case: causation & effectuation) is the main target. Due to the newness of the constructs causation and effectuation, studies about the cultural influence on these entrepreneurial processes are lacking. Since empirical research is lacking, based on logic reasoning possible relationships should be derived, which indicate the relation between the different cultural dimensions and entrepreneurial processes.

Based on these propositions, hypotheses can be formulated about the assumed cultural influences on the elements of causation and effectuation. The outcomes have to show whether these hypotheses hold true. Finally, it is important to note that the contradictory results about the cultural influence on entrepreneurship do not increase the possibility to predict cultural influences on the use of either causation or effectuation.

5.2 Hypotheses development

The question is which cultural theory to use for analyzing the research results. The answer to this question is obvious: It should be the theory which best matches with aspects of causation and effectuation. Why? If a certain theory includes a dimension which does not have anything in common with one of the aspects of causation or effectuation, there can not be said anything about the influence of this cultural dimension on the use of one of the two entrepreneurial processes. And of course, there should be numbers available for as well The Netherlands as Poland.

Of course an attempt could be made to search for one particular intercultural theory which can be smoothly related to the aspects of causation/effectuation. The cultural dimensions of Hofstede would be an obvious choice, since his intercultural theory is by the far the most known and widespread in his field. However, the fact is that none of these intercultural theories, even Hofstede's, do take all aspects of causation and effectuation into account and are therefore not comprehensive. That is not surprising, since these theories are developed to describe a culture and not to describe the concepts of causation and effectuation. Therefore, a different approach is chosen: All elements of both causation and effectuation (as shown in the table below) are coupled with useful cultural dimensions. In fact, a new cultural theory is developed in the section below.

Causal	Effectual
G – Goal-driven	M – Means-based
R – Expected returns	L – Affordable loss
B – Competitive analysis	A – Use of alliances or partnerships
K – Existing market knowledge	E – Exploration of contingency
P – Predictions of the future	C – Non-predictive control
Z – Emphasis on analysis of data	D – Distrusting or opposing (marketing) research
X – Causal (no subcategory given)	N – Effectual (no subcategory given)

Figure 10: Coding Scheme interviews

Because of their mutual interdependency, several elements of the causation/effectuation coding scheme could be applied to several cultural dimensions. For example, the dimensions future orientation (GLOBE) and long term orientation (Hofstede) both indicate predictions about the future. However, in order to provide a clear overview is chosen to pick the most appropriate cultural dimension. For example, in the case of predictions of the future is chosen to take the future orientation dimension, because, although it can be assumed, it is not sure that a short term oriented entrepreneurs is less focused on the future than his long term oriented colleague, since also the short term belongs to the future.

Each hypothesis starts with one element of causation and effectuation, derived from the coding scheme, followed by the hypothesis. The argumentation for this choice is standing each time in the text below, followed by the scores on the different cultural dimensions, for as well the Netherlands as Poland.

5.2.1 Goal-driven/Means-based

Hypothesis: The more performance-oriented a national culture is, the more goal-driven the entrepreneurs will be.

As said, causal entrepreneurs choose a particular goal and focus on selecting between means to create that effect. On the other hand, effectual entrepreneurs take a set of means as given and focus on selecting between possible outcomes that can be created with that set of means. Effectual entrepreneurs are less driven by goals which have to be reached, since goals are simply often not known in advance. Therefore, causal entrepreneurs tend to be more goal-driven than their effectual counterparts (Sarasvathy, 2001b). This goal-driven causal perspective is focused on the performance of the firm (Sarasvathy, 2008). Therefore, causation implies an emphasis on firm performance. The next step is to find a cultural dimension which can act as a valuable measurement to determine this performance orientation of an entrepreneur. Fortunately, the earlier mentioned GLOBE-study (House, 2004) comes up with a cultural dimension that is titled *performance orientation*. House (2004) defines performance orientation as the degree to which an organization or society encourages and rewards group members for performance improvement and excellence. This

encouragement and rewarding of performance improvement and excellence implies a focus on maximizing returns, which is, according to Sarasvathy (2004) a characteristic of the causal perspective. Further, as said, the performance orientation was derived from McClelland's work (1961) on the need for achievement (House, 2004). McClelland argues that one of the sources of this need for achievement is the praise and rewards for success, which is comparable to the earlier mentioned encouragement and rewarding of performance improvement and excellence (House, 2004).

Therefore, there can be expected a positive correlation between the performance orientation of House (2004) and the use of a goal-driven viewpoint as being part of the causal perspective, as defined by Sarasvathy (2001b). This implies the prediction that within performance-oriented countries the use of causation among entrepreneurs is higher in comparison to countries with a lower performance orientation. This prediction is strengthened by an argument which can be found in a dimension which is, according to House (2004), similar to the performance orientation dimension, namely Confucian Dynamism, as defined by Hofstede and Bond (1988). The authors argue namely that high Confucian Dynamism characterizes individuals who are more future-oriented. And future orientation, as mentioned by Sarasvathy (2001b), is a characteristic of a causal perspective.

The performance orientation of the Netherlands is 4,32, whereas Poland scores 3,89. Therefore, based on these values, it can be expected that Dutch entrepreneurs will make more use of a goal-driven causal perspective.

5.2.2 Expected returns/Affordable loss

Hypothesis: The more sequential time focused a culture is, the more the entrepreneurs are focused on expected returns.

Causal entrepreneurs tend to be more focused on expected returns, which are based on designed strategy and business planning models (Sarasvathy, 2001b). Management literature is dominated by *sequential* business planning models for the last 50 years (Chaston, 2011) For example, according to Chesbrough & Rosenbloom (2002), a business planning model is the result of a sequential time perspective. Further, Casson & Wadeson (2007) argue that entrepreneurs striving for the highest expected return utilize a sequential screening process. This suggests a possible correlation between a sequential time focus, as defined as a cultural dimension by Trompenaars & Hampden-Turner (1998), and a focus on expected returns, since this focus is part of the causal perspective (Sarasvathy, 2001b).

Causation is consistent with planned strategy approaches (Mintzberg, 1978). The planning and analysis required by such models assume conditions in which the distribution of outcomes in a group is predictable through statistical calculation (Sarasvathy, 2001). This approach can be related to the sequential time perspective of

Trompenaars & Hampden-Turner (1998), which is characterized by planning based on statistical forecasting. Since an emphasis on planning is included in Sarasvathy's causal element called "focus on expected returns" (2001), this is another argument for the possible correlation between a focus on expected returns and a sequential time approach.

Since in the Netherlands the sequential time perspective predominates and in Poland the synchronic time perspective, it can be expected that Dutch entrepreneurs make more use of expected returns-arguments.

5.2.3 Competitive analysis/Use of alliances or partnerships

Hypothesis: The more individualistic a country is, the more the entrepreneurs will make use of competitive analysis

The entrepreneurial perspective on other players in the market shows a clear deviation between causation and effectuation (Sarasvathy, 2001b). The causal viewpoint has a focus on competitive analysis, such as the Porter model in strategy (Porter, 1980), and its opposite effectual counterpart shows a high willingness to cooperate, by utilizing relationships and alliances, in order to create new markets (Sarasvathy, 2001b).

Putting this into a cultural perspective, it appears that the willingness to cooperate is influenced by cultural aspects (Smith et al., 1995). This (effectual) emphasis on relationships appears to be a characteristic of collectivistic countries (Hofstede, 1991). In collectivistic countries, relationships are, in contradiction to individualistic countries, more personalized, synchronized and harmonious (Morris et al., 1994). Scholars have shown that collectivists, in contradiction to individualists, are in general more co-operative and enjoy working together more (e.g. Cox et al., 1991; Earley, 1989, 1993). On the other hand, the (causal) emphasis on a firm's competitors appears to be a characteristic of individualistic countries, where competition among individuals encourages greater numbers of novel concepts and ideas (Morris et al., 1994). Based on these findings, there can be expected a correlation between the use of competitive analysis and individualism on the one hand and between the use of alliances and partnerships and collectivism and collectivism on the other hand.

Individualism prevails in developed and Western countries, while collectivism prevails in less developed and Eastern countries (Hofstede, 1995), which is shown by the scores for the Netherlands and Poland. The individualism index of the Netherlands is namely 80, whereas Poland scores 60. Based on these values, it can be expected that Polish entrepreneurs will make more use of alliances or partnerships, whereas competitive analysis is more frequently used by Dutch entrepreneurs.

5.2.4 Existing market knowledge/Exploration of contingency

Hypothesis: The more a culture is focused on internal control, the more the entrepreneurs will make use of existing market knowledge.

Whereas causal entrepreneurs base their decision mostly on the knowledge of existing markets, effectual entrepreneurs tend to pay more attention to the possible exploration of contingencies as they arise. This contingency exploration obviously involves considerably organizational changes. Processes of causation are not much use on the cusps of such significant changes. (Sarasvathy, 2001b). Therefore, there can be made a distinction between causation and effectuation based on their comfortableness with change. This point is also stressed by Kraaijenbrink (2008), who argues that effectuation is more appropriate for new markets, which is a process implying an organizational change.

Nations face dilemmas in dealing with the tension between the existing set of values and the preferred ones. While cultures differ remarkably in how they approach these dilemmas, they do not differ in needing to make some kind of response in order to realize changes (Trompenaars and Woolliams, 2003). Trompenaars (1998) argues that people within internal-oriented cultures are uncomfortable in change situations. On the other hand, people within external-oriented cultures are more comfortable with change. Further, Trompenaars argues that internals tend to attempt to control their environment, whereas their external counterparts rather adapt to their environment. This also stressed by Rotter (1975), who argues that externals attribute outcomes of events to external circumstances. This fact strengthens the presumed relation between external control and effectuation, since Sarasvathy (2001b) states that effectuators exploit contingencies as they arise in their environment. Therefore, these contingencies can be attributed to external circumstances.

Another argument for the presumed relation between external control and effectuation can again be found in the work of Trompenaars (1998). He argues namely that externals are characterized by an emphasis on relationships, which also applies for effectuators (Sarasvathy,2001b). On the other hand, internals work mainly goal-based, which is corresponding with causators. Moreover, if causators believe they are dealing with a measurable or relatively predictable future, they will tend to do some systematic information gathering and invest some effort on a reasonable analysis of that information (Sarasvathy, 2001b). This is in accordance with internals, who have a greater tendency to gather and use more information in decision making (Phares, 1976).

The above stated arguments all suggest a possible relation between, on the one hand, internal control and the causal emphasis on existing market knowledge and, on the other hand, external control and the effectual exploration of contingencies. Since in the Netherlands the internal control perspective predominates and in Poland the external control perspective, it can be expected that Polish entrepreneurs make more

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use of explorations of contingencies, whereas the Dutch are assumed to have a preference for existing market knowledge.

5.2.5 Predictions of the future/Non-predictive control

Hypothesis: The more a culture is future-oriented, the more the entrepreneurs will rely on predictions of the future.

Entrepreneurs tend to focus primarily on the future - perhaps to a greater extent than do other people (Baron, 1998). However, causal and effectual entrepreneurs can be clearly separated by the way they focus on the future. Based on Simon's (1991) concept of bounded rationality, which points at the essential goal ambiguity and limited rationality underlying many organizational decisions, Sarasvathy (2001b) comes up with the effectual future perspective, which assumes an unpredictable, yet controllable future. Therefore, effectual entrepreneurs rather focus on controlling the future instead of predicting it. On the other hand, causal entrepreneur focus on the predictable aspects of an uncertain future and attempt to control the future by predicting it.

Future predictions, by their very nature, induce a *future orientation* (Baron, 1998). Since causal entrepreneurs rely on future predictions, it can be assumed that they have a higher future orientation. The above standing assumes a possible relation between the usage of predictions for the future, as part of the causal perspective, and a future orientation. This assumption is strengthened by the fact that causation involves elaborate planning processes (Sarasvathy, 2001b). And the proper realm of planning is a future orientation (Das, 1987), which is also argued by Myers & Kitsuse (2000), who state that it is evident to many that the very purpose of planning is to prepare for future activity, which again implies a strong future orientation among causal entrepreneurs.

A comprehensive cultural dimension describing this future orientation can be found in the earlier mentioned GLOBE-study (House et al., 2001). The dimension *future orientation* namely describes the degree to which a collectivity encourages and rewards future-oriented behaviors such as planning and delaying gratification. And, as said, planning is a characteristic rather subscribed to causation than to effectuation (Sarasvathy, 2001b). So, a future orientation can be related to a tendency to make predictions of the future. The future orientation in the Netherlands is 4,61, whereas Poland scores 3,11. Based on these values, it can be expected that Polish entrepreneurs will make more use non-predictive control and the Dutch more of predictions-of the future.

5.2.6 Emphasis on analysis of data/Distrusting or opposing (marketing) research

Hypothesis: The more universalistic a country is, the more the entrepreneurs will place an emphasis on the analysis of data.

Causal entrepreneurs focus especially on the analysis of data, whereas effectual entrepreneurs have a stronger tendency to distrust or even oppose market research (Sarasvathy, 2001b). Combining this with a comprehensive cultural dimension, it appears that this strong reliance on the analysis of data also appears in the universalistic perspective of Trompenaars (1994).

It has been found that universalist and particularist cultures differ in the way they treat and deal with information. Universalists are namely guided by objective standards (Blau, 1962). Objective data have long been advocated as bases for business decision making (Sadler-Smith and Shefy, 2004), which also applies to the causal perspective (Sarasvathy, 2001b). Therefore, universalism, with its strong reliance on objective data, can be combined with a causal perspective. Sarasvathy and Dew (2005) put forward the notion that effectuation is a theory of entrepreneurial expertise. Further, Sarasvathy (2008) argues that expertise is significantly associated with the disbelief in data. Since universalists rely on objective data (Trompenaars, 1994), this argument shows the inappropriateness of a possible correlation between universalism and effectuation.

On the other hand, the particularistic perspective appears to have similarities with the effectual approach, since a particularist society is contingency-oriented (Calingo, 2002). As stated, the exploration of contingencies is also a characteristic of effectual entrepreneurs (Sarasvathy 2001b). Further, within the particularistic perspective there is a strong emphasis on relationships (Calingo, 2002), which also applies to the effectual approach (Sarasvathy, 2001b). These arguments propose a possible relation between a particularistic perspective and an effectual approach, which is in line with the earlier suggested opposite relation between universalism and causation.

Since the Netherlands have a universalism index of 87, compared to 75 for Poland, it can be expected that the Polish entrepreneurs have a stronger tendency toward (the effectual) distrusting or opposing (marketing) research, whereas the Dutch entrepreneurs will tend to focus on the (causal) analysis of data.

5.3 Conclusion

Based on the different hypotheses, it is clear that Polish student entrepreneurs are assumed to have a higher rate of effectual reasoning, since all cultural scores of Poland in comparison to the Netherlands point into the direction of effectuation, assuming the validity of the developed hypotheses. Logically, the Dutch entrepreneurs are expected to have a higher usage of causation. The research results have to show the validity of these statements.

6 Methodology

6.1 Overview of the experiment

For this study, fifteen Dutch and fifteen Polish student entrepreneurs were interviewed. Student entrepreneurs were defined as university students who already started their own company, or entrepreneurs who recently obtained their degree. This interview consisted of two parts: a case and a questionnaire. The case described an imaginary business venture process, where the student entrepreneur had to make decisions at each separate stage. Both Dutch and Polish entrepreneurs received the same questions. An example of the case is added in the attachments. In order to pick a varied sample, student entrepreneurs with divergent characteristics are chosen; e.g. different age, gender, branch and place of living. Besides this case, an additional questionnaire is added which asks direct questions about the lay of thinking of the entrepreneurs.

6.2 Procedures

The focus of this thesis lays on the earlier mentioned business case. By asking 30 subjects to go through this business case is measured how student entrepreneurs work. This measurement is done during so-called 'think aloud' sessions. The think aloud method consists of asking persons to think aloud while solving a problem and analyzing the resulting verbal protocols. (Van Someren, M. et al., 1994). Main characteristic of this method is the fact that the interviewed person expresses al his thoughts as properly as possible, while the interviewer interrupts him or her as less as possible. Furthermore, the subjects are asked to fill in a questionnaire afterwards. An extensive description of the method is added below.

6.2.1 Think aloud method: "Please, keep talking."

The think-aloud method enables to evaluate thought processes or decision making of some person who performs a certain task (Ericsson & Simon, 1984). Ericsson and Simon (1993) outline the benefits of using think aloud protocols over other research methods. The major advantage of the think aloud method is the fact that it is the closest possible method to get to the cognitive processes of subjects. The think aloud protocols require concurrent verbalization of the thoughts of the interviewees. The logic behind the use of a protocol analysis is the fact that while retrospective recall allows the interviewed subjects to make up good stories about how the subjects believe they solve problems, and stimulus-response research methods force to deduce subjects' decision making processes after the fact, concurrent verbalization allows the researchers to look immediately inside the black box of the cognitive process, because short term memory system structure of the human brain (Ericsson and Simon, 1980). The validity of verbally reported thought sequences by the think aloud method results from its immediacy: the minimal gap between the verbalization

and the occurrence of the thoughts. Therefore this concurrent verbalization method is little harmed by either introspection or retrospection biases. (Ericsson, 2006). However, because of the fact that only the conscious processes are available for verbalization, much of what is going on in the mind of the interviewees remains undiscovered.

In many cases the think aloud method is a unique source of information on cognitive processes (Van Someren, M. et al., 1994). Thinking aloud was originally described by Karl Duncker (1945) in his studies within experimental psychology where he investigated productive thinking. The think aloud method is often referred to as the pre-eminent usability method and used both in workshop, laboratory settings and field testing (Kensing 1998; Nielsen 1992; Rowley 1994). Below is given a step by step overview of the practical procedures in think aloud methods, mostly based on the prescriptions of Van Someren et al. (1994).

6.2.1.1 Setting

There is general consensus that the think aloud method requires careful setting up and preparation on the researcher's part (e.g. Seliger & Shohamy, 1989). The first thing to do when the researchers wants to get an interviewee to think aloud, is to ensure that the setting is such that the subject feels at ease The interviewee should be settled comfortably. The room should be silent, a glass of water should preferably be at hand and the chair should be comfortable. This undisrupted focus on the completion of the presented tasks is also stressed by Ericsson & Simon (1998), who call it the single most important precondition for successful expression of thinking. Although these setting requirements hold for all kinds of psychological studies, it is particularly important to remember in the case of thinking aloud, especially when an experiment is going to take quite some time and will be tiresome for the voice and throat of the interviewed person. The situation should be focused on the task and the experimenter should interfere as little as necessary with the thought process to prevent influencing its course.

6.2.1.2 Instructions

Instructions about the task at hand should be given as customary. The instruction on thinking aloud is quite simple: The essence of the instruction is to perform the task and to say out loud what comes to the mind of the subject. Instructions should be written down beforehand and should be red to the subject. It is not recommended to use sentences like: 'Tell me what you think'. A person may imagine that the experimenter is asking for his or her opinion or for an evaluation of his or her thoughts. Subjects would not feel free to report ideas that just occurred to them, apparently not as part of a rational goal-directed thought process. Instructions should not be too long. The more is said, the more subjects will make up their own interpretations about what the experimenter wants from them.

6.2.1.3 *Warming up*

Although the majority of people do not have a lot of difficulties with rendering their thoughts, there are some subjects for whom this method does not work that well.

Most subjects need a little training but after some time, usually a few minutes to a quarter of an hour, most subjects will talk quite automatically. The issue of warming up tasks is also stressed by Ericson & Simon (1984). They argue that since the expectation that participants should describe or explain their thoughts verbally to another person is often deeply ingrained, especially in students, it is recommended that after being given the standard instructions to think aloud, the participants should be given a series of simple warm-up tasks. When after fifteen minutes a subject still finds it difficult to verbalize his or her thoughts, it is better to stop the interview, because this subject is unlikely to provide useful protocols. This issue is also mentioned by Cotton & Gresty (2006), who experienced that some students find think-aloud easier than other students.

6.2.1.4 Behavior of the experimenter and prompting

When the subject is working on the task, the role of the experimenter is a reserved one. Interference should only happen when the subject stops talking. In such a case the experimenter should stimulate the interview person by just, and only just saying: 'Keep on talking'. This is usually enough to keep the subject engaged in thinking aloud for some time. This can be a hard job for the experimenter. Especially when the experimenter is familiar with the task domain, he is inclined to correct the subject when going wrong or help the subject along when stuck. It is important to note that this must be avoided. So preferably, the experimenter should have some familiarity in gathering think aloud data, in particular in avoiding unnecessary interference.

6.2.1.5 Recording

The session is usually recorded on a video- or audio-tape. It may be helpful to include the instruction and the practicing phase, in order to be able to control afterwards whether the procedure was performed properly. Ericsson and Simon (1993) state that during the recording session as well the recording device as the researcher should be out of sight, in order to improve the reliability of the collected data. It may sound quite obvious, but always check and double check the recording instruments; one would not be the first to end up with an empty tape after a long session with a unique interviewee. It is also recommended to check equipment regularly during the session, as unnoticeably as possible.

6.2.1.6 Transcription of the protocol

After the think aloud session has been recorded, the next step is to transcribe it. Typing out complete protocols is generally inevitable in psychology to be able to apply reliable coding procedures (Van Someren, M. et al., 1994). Bringing the data together and formulating conclusions about the effectiveness of the resource is a complex and time-consuming task that should not be under-estimated (Cotton, D. & Gresty K., 2006). Data analysis is seen as the most essential step to build theories from case study research, even though it is also considered the most difficult and least systemized phase (Eisenhardt, 1989).

After conducting the interviews, the recorded cases are typed out. Once done, these texts are coded following a coding scheme, which describes different elements of

causation and effectuation. The coding scheme is developed by the earlier mentioned Sarasvathy. Logically, all participants of the EPIC-C project use the same coding scheme. Every given argument which fits into the coding scheme is listed in the right causal/effectual dimension. Once coded, the results are counted per causal and effectual dimension. In this way, the differences between the Dutch and Polish entrepreneurs are easily shown. The eventual comparison between the Polish and Dutch entrepreneurs is based upon their relative use of causation and effectuation. For example, the results could reveal that one entrepreneur has given 7 causal, towards 3 effectual arguments, which results in a 70% score on causation. The coded interviews are not only mutually compared, but also compared with the results of the additional questionnaires, in order to find out whether the results of these two materials are in line with each other. In this way, the stated hypotheses can either be rejected or accepted, which is outlined in the next section.

6.2.1.7 Considerations

A consideration which is of interest in this assignment is the potential danger that subjects will worry more about speaking out loud and concentrate less on the reading itself if they are required to verbalize, since they have to speak a foreign language. (Van Someren et al., 1994).

6.3 Materials

The two used data collection methods are the already mentioned case and the subsequent questionnaire. The two materials are provided by the supervisors of the whole student project.

6.3.1 Business Case

The purpose of the case which the subject will execute is to set up a new coffee corner. The subjects can find information with respect to the coffee corner in the case. The interviewees have two hours available for this task. Then a short interview will follow. To provide an insight into the case, which can be found in the attachment, a small overview of the content will be given: The subject has to imagine he or she builds with little money a new company for an imaginary product. Although limited financial possibilities, the subject is said to have about five years of relevant working experience in the area. The subject is thinking about starting a coffee-corner at his or her university, since the current supply of coffee at the university is insufficient.

Since the subject has been working in a coffee corner for 5 years, he or she has some market knowledge. After having imagined starting a coffee corner, ten decision problems are presented to the subject. Going through the case, the interviewee is going as it were through different phases of the business process, with all along coming problems and challenges. The decision problems relate to the following issues: identifying and defining the market, financing, leadership/vision, product (re-)development, growth strategies, management, goodwill and leaving the company.

6.3.2 Additional interview

They have to judge to what extent they fit into the different characteristics of causation and effectuation. This interview functions as an extra tool to control the outcomes of the business cases. The main emphasis is put upon these cases, since self-analysis involves a greater chance on measurement error. The usefulness of a self-analysis is limited, since such an analysis is by its nature subjective. Within the self-analysis there could be a gap between an entrepreneur's thoughts and his actual handlings.

6.4 Statistical Analysis

After having collected and processed the data, a statistical analysis is conducted. For each causal and effectual dimension, the Polish and Dutch answers are compared. This resulted in a causal and effectual percentage per dimension. For example, the causal percentage on the goal-based/means-based dimension is the amount of causal (and therefore goal-based) answers divided by the total amount of answers in this dimension. So, the Dutch and Polish causal and effectual percentage per dimension are compared for each hypothesis. The t-test is a method to compare two independent samples, which is the case in this assignment. However, the t-test requires that the deviation of the data follow a normal distribution under the null hypothesis. By conducting normality tests, it appears that the data of as well the Polish as the Dutch student entrepreneurs indeed are normal distributed. Further, the t-test requires that the two samples have the same variance. This equal variance can be tested by, among others, the F-test and the Levene's test. The results of these tests show that the variances of the Dutch and the Polish samples can be regarded as equal. Since the assumptions are fulfilled, the t-test can be conducted (Peck et al., 2011).

7 Results

The data are statistically analyzed as described in the previous section. The outcomes will be presented in this part. First of all has to be stated that the outcomes of the interview cases and the additional questionnaires are in line with each other, which is increases the trustworthiness of the results. Figure 12 shows the deviation of the causal elements, as mentioned in the cases by the Polish and Dutch student entrepreneurs per dimension. Every column represents the proportion of causal elements for each dimension. In this way it is possible to compare the 'causal proportion' of the Polish and Dutch entrepreneurs.

The figure shows that the Dutch student entrepreneurs have a higher causal score on 5 separate causation/effectuation dimensions, namely 'goal-based', 'competitive analysis, 'existing market knowledge', 'emphasis on analysis of data' and remaining causal elements and a higher score on the total causal share. The Polish student entrepreneurs gave relatively more causal answer for the dimensions 'expected return' and 'predictions for the future'.

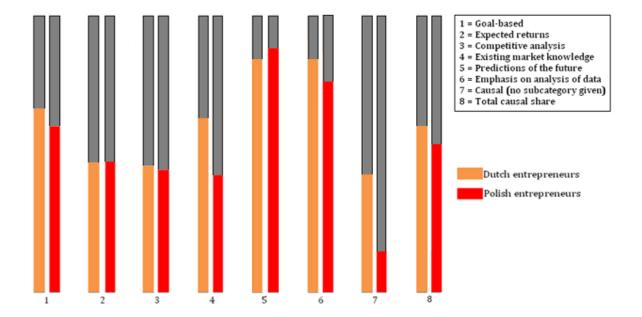


Figure 11: Causal proportion per dimension

After having presented the general findings, it is time to separately judge the hypotheses on their possible significance. In order to judge this significance, the causal proportions of the Dutch and Polish student entrepreneurs are compared for each dimension by statistical testing. The causal proportion is calculated as follows: The amount of causal elements mentioned by the student entrepreneur divided by the amount of all causal and effectual elements for one causation/effectuation dimension.

In this case each time two percentages are compared. Since all assumptions are fulfilled, a t-test is conducted to judge the significance of the outcomes.

7.1 Goal-driven/Means-based

The more performance-oriented a national culture is, the more goal-driven the entrepreneurs will be.

Performance Orientation: The Netherlands: 4.32

Poland: 3.89

Figure 12 already shows that the Dutch student entrepreneurs come up with relatively more goal-based elements than their Polish colleagues, which is in line with the hypothesis. The causal proportion of the Dutch is 0,69, compared to 0,62 for the Polish entrepreneurs. The t-test is conducted in order to investigate the significant difference between the two samples, which resulted in a p-value of 0,27. This high P-value does not support the hypothesis, which can therefore be rejected.

7.2 Expected returns/Affordable loss

The more sequential time focused a culture is, the more entrepreneurs are focused on expected returns.

Time focus:

The Netherlands: Sequential time

Poland: Synchronic time

This hypothesis is one of the two which are contradicting the case outcomes, because the findings are the opposite of the hypothesized outcomes. So, this hypothesis can be rejected beforehand. Conducting the t-test shows that the P-value is 0,83. The causal proportion of the Dutch entrepreneurs is 0,45, towards 0,47 for the Polish. The high P-value shows that the probability that the two proportions have the same mean is pretty high.

7.3 Competitive analysis/Use of alliances or partnerships

The more individualistic a country is, the more the entrepreneurs will make use of competitive analysis

Individualism index: The Netherlands: 80

Poland: 60

As can already be noticed in Figure 12, the difference in causal usage between the Dutch and Polish entrepreneurs is relatively small, which is also made clear by the high P-value of 0,55. The causal proportion of the Dutch student entrepreneurs is 0,49, towards 0,45 for the Polish. Obviously, with a P-value that high, the hypothesis has to be rejected.

7.4 Existing market knowledge/Exploration of contingency

The more a culture is focused on internal control, the more the entrepreneurs will make use of existing market knowledge.

Locus of control:

The Netherlands: internal control

Poland: external control

Analyzing Figure 12 shows clearly that the 'existing market knowledge'-dimension shows a large difference between Polish and Dutch student entrepreneurs. To be precise, the difference in causal proportion between the two samples is 0,24. The causal proportion for the Dutch is 0,67, whereas the Polish score 0,43. This observation is supported by the statistical analysis, which results in a P-value of 0,01. Therefore, this hypothesis can be significantly proven.

7.5 Predictions of the future/Non-predictive control

The more a culture is future-oriented, the more the entrepreneurs will rely on predictions of the future.

Future orientation: The Netherlands: 4,61

Poland: 3,11

This hypothesis can be rejected on forehand, since the Polish student entrepreneurs tend to make more use of predictions for the future, which is in contradiction with the hypothesis. The Polish student entrepreneurs turn out to have a causal usage on this dimension of 0,91, towards 0,87 for the Dutch. For what it is worth; the p-value is 0,61.

7.6 Emphasis on analysis of data/Distrusting or opposing (marketing) research

The more universalistic a country is, the more the entrepreneurs will place an emphasis on the analysis of data.

Universalism/Particularism:

The Netherlands: Universalism

Poland: Particularism

As expected, the emphasis on data of the Dutch entrepreneurs is higher in comparison to the Polish. The Dutch causal proportion on this dimension is 0,87. The Polish score 0.79. The observable, relatively small difference in causal proportion between the Polish and Dutch student entrepreneurs is reflected in the outcome of the t-test, namely a p-value of 0,56. Therefore, this hypothesis has to be rejected.

7.7 Conclusion

In conclusion can be stated that one hypothesis can be accepted, namely: The more a culture is focused on existing market knowledge, the more causation-oriented the entrepreneur will be. What can be said about the other five rejected hypotheses? With regard to these, it can be observed that the outcomes of three of them are in line with the expectations. However, the difference in causal proportion between the Dutch and Polish student entrepreneurs turned out to be too small, which resulted in a too high P-value. Possibly, the small sample size is due to this. The remaining two hypotheses are contradicting the expectations. So, surprisingly, Polish student entrepreneur tend to focus more on expected returns and predictions for the future. How can this be explained? Possibly, the difference in economic state between the two countries can provide an answer. As already stated, the GDP per capita in the Netherlands is much higher than in Poland. Logically, in a country with a higher average income, the possibility to follow the 'affordable loss'-principle could be higher. Then the second contradicting hypothesis: predictions for the future. Perhaps the current economic situation plays a role in this. In contradiction to Poland, The Netherlands are facing the Euro-crisis. Due to this crisis, the future is uncertain for the Dutch student entrepreneurs. And an uncertain future cannot be predicted. That is why the focus on the future of the Dutch entrepreneurs could be lower when compared with the Polish scores. However, again it can be argued that the relatively small sample size could as well be the cause of the contradicting results.

Finally, an overall remark can be made. Since all the different hypotheses have as well an effectual as a causal element, it is possible to make a general conclusion about the usage of causation and effectuation with regard to the Polish and Dutch student entrepreneurs. According to the hypotheses, it could be expected that the Polish would relatively make more usage of effectuation, since all hypotheses point into that direction. Summing up all mentioned causal and effectual elements results in an average effectual usage among the Polish student entrepreneurs of 0,46, whereas the Dutch student entrepreneurs score 0,39. The statistical analysis shows that the probability that the two proportions have the same mean is only 0,06. Assuming a confidence interval of 90%, it can be said that this is a significant difference, which leads to the finishing conclusion that the Polish student entrepreneurs are more focused on effectuation in comparison to their Dutch colleagues.

8 Discussion

8.1 Review of the findings

The main purpose of the study was to find out whether certain defined cultural dimensions are correlated with certain causal/effectual elements. A fwell-known Latin saying is: 'Cum hog ergo' – correlation implicates (or pretends) a cause. However, correlation does not automatically imply a cause. It simply cannot be stated that culture is the cause of the noticed differences in outcomes. Why? Well, who says that the differences are not caused by, for example, different economic situations? It can only be said that culture is the cause, when two identical countries are compared – and that is simply impossible, since differences in, for example, climate, geography, demography or landscape, always exist. This fundamental shortcoming in science is of course known in the scientific world as the induction problem of the Scottish sceptical David Hume (1711-1776). No matter how strong the results assume culture as the cause of the differences between the Dutch and Polish sample, the results will always be incomplete projects of the reality; there will always be known unknowns and unknown knows which are not taken into consideration.

Well, to return to the results: In general it can be concluded that, as was expected, the Polish student entrepreneurs have a higher effectual usage, although this does not apply for each formulated hypothesis. Possibly the relatively small sample size is due to this last fact. Therefore, replicated research could provide more evidence for the stated hypotheses.

As already stated briefly in the previous part, the current economical state of the two countries might have influenced the decisions made in this business case and caused the unexpected results. The current economic state of both countries is contradicting: Whereas the high developed Dutch economy faces difficulties, the less developed Polish economy is growing and growing. A less developed country might have a lower focus on affordable loss, because of its struggle for survival. Further, disappointing economical figures could lead to a state of uncertainty, which could result in a lower tendency to trust on predictions for the future.

The validity of the results of this study could be improved when they are in line with the outcomes of the other theses within this study project. If these studies come to similar conclusions, this might have significant implications: It means that based on the values for certain cultural dimensions, the usage of causation and effectuation could be predicted. Based on the formulated hypotheses for Poland and the Netherlands, the assumption could be made that more developed countries have a higher usage of causation.

This can be logically explained by analyzing the dimensions of causation and effectuation: well-developed countries have a more certain future, which increases the possibility to predict it and to trust on market research, have more possibilities to follow the affordable loss-principle and are more financially independent and therefore less dependent on alliances or partnerships. Further, well-developed countries have a higher rate of well-educated persons, who are taught by a causal way of reasoning. However, as stated by Sarasvathy, in general effectual entrepreneurs tend to be more successful. If it turns out that an increase in development leads to an increase in the proportion of causal entrepreneurs, this outcome can be regarded as quite paradoxical.

8.2 Limitations

Even this study is not without limitations. The first limitation is a familiar one for Geert Hofstede: The fact that the data were collected in one particular city makes it questionable whether the outcomes of the research would have been the same when student entrepreneurs in several cities would have been included in the survey sample. Since possible regional are neglected, there is a certain degree of uncertainty about the fact whether the obtained research results show a fair national representation.

Further, this research is conducted at a certain moment in time, making it impossible to notice possible changes or trends. In this globalizing, fast changing world it is not unimaginable that entrepreneurial processes to are subject to change. The only way to cross out this limitation is obviously by a follow-up research.

The third limitation of this research results from the chosen subjects included in the sample. As mentioned above, the sample existed of high-educated entrepreneurs, which in this case means entrepreneurs that were still studying or entrepreneurs that were recently graduated. In the introduction of this thesis was already mentioned that not all entrepreneurs are the same. The logically following conclusion is that one should be cautious with generalizing outcomes of this research to entrepreneurial processes in general. Possibly, entrepreneurs with a lower – or even no – education or entrepreneurs with an older age, go through different entrepreneurial processes when founding a new business venture. Again, further research is needed in order to come up with conclusions about followed entrepreneurial processes generalizable to different kinds of entrepreneurs. The selected subject may differ significantly from the majority of entrepreneurs.

The fourth limitation is a possible gap between theory and practice, which means that the answers subjects gave not necessarily correspond with their actual decisions handlings when they are faced with a situation mentioned in the case. A clear example illustrating this argument is the decision problem about hiring professional management. One could imagine that a starting entrepreneur does not have a clear idea about this issue. The purpose of the interview is to see which entrepreneurial processes are used during different phases of the business venture. But the question is

whether the interview answers of a subject with, for example, an effectual mindset replicate a true picture of his actual decisions when he would really face the given situations.

The fifth limitation can be found in the way of interviewing. Analyzing the business case it can be noticed that the way of posing the questions might have influenced the results into a certain direction. For example, in the first question the student entrepreneurs have to state how they think about chances for growth in the future. Of course the student entrepreneurs give answers which fit into the causal element 'future oriented'. Asking questions in such a steering way, is probably not the best way to obtain a fair insight into the usage of causation and effectuation among the student entrepreneurs. On the other hand has to be stated that the fact that the additional questionnaires are in line with the case results, increases the trustworthiness of the results. However, also the additional questionnaires are limited in usage, as already argued earlier.

8.3 Further research

Further research is already in conduction by the other members of the EPIC-C-project. By analyzing these results, the hypothesized economic influence on the usage of causal and effectual processes, as stated, could also be investigated and either rejected or accepted. The results of all master theses together will provide a clear insight into the possible relation between culture and causation & effectuation. All the results together could help by formulating a new intercultural theory, which could act as the 'missing link' between culture and causation & effectuation.

As stated in the discussion part of this thesis, the relation between the economical situation of a country and the usage of causation and effectuation among entrepreneurs could be an interesting subject for further research. Further, this research has purely measured the use of causal or effectual processes among student entrepreneurs. However, the obtained results do not say anything about the success of a company. How could this be investigated? A sample can be made of successful entrepreneurs in as well Poland as the Netherlands. Then the question is which entrepreneurial process they followed. It could turn out that entrepreneurs in different cultures rather succeed by using either causal or effectual processes.

As already argued, education in Western countries is mainly dominated by a causal perspective. It could be interesting to find out to which extent education influences the usage of either causation or effectuation among entrepreneurs. In order to investigate this, a comparison could be made between well- and less-educated countries. If there can be found a relation between the usage of causation and education, then entrepreneurial education in general is challenged by the question how to apply the experience-based concept of effectuation into the classrooms.

9. Appendix

9.1 Polish Interview Results

A short explanation will be given to ensure a right interpretation of the showed results. The table at the right shows the causal and effectual usage per interviewee. Logically, because of privacy issues the names of the interviewees are turned into numbers. The remaining two tables show the scores per dimension. The dimensions are derived from the already shown coding scheme. In this way it was possible to analyze – and compare - the causal and effectual usage per dimension by summing up all mentioned elements. The row 'share' – at the bottom of the figure – shows the deviation between causal and effectual usage. For example, it turns out that the interview Polish student entrepreneurs are more goal-based (61%) than means-based (39%).

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Figure 12: Polish interview results

9.2 Dutch Interview Results

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Share	Total	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Causation
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	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	Total
	39%	47%	42%	31%	41%	32%	27%	26%	27%	26%	41%	30%	58%	60%	38%	53%	Effectual
	61%	53%	58%	69%	59%	68%	73%	74%	73%	74%	59%	70%	42%	40%	62%	47%	Causal
	Total	15	14	13	12	11	10	6	8	7	6	5	4	3	2	1	
											ewee	er intervi	վ usage p	Dutch deviation of causal and effectual usage per interviewee	causal an	iation of	Dutch dev

Figure 13: Dutch interview results

9.3 Overview intercultural theories

In the assignment the cultural dimensions are mentioned which are used for the hypotheses. In order to provide a clear overview of the intercultural theories, all dimensions of these theories are listed below.

9.3.1 Hofstede's Cultural Dimensions

9.3.1.1 Power Distance Index (PDI)

This dimension is defined as the extent to which the less powerful members of institutions and organizations within a society expect and accept that power is distributed unequally. In countries with a high PDI-score, children are expected to obey and to be respectful to their parents; whereas in countries with a low score, children are treated as equals and they are independent at a relatively young age.

9.3.1.2 Uncertainty avoidance (UAI)

This dimension refers to a society's discomfort with uncertainty, having a preference for predictability and stability. In countries with high UAI-scores, the society needs strict regulation and legislation, although in practice people do not have to stick to these rules. Inhabitants of countries with a low score can be characterized as relaxed and calm.

9.3.1.3 Individualism Index (IDV)

This dimension indicates the comparison between collectivism and individualism. Individualism stands for a society in which the ties between individuals are loose: a person is expected to look after himself or herself and his or her immediate family only. Collectivism stands for a society in which people from birth onwards are integrated into strong, cohesive in-groups, which continue to protect them throughout their lifetime in exchange for unquestioning loyalty. The index reflects the extent to which persons prefer to take care of themselves and their immediate families, remaining emotionally dependant from groups, organizations, and/or collectivities. In most countries the behavior of an individual is determined by the society. In individualistic countries the family is a dominant factor.

9.3.1.4 Masculinity dimension (MAS)

This dimension refers to the bias towards either masculine values of assertiveness, materialism and competitiveness or feminine values or nurturing, life quality and relationships. Masculinity stands for a society in which social gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life. Femininity stands for a society in which social gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life.

9.3.1.5 Long-term orientation (LTO)

This dimension deals with virtue regardless of truth. Values associated with long term orientation are thrift and perseverance; values associated with short term orientation

are respect for tradition, fulfilling social obligations, and protecting one's 'face'. Long Term Orientation stands for a society which fosters virtues oriented towards future rewards, in particular adaptation, perseverance and thrift. Short Term orientation stands for a society which fosters virtues related to the past and present, in particular respect for tradition, preservation of "face", and fulfilling social obligations (Hofstede, 2001; Van Rossem, 2005).

9.3.2 Trompenaars & Hampden-Turner's Cultural Dimensions

9.3.2.1 Universalism vs. particularism

This dimension describes how people assess other people's behavior. Within universalistic societies there certain absolute rules which apply to everyone. Universalistic people attach high value to the observance of rules, regardless the circumstances. Therefore, universalistic people will not make differences between people from the narrow environment or the wider community. On the other hand, particularistic people pay more attention to specific circumstances or personal backgrounds. Therefore, what is right in one situation may not be right in another. Person in particularistic societies treat family, friends and members of their in-group as good as possible. High attention is paid to personal feelings.

9.3.2.2 Individualism vs. collectivism

This dimension is almost identical to the identical named dimension of Hofstede, which is already extensively described.

9.3.2.3 Neutral vs. emotional

This dimension describes the importance of relationships and feelings within a society. Neutral persons do not carry out their feelings but keep them under control and subdued. However, it is not said that people in these cultures are necessarily unfeeling or emotionally constipated. On the other hand, emotional people show their feelings expressively.

9.3.2.4 Specific vs. diffuse

A member of a specific-oriented culture is open in the public space but more closed in the private one. Other characteristic features of specific people in are directness, being to the point and focused in relating. In diffuse-oriented cultures there is a close relation between work and family. A diffuse person is more closed in public space but very open in private space. Diffuse people can be characterized as indirect, circuitous and apparently pointless in relating. High situational morality is dependent upon the context and person and which is encountered.

9.3.2.5 Achievement vs. ascription

This dimension refers to the question how the status of an individual is determined. As the name indicates, within achievement cultures status is based upon own achievements and performance. In achievement-oriented cultures a title is used only when it is from importance. Respect for higher ranked people is based upon their knowledge and skills. Decision-making is based upon technical and functional grounds. However, in an ascription-oriented culture a title is extensively used and respect for a

higher ranked people is rather based on seniority and hierarchy. Decision-making is influenced by persons with a higher authority. In an ascription-oriented culture a status is related to ones religion and origin.

9.3.2.6 Sequential vs. synchronic

This dimension refers to the question how people in different cultures manage their time. On the one hand, managing time in a sequential way means that people feel time as a series of passing events. A sequential person tends to schedule tightly and doesn't like to be thrown off his or her schedule by unanticipated events. Within synchronic time management the past, present and future are interrelated. Synchronic people follow various activities in parallel. Within synchronic cultures there is one final goal, but several ways to reach this.

9.3.2.7 Internal vs. external control

The final dimension refers to the question whether an environment can be controlled or not. Within cultures driven by internal control, there exists the belief that the environment can be controlled, whereas within external control an organization is viewed as a product of the environment (Trompenaars & Hampden-Turner, 1998).

9.3.3 GLOBE's Cultural Dimensions

9.3.3.1 Gender Egalitarianism

This dimension refers to the extent to which an organization or a society reduces differences in gender role. Societies with a high degree of gender egalitarianism are characterized by a high percentage of women in authority positions, less occupational sex segregation, similar levels of educational attainment for males and females and a greater possibility for women to make decisions in community affairs. A high value placed on gender egalitarianism was strongly and positively associated with the most widely endorsed global leadership dimension, Charismatic/Value-Based leadership.

9.3.3.2 Assertiveness

This dimension refers to the degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships. Highly assertive cultures value competition, success and progress, communicate directly and unambiguously, try to have control over the environment, expect subordinates to take initiative and build trust on basis of calculation.

9.3.3.3 Future Orientation

This is the degree to which individuals in organizations or societies engage in futureoriented behaviors such as planning, investing in the future, and delaying gratification. Highly future oriented cultures are characterized by a propensity to save now for the future, an emphasis on working for long-term success, organizations that tend to be flexible and adaptive and by the perspective to see material success and spiritual fulfillment as an integrated whole.

9.3.3.4 Performance Orientation

This dimension refers to the extent to which an organization or society encourages and rewards group members for performance improvement and excellence. The GLOBE researchers conclude that performance orientation "relates to the extent to which leaders set ambitious goals, communicate high expectations for their subordinates, build their subordinates' self-confidence, and intellectually challenge them". And their concluding remark is that people who value high performance "seem to look to charismatic leaders who paint a picture of an ambitious and enticing future, but leave it to the people to build it".

9.3.3.5 Humane Orientation

Humane Orientation refers to the degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others. High humane oriented societies are characterized by a high personal interest in other persons, people that are motivated primarily by a need for belonging and affiliation, members of society that are responsible for promoting the well-being of others and the fact that people are urged to be sensitive to all forms of racial discrimination (House, Javidan, & Dorfman, 2001).

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