Cultural differences in startup firms: An explanatory research in terms of causation and effectuation.

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Abstract
This paper consists of an explanatory research of startup firms and the differences in the entrepreneurial process among novice entrepreneurs in two different cultures. Cultural dimensions provided by the GLOBE research will be used to differentiate the national cultures. Further a qualitative research among novice entrepreneurs will be used to determine whether novice entrepreneurs started their business from a causation or an effectuation perspective.

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Keywords
Cultural differences, national culture, GLOBE, causation, effectuation, novice entrepreneurs, startup firms.

CONTENTS

1.1 INTRODUCTION

When starting your own venture, various decisions have to be made (e.g. how much money to invest or which goal to set); all these choices towards the start of a venture are called the entrepreneurial process. The entrepreneurial process is crucial for firm performance (Brinckmann, Grichnik, & Kapsa, 2008). Sarasvathy (2001) made a distinction between two types of entrepreneurial process, causation and effectuation. To get a clear distinction between these two concepts Sarasvathy (2001) compares it with cooking a dinner. If you are going to cook, you can pick a recipe and buy the ingredients needed for that recipe. Another option is to look through the cupboards in the kitchen to find possible ingredients and then think of a possible dinner that can be made with those ingredients. The first type is causation, the second effectuation. The same works for starting a venture, you can start with a clear goal and find the means needed to achieve that goal (money, alliances, etcetera) or you can start by using your own abilities, money or alliances and exploit the opportunities that emerge along the way. Since the introduction of the concepts of causation and effectuation by Sarasvathy (2001), a lot literature is available towards these different perspectives of the entrepreneurial process, Perry et al. (2011) reviewed the literature using the Edmondson and McManus' framework (2007). Their review showed that most of the effectual research took place in the nascent or conceptual state of research, e.g. Sarasvathy (2001). This paper contributes in the field of effectuation towards a more intermediate or advanced state of research, e.g. Dew et al. (2009). Therefore this paper includes an empirical research among entrepreneurs from different countries. Most of the current research in the field of entrepreneurial process in terms of effectuation consists of conceptual aspects, according to Perry et al. (2011) only a few contribute to the literature with empirical findings (Sarasvathy & Kotha, 2001; Harting, 2004; Harmeling, Oberman, Venkatamaran, & Stevenson, 2004; Chandler, DeTienne, McKelvie, & Mumford, 2009; Wiltbank, Dew, Read, & Sarasvathy, 2009). This paper will focus on an empirical approach. In the emerging phase of a venture, the differences in strategy development are the most of interest, because in this phase a choice between causation and effectuation is made (Perry, Chandler, & Markova, 2011). Although expert entrepreneurs can start new ventures as well, the dataset used only contains data from novice entrepreneur so for that reason only these entrepreneurs are considered. In the current scientific literature about effectuation little or no attention is paid to differences between entrepreneurs in different countries. Although around thirty thesis projects at the University of Twente paid attention to this subject, no clear meaning of the results has yet been found.

Culture is still a hot topic nowadays. A quick search at Google towards culture provides over 1,4 billion regular results and over 5,2 million literature results. Due to ongoing globalization different values and believes of certain groups of people are under pressure. Although some researchers argue that globalization will cause a global culture to arise and cultural differences to vanish (Featherstone, 1990), today cultural differences still play an important role in doing business. Cultural differences are considered as the differences between groups of people. According to House et al. (2004) the term culture refers to: *"A set of parameters of collectives that differentiate each collective in a meaningful way"* (p.15). Hofstede (2001) used another definition of culture which is: *"Culture is the collective programming of the mind which is shared by members of one group, but not by members of other groups."* (p.21) In this paper culture is used to represent informal institutions. Given the limitations indentified in the research of Hofstede (Ailon, 2008; McSweeney, 2002), the research by House et al. (2004) will be used to measure the cultural practices (Holmes, Miller, Hitt, & Salmador, 2012). Culture can be divided into national culture and corporate culture. In this situation national culture is only considered as the differences between countries as groups of people. Within countries different distinctions can be made in terms of regions or even cities, however little data and literature is available for these distinctions (Hofstede G. H., 2001). Corporate culture is the culture that exists within large corporations; people working in these organizations behave among certain values of that organization. Some researchers argue that national culture is not measurable (McSweeney, 2002), in most of

the literature regarding differences between countries, national culture is considered to be the best unit of analysis for describing differences between countries (Hayton, George, & Zahra, 2002; Zahra & Li, 2012), therefore the focus will be on national culture.

As clarified in two major literature studies, cultural differences still play an important role and will cause organizations to fail if not taken into account (Hofstede G. H., 2001), (House, Hanges, Javidan, Dorfman, & Gupta, 2004). In this paper the focus is not on established firms going global but on novice entrepreneurs starting a business in different areas of the world. Novice entrepreneurs in this context are referred to as early graduates starting their own business, a startup firm. The main purpose of this paper is to find differences between startup firms in different countries. To address the cultural differences of the countries which will be investigated, the nine dimensions provided by the GLOBE (Global Leadership and Organizational Behavior Effectiveness) research by House et al. (2004) will be used. Hofstede (2001) discovered a similar model for comparing national cultures, however, as explained later, the dimensions provided by GLOBE will be used in this research. To address differences between novice entrepreneurs in terms of their way of starting a business, their entrepreneurial process, the model of causation and effectuation (Sarasvathy S. D., 2001) will be used. The current literature provides extensive information about differences between national cultures and about start up firms in general, but little information is available on the combination of these two aspects and about the differences between startups in different countries. Therefore the following research question is developed:

To what extent is national culture of influence on strategy development in the entrepreneurial process?

Knowing differences between startups in multiple countries is very useful for fresh entrepreneurs who are considering starting a business in a foreign country or in his/her own country. This research can provide them with useful insights on the approved ways to start businesses in that particular country. For companies operating solely in their domestic market this research can provide them with insights on how to start a successful subsidiary abroad. In education this research can be valuable as well; a teacher educating students about entrepreneurship should know the values and practices about entrepreneurship in the particular country.

1.2 OVERVIEW OF THE PAPER

This paper consists of six parts. The first part is the introduction part which is written above. In the second part the theory form previous work is reviewed. In the following third part hypotheses which are derived from the literature shall be presented. The methods of the research in this paper are explained in the fourth part and the fifth part the results of the research are presented. The paper finishes with a discussion, conclusions and recommendations for future research.

2. THEORY

2.1 Causation and effectuation

When becoming an entrepreneur two different perspectives can be used at the start. Sarasvathy's research (2001) made a distinction between the different perspectives of a novice entrepreneur. These perspectives are causation and effectuation. The definition of causation by Sarasvathy is: *"Causation processes take a particular effect as given and focus on selecting between means to create that effect."* (Sarasvathy S. D., 2001, p. 245). Second, effectuation is considered to be opposite from causation, the definition of effectuation by Sarasvathy is: *"Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means."* (Sarasvathy S. D., 2001, p. 245). When starting a business different choices have to be made. The two aspects, causation and effectuation, are considered to be dichotomous, a mix between these aspects is possible. An entrepreneur for instance can be effectual and causal, but more towards either one of these perspectives. Via five different aspects the entrepreneurs can be addressed in terms of causation and effectuation. These five aspects are:

1. Prediction vs. Control of the future. If the entrepreneur believes he can control the future by creating new markets, this can be qualified

as an aspect of effectuation. If the entrepreneur believes that the future can be predicted on the basis of past experiences, he will be considered more causal.

2. Goal driven vs. Means based. A causal entrepreneur is considered to be more goal driven, i.e. this is the goal, and what means do I need? On the other hand, an effectual entrepreneur shall be more means based, i.e. these are my means, what can I achieve? Effectual entrepreneurs begin with who they are, what they know and whom they know, rather than a predetermined vision or externally validated "opportunity" (Wiltbank, Read, Dew, & Sarasvathy, 2009, p. 117).

3. Expected returns vs. Affordable loss. Expected returns is a calculation of future profit, together with the needed investment. This is considered causal. An effectual entrepreneur has a certain amount of money available which is his maximum affordable loss.

4. Competitive oriented vs. Use of alliances. Whether an entrepreneur sees other businesses as competitors or as alliances is also a distinction between causal or effectual. A causal entrepreneur shall analyze its competitors and tries to do business better than them, while an effectual entrepreneur will seek for opportunities to collaborate with "competitors" to improve business.

5. Avoiding vs. Embracing contingencies. This aspect is about the attitude towards unexpected events. A causal entrepreneur will avoid contingencies while a more effectual entrepreneur shall embrace them.

2.2 Culture

In this section the two most cited cultural researches shall be compared, GLOBE and Hofstede (2001). Hofstede (2001) conducted his research among IBM employees of 76 countries worldwide. He conducted most of his surveys around the 1980s. He developed six dimensions among countries can be ranked. Critics argue that just researching IBM employees might in many countries not be representative for the entire population (Ailon, 2008; Baskerville, 2003). Most IBM employees differ from the average inhabitant for instance in terms of education. Within IBM a corporate culture probably exists which differs from the national culture. Hofstede (2001) stated that by just researching IBM employees he could exclude the corporate culture and finding only national cultures. However McSweeney (2002) stated that it is not clear if the corporate culture of IBM really exists and what the influence will be on national culture.

The GLOBE research focused on managers of all kinds of industries, not solely on IBM employees. The GLOBE research is meant to replicate Hofstede's landmark study and extend that study to test hypotheses relevant to relationships among societal-level variables, organizational practices, and leader attributes and behavior (House, Hanges, Javidan, Dorfman, & Gupta, 2004, p. XXV). An important distinction between the GLOBE research and Hofstede (2001) lies in the definition of culture used by the researchers. GLOBE examines culture as practices and values. Practices are acts or "the way things are done in this culture", and values are artifacts because they are human made and, in this specific case, are judgments about "the way things should be done" (House, Hanges, Javidan, Dorfman, & Gupta, 2004, p. XV). Hofstede (2012, p. 21) refers to culture as the collective programming of the mind which is shared by members of a group and not shared by members of another group. Since his definition of cultures focuses solely on the mental processes and not on the way things are in a specific culture, his research does not take the practices into account, while GLOBE focuses on both values and practices. To make a relevant distinction in terms of cultural differences it is necessary to take both values and practices into account, therefore the GLOBE research will be used in this paper. GLOBE did receive some critique as well, but they were largely provided by Hofstede (2006) and he argued mainly that the model is too extensive.

2.3 GLOBE

The GLOBE (Global Leadership and Organizational Behavior Effectiveness) research is a cultural and leadership research in 62 countries worldwide. A survey was conducted among thousands of middle managers in food processing, finance and telecommunications (House, Javidan, Hanges, & Dorfman, 2002). When comparing the data from these 17.300 surveys, House et al. (2004) developed nine cultural dimensions which can be used to com-

pare countries in terms of cultural differences. These nine dimensions are listed below (House, Javidan, Hanges, & Dorfman, 2002).

1. Uncertainty avoidance. Uncertainty avoidance is defined as the extent to which members of an organization or society strive to avoid uncertainty by reliance on social norms, rituals and bureaucratic practices to mitigate the unpredictability of future events.

2. Power Distance. The degree to which members of an organization or society expect and agree that power should be unequally shared is referred to as power distance.

3. Collectivism I: Societal Collectivism. This dimension refers to the degree to which individuals behave as an individualist or as collective in society. A high score on this dimension reflects a collectivistic emphasis by means of laws, social programs or institutional practices.

4. Collectivism II: In-Group Collectivism. In-Group Collectivism refers to the degree to which individuals express pride, loyalty and social coherence in their organizations or families.

5. Gender Egalitarianism. To what extent gender role differences and gender discrimination are minimized in a society is referred to by Gender Egalitarianism. A high score indicates men and women to have equal access to resources like education, while a low score indicates a more masculine society.

6. Assertiveness. The dimension of Assertiveness is the degree to which individuals in organizations or societies are assertive, confrontational and aggressive in social relationships. Most societies scoring high on this dimension do well in global competitiveness but do less well on psychological health (House, Hanges, Javidan, Dorfman, & Gupta, 2004, p. XVI).

7. Future Orientation. A high score on this dimension implies individuals in organizations or societies engaged in future-oriented behaviors such as planning, investing in the future and delaying satisfaction.

8. Performance Orientation. Performance Orientation refers to the extent to which an organization or society encourages and rewards group members for performance improvements and excellence.

9. Humane Orientation. The degree to which individuals in organizations or societies encourage and reward other individuals for being fair, altruistic, friendly, generous, caring and kind to others.

2.4 PBC and SSC

Little literature has paid attention to the connection of entrepreneurship and culture. However, Stephan & Uhlaner (2010) developed a cross-national study of entrepreneurship to find differences between cultures in terms of Socially Supportive Culture (SSC) and Performance-Based Culture (PBC). They used the cultural dimensions provided in the GLOBE research to make a contribution in the relevance of national culture on business. PBCs expect individuals and organizations to perform more while SCCs support entrepreneurs to achieve higher performances (Stephan & Uhlaner, 2010). In their research, Stephan & Uhlaner differentiated between demand-side and supply side variables. Demand-side variables refer to the national institutions which are aimed at supporting entrepreneurship. Supply side refers to the amount of potential entrepreneurs in a society. SSCs are more focused on supply side, while PBCs are more focused on demand-side. SSCs help the potential entrepreneurs in their process of starting a venture. Their research proved a positive relation between SSC and the national entrepreneurship rate (Stephan & Uhlaner, 2010). .

3. HYPOTHESES

The aspects causation and effectuation are dichotomous, when you start your business, you will find a mix between causation and effectuation, some components of the entrepreneurial process might be causation while others might be more towards effectuation. For example, you have a certain amount of available investable money, your affordable loss, and you have a defined product you want to commercialize, your goal. In this situation you mix between causation and effectuation, because affordable loss is typical effectual while a clear goal is typical causal. In this paper the possible link between the cultural differences according to the nine dimensions of GLOBE and whether an entrepreneur operates from a causation or an effectuation perspective shall be investigated. In this research the dimension of Uncertainty Avoidance provided by the GLOBE research will be used, because this dimension has a

possible connection with theory from Sarasvathy (2001). In this section the hypotheses which will be tested later in this paper shall be presented. Each hypothesis includes an alternative hypothesis as well, since causation and effectuation is dichotomous, a relation might be significant as well if tested backwards.

A country which has a high score on Uncertainty Avoidance has more rules and regulations to prevent from unexpected events in the future (House, Hanges, Javidan, Dorfman, & Gupta, 2004). Entrepreneurs operating in a country with a high level of Uncertainty Avoidance shall therefore try to minimize the impact of these unexpected events (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009). Contingencies are considered to be unexpected events. As Sarasvathy (2001) showed, an entrepreneur can either be avoiding contingencies or embracing them to gain competitive advantage. This provides this paper with the first hypothesis:

Hypothesis 1A: Countries with a high level of Uncertainty Avoidance will have a tendency to avoid contingencies.

The alternative hypothesis is:

Hypothesis 1B: Countries with a low level of Uncertainty Avoidance will have a tendency to embrace contingencies.

On the other hand, with the same high level of Uncertainty Avoidance, a contradictory hypothesis can be drawn. Rules and regulations in a society with high Uncertainty Avoidance are meant to prevent uncertainty from happening. Sarasvathy (2001) showed that an entrepreneur can either control the future or predict the future. If entrepreneurs use rules and regulations to prevent uncertainty or unexpected events from happening, it can be assumed that they attempt to control the future instead of predicting it. Therefore, the second hypothesis is:

Hypothesis 2A: Countries with a high level of Uncertainty Avoidance will cause entrepreneurs to be more oriented in controlling the future.

And the alternative hypothesis:

Hypothesis 2B: Countries with a low level of Uncertainty Avoidance will cause entrepreneurs to be more oriented in predicting the future.

As mentioned by Stephen & Uhlaner (2010), Socially Supportive Cultures are positively associated with the national entrepreneurship rate. They suggest that this might be caused by descriptive norms of high human orientation and low assertiveness, which will establish a positive societal climate in which people support each other (p. 1351). If people support each other they are more likely to establish alliances instead of being competitive oriented. Therefore, the third hypothesis will be:

Hypothesis 3A: Entrepreneurs operating in SSCs tend to be more likely to establish alliances.

The alternative hypothesis will be:

Hypothesis 3B: Entrepreneurs operating in PBCs tend to be more competitive oriented.

In the article of Dew, Sarasvathy, Read & Wiltbank (2009) an analysis is made for entrepreneurs who take the plunge in terms of their financial affordable loss. Their research made clear that entrepreneurs who have to deal with higher risks or uncertainty are more likely to use the effectual aspect of affordable loss. This will cause the fourth hypothesis to be:

Hypothesis 4A: Entrepreneurs operating in countries with a high level of uncertainty avoidance will have a tendency to be more focused on affordable loss.

And the alternative hypothesis will be:

Hypothesis 4B: Entrepreneurs operating in countries with a low level of uncertainty avoidance will have a tendency to be more focused on expected returns.

However, the line of reasoning made by Dew, Sarasvathy, Read & Wiltbank (2009) could also be made the other way round. For instance, if an entrepreneur operates in a country with a high level of uncertainty avoidance, he will probably want to be sure of his future returns on his initial investment. He therefore tend to be more causal. To find out what will hold in practice, another set of hypotheses will be tested.

Hypothesis 4C: Entrepreneurs operating in countries with a high level of uncertainty avoidance will have a tendency to be more focused on expected returns.

And the alternative hypotheses:

Hypothesis 4D: Entrepreneurs operating in countries with a low level of uncertainty avoidance will have a tendency to be more focused on affordable loss.

4. METHODS

For this research the dataset collected in 2012 by students participating in the EPICC-project (Entrepreneurial Process In Cultural Context)

will be used. Students in EPICC collected this data among 500 novice entrepreneurs in 21 countries. This dataset is derived from think-aloud protocols among novice entrepreneurs. The entrepreneurs were given a case with ten problems and were told to think aloud when solving the case. These think-aloud sessions are recorded and later transcribed in terms of causation and effectuation. Think-aloud protocols are considered useful because they can provide the researcher with not just answers on questions but also with thought processes on how they come to their decision (van Someren, Barnard, & Sandberg, 1994; Ericsson & Simon, 1993). In this research a comparison between two countries will be made. Then the dataset is made quantitative by counting the times an entrepreneur mentioned something about one of the five aspects provided by Sarasvathy (2001). The countries for comparison are Russia and the Netherlands. The reason for the choice in countries is that these two countries seem to be very different in terms of culture according to the data of House et al (2004) and Stephan & Uhlaner (2010), so if there are differences between novice entrepreneurs in different countries than these will be brought clear when comparing these two countries. The dataset involves 46 respondents from the Netherlands and 20 from Russia. Further, an independent samples t-test will be used to find significant differences between the two countries. Since the data of both countries is not normally distributed and the sample sizes are unequal, a bootstrap with thousand samples is used to make the results statistically comparable. Bootstrapping is a very useful and simple technique to cope with non-normality in datasets. In SPSS it is possible to select the option bootstrap and to choose the sample size, to receive valid results it is important to choose a large sample size. Thousand samples is considered as large enough. When starting the calculation, the computer picks random smaller samples from the data and calculates the means of these samples and does this a thousand times. The new dataset consist then of thousand numbers which are normally divided and can thus be statistically compared with the data from the other country (Field, 2013). In the GLOBE research two types of data are provided, both values as practices. In this research the data from practice shall be used because this displays the acts or the way things are actually done in a specific culture (House, Hanges, Javidan, Dorfman, & Gupta, 2004, p. XV).

5. RESULTS

For the first hypothesis (1A); *Countries with a high level of Uncertainty Avoidance will have a tendency to avoid contingencies*; the data of table 1 derived from House et al (2004) about Uncertainty Avoidance has to be compared with the results from the think-aloud protocols. At the dimension of Uncertainty Avoidance the Netherlands scored 4,70 points (table 1) out of a maximum of 5,37. Russia on the other hand has the lowest score, with 2,88 (table 1) points. Therefore Russia can be considered as having a very low level of Uncertainty Avoidance while the Netherlands has a very high level. If the data from the research is compared via the independent samples t-test, the hypotheses will be confirmed if $p < .05$. The data for the first set of hypotheses can be found in the appendix. Testing the first hypothesis shows entrepreneurs from Russia to be more avoiding contingencies ($M = 8.65$, $SE = 0.93$), than entrepreneurs from the Netherlands ($M = 4.46$, $SE = 0.60$), this difference, 4.19, BCa 95% CI [-6.44, -1.94], was significant, $t(64) = -3.72$, $p < .05$. However, it differs from the hypothesis, since Russia has a much higher level of avoiding contingencies compared to the Netherlands. Therefore hypothesis 1A is **not supported.** Testing the alternative hypothesis 1B, c*ountries with a low level of Uncertainty Avoidance will have a tendency to embrace contingencies,* shows entrepreneurs from the Netherlands embracing more contingencies ($M = 2.54$, $SE = 0.35$) than entrepreneurs from Russia ($M = 1.75$, $SE = 0.28$). This difference, 0.79, BCa 95% CI [-0.39, 1.97], was not significant, $t(64) = 1.34$, $p > .05$. Therefore hypothesis 1B is **not supported.**

The second hypothesis is about Uncertainty Avoidance as well, but this time Uncertainty Avoidance will be linked to a more effectual aspect of business, the creation of the future. This hypothesis is; *Countries with a high level of Uncertainty Avoidance will cause entrepre-*

Subject	Netherlands	Russia
Uncertainty Avoidance	4,70	2,88
Performance-Based	4,38	2,85
Socially Supportive	3,78	4,09

Table 1

neurs to be more oriented in controlling the future. Testing this hypothesis shows entrepreneurs from Russia more oriented in controlling the future (M = 2.35, SE = 0.46) than entrepreneurs from the Netherlands (M = 1.57, SE = 0.18). This difference, -0.78, BCa 95% CI [-1.62, 0.05], was not significant, $t(64) = -1.88$, $p > .05$. Therefore hypothesis 2A is **not supported**. Testing the alternative hypothesis, *Countries with a low level of Uncertainty Avoidance will cause entrepreneurs to be more oriented in predicting the future,* shows entrepreneurs from Russia to be focused more on predicting the future (M = 12.30, SE = 0.89) than entrepreneurs from the Netherlands (M = 3.96, SE = 0.44). This difference, -8.34, BCa 95% CI [-10.09, -6.60] was significant, $t(64) = -9.56$, $p < .05$. Therefore hypothesis 2B is **supported.**

Hypothesis 3A compares the results of the think-aloud protocols with the data provided by Stephan & Uhlaner (2010). This hypothesis is: *Entrepreneurs operating in SSCs tend to be more likely to establish alliances.* In the research done in 64 countries by Stephan & Uhlaner (2010), Russia scored higher than the Netherlands on SSC. This indicates that Russia is more a Socially Supportive Culture than the Netherlands. Testing this hypothesis shows entrepreneurs from the Netherlands being more likely to establish alliances or partnerships (M = 4.26, SE = 0.44) than entrepreneurs from Russia (M = 2.90, SE = 0.33). This difference, 1.36, BCa 95% CI [-0.10, 2.82], was significant $t(64) = 1.86$, $p < .05$. However the hypothesis suggested that entrepreneurs from Russia are more likely to establish alliances or partnerships. Therefore, hypothesis 3A is **not supported.** Testing the alternative hypothesis, *entrepreneurs operating in PBCs tend to be more competitive oriented,* shows entrepreneurs from Russia being slightly more competitive oriented (M = 4.60, SE = 0.41) than entrepreneurs from the Netherlands (M = 4.04, SE = 0.40). This difference, -0.56, BCa 95% CI [-1.92, 0.81], was not significant, $t(64) = -0.82$, $p > .05$. Therefore, hypothesis 3B is **not supported.**

Hypothesis 4A is: *Entrepreneurs operating in countries with a high level of uncertainty avoidance will have a tendency to be more focused on affordable loss.* Since the Netherlands has a much higher level of Uncertainty Avoidance, this hypotheses suggests that entrepreneurs in the Netherlands will make more use of the affordable loss heuristics. Testing this hypothesis show entrepreneurs from Russia slightly more focused on affordable loss (M = 2.90, SE = 0.39) than entrepreneurs from the Netherlands (M = 2.78, SE = 0.38). This difference, -0.12, BCa 95% CI [-1.44, 1.20], was not significant, $t(64) = -0.18$, $p > .05$. Therefore hypothesis 4A is **not supported.** Testing the first alternative hypothesis, *entrepreneurs operating in countries with a low level of uncertainty avoidance will have a tendency to be more focused on expected returns,* shows entrepreneurs from Russia slightly more focused on expected returns (M = 6.25, SE = 0.50) than entrepreneurs from the Netherlands (M = 5.76, SE = 0.51). This difference, -0.49, BCa 95% CI [-2.16, 1.18], was not significant, $t(64) = -0.58$, $p > .05$. Therefore, hypothesis 4B is **not supported.** Hypothesis 4 involves an additional set of alternative hypotheses since the line of reasoning done by Read, Dew, Sarasvathy, and Wiltbank (2009) could also been made the other way round. Testing hypothesis 4C, *entrepreneurs operating in countries with a high level of uncertainty avoidance will have a tendency to be more focused on expected returns,* shows entrepreneurs from Russia slightly more focused on expected returns (M = 6.25, SE = 0.50) than entrepreneurs from the Netherlands (M = 5.76, SE = 0.51). This difference, -0.49, BCa 95% CI [-2.16, 1.18], was not significant, $t(64) = -0.58$, $p > .05$. Therefore, hypothesis 4C is **not supported.** Testing the final alternative hypothesis, *entrepreneurs operating in countries with a low level of uncertainty avoidance will have a tendency to be more focused on affordable loss,* shows entrepreneurs from Russia slightly more focused on affordable loss (M = 2.90, SE = 0.39) than entrepreneurs from the Netherlands (M = 2.78, SE = 0.38). This difference, -0.12, BCa 95% CI [-1.44, 1.20], was not significant, $t(64) = -0.18$, $p > .05$. Therefore hypothesis 4D is **not supported.**

6.DISCUSSION

In this paper a comparison is made between novice entrepreneurs in two different countries, Russia and the Netherlands. The theory of Sarasvathy (2001) about causation and effectuation is compared with the cultural dimensions of GLOBE and the distinction between PBCs and SSCs made by Stephan & Uhlaner (2010). This paper tried to contribute in the field

of entrepreneurial research to find differences between novice entrepreneurs operating in different countries. First of all, the current literature about culture and entrepreneurship is explained. Second using the current literature four sets of hypotheses are drawn and third, using think-aloud protocols, data is collected and fourth this data is tested using statistical methods.

6.1 Initial Discussion and Interpretation of Results

Sarasvathy (2001) made clear that different entrepreneurs differ in the way they approach business. GLOBE, Hofstede (2001) and Stephan & Uhlaner (2010) have written extensive literature about differences between countries. Although some argue that these differences are not measurable (McSweeney, 2002), countries differ in all kinds of aspects and national culture is most accepted in major business literature. GLOBE and Hofstede (2001) both described culture in terms of dimensions for analysis. However, Hofstede (2001) focused solely on values, while GLOBE investigated both values and practices. For this research the practice approach by GLOBE is used, because these practices display the actual cultural differences instead of the cognitive differences. Although only one hypothesis is somehow supported, some things became clear from this research. First, as Sarasvathy (2001) suggested, different entrepreneurs use different approaches to start their venture. Although the differences between entrepreneurs in Russia and the Netherlands are often not significant. The differences between entrepreneurs in one country are high. This can be concluded due to the high standard deviation of each dataset (see Appendix). As the data from GLOBE and Stephan & Uhlaner (2010) suggested, differences between entrepreneurs in different countries exist. However, this research showed that when comparing Russia and the Netherlands, only one aspect turned out to be significantly different. Entrepreneurs operating in countries with a low level of uncertainty avoidance are more oriented in predicting the future. Other aspects turned out to be not significant or significant in an opposite way than suggested by the literature (hypothesis 1A and 3A). Due to the high standard deviation of the data, the small sample size and the minor differences between the two countries, the differences between the two countries not being significant can be easily explained. However, why two hypotheses are significant in the reverse way than suggested by the literature is harder. A plausible explanation might be that the entrepreneurs investigated in this research are not representative for all the entrepreneurs of one nation, enlarging the sample size could solve this problem. Another explanation could be that entrepreneurs as units of analysis differ from other members of society. But even a failure of current literature cannot be excluded, future research should investigate this.

6.2 Limitations, Strengths and Directions for Future Research

In interpreting the results mentioned in the results section, it is necessary to keep in mind the limitations of the research design. Since only two countries are compared in this research, results may not apply for all countries. The sample size can be considered small as well, since in Russia only 20 novice entrepreneurs are included. Another concern regarding this research is the deviation in data from different entrepreneurs in a similar country. For instance with the aspect of contingencies in the Netherlands, the highest score was 16 while the lowest was only none mention at all about avoiding contingencies in the entrepreneurial process. Also the data was not normally distributed, which indicates that differences among respondents in a similar country are high. Although the statistical bootstrapping is a useful way to overcome this problem, there are also some drawbacks of this method. Each time the bootstrapping method is repeated the results slightly differ, because other random samples are taken by the computer. On this small scale this will probably not cause any problems, but if the research is extended to other countries this might imply differences between countries with do not exist in practice. Instead of using the bootstrap it is better to enlarge the sample size to gain normally divided data.

These issues make it hard to say whether entrepreneurs from one country behave comparable when starting a business. To find out whether these differences are really caused by culture instead of character, future researchers should increase the sample size and investigate

more countries. If the results of this research will hold in more cases it will be more useful for education towards entrepreneurship in a certain country. It might as well be the case that hypotheses which did not hold in this research will hold in a majority of other countries.
Using think-aloud protocols is an approved way of collecting data among entrepreneurs. Using this method provides the researcher with more honest answers instead of socially desired answers, which might be when using a survey (van Someren, Barnard, & Sandberg, 1994).

7.CONCLUSION

This research contributed to the field of empirical research by combining the literature from Sarasvathy (2001) with the cultural dimensions of GLOBE. It provided a potential entrepreneur with useful insights on entrepreneurship abroad. And showed a teacher educating entrepreneurship that differences exists between countries, but that these differences are not predictable like the current literature suggests. Looking back at the research question given in the introduction section, *to what extent is national culture of influence on strategy development in the entrepreneurial process?* It can be concluded that cultural differences do have a significant influence in strategy development in the entrepreneurial process but that these differences cannot be written down in a manual for entrepreneurship abroad.

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9. APPENDIX

SPSS results testing hypotheses:

Group Statistics

Country			Statistic	Bootstrap[a] Bias	Bootstrap[a] Std. Error	Bootstrap[a] BCa 95% Confidence Interval Lower	Bootstrap[a] BCa 95% Confidence Interval Upper
Contingencies	NL	N	46				
		Mean	4,46	0,02	0,60	3,20	5,80
		Std. Deviation	4,20	-0,04	0,37	3,53	4,79
		Std. Error Mean	,62				
	RU	N	20				
		Mean	8,65	-0,08	0,93	7,06	10,17
		Std. Deviation	4,21	-0,16	0,65	2,91	5,03
		Std. Error Mean	,94				
Embracing	NL	N	46				
		Mean	2,54	0,01	0,35	1,84	3,34
		Std. Deviation	2,49	-0,04	0,36	1,83	3,05
		Std. Error Mean	,37				
	RU	N	20				
		Mean	1,75	-0,03	0,28	1,27	2,21
		Std. Deviation	1,29	-0,06	0,23	0,90	1,58
		Std. Error Mean	,29				
Creation	NL	N	46				
		Mean	1,57	0,00	0,18	1,20	1,96
		Std. Deviation	1,28	-0,01	0,12	1,06	1,46
		Std. Error Mean	,19				
	RU	N	20				
		Mean	2,35	-0,04	0,46	1,61	3,12
		Std. Deviation	2,08	-0,09	0,37	1,37	2,52
		Std. Error Mean	,47				
Prediction	NL	N	46				
		Mean	3,96	0,01	0,43	3,14	4,86
		Std. Deviation	2,92	-0,04	0,26	2,42	3,32
		Std. Error Mean	,43				
	RU	N	20				
		Mean	12,30	0,00	0,89	10,55	14,17
		Std. Deviation	3,95	-0,16	0,69	2,79	4,80
		Std. Error Mean	,88				
Alliances	NL	N	46				
		Mean	4,26	0,02	0,44	3,34	5,23
		Std. Deviation	3,10	-0,04	0,28	2,60	3,52
		Std. Error Mean	,46				

	RU	N	20				
		Mean	2,90	-0,03	0,33	2,25	3,45
		Std. Deviation	1,52	-0,04	0,21	1,13	1,79
		Std. Error Mean	,34				
Competitive	NL	N	46				
		Mean	4,04	-0,01	0,40	3,39	4,74
		Std. Deviation	2,80	-0,06	0,27	2,37	3,16
		Std. Error Mean	,41				
	RU	N	20				
		Mean	4,60	-0,02	0,41	3,86	5,33
		Std. Deviation	1,79	-0,06	0,24	1,41	2,07
		Std. Error Mean	,40				
Expected	NL	N	46				
		Mean	5,76	0,01	0,51	4,84	6,78
		Std. Deviation	3,42	-0,04	0,34	2,82	3,97
		Std. Error Mean	,50				
	RU	N	20				
		Mean	6,25	-0,01	0,50	5,33	7,15
		Std. Deviation	2,27	-0,07	0,30	1,76	2,62
		Std. Error Mean	,51				
Loss	NL	N	46				
		Mean	2,78	0,01	0,38	2,00	3,67
		Std. Deviation	2,71	-0,04	0,33	2,09	3,22
		Std. Error Mean	,40				
	RU	N	20				
		Mean	2,90	-0,03	0,39	2,25	3,50
		Std. Deviation	1,77	-0,06	0,19	1,44	1,98
		Std. Error Mean	,40				

a. Bootstrap results are based on 1000 bootstrap samples

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Contingencies	Equal variances assumed	0,44	0,51	-3,72	64,00	0,00	-4,19	1,13	-6,44	-1,94
	Equal variances not assumed			-3,72	36,19	0,00	-4,19	1,13	-6,48	-1,91
Embracing	Equal variances assumed	6,56	0,01	1,34	64,00	0,18	0,79	0,59	-0,39	1,97
	Equal variances not assumed			1,70	61,84	0,09	0,79	0,47	-0,14	1,73

Creation	Equal variances assumed	5,34	0,02	-1,88	64,00	0,06	-0,78	0,42	-1,62	0,05
	Equal variances not assumed			-1,56	25,41	0,13	-0,78	0,50	-1,82	0,25
Prediction	Equal variances assumed	1,30	0,26	-9,56	64,00	0,00	-8,34	0,87	-10,09	-6,60
	Equal variances not assumed			-8,49	28,44	0,00	-8,34	0,98	-10,35	-6,33
Alliances	Equal variances assumed	13,84	0,00	1,86	64,00	0,07	1,36	0,73	-0,10	2,82
	Equal variances not assumed			2,39	62,97	0,02	1,36	0,57	0,22	2,50
Competitive	Equal variances assumed	6,07	0,02	-0,82	64,00	0,42	-0,56	0,68	-1,92	0,81
	Equal variances not assumed			-0,97	54,85	0,34	-0,56	0,58	-1,71	0,60
Expected	Equal variances assumed	4,22	0,04	-0,58	64,00	0,56	-0,49	0,84	-2,16	1,18
	Equal variances not assumed			-0,68	53,19	0,50	-0,49	0,72	-1,92	0,95
Loss	Equal variances assumed	2,85	0,10	-0,18	64,00	0,86	-0,12	0,66	-1,44	1,20
	Equal variances not assumed			-0,21	53,71	0,84	-0,12	0,56	-1,25	1,01

Bootstrap for Independent Samples Test

			Bootstrap[a]				
						BCa 95% Confidence Interval	
		Mean Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
Contingencies	Equal variances assumed	-4,19	0,10	1,13	0,00	-6,87	-1,36
	Equal variances not assumed	-4,19	0,10	1,13	0,00	-6,87	-1,36
Embracing	Equal variances assumed	0,79	0,04	0,46	0,08	-0,23	1,93
	Equal variances not assumed	0,79	0,04	0,46	0,08	-0,23	1,93
Creation	Equal variances assumed	-0,78	0,04	0,50		-1,96	0,40
	Equal variances not assumed	-0,78	0,04	0,50		-1,96	0,40
Prediction	Equal variances assumed	-8,34	0,01	0,99	0,00	-10,48	-6,45
	Equal variances not assumed	-8,34	0,01	0,99	0,00	-10,48	-6,45

Alliances	Equal variances assumed	1,36	0,05	0,56	0,02	0,18	2,72
	Equal variances not assumed	1,36	0,05	0,56	0,02	0,18	2,72
Competitive	Equal variances assumed	-0,56	0,01	0,58		-1,61	0,55
	Equal variances not assumed	-0,56	0,01	0,58		-1,61	0,55
Expected	Equal variances assumed	-0,49	0,02	0,72		-2,00	0,95
	Equal variances not assumed	-0,49	0,02	0,72		-2,00	0,95
Loss	Equal variances assumed	-0,12	0,05	0,56	0,84	-1,33	1,32
	Equal variances not assumed	-0,12	0,05	0,56	0,84	-1,33	1,32

a. Bootstrap results are based on 1000 bootstrap samples

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