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Bachelor's thesis International Business Administration

Measurement of culture

Measurement of culture; are regional and national level culture any different? India as a case study.



Supervisors:

M. Stienstra MSc

PD. Dr. R. Harms

Arnoud Weustink

arnoudweustink@gmail.com

International Business Administration

Student Number: s1020382

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Preface

The differences in culture have always been an interest to me. When I was younger I observed the differences, later I began to experience them during holidays and friends from different cultures. During my study at the University of Twente I have worked for 3 years at AIESEC, an organization that facilitates the exchange of students all over the world to get more intercultural understanding. During my work I came across a variety of cultures. I was responsible for the incoming interns to Twente from all over the world, I have lead a team with different nationalities, have been to many national and international conferences and have been on exchange abroad. I saw different ways of working, different not meaning better or worse, it only means another possible way of dealing with the circumstances. Circumstances that relate to culture, only does it also relate to national culture?

For my bachelor thesis I was searching for a project that was researching the topic of intercultural differences to relate my question to it: is culture always related to the nationality of people? Searching within the University of Twente for a research project in that direction, I came across the Entrepreneurial Processes in a Cultural context (EPICC) project of Mr. M. Stienstra and Dr. R. Harms. They are studying the entrepreneurial processes as a sequence of activities and decisions in different cultural contexts. Doing this in different countries all over the world the influence of (national) culture can be measured on these processes.

India stood out for me with doing research on different countries and their cultural background. As a good basis to do research from, it is one of the countries that has English as a native language so research is more valuable and more valid. Moreover I chose India because of its enormous history different cultures. The country is the second biggest country in the world, and different parts of India have been colonized for a longer period of time. Have these colonized periods have had influence on the culture and if so, does one national culture in India then exist? And how can one connect this to other countries, how can one measure culture in a country accurately?

To get a sense of the direction of the research, I decided to go to India for seven weeks in the summer of 2013. I travelled the country for two weeks to experience different parts of the country. I went first through the state of Tamil Nadu for a week, and afterward travelled through the state of Kerala from the south upward to the north ending up in Manipal, Karnataka. In Manipal I did an AIESEC internship for 5 weeks, where I also did my research on the cultural differences.

Acknowledgements for the support in writing this thesis when I can back from India go out to a special group of people. First of all my first supervisor Martin Stienstra, who I already have been in contact with for more than two years. From the very first moment I was inspired by his fascination for different cultures. He has been a great and intensive support from the beginning to the very end. My second supervisor Dr. R. Harms has supported me on the project for a smaller amount of time, while he has left his critical footprint.

I also want to thank other people who have invested time and energy for support. People who are not directly related to the project but were very supportive in the process; I want to name Bob Steenhuis as a friend, André Schenk from the writing centre of the University of Twente and my mother Janny Voortman. Next to that I want to thank the people in my direct environment for the (mental) support, and AIESEC for the great network and exchange possibilities it offers that made this research more efficient. Thank you very much!

Summary

This report elaborates on the research with the research question: to what extent is a regional culture level representative for a whole country? To answer this question an in depth research has been done comparing studies on value dimensions on national and regional level to see if similar methods can be used to research on regional and national cultural levels. Next to that a research has been done in India to investigate regional cultural differences in this specific country.

To find the most accurate way to measure culture an in depth research has been done on six studies on value dimension in mainstream literature on a national level (Fink et al, 2005). The VSM framework of Hofstede (1980, 2001) is argued to be most user-friendly, cultural dimension focussed and based on the refutation of critique for more than 30 years, the easy application of the framework in everyday situations (Dahl, 2002). Next to that the framework is widely used, his work is most often cited (Dahl, 2002; Harzing, 1999; Brewer & Venaik, 2010) and last but not least; the framework is validated (Taras, 2010).

The national level of measurement is most commonly used first of all because the nationality of a person can easily be established in form of governmental registration. Second of all there is support for the notion that people who are coming from one country will be shaped by largely the same values and norms as their co-patriots (Hofstede, 1991; Smith & Bond, 1998). Thirdly because culture is not the only factor influencing human behaviour, an individual will be formed by culture but is not a 'slave of culture' (Dahl, 2002).

The national level measurement is not always most accurate. Out of the results of the studies using Hofstede's VSM method, IsHak and More (1988) pointed out that four nations – Canada, Belgium, Malaysia and the United States – are composed of more than one culture. Linguistic, regional, tribal, ethnic, religious and caste cleavages within nations may make the data non-representative for the whole of the nation (Bosland, 1985). Taking these cultural terms as similar variables means that regulative mechanisms governments can use as rules and laws to impose certain practises or values systems on their citizens are not taken into account (Peterson & Smith, 2008). Therefore taking nation-state as primary research unit is being potentially misleading (Huo & Randall, 1991; Tung, 2008).

Hofstede's (1980, 2001) VSM can also be used to explore regional cultural differences. Bosland (1985) contended that the VSM should be limited to countries which are internally homogeneous. However, abiding by this guideline would limit our understanding of cultural differences as it *"forces researchers to forgo studying a number of culturally heterogeneous countries such as China and India"* (Bosland, 1985 in Huo & Randall, 1991: 167).

Multiple studies on regional cultural differences concluded that within some countries it is better to measure regional cultural differences to measure culture accurately. They have given results in line with Bosland's (1985) arguments. For example China (Huo & Randall, 1991; Kwon, 2010) and Brazil (Hofstede et al, 2008) confirmed the contentment of Bosland (1985): Brazil as an internally homogeneous country does not have significant differences among regions within the country, where China – as internally heterogeneous country – has regional cultural differences within the country.

This research in India brought to light that India is an internally heterogeneous country. Previous research had concluded that India could be internally heterogeneous (Huo & Randall, 1991) and this research confirms that theory. On one hand the right direction was set by an ethnographic study what later on confirmed the statement from literature: the more economically develop a region, the more Individualism (Huo and Randall, 1991).

Next to that once again the VSM was proven to be as firstly an method that is easily applicable, user-friendly and reproducible to ensure efficiency and the comparison with other studies (Yageneh et al, 2009; Hoppe, 2007), secondly based on value dimensions instead of preferred (Dahl, 2002, Fink et al., 2005) and thirdly validated by the amount of participants and by other academic writers that they correctly measure what they say to measure. This count for both regional and national level measurement, that makes it well useable for efficient and effective cultural measurement in further empirical research.

1. Introduction

1.1 Background

The way people behave different from each other has always been an area of interest of many researchers (Fink et al., 2005). While traveling through for example Europe one can see all kinds of different places which have their own tools, pottery, houses, machines and works of art, which are artefacts of culture, formed in history and shaped over time (Bates & Plog, 1976). These artefacts together with words and gestures are the most superficial layer of culture, which can be compared to the outer layer of an onion. In this kind of view, the cultural system can be peeled, layer by layer in order to reveal the content (Dahl, 2004). In this way one who is interested in culture – for example a researcher – can evaluate and research a culture.

Following the onion a layers inwards, artefacts are formed by hero's - with properties that are highly valued in a culture and because of that, function as a role model – and rituals – collective activities that are technically unnecessary to reach a goal, but are seen as social essential within a culture. The core of the onion consists of a pattern of values where the artefacts, heroes and rituals are formed from (Hofstede, 2011). The differences in artefacts, heroes and rituals can directly relate to differences in culture (Bates & Plog (1976). This research will be focussed on cultural differences, which can be researched by studying values (Hofstede, 2011).

Culture provides a communally held set of customs and meanings, many of which are adopted by the person, becoming part of personality and influencing interactions with the social and physical environment (Dake, 1991). The word 'culture' itself comes from the Latin word 'cultura' that is derived from 'colere' which means cropping, editing, worshiping, decorating and entertaining; to cultivate (Dahl, 1998; 2000). Many definitions of culture are similar to *"the collective programming of the mind distinguishing the members of one group or category of people from the other"* (Hofstede, 2011: 21). The work of Hofstede is most cited definition and so the most commonly used (Dahl, 2002; Harzing, 1999; Brewer & Venaik, 2010).

1.2 Context

There are different levels on which one can look at culture (Hofstede, 2011):

- On national level; based on one's country.
- On regional, ethnic, religious and/or language level; because most nations consist of more than one cultural different region.
- On sex level; if you were born as a boy or girl.
- On generation level; separating parents from their children.

- Social-class level; correlates with received education and profession.
- Employee level; on organisation, enterprise or department level depending on where people get associated with.

Of these levels of culture, the latter has raised attention for the past two decades in empirical research, mainly because entrepreneurship is often regarded as a very important economic development strategy to develop country's economy and maintain the country's competitiveness (Schaper & Volery, 2004; Venkatachalam & Waqif, 2005).

The national cultural level has been the preferred level of research for example because there is considerable support for the notion that people coming from one country will be shaped by largely the same values and norms as their co-patriots (Hofstede, 1991; Smith and Bond, 1998 in Dahl, 2004). Only taking national culture as level of measurement, within country differences could be ignored (Kwon, 2010). This means that it can make the data non-representative for the whole of the nation (Bosland, 1985) and can make the outcome of research potentially misleading (Huo & Randall, 1991; Tung, 2008). Also McSweeney (2002) has found different ways why national culture is not the most accurate way to measure culture, which will be elaborated on at the end of chapter 2 when his critique on Hofstede's (1980, 2001) work will be discussed.

1.3 Main research question

The goal of this research is to determine what is the predominating measurement to measure culture in an country accurately. There is research has been executed with regional culture as level of measurement. Among others, regional cultural differences have been researched in China (Huo & Randall, 1991; Kwon, 2010) and Brazil (Hofstede et al, 2010). The research in Brazil resulted in a conclusion that Brazil is a homogeneous country where the culture from different regions does not differ enough to call it a real difference (Hofstede et al., 2001). Therefore national culture is a useful level of measurement that formulates the culture in the country accurately. In contradiction, in China cultural differences conformably were found across different regions (Huo & Randall, 1991). The goal of this study is to research what most accurate tool is to measure culture in countries. The first step will be set by this research by answering the following research question:

'To what extent is cultural measurement on a regional level more useful than on a national level to measure culture in a country accurately?'

Outline of the report

In Chapter 2 literature on the topics of national and regional level cultural measurement is discussed. Chapter 3 consists of methods of the research; Chapter 4 contains the results with conclusions and the study is discussed in Chapter 5 with recommendations of further research.

2. Theoretical background

2.1 Culture and values

As seen in the previous chapter, values are in the core of any culture – Hofstede (2011) described it as the core of an onion. Values are “*a learned organization of rules for making choices and for resolving conflicts. These rules and guideposts are normative and teach us what is useful, good, right, wrong, what to strive for, how to live our life and even what to die for*” (Rokeach, 1973: 161) what comes forward in the way the artefacts, heroes and rituals are built on the core of the union (Hofstede, 2011). These values are studied to understand differences and similarities between human beings from different cultural backgrounds (Hills, 2002). The studies of value differences are the best conceptual frameworks currently available to guide cross-cultural research (Smith & Bond 1998).

2.2 Levels of analysis

2.2.1 NATIONAL LEVEL MEASUREMENT

For cross-cultural research the national level of culture is mostly used (Fink et al., 2005). There are three main reasons why. First of all the nationality of a person can easily be established in form of governmental registration. This is more difficult for subcultures, particularly in cases where individuals are members of various sub-cultures at the same time. Researching national culture means there is no unnecessary duplication and it removes ambiguity in the research process (Dahl, 2002). Second of all there is support for the notion that people who are coming from one country will be shaped by largely the same values and norms as their co-patriots (Hofstede, 1991; Smith & Bond, 1998). Thirdly, culture is not the only factor influencing human behaviour. An individual will be formed by culture but is not a ‘slave of culture’ of a country. This means although these value dimensions work in general on a cultural-level, these may not necessary be reflected on the behaviour of each individual living in that culture (Dahl, 2002).

2.2.2 DIFFERENT STUDIES ON NATIONAL CULTURE

Many different authors have researched the topic of national culture, its value dimensions and its influences. Fink et al. (2005) describes six studies on value dimensions in mainstream literature. In the following section a comparison will be made between the different study methods and the best method will be chosen in the section afterwards to ensure effective and efficient research. The most useful study – meaning easy applicable, value dimension based and validated – will be used to undertake this study with.

The first researchers to study value orientation were Kluckhohn and Strodtbeck (1961; in Fink et al, 2005). They proposed that it is possible to distinguish cultures based on how research participants - 106 in total - each addressed five common human concerns about

universal problems, to figure out human's relations with time, nature and each other, the basic human motives and the basis of human nature.

The same corporate angle to intercultural differences research was used a few decades later by Hall & Hall (1990) among 180 participants. They did a similar research with the focus to help managers in the United States understand the behaviour of West-German and French employees based on four value dimensions. Their idea is that this understanding happens when one experiences a very different culture. The role of culture is both the influential factor for behaviour as well as the interpretation factor of behaviour, defined in four value dimensions: fast versus slow messages, high versus low context messages and the value definition of space and time.

A more extensive research has been executed by Trompenaars & Hampden-Turner (1994) who did his research among 15.000 employees in companies, focussed on mixed behavioural and value patterns as cultural dimensions of business execution. He defines seven value orientations as waves of culture that involve the definition of diffuse versus specific cultures, universalism, individualism, the achievement versus ascription and the human aspects of emotions and the relationships with time and nature, focussed on the behaviour aspect.

The most comprehensive study to date that empirically researched the relationship between culture and leader behaviour in so many societies (Hoppe, 2007), is the research of the Global Leadership and Organizational Behaviour Effectiveness (GLOBE) group (House et al., 2004). They conducted research on 17.300 middle managers in 951 organizations focussing on the preferred states of behaviour as measurement instrument. This research takes the results of the research of Hofstede (1980, 2001) – explained in the next paragraph – as a base. The major finding of the research is that leader effectiveness is contextual. It is embedded in the societal and organizational norms, values and beliefs of the people being led.

As the first step to gauge leader effectiveness across cultures, GLOBE empirically established nine cultural dimensions to make it possible to capture the similarities and/or differences in norms, values, beliefs among societies building on the work of many researchers till that date. (Hoppe, 2007).

Also the research of Hofstede (1980, 2001) is focussed on the value dimensions. With this research GLOBE expanded Hofstede's (1980) research by a very large empirical study. The work that Hofstede published in 1980 – investigating approximately 116.000 IBM-employees in the 1970's - was based on his Value Survey Method (VSM) examining work-related values in 79 different countries and continental regions. In his research he sees culture as *"the collective programming of the mind distinguishing the members of one group or category of*

people from the other" (Hofstede, 2011: 21), where he aggregates scores of individuals within one organization to form the business' cultural outcome.

A radical departure of these behavioural aspects was taken by Schwarz (1994) using values as measurement instrument instead of the preferred states of behaviour. Schwarz's work is separated into an individual-level analysis and a culture-level analysis. In this he was very clear about the individual and cultural levels of analysis, where Hofstede (1980) and Trompenaars & Hampden-Turner (1994) are not that clear although they claim to work on cultural level (Dahl, 2002). In his research involving 60.000 students and teachers in 63 different countries, he used his own Schwartz Value Inventory (SVI). With this method he was not asking for preferred outcomes but asked the respondents to assess 56 values as to how important they felt these values are as "guiding principles of one's life" (Schwartz, 1994).

2.2.3 MOST USEFUL METHOD TO MEASURE CULTURE ON A NATIONAL LEVEL

I came across three topics that are frequently discussed in literature on national level cultural measurement. Based on these topics the most useful method for national cultural measurement will be chosen. These are:

1. The method should be easily applicable, user-friendly and reproducible to ensure efficiency and the comparison with other studies (Yageneh et al, 2009; Hoppe, 2007).
2. The method should be based on value dimensions instead of preferred behaviour because when participants are asked about values rather than specific outcomes they may be inclined to choose a more utopian answer what may not reflect their actual behaviour (Dahl, 2002, Fink et al., 2005).
3. The method should be validated by the amount of participants and by other academic writers that they correctly measure what they say to measure (Taras, 2010).

2.2.3.1 USER-FRIENDLINESS

The method should be easily applicable, user-friendly and reproducible to ensure efficiency and the comparison with other studies.

The user-friendliness of the first two studies described (Kluckhohn & Strodtbeck, 1961; Hall & Hall 1990) is high due to the low amount of value dimensions. It makes it easy to apply, and easy to reproduce. The same goes for Hofstede (1980, 2001), only for using his framework no raw data is necessary for reproduction while in the first two cases it is.

To explain why the three methods of study do not work, first Trompenaars & Hampden-Turner (1994) will be explained. This study method does not consider cultural dimensions linear and divided. Next to that there are a lot of similarities between the model of Hofstede (1980) and Trompenaars & Hampden-Turner (1994) except for the fact that the study of the second study offers a model with additional dimensions, but apart from the overlap

Trompenaars & Hampden-Turner's (1994) model does not provide a practical approach to measure culture in an adequate way. Together with the fact of the blurry borders makes this model less applicable for this research (Yeganeh et al., 2009).

Extending a research also means extending the amount of dimensions. That is what the GLOBE research group did with the Hofstede (1980) research. This makes the model to appear robust from empirical standpoint (Yeganeh et al., 2009). On the other hand it does not offer any conceptual novelty and only makes it more complex to measure. The dimensions are not broad enough to be considered as pure cultural values. Next to that the model falls short in applicability as it only deals with work-related values (Yeganeh et al., 2009).

The comprehensiveness of value types of Schwartz (1994) – a total of 56 types – makes the value types relatively mutually exclusive. It offers insight into structures of value types what makes it very useful in empirical research to produce visible figures of the values and their possible relationships (Yeganeh et al., 2009). Only because of the many values parts in Schwartz' research it is hard to reproduce correctly (Yeganeh et al., 2009).

To conclude, the work of Kluckhohn & Strodtbeck (1961), Hall & Hall (1990) and Hofstede (1980, 2001) fulfil the criteria as indicated and will therefore be the focus of what sort of framework can be used for this study.

2.2.3.2 CULTURAL DIMENSION BASED

The method should be based on value dimensions instead of preferred behaviour because when participants are asked about values rather than specific outcomes they may be inclined to choose a more utopian answer what may not reflect their actual behaviour (Dahl, 2002).

Until now, literature in the English-speaking world has mainly concentrated on two types of cultural constructs: cultural dimensions and personality traits (Fink et al., 2005). Cultural dimensions measure values – that is, *“a conception, distinctive of an individual of a desirable which influences the selection from available modes, means and ends of action”* (Kluckhohn, 1951; 395). Personality traits can be understood as dispositional motives used by individuals during goal attainment (Buss, 1991). While personality traits are focussed on the individual level of measurement, the cultural dimension are focussed on the differences between groups, what makes it better suitable for the research on cultural differences.

Cultural dimensional research has been rising with the research of Kluckhohn & Strodtbeck (1961), who were one of the first researchers who studied culture based on cultural dimensions. With the focus of their research on cultural dimensions they have served as a benchmark for all further research on values and for the development of measurement of cultural dimensions. Hall & Hall (1990) did a similar research with the focus to help managers in the United States understand the behaviour of West-German and French employees.

Another similar research based on the benchmark of Kluckhohn & Strodtbeck (1961) was the study of Hofstede (1980, 2001) with 4 cultural value dimensions. Later House et al. (2004) with the GLOBE research extended that research on value dimensions making it 9 dimensions and distinguishing situations *as is* and *as should be*.

Considerate differences in comparison to other studies with a similar focus of research were shown by the sample of Trompenaars & Hampden-Turner (1994). Trompenaars & Hampden-Turner (1994) seems to focus more on some resulting effects of underlying value dimensions – similar to personality traits - what means that it is more focussed on the behaviour aspect instead of the value itself. By this difference, evidence for correct findings based on comparison with other literature is nowhere to be found (Dahl, 2002).

Many advantages make the model of Schwartz (1994) suitable for research (Yeganeh et al., 2009). Because of the radical departure of these behavioural aspects Schwartz (1994) eliminates, at least potentially, the chance of situational variables having strong impact on the respondents. This also means it has influence on consequence that respondents - when asked about values rather than specific outcomes – may be inclined to choose a more utopian answer what may not reflect their actual behaviour (Dahl, 2002).

To conclude this cultural dimension part, the focus of the first four studies described is on cultural dimensions – Kluckhohn & Strodtbeck (1961), Hall & Hall (1990), Hofstede (1980, 2001) and later House et al, (2004) are most suitable for research on a cultural level. The research of Trompenaars & Hampden-Turner (1994) and Schwartz (1994) take a radical departure from this reasoning what makes the use of their models better applicable for research on a psychology level.

With the first two criteria discussed, Kluckhohn & Strodtbeck (1961), Hall & Hall (1990), Hofstede (1980, 2001) still fulfil all the criteria.

2.2.3.3. CHOICE OF FRAMEWORK

Next to the first two criteria, the method of use should be validated by the amount of participants and by other academic writers that they correctly measure what they say to measure (Taras, 2010).

The general rule in research is, the bigger the amount of participants for a research, the higher the external validity can be. The first two studies mentioned - Kluckhohn & Strodtbeck (1961) and Hall & Hall (1990) – are with respectively 108 and 180 participants not strong in generalizability. Next to that both have problems with objective measurements. In the framework of Kluckhohn & Strodtbeck (1961) there is a lack of objective and measurable yardsticks for cultural orientations, whereas Hall & Hall's framework does not provide objective measurements for cross-cultural comparison (Yeganeh et al., 2009).

The biggest concern with Hall & Hall's elements is that they are not mutually exclusive and seem subjective. For instance, the notions of high/low context and

monochromic/polychromic are conceptually overlapping (Yeganeh et al., (2009). Furthermore, Hall & Hall's framework does not distinguish any ranking between its elements. Its framework might be most useful in comparisons between unrelated cultures and not so much in related cultures (Yeganeh et al., (2009).

The exclusiveness of the model is the problem with the model of Trompenaars & Hampden-Turner (1994); it is very low. Some of the cultural orientations have blurry borders. This shortcoming decreases the applicability in cross-cultural research. Trompenaars & Hampden-Turner (1994) model measures the intensity of cultural values, however, it is not appropriate to measure or compare the relative importance of every cultural value with respect to other values (Yeganeh et al., 2009). Also the sample used in the Trompenaars & Hampden-Turner (1994) research is highly different from other studies in the focus of the research. They seem to focus more on some resulting effects of underlying value dimensions which means that it is more focussed on the behaviour aspect instead of the value itself. By this difference again, evidence for correct findings based on comparison with other literature is nowhere to be found (Dahl, 2002). Together with the fact of the blurry borders makes this model less applicable for this research (Yeganeh et al., 2009).

Being based on the research theory of Kluckhohn & Strodtbeck (1961) and Hofstede (1980) makes the model of the GLOBE research (House et al., 2004) to appear robust from empirical standpoint (Yeganeh et al., 2009). On the other hand it does not offer any conceptual novelty. The scales assess unfounded stereotypes rather than objective features of the society (McCrea et al., 2008) and for that do not measure what should be measured.

As stated before the model of Schwartz (1994) has many advantages that make it suitable for research (Yeganeh et al., 2009). Because of the radical departure of these behavioural aspects Schwartz (1994) eliminates, at least potentially, the chance of situational variables having strong impact on the respondents (Dahl, 2002). This also means it influences respondents when asked about values rather than specific outcomes. This means one may be inclined to choose a more utopian answer what may not reflect their actual behaviour (Dahl, 2002). So using this model could mean that one is not measuring what one wants to measure and that makes the outcome potentially misleading.

Five study methods have been discussed that were not ranked high on validation. The next study is not only validated, it is also the study that has been most widely written about (Dahl, 2002; Harzing, 1999; Brewer & Venaik, 2010). This longer and deeper discussion on this study results in more information available to write about, so here is the more detailed description:

There are several writers who have criticised the work of Hofstede (1980, 2001) that starts at the research it was based on; the methodology of George Murdock (1969). This methodology is rather universal and does not take into consideration the interaction among

societies and because of this can only be valid if they are isolated from each other (Rokkan, 1996). Next to that, Hofstede's work is concentrating on cross-cultural studies in business research and not in sociology and anthropology, so he was trying to unify national characteristics in one variable while analysing organizational or business behaviour (Rokkan, 1995). In contrast to that, in the GLBOE research they used two formats of culture questions: 'in this society' and 'in this organization'. One half of the respondents received the first format, the other half the second. In the GLOBE research in most cases the format scores were closely related and in the GLOBE book they are not even treated separately (Hofstede, 2006). Next to that, Hofstede agrees that nations are not suitable units of a culture study, but *"they are usually the only kinds of units available for comparison"* (Hofstede, 2002: 2).

Other weak points were found by McSweeney (2002) on the empirical descriptions of Hofstede's work. He argues there are weak points in all of Hofstede's assumptions and that they are incorrect. Consequently they lead to false empirical descriptions despite the amount of used data and statistical manipulation. Next to that he argues that Hofstede did not manage to characterize culture fully and his work is too restricted. I will first name the five main critics and secondly name the responses of Hofstede.

The first critique comes from the combination of three non-interacting and durable cultures measured in the research: 'organizational', 'occupational' and 'national'. Here only national culture would differ, because the research was done at one and the same organization (IBM) and the occupational respondents were matched. Only the similarities in organizational culture of IBM offices are doubtful (McSweeney, 2002).

The second critic is that a national aggregate measured with the VSM, is *the* national aggregate. Applying this rule would imply that every individual within a country would share the same national culture – the country would be internally homogeneous – what does not make sense because then the third component 'national' culture as discussed in critique 1 would also be a constant factor (McSweeney, 2002).

A third critique is about the questionnaire. The layers of the questionnaire would produce differences in the way it is setup (Schwarz, 1994; in McSweeney, 2002). It can be linked anything, where Hofstede linked it to culture.

For the fourth critique, let us assume that the third critique is correct. Having assumed that the pertinent response differences were caused by national values, Hofstede supposes that the questionnaire response differences are decipherable manifestations of culture. But 'cause' and 'effect' are not identical: the particulars (opinions) are logically and empirically distinct from culture (McSweeney, 2002).

A fifth and last critique from McSweeney on his work is the assumption that the situation in IBM is the same in any circumstances within a nation. *"I suggest that the apparent derivation of a national generalization from situationally specific data is in fact a presupposition"* (McSweeney, 2002: 107).

In 2001 Hofstede was asked to write a response to McSweeney's critique. Hofstede (2001) argues that the re-written and updated edition of his 1980 book itself gives answers to a great part of McSweeney's critique. In his reply directly on the critique of McSweeney he agrees that surveys are not a suitable way of measuring cultural differences and says that they should not be the only way (Hofstede, 2002).

On the critique that national cultures are not the best units for studying cultures, he agrees but says that they are usually the only kind of units available for comparison, and that they are better than nothing. On the critique that studying subsidiaries of one company cannot provide information about entire national cultures he argues that *the difference between national cultures was measured* (Hofstede, 2002).

Additionally to the critiques of McSweeney he gives answers to two other formed critiques. One of the two is the critique that the IBM data are old and therefore obsolete, where he answers that *"the dimensions found are assumed to have centuries-old roots; only data which remained stable across two subsequent surveys were maintained; and they have since been validated against all kinds of external measurements"; recent replications show no loss of validity*" (Hofstede, 2002: 2).

Another frequently heard critique is that four or five dimensions are not enough, where Hofstede finds additional dimensions should be both conceptually and statistically independent from the five existing dimensions and they also should be validated by significant correlations with conceptually related external measures (Hofstede, 2002). And due to the relatively general framework for analysis, the framework can be applied easily to many everyday intercultural encounters. It is particularly useful, as it reduces the complexities of culture and its interactions into five relatively easily understood cultural dimensions (Dahl, 2002) and is validated (Taras, 2010).

The Hofstede's framework of dimensions by Hofstede is the most extensively used national cultural framework in psychology, sociology, marketing and management studies (Steenkamp, 2001). And last but not least, his work is most famous and most often cited: over 25.000 times (Dahl, 2002; Harzing, 1999; Brewer & Venaik, 2010). This whole sum of arguments together with the user-friendliness and validation makes Hofstede's VSM method most useful method to measure culture in a country accurately.

This conclusion could imply that national level of cultural measurement is most useful to measure culture in a country accurately. This, while there are reservations researching another level of measurement: the regional cultural level. Here is why.

National culture might not always be the most accurate measurement of culture in a country while in cross-cultural management research, nation and culture have regularly been defined in terms of similar variables (Kwon, 2010).

Taking these terms as similar variables means differences within a country could be ignored. Examples for these factors are local environment, organisational subculture, industry or recent history. Other reasons for regional cultural differences are regulative mechanisms of

governments that can be used as rules and laws to impose certain practises or values systems on their citizens are not taken into account (Peterson & Smith, 2008). And linguistic, regional, tribal, ethnic, religious and caste cleavages within nations may make the data non-representative for the whole of the nation (Bosland, 1985). So, taking nation-state as primary research unit is being potentially misleading (Huo & Randall, 1991; Tung, 2008), what may explain why – for example in Hofstede’s VSM – so widely divergent dimensions scores for the same national cultures are found (Bosland, 1985). All of this indicates that the regional cultural measurement level might be a better level to measure culture.

2.3 Regional culture’s measurement

The differences in national and regional level cultural measurement all come forward from the classic distinction in the study of culture which separates etic from emic approaches (Peterson & Pike, 2002). Where the etic approach compares culture according to a common external framework, the emic approach defines its distinctions from within the culture(s) in question. If studies represent the etic side, regions within a country share a common national context that translates into a common emic, which means that global-level dimension may be too coarse a framework to interpret local variation (Peterson & Pike, 2002).

2.3.2 RESEARCH ON A REGIONAL CULTURAL LEVEL

Hofstede’s (1980, 2001) research is the only research on value dimension in mainstream literature, who also lent his used method to the research of regional cultural differences. With the conclusion of using his VSM for the research on the national cultural level, the most straight-forward way for the research on regional level would be to also use the VSM here, if possible.

With the first publication of the Value Survey Method (VSM) from Hofstede’s in 1980 he puts forward that the VSM can be used for research on cultural differences on an anthropological national level. Already a few years after *Culture’s consequences* (Hofstede, 1980), the findings that Hofstede did on a national level were tested. IsHak and More (1988) pointed out that four nations within Hofstede’s sample – Canada, Belgium, Malaysia and the United Stated – are composed of more than one culture. In the same line, Bosland (1985) contended that the VSM should be limited to countries which are internally homogeneous. However, abiding by this guideline would limit our understanding of cultural differences as it *“forces researchers to forgo studying a number of culturally heterogeneous countries such as China and India”* (Bosland, 1985 in Huo & Randall, 1991: 167).

Heterogeneous countries have been researched by a number of researchers; Huo & Randall (1991) conducted the first research on the topic of cultural differences using the VSM 82 (4 cultural dimensions). They adjusted the value scores on the basis of demographic features of samples in the present study. Value differences between subcultural groupings in four

Chinese-populated regions (Taiwan, Beijing, Hong Kong and Wuhan) were studied and strong subcultural differences revealed. Even after additional adjustments were made for age, gender and proportion of higher level managers, the differences remained. The values for the different dimensions still range widely; IDV range from 20 to 67; UAI ranges from 48 to 117; PDI ranges from 24 to 85 and MAS ranges from -44 to 15. (Huo & Randall, 1991). *“Our study also demonstrates that VSM, with appropriate statistical modifications, can be used to facilitate comparison across various political subdivisions and still yield meaningful interpretation”* (Huo & Randall, 1991: 167).

In 2010 Brazil was subject of research of regional cultural differences (Hofstede et al, 2010). Dividing the country into five research regions (South, Southeast, Central West, Northeast and North) and comparing them based on the outcome of the VSM scores found and other previous conducted research, Brazil’s states were much more similar to each other than to other Latin American countries, let alone countries worldwide. This led to the conclusion that Brazil is an internal homogeneous country (Hofstede et al, 2010). With Hofstede himself doing this research with the VSM method on a regional level after all these years is the ultimate proof that he trusts the VSM on a regional level as much as on a national level. Exactly that was the outcome of the research in Brazil, saying that the VSM basically might apply to geographical regions within a country or across countries, but in this case the questionnaire may have to be extended with locally relevant items (Hofstede et al., 2010) by researching local literature, the insight of local experts and open pilot interviews across different states (Hofstede et al., 2008).

Regional cultural differences were also determined in a second study on China by Kwon (2010). Two different regions (Taiyuan and Shenzhen) were compared also using the VSM method. Differences in IDV and UAI were found across these regions so again regional cultural differences were found in research. He concluded that *“The VSM can be a useful tool to investigate cross-national differences in work-related values as evidenced when studying internally homogeneous countries. However, if researchers examined a culturally heterogeneous country such as China, such results can only provide a very limited understanding of cultural differences across regions within China”* (Kwon, 2010: 94). This shows again – next to the other study in China and the study in Brazil - that the VSM can be a useful tool that can be used to explore regional cultural differences (Kwon, 2010). That, together with the conclusion of the previous chapter – the VSM is useful for national cultural level measurement – makes that the VSM will be used for this research.

2.3.3 DIRECTION OF THE STUDY

To set direction for this research, triangulation of methods will be used. This means multiple ways are used to do the research, in this way to help setting direction. First of all a case-study in a new reality is chosen to set the direction and find more empirical support for this

study in general. An example for this is an ethnographic study, which is a study in the socio-cultural context, processes and meanings within cultural systems that can influence behaviour. With this study in-depth knowledge of this new reality can be extracted from this reality itself. In addition local relevant items that are needed (Huo & Randall, 1991; Hofstede et al., 2008) can be found. Secondly, literature research will be done.

To do the research on regional cultural differences efficient, differences in outcomes of at least one of the value dimensions of Hofstede (1980, 2001) is to be significant to provide the result regional cultural differences. This means not every value dimension need focus of research, only the value dimensions fitting most to the regional cultural differences deserve a hypothesis. Depending on the outcome of the research, the research needs at least two hypotheses as direction to form a scale to measure on without losing any valuable data for the outcome of the research. If the hypotheses both confirm that regional cultures are the same, the main research question is confirmed. The formats of these hypotheses are:

H-0: The scores for VALUE DIMENSION X in different regions within a country are the same.

H-1: The scores for VALUE DIMENSION X in different regions are significantly different.

In Chapter 4 the outcomes will be shown and the H-0 hypotheses will be rejected or not and the main research question will be answered.

3. Methods

This chapter describes what methods will be used to perform this study. Step by step the reader will be taken through the structure for answering the research question.

3.1 Introduction of methods

This executed research is a mix of a theoretical and practical research. First of all the theoretical part was described in chapter 2, where a choice was made which empirically tested framework would be used to execute the research in this study for measuring regional culture accurately: the VSM questionnaire. Secondly, to find more empirical support for this study a triangulation will be executed using multiple measurement tools. An example for this can be a first-hand qualitative ethnographic study, which will form part of the direction of the study. This will also form the additional local relevant items that are needed (Huo & Randall, 1991; Hofstede et al., 2008). Thirdly the results of the executed VSM case-study will be compared with previous research Hofstede (1980, 2001) did.

3.1.1 THE VSM METHOD

For this research, a cross sectional survey was chosen as a method because of the big reach with the possibility to calculate correlations on numerous kinds of ways (Verschuren & Doorewaard, 2007). This makes it easy for this explorational research to be expanded. As discussed in chapter 2, the VSM method is the most useful way to research cultural differences on a regional basis, which is also validated (Taras, 2010).

The Value Survey Module is a paper and pencil questionnaire developed for comparing culturally influenced values and sentiments of similar respondents from two or more countries, or regions within countries. It has 34-item questionnaire based on four questions per dimension. Questions ask for demographic information: the respondent's gender, age, education level, kind of job, present nationality, and nationality at birth. All content questions are scored on five-point likert-scales, a linear scale 1 means; I do not agree and 5; I fully agree. Index scores are derived from the mean scores on the questions for national samples of respondents. The term module means that the questionnaire can be used as part of a larger instrument comparing countries on other aspects.

Research experience has shown that the answers to the content questions are influenced by the nationality of the respondents. It is not that every respondent of nationality A gives a different answer than every respondent of nationality B, but one can expect systematic differences in the average answers from the different samples (Hofstede et al., 2008).

The content questions were selected in such a way that the comparison of matched samples from ten or more countries showed that the country scores on the four questions belonging to the same dimension usually vary together. In statistical terms, this means that the mean

country scores are significantly correlated (Hofstede et al., 2008). The different dimensions have their own formula to be calculated with:

Dimension	Formula
Power Distance	$PDI = 35(m07 - m02) + 25(m23 - m26) + C(pd)$
Individualism	$IDV = 35(m04 - m01) + 35(m09 - m06) + C(ic)$
Masculinity	$MAS = 35(m05 - m03) + 35(m08 - m10) + C(mf)$
Uncertainty Avoidance	$UAI = 40(m20 - m16) + 25(m24 - m27) + C(ua)$
Long-Term Orientation	$LTO = 40(m18 - m15) + 25(m28 - m25) + C(ls)$

Table 1: Formulas to calculate the different dimensions (Hofstede, 2008)

In the formulas, m01 is the mean score of question 01, m02 the mean of question 02 etc. The index normally has a range of about 100 points between a very small and a very large score on one of the dimensions. The C(x) is a constant (positive or negative) that depends on the nature of the samples; it puts the scores in the perspective of 0 till 100 points, but does not affect the comparison between countries (Hofstede et al., 2008). In this study the C(x) constant is not taken into account because doing so makes it impossible to compare the outcomes of this first-hand research with the outcomes of Hofstede (1980, 2001).

The earliest public version of the instrument was the VSM82 covering four dimensions that were derived from a comparison of subsidiaries of the IBM Corporation in 40 countries. The version preceding the present one is the VM 94 that covered five dimensions; the addition dimension LTO was found in a comparison of students in 23 countries using a questionnaire mainly designed by Chinese scholars (Hofstede & Bond, 1988). The most present version in the time of this research – 2013 – is the VSM08 with the five dimensions previously named.

3.1.2 IN-DEPTH KNOWLEDGE OF REALITY

Ethnography is the study of the socio-cultural context, processes and meanings within cultural systems that can influence behaviour. Of these cultural systems individuals are members, occupying physical environment by their significant social system and of significant individual and shared historical patterns. With the ethnographer participating during social activities he or she is observing, helping the ethnographer or ethnographic team to gain an emic or indigenous sense of the social setting being studied, *“Approaching the activity in process without any particular orientation in mind, but only the general question, ‘What is going on here?’”* (Spradley, 1980: 73). In this way, culturally different defined regions by literature will be observed to support these differences and abstract hypotheses about the differences in regional culture (McBride, 2012).

While a full-fledged ethnography typically demands long-term engagement in the field, ethnographic case studies can be conducted over shorter spans of time to explore narrower

fields of interest to help generate hypotheses. In the study, the ethnographer's whole body becomes a highly charged data collecting instrument to take in and process stimuli that might have meaning for the members of community, or that provide insight regarding their life ways (Spradley, 1980).

Spradley (1980) defined structure to describe situations with explanation as follows:

Number	Item	Explanation
1	Setting	The various attributes of the scene which is being observed or studied
2	Acts	Here the ethnographer is interested in the specific behavioural acts that are carried out in the social settings
3	Activities	Activities are sets of related acts
4	Events	The patterns of activities, planned or unplanned
5	Actors	The actors in the setting
6	Space	The space occupied by these actors, and how these actors are situated in the space
7	Objects	The objects in that space, and how these objects are situated or arranged
8	Time	The time of observations (hours of the day, days of the week, specific months or seasons of the year)
9	Goals	Whether there seems to be any goals associated with the behaviour of the actors
10	Emotions	Do behaviours seem to be carried out with any level of emotions or feelings?

Table 2: The structure on how to do an ethnography study (Spradley, 1980)

For the literature research articles will be read on the topic of national and regional cultural differences where the findings in those articles will be used to form a hypothesis or hypotheses. When this study produces outcomes, the outcomes will be compared with the outcomes of the Hofstede (1980, 2001) study looking at significant differences between this and his study.

3.2 India as a case study

For this study, internally heterogeneous countries are most interesting to study – there are differences between outcomes on the measurement level national to regional level culture – but first evidence has to prove the countries status of being internally heterogeneous.

Bosland (1985: 167) suggests “*a number of culturally heterogeneous countries such as China and India*”. Research has shown that China is internally heterogeneous (Huo & Randall, 1991; Kwon, 2010), but for India this is still unknown.

Next to that India is one of the 4 BRIC-countries: countries that are in a similar state of economic development and have the same growth perspective. They will undergo change and investors will find their way to that country. These four countries – the acronym stands

for Brazil, Russia, India and China - are defined as big economical influences for the future are BRIC-countries (Jim O'Neill, 2001). This makes India even more interesting to study, because the research will have even more value in the future.

Last but not least it is a country where citizens speak native English which makes doing research and translating that into results more valuable and more valid.

3.2.1 CONTEXT

The dependent variable of this study is the difference in culture across the high, mid and low disparity regions and compared with the aggregate scores of the country India. There has been research on regional differences within India already, where poverty and inequality are topic of great attention for that research. Only the main focus of economic research has been on identifying and defining the contours of poverty and redistributive policies that target the poor as a group. While this is undoubtedly essential, this has excluded the study of other ways of layering the research, most notably caste, and precludes any inferences about intergroup disparity based upon caste. For a system that has strong economic overtones such as prescriptions of a division of labour, the caste system is noteworthy for the scant attention it has received in the theoretical economic literature related to India (Deshpande, 2001).

The castes system is a system of social stratification, which is now also used as a basis for affirmative action. From English it is translated into two different meanings in Hindi that are not the same: Varna and Jati.

Varna – that literarily means ‘colour’ – classifies a person based on the basis of his attributes/characteristics. In Varna there are 4, later 5 casts/varnas. Ranked by the highest casts to the lowest, the highest cast consists of Brahims who work as priests. Kshatriyas who are warriors, the Vaisyas cast that consists of traders and merchants, the Sudras formed by those who are engaged in menial jobs and the Ant Sudras – former untouchables – who’s people work on most despicable menial jobs.

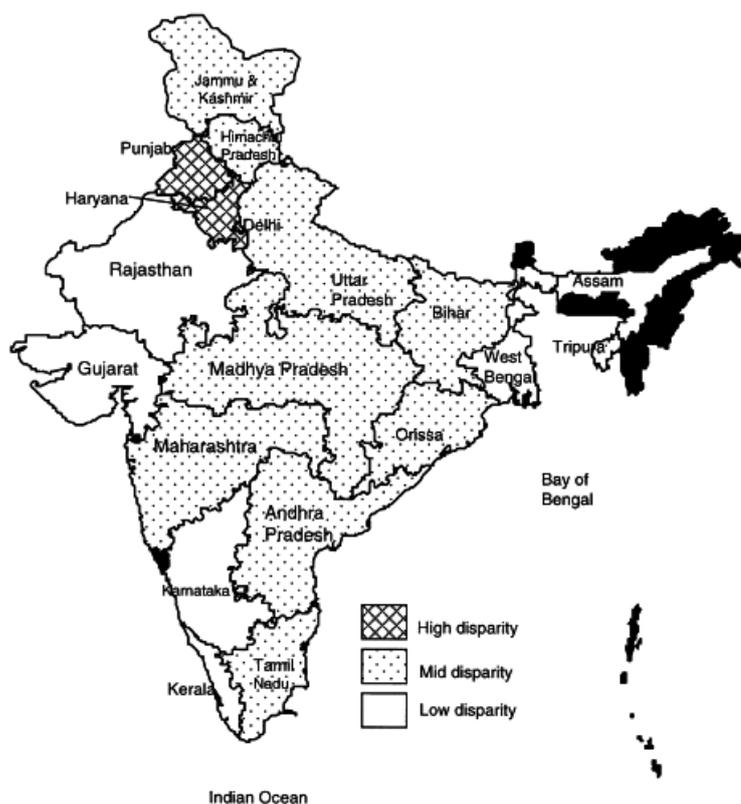


Figure 1: India split in different disparity-regions (Deshpande, 2001)

The Jati – what literarily means ‘birth’ – reflect the trade or profession of a particular community to distinguish people from the same Varna. They are also casts and share basic characteristics of the Varna. Only they follow a more complex system of hierarchy and rules of conduct towards each other. At one end of the spectrum one can find individuals who lead a life completely free of the caste code. At the other end, there are individuals whose life trajectories would follow a more or less predetermined path.

Politically, castes are perceived as “vote banks”, and thus are presumed to hold and wield power. Since the independence in 1947 there is a belief of ascendancy of non-Brahmins in the political arena that represents a fundamental change in the socioeconomic conditions of lower casts (Panini, 1996; Beteille, 1997). The research of Deshpande (2001) showed that there has not been upwards caste mobility the Ant Sudras cast in the past 50 years. He also showed evidence of inter-caste disparity (read caste cleavages) within the more general problem of poverty that differs over regions/states (Deshpande, 2001). For this explorational research the difference in disparity – high, mid and low disparity – are taken to evaluate cultural differences between these regions.

3.2.1.1 USING THE ETHNOGRAPHIC STUDY TO SET DIRECTION

To analyse this variable and confirm the disparity theory, an ethnographic study will be done to compare different disparity regions. The north of India is known for the touristic routs where the south of India should be more pure Indian culture. Two disparity regions that differ from each other and are most southern are Tamil Nadu and Kerala. Every region will be travelled and studied, one week each and by using the Spradley (1980) structure.

The state of Tamil Nadu has the highest number of business enterprises in India. The state has been home of Tamil people for more than 3500 years, where they speak the Tamil language next to their English. Kerala has an even bigger history where it was a prominent spice exporter from 3000 BCE. It is now the state with the highest Human Development Index (HDI) of the country.

Since India is known for bad hygiene, there is a high probability that cultural differences can be abstracted from hygiene habits. This will be done while traveling; stopping at different bus stations, picking two of the bus stations randomly (by tossing a coin). In Tamil Nadu is disparity low and in Kerala medium (Deshpande, 2001).

3.2.2 SAMPLE

Once the theory is confirmed 20 Indian non-MBA student-entrepreneurs from the different disparity regions will be selected to participate in this study using the VSM08 method. Student-entrepreneurs are chosen to form a coherent sample. Cultural characteristics transform and complement the institutional and economic context to influence entrepreneurship (Hayton et al., 2002) where it is often regarded as a very important for economic development factor to develop country’s economy and maintain the country’s

competitiveness (Schaper & Volery, 2004; Venkatachalam & Waqif, 2005). They create a homogenous group, where the research is only on entrepreneurs who have a non-business background. In general, in MBA programs across the world, students are taught causal or predictive reasoning (Sarasvathy, 2001), while non-MBA students are left free from this: working values are not influenced.

These non-MBA students will represent the Indian culture in the different regions. After the questionnaire is undertaken, the dimension scores of culture will be calculated using the VSM08 formulas given previously. Because the scores can be negatively as well as positively significantly different, a two sided T-test is chosen for comparison. The most commonly used Alpha-size is and compare them to each other using a two-sided t-test with alpha .05.

3.2.2 ANALYSING RESULTS

The independent variable of this study is the difference in external factors defined as disparity: high, mid and low disparity as stated before. The regions with high disparity will be taken as one group, the regions with mid disparity will be taken as one group, and the regions with low disparity will be taken as one group.

The results will be calculated using SPSS. Here the Skewness and Kurtosis form important factors. The Skewness is an indicator used in distribution analysis as a sign of asymmetry and deviation from a normal distribution. The interpretation goes as follows:

- Skewness > 0 - Right skewed distribution - most values are concentrated on left of the mean, with extreme values to the right.
- Skewness < 0 - Left skewed distribution - most values are concentrated on the right of the mean, with extreme values to the left.
- Skewness = 0 - mean = median, the distribution is symmetrical around the mean.

The Kurtosis is an indicator used in distribution analysis as a sign of flattening or "peakedness" of a distribution. The interpretation goes as follows:

- Kurtosis > 3 - Leptokurtic distribution, sharper than a normal distribution, with values concentrated around the mean and thicker tails. This means high probability for extreme values.
- Kurtosis < 3 - Platykurtic distribution, flatter than a normal distribution with a wider peak. The probability for extreme values is less than for a normal distribution, and the values are wider spread around the mean.
- Kurtosis = 3 - Mesokurtic distribution - normal distribution for example.

The results will be analysed using the Kruskal-Wallis test, because it analyses variances by ranks and is non-parametric. It calculates the if the samples originate from the same distribution by comparison.

Thereafter the Mann-Whitney U test, which is a rank-sum test that also is non-parametric. It tests the null hypothesis that and can calculate if two different populations have an overlap. With this the differences between the different regions can be calculated comparing them one by one, which gives more insights than the Kruskal-Wallis test using all of them at the same time.

3.2.3 CONTROL VARIABLES

The following variables were used as control variables: gender, age, student-entrepreneurs, and non-MBA students. Here, the level of education of the non-MBA students is most important. The level of education will be controlled by picking one of the best technological universities of India which will have students from all over India to study there: Manipal University; Manipal Institute of Technology (MIT) to be precise. Indian schools work with a point system in high school where only the best students can go to the best universities. In this way the education level is controlled as well as the fact that students who study there do not have an MBA background because of studying a technological subject. And if they do, they will not be invited for a survey.

And choosing a university also means the sample has about the same age, and at least the same stage in life where they want to learn more to provide them better perspective in future life. Then selecting student-entrepreneurs means we have a select group of like-minded people who in general are left free from being taught to reason in a causal or predictive way (Saravathy, 2001). In India there are associations to empower student entrepreneurship so it should be possible to at least start the snow-ball sampling there. Although a national culture should be represented in both males and females of a country, gender will be controlled. In India it is very hard to find female-entrepreneurs probably because of the high score in masculinity. To thoroughly conduct the analysis, women should be included in the sample.

4. Results

4.1 Setting direction

The findings of this ethnographic and literature study will determine the focus of the hypotheses by formulating a direction on one of the five dimensions of Hofstede (1980, 2001). If at least one H-0 hypothesis is confirmed there can conclude that the national cultural level is not a useful level to measure culture accurately in India.

4.1.1 HYPOTHESIS INDIVIDUALISM (IDV)

By tossing a coin cities were chosen where to do the ethnographic study in on the main bus stop. In Tamil Nadu the cities are Tiruchirappalli and Madurai, in Kerala the cities are Kollam and Ooty. The findings can be found in Appendix A, with a summary given at the first relevant hypothesis directly below. From the ethnographic one hypothesis was formed. In the study one can see that the circumstances of all 4 locations are very much the same. The timing of the study was on 4 different days in the time length of 12 days. At each predetermined bus stop the focus of the study was on the hygiene habits of people at that bus stop, who can be travellers, bus drivers and station personnel. The findings of this studies is that people in Tamil Nadu use whatever place they can find to fulfil their toiletry needs, while in Kerala people needed to go to a toilet building and even pay to fulfil their needs.

There is a direct connection between business ownership – you can call the toilet houses where people pay to go to the toilet a business – and economic development (Carree et al., 2000). This economic development is connected to the economic development Hofstede (1980, 2001) describes in his Individualism/Collectivism dimension. This dimension gives direction saying; the more economic development, the more individualistic the people are (Huo and Randall, 1991).

Connecting this to the ethnographic study one can see that in Kerala people have improved living standards as they do not have to urinate on the streets. Instead of this they can go to a toilet house and even have to pay money for this service and can go to the toilet in a more hygienic way. These findings suggest a higher economic development, so greater individualism scores. So the hypothesis for Individualism/Collectivism is constructed in this way:

H-IDV-0: The scores for Individualism/Collectivism in different disparity regions within a country are the same.

H-IDV-1: The scores for Individualism/Collectivism in different disparity regions are significantly different.

4.2.1 HYPOTHESIS POWER DISTANCE (PDI)

For this hypothesis a literature study has been done. This means that literature is read. Because in this study the division between three different disparity regions is made, the focus of the literature research was in this direction.

Next to that intergroup disparity is ubiquity an extremely serious issue in industrialized nations which sharpens ethnic division all over the world (Deshpande, 2001). Ethnic heterogeneity is linked with low power distance scores in previous research (Lenartowicz et al, 2003; Triandis, 1989), so translating that into the module this research is using, it means that the higher disparity is, the lower the power distance scores are on the VSM. The hypotheses concerning power distance are:

H-PDI-0: The scores for Power Distance in different disparity regions within a country are the same.

H-PDI-1: The scores for Power Distance in different disparity regions are significantly different.

4.2.2 VSM08

For execution of the research, snowball sampling was used. Via the AIESEC network in India connections were laid with universities and from the AIESEC local network in Manipal and the local association of student-entrepreneurs connections with student-entrepreneurs. Once in contact a meeting was scheduled in real life where the respondents filled in the questionnaire.

4.3 Statistical analysis on regional differences

While the research is done, an analysis is needed to convert the results into something we can use to answer the hypotheses and eventually the main research question. A good way to do this is by using SPSS software. The way the analysis is conducted is explained step by step below.

4.3.1 DESCRIPTIVE ANALYSIS – HIGH/MID/LOW DISPARITY IN THE 5 DIMENSIONS

With all the data filled in, the first statistical overview gives the different dimension scores in the different disparity levels with the function; Descriptive Statistics – Frequencies. Here the most important information is the mean, which is the score of the dimension.

Frequencies

Disparitylevel		Statistics				
		PDI	IDV	MAS	UAI	LTO
low disparity	N	5	5	5	5	5
	Valid					
	Missing	0	0	0	0	0
	Mean	-58,0000	-14,0000	,0000	-52,0000	41,0000
	Std. Deviation	60,58052	31,30495	158,46924	70,58683	12,44990
	Skewness	-1,264	1,258	,970	,711	,596
	Std. Error of Skewness	,913	,913	,913	,913	,913
	Kurtosis	1,410	,313	,667	-,808	2,190
	Std. Error of Kurtosis	2,000	2,000	2,000	2,000	2,000
	Range	155,00	70,00	385,00	170,00	35,00
	Minimum	-155,00	-35,00	-140,00	-120,00	25,00
	Maximum	,00	35,00	245,00	50,00	60,00
medium disparity	N	9	9	9	9	9
	Valid					
	Missing	0	0	0	0	0
	Mean	-6,1111	-89,4444	-27,2222	-13,8889	29,4444
	Std. Deviation	84,03042	76,50345	60,05784	60,91889	61,15781
	Skewness	-,325	,096	1,279	-,122	,731
	Std. Error of Skewness	,717	,717	,717	,717	,717
	Kurtosis	-,459	-,121	2,636	-1,404	-,363
	Std. Error of Kurtosis	1,400	1,400	1,400	1,400	1,400
	Range	250,00	245,00	210,00	175,00	180,00
	Minimum	-130,00	-210,00	-105,00	-110,00	-50,00
	Maximum	120,00	35,00	105,00	65,00	130,00
high disparity	N	6	6	6	6	6
	Valid					
	Missing	0	0	0	0	0
	Mean	29,1667	-87,5000	-5,8333	5,0000	55,8333
	Std. Deviation	44,43160	79,04113	40,91658	70,85196	55,80472
	Skewness	,022	,000	-,668	1,845	,333
	Std. Error of Skewness	,845	,845	,845	,845	,845
	Kurtosis	,335	-2,042	-,446	3,327	-1,752
	Std. Error of Kurtosis	1,741	1,741	1,741	1,741	1,741
	Range	130,00	175,00	105,00	180,00	135,00
	Minimum	-35,00	-175,00	-70,00	-40,00	,00
	Maximum	95,00	,00	35,00	140,00	135,00

Table 3: Frequencies of the 5 dimensions in the low/mid/high disparity regions

In this table for every dimension the mean of the respondents (N) can be found. For the low disparity region for example, the PDI score of the 5 respondents is -58, while for medium disparity regions it is -6.1111 and high disparity it is 29,16667. The other important outcomes from this table are the range, and the minimum and maximum of the scores. In this way the distribution can be found, where one can see that for example PDI in medium disparity has a very big range, so individual scores fluctuate a lot.

Analysed through this is the correlation in low-mid-high means in the different dimensions is linear in only one case: UAI. The standard deviation and range is in most cases high with one extreme in the low disparity: the group where there are the least participants.

Scores of research	PDI	IDV	MAS	UAI	LTO
Low disparity	-58	-14	0	-52	41
Medium disparity	-6	-89	-27	-14	29
High disparity	29	-87	-6	5	66
National VSM scores Hofstede India	77	48	56	40	26

Table 4: The regional and national scores of the VSM research

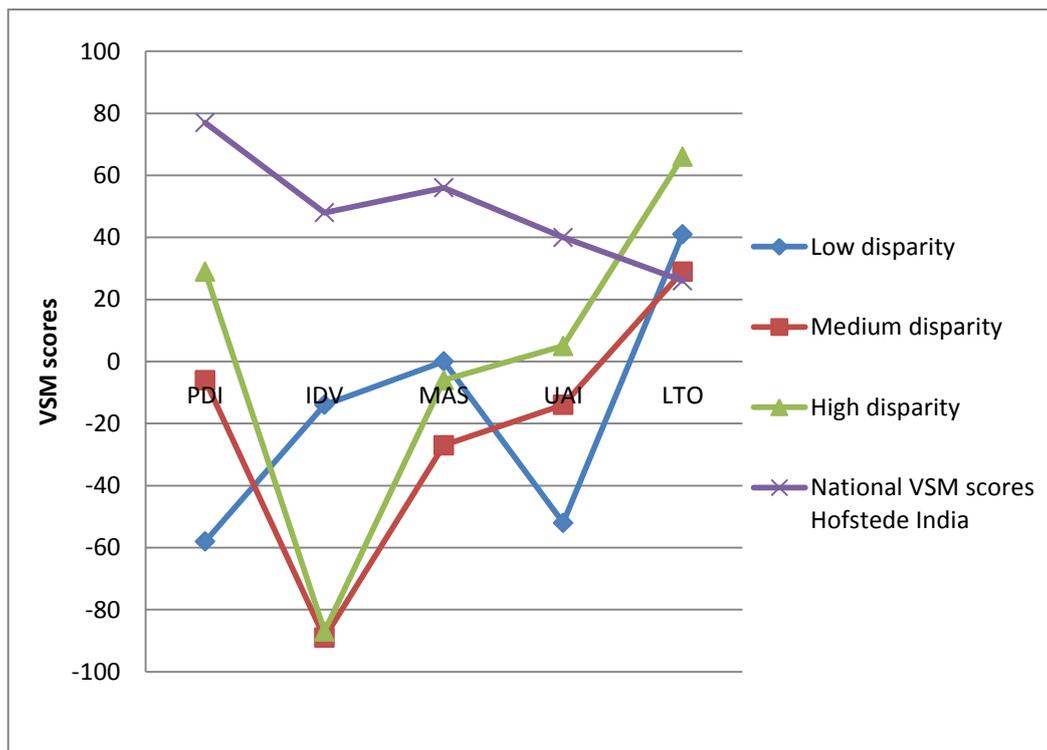


Figure 2: Differences visualized in dimension scores over de different disparity regions.

Here the focus is on the first 2 dimensions, PDI and IDV to test our hypotheses. One can see this as a big variety in scores especially between the high and low disparity regions. Medium disparity is more in the direction of the high disparity regions, and with IDV it is almost identical. Only are the differences significant?

4.3.2 RESULTS OF REGIONAL CULTURAL DIFFERENCES MEASUREMENT

There is a sample size of each of the groups of on average 7. From table 4 looking at the Skewness and Kurtosis the conclusion can be drawn that the sample is not conditionally normal distributed. This means that for the statistical analysis one needs to use a non-parametric analysis, which can compare two or more groups: the Kruskal-Wallis test.

With this Kruskal-Wallis test one calculates a generalization to two or more groups to see if at least two groups were different. A two-tailed t-test has been chosen with alpha .05 meaning the 0-hypothesis is refused if the outcome of the test if scores are between .025 and .975.

Kruskal-Wallis Test

Ranks			
Disparitylevel	N	Mean Rank	
PDI	low disparity	5	5,90
	medium disparity	9	11,00
	high disparity	6	13,58
	Total	20	
IDV	low disparity	5	15,00
	medium disparity	9	8,83
	high disparity	6	9,25
	Total	20	
MAS	low disparity	5	10,60
	medium disparity	9	9,28
	high disparity	6	12,25
	Total	20	
UAI	low disparity	5	7,60
	medium disparity	9	10,89
	high disparity	6	12,33
	Total	20	
LTO	low disparity	5	11,90
	medium disparity	9	8,89
	high disparity	6	11,75
	Total	20	

Test Statistics ^{a,b}					
	PDI	IDV	MAS	UAI	LTO
Chi-Square	4,738	3,974	,938	1,829	1,244
df	2	2	2	2	2
Asymp. Sig.	,094	,137	,626	,401	,537

a. Kruskal Wallis Test

b. Grouping Variable: Disparitylevel

Table 5: Kruskal-Wallis Test for statistical difference

The outcomes of the different dimensions are all between the scores of .025 and .975 – see Asymptotic significance (Asymp. Sig. in the table) for the different dimensions - meaning there are no significant differences between the 5 dimensions based on the Kruskal-Wallis test.

With these results it is unclear how the groups are different from each other on a statistical level. With running a post-hoc test on the Kruskal-Wallis test, each pair of groups can be compared. In this case low and mid disparity, low and high disparity and mid and high disparity. For this the Mann Whitney U test is used.

With the sample size of at least 20, the Mann Whitney U test follows a Z-distribution. In this Z-distribution we are using a two sided T-test with alpha .05. This means that on each side of the normal distribution Alpha is 0.025. So if the outcome of the Z of the Mann-Whitney Test is lower than -1.96 or higher than 1.96, the 0-hypothesis (regions are culturally the same) will be accepted. Here are the results:

	PDI	IDV	MAS	UAI	LTO
Disparity low/medium	-1.472	-1.957	-.202	-1.070	-1.024
Disparity low/high	-2.201	-1.491	-.186	-1.200	-.093
Disparity medium/high	-.768	-.060	-1.145	-.533	-.833

Table 6: Mann-Whitney comparison test between low/mid, low/high and mid/high disparity regions for all 5 dimensions.

In this table above the most important information of the 3 different Mann-Whitney Tests are given to compare low/medium, low/high and medium/high disparity regions. This can also be found in Appendix C.

4.4 Conclusions on hypotheses

In this section the conclusion of the two hypotheses will be discussed one by one.

4.4.1 OUTCOMES ON HYPOTHESIS 1: REGIONAL CULTURAL DIFFERENCES IN POWER DISTANCE

To prove the hypothesis – the scores for individualism would be the same for different disparity regions – wrong, the outcome should form a negative correlation between the lower and the higher disparity regions and it would be statistically different if the Z value would be less than -1.96. Here one would expect the most difference between low and high disparity regions.

Looking at the outcomes in table 6 where PDI and Z cross for the different comparisons, the outcome is a value of -2.201 at the comparison of the low and high disparity regions, meaning a significant difference in that value dimension. This means the 0-PDI-hypothesis gets rejected: there is a significant difference in the dimension of Power Distance between low and high disparity regions. This concludes regional cultural differences based on the Power Distance dimension: the scores between the high and low disparity regions on Power Distance are significantly different.

Also a difference can be seen in the comparison between low and medium and medium and high disparity regions; they are not high enough to be significantly different, with a z value respectively of -1.472 and -.768. Even if one would do a two sided t-test with an alpha score

of .10 instead of .05 the values would not come close to the Z-value of -1.645 to 1.645 in produces.

4.4.2 OUTCOMES ON HYPOTHESIS 2: REGIONAL CULTURAL DIFFERENCES IN INDIVIDUALISM

Next to that it is hypothesized that the scores for Individualism would be the same for different disparity regions. To prove this wrong the outcome should be a negative correlation between the lower and the higher disparity regions and it would be statistically different if the Z value would be less than -1,96 or higher than 1,96. Here one would expect the most difference between low and high disparity regions.

Looking at the outcomes in table 6 where IDV and Z cross for the different comparisons of regions, the scores for statistical differences between low and medium, low and high and medium and high are respectively -1.957, -1.491 and .060. This first of all means that the expectation of the most difference between low and high disparity regions is not valid according to this data, because the difference between low and medium is biggest. Next to that the highest score is -1.957, which is not lower than -1.96 and so the H-IDV-0 hypothesis will not be rejected because there is no significant difference in the scores between the different disparity regions on the dimension of Individualism. The difference would be significant if the alpha would exceed .05, so this is definitely something to keep in mind for further research.

With the top-scores in Masculinity, Uncertainty Avoidance and Long Term orientation of respectively -1.145 (mid/high), -1.200 (low/high) and -1.024 the other 3 dimensions do not play a significant role in measuring cultural differences across the different disparity regions. The only dimensions playing a role in regional cultural differences in India are Individualism and Power Distance which will be taken to the conclusion.

What does play a significant role next to the two hypotheses is the difference between the (average) outcome of this study and the study previously done by Hofstede (1980, 2001). There is a huge gap between the outcomes, what even more strongly confirms the difference between regional and national culture in India.

Discussion and conclusion

5.1 Discussion

The outcomes of the hypotheses and with that the outcome of the main research question are in line with what I have seen in India while traveling around. Because of the diverse history of the different regions within India of only the three states I have been in, I could not image that there would be one national culture in India as the study will conclude.

To see it with your own eyes is one, putting it in an academic framework is another thing. By means of the ethnographic study this first step was taken and this has put the study in a right direction, with the confirmation of the results in chapter 4: also results show a significant difference in the two focus dimensions.

Writing academically means next to this that literature should underpin your findings. With Hofstede's (1980, 2001) framework of dimensions being the most extensively used national cultural framework in psychology, sociology, marketing and management studies (Steenkamp, 2001). With Hofstede's (1980, 2001) framework being most famous and most often cited: over 25.000 times (Dahl, 2002; Harzing, 1999; Brewer & Venaik, 2010). With this sum of arguments all together with the user-friendliness and validation makes Hofstede's VSM method most useful method to measure culture in a country accurately. This had the highest chance of success, and it had success.

Then the research with Hofstede's (1980, 2001) VSM on a regional basis did not have much validation yet, what could mean it is not applicable for this level of research. Only with the researches of Bosland (1985), Kwon (2010) and even Hofstede himself (Hofstede et al., 2008) concluding that the VSM also can be used for regional cultural differences, the model has not as much validation as the VSM on a national level, only that time might come. This at least again proofs that the VSM can also be used on a regional level.

In every research there are also problems with the validity of the research. There might be a problem that the sample does not represent the reality. The sample of this research solely consists of student-entrepreneurs. This has been chosen to match the different sample sets on age and profession but limits the external validity of the research. First of all the group of student-entrepreneurs might not represent Indian student-entrepreneurs. Next to that, they might not reflect entrepreneurs in general – this group might be different from expert-entrepreneurs for example.

Because of the intentions of this research – exploring a new country to do a first test for further research - it has the minimum amount of 20 respondents for a research. This means it forms a good base for further research, where the internal and external validity can become better in future research.

A possible problem with the selection process of the participants is the snowball sampling. With this method the participants get known by reference which is not at random but could influence the outcome of the research. This has extra influence on the problem of contamination, because the participants know each other from reference and possibly participants talk with future participants which might influence the outcome. On the other hand the questionnaire is focussed on personal values and not on for example a case, what minimizes the possibility to influence outcomes.

5.2 Conclusion

This study was executed to find out:

'To what extent is cultural measurement on a regional level more useful than on a national level to measure culture in a country accurately?'

With a comparative study the most useful tool for measuring culture accurately on a national level is the VSM method of Hofstede (1980, 2001).

One of the two 0-hypotheses (on PDI and IDV) is rejected and so the conclusion is that India is an internally heterogeneous country and so the cultural measurement on a regional level is more useful than on a national level to measure culture in this country accurately. This concludes that India is an internally heterogeneous country, which confirms the statement *"culturally heterogeneous countries such as China and India"* of Huo & Randall (1991) to be valid as also two previous studies have shown China to be internally heterogeneous (Huo & Randall, 1991; Kwon, 2010). This confirms that in general – for the whole world – a division between internally homogeneous and internally heterogeneous countries is made. The internally homogeneous countries can be compared to each other using the VSM method on a national cultural level. The internally heterogeneous countries can be internally compared using the VSM on a regional cultural level.

With this research also more evidence was found for the statement Bosland (1985, in Huo & Randall, 1991: 167) made. Power Distance and Individualism were found by literature and ethnographic study to be most likely different across the different disparity regions and were formed into hypotheses. If one of the two focus-dimensions (PDI and IDV) is significantly different in the different disparity regions, this would prove regional cultural differences and so leads to the conclusion that the national cultural level is not a useful level of measurement for an internally heterogeneous country like India to measure culture accurately.

5.3 Recommendations for further research

5.3.1 PRACTISE

Generally this report also contributes to two other debates in this field of research. First of all my research shows again that the VSM is the right tool for cultural research on a national and regional scale. Nationwide Hofstede manages to respond to the critique build in the past approximately 30 years in a proper way and continue being the founder of a validated research measuring cultural differences among nations. The framework can be applied easily to many everyday intercultural encounters so it is particularly useful, as it reduces the complexities of culture and its interactions into five relatively easily understood cultural dimensions (Dahl, 2002) and is validated (Taras, 2010). Even so Hofstede's framework of dimensions is the most extensively used national cultural framework in psychology, sociology, marketing and management studies (Steenkamp, 2001). And last but not least, his work is most famous and most often cited: over 25.000 times (Dahl, 2002; Harzing, 1999; Brewer & Venaik, 2010). Taken together, this arguments from a proper reason to believe Hofstede's VSM method is the most useful to explore national cultural differences.

For regional cultural research this research brings the knowledge of previous studies together of researchers who have used the VSM to conduct research on regional cultural differences. The previous studies (Huo & Randall, 1991; Hofstede et al., 2010; Kwon, 2010) have all confirmed the usefulness of the VSM, and also this research has results in the line of previous named hypotheses by ethnographic research and secondary research that confirm the usefulness of the method again.

Secondly this research has brought knowledge together about how the regional cultural differences are most usefully measured with the VSM, where the method let to interpretable results. Even though, Hofstede et al. (2008) wonder whether to recommend it as the ultimate research strategy for within-country regional comparisons after their Brazil research. This because of the classic distinction in the study of culture which separates etic from emic approaches (Peterson & Pike, 2002). Where the etic approach compares culture according to a common external framework, the emic approach defines its distinctions from within the cultures in question. The 3 studies used for Brazil clearly represent the etic side; however regions within a country share a common national context that translates into a common emic, which means that global-level dimension may be too coarse a framework to interpret local variation. The solution is to extend global questionnaires with local questions, based on insiders' (emic) familiarity with the country's history and national cultural peculiarities: local literature, the insight of local experts and open pilot interviews across different states. Kwon (2010) agrees saying "*The results can only provide a very limited understanding of cultural differences across regions*" (Kwon, 2010: 94). "*The VSM might apply for regional cultural differences, but in this case may have to be extended with local*

relevant questions” (Hofstede et al., 2008: 5). Also with my own research, regional cultural differences are found only its implications are missing deeper meanings. These deeper implications can be found by another framework build specifically for that country should point out the exact cultural differences based on the country’s history and national cultural peculiarities.

5.3.2 THEORETICAL CONTRIBUTION

An interesting find of this research is the division of internally heterogeneous and internally homogeneous countries as a way of determining whether to use the VSM on a national or regional basis. For internally homogeneous countries the VSM method works as it is. Interesting is the need for a research method for in depth regional cultural difference research. This research has shown that the VSM method is a useful method for discovering regional cultural differences and gives some direction in those differences, only it does not give in depth analysis of the accurate cultural differences that is needed to discover what the cultural differences itself are. This could be done for example by developing a group of dimensions where every set of regions within a country has to be compared on a certain amount from that are most suitable for that situation. This can be in combination with the value dimensions in the 5 dimensions of Hofstede (2001) and based on local literature, the insight of local experts and open pilot interviews across different states (Peterson & Pike, 2002). With this a more in depth regional cultural difference research can be done in India, since this research gives a good base for interesting in depth research.

Another application for further research is to enlarge the research done within India to confirm the conclusions found in this research, and also to stretch the research for other countries surrounding India to find similarities of regions that have more similarities with that country than India itself to see where these cultural differences come from. This will also contribute to the confirmation of the calculated outcomes of this research. Having scores that are slightly different can make a huge difference in the conclusion on hypotheses. For example the highest score difference of IDV between low and medium disparity is -1.957, which is just a little higher than the boarder of -1.96 and so the H-IDV-0 hypothesis is rejected: it is no significant different. The difference would be significant if the alpha would exceed .05, so with a larger research where the outcomes are a just a bit further away from each other, the IDV-0 hypothesis is confirmed and the conclusion is even stronger.

Next to that for the efficiency of intercultural research and its applications, a tool - other than the VSM with the extra research tool for regional cultural differences – could be developed to define if a country is internally heterogeneous or homogeneous. In this way not every country has to be researched on the VSM and the extra research tool to research if there are regional cultural differences and we can improve the effectiveness and efficiency of future cultural measurement.

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Appendix A: Ethnographic study

No	Item	Findings bus station Tiruchirappalli (Tamil Nadu)	Findings bus station Madurai (Tamil Nadu)	Findings bus station Kollam (Kerala)	Findings bus station Ooty (Kerala)
1	Setting	Bus station, busses, shops, people, rickshaws.	Bus station, busses, shops, people, rickshaws	Bus station, busses, shops, people, rickshaws	Bus station, busses, shops, people, rickshaws
2	Acts	Hygiene.	Hygiene.	Hygiene.	Hygiene.
3	Activities	Going to the toilet.			
4	Events	Taking a wall to pee on.	Taking a wall to pee on.	Spending money to get access to toilet facilities.	Spending money to get access to toilet facilities.
5	Actors	Travellers, bus drivers, station personnel.			
6	Space	Travellers: sitting, walking, buying Bus drivers: sitting, walking, selling tickets, giving directions, driving. Station personnel: sitting, walking, selling, giving directions.	Travellers: sitting, walking, buying Bus drivers: sitting, walking, selling tickets, giving directions, driving. Station personnel: sitting, walking, selling, giving directions.	Travellers: sitting, walking, buying Bus drivers: sitting, walking, selling tickets, giving directions, driving. Station personnel: sitting, walking, selling, giving directions.	Travellers: sitting, walking, buying Bus drivers: sitting, walking, selling tickets, giving directions, driving. Station personnel: sitting, walking, selling, giving directions.
7	Objects	Main building with pillars and roof. Shops underneath and busses along the sides. Rickshaws along the near the exit to the roads.	Main building with pillars and roof. Shops underneath and busses along the sides. Rickshaws along the near the exit to the roads.	Main building with pillars and roof. Shops underneath and busses along the sides. Rickshaws along the near the exit to the roads.	Main building with pillars and roof. Shops underneath and busses along the sides. Rickshaws along the near the exit to the roads.
8	Time	03-08-2013 11:15 hours.	06-08-2013 16:40 hours.	11-08-2013 09:10 hours.	14-08-2013 13:20 hours.
9	Goals	Getting toiletry needs fulfilled.	Getting toiletry needs fulfilled.	Getting toiletry needs fulfilled in a hygienic way and pay for this.	Getting toiletry needs fulfilled in a hygienic way and pay for this.
10	Emotions	Not really, it seems normal.			

Appendix B: VSM 08 Questionnaire

In this questionnaire numbers are put in front of the questions corresponding with the VSM08 question number – a total of 34 – for calculation. These questions are mostly found in the Values section of the questionnaire.

General Information

Interviewer name _____

Interviewee name _____

Code number interview _____

Email interviewee _____

Name / website of student company _____

Biographic information

33 Nationality of interviewee: _____

Study programme _____

Level: (Bachelor, Master, PhD, other) _____

University name and city _____

Years of university education: _____

Years of working experience _____

Years of working experience with
entrepreneurship/leadership component
OUTSIDE own company _____

30 Date of birth _____

29 Sex: (male/female) _____

34 Place of Birth: (city, country) _____

Religion: _____

Marital status: (single, living together, married) _____

Children? (yes/no) _____

Years of international experience _____

Role during foreign experience: (Student, working, raising a kid, other) _____

Country of international experience: _____

How does your parents' income compare to country average?

- Lower quartile
- Middle half
- Upper Quartile

What is the professional background of your parents?

- At least one of them is entrepreneur or self-employed
- At least one of them is employed in a private company
- At least one of them is public servant
- Other _____

Company

Short description of student company (what business are you in):

Founding date _____

Founding place

Number of founders (including entrepreneur)

Current number of employees (including all founders, in full time equivalents)

Annual turnover in country currency: (add currency)

Please answer the following questions from “Not at all” to “Absolutely”.

Not at all

Absolutely

1 2 3 4 5

To what degree did you start your enterprise because you had no other option for work?

To what degree did you start your enterprise because you wanted to become independent or increase your income

Reflecting on the company

Please answer this questionnaire on the basis of reflecting on your own company.

Please have a look at the following statements. Now, indicate to what extent you agree or not agree to the statement.

Do not agree

Fully agree

1 2 3 4 5

I analyzed long run opportunities and selected what I thought would provide the best returns

I developed a strategy to best take advantage of resources and capabilities

I designed and planned business strategies

I organized and implemented control processes to make sure I met objectives

I researched and selected target markets and did meaningful competitive analysis

I had a clear and consistent vision for where I wanted to end up

I designed and planned production and marketing efforts

I experimented with different products and / or business models

The product/service I now provide is essentially the same as

Sehr
unzufrieden

originally conceptualized

The ultimate product/service I now provide is substantially different from than I first imagined	<input type="radio"/>				
I tried a number of different approaches until I found a business model that worked	<input type="radio"/>				
We were careful not to commit more resources than we could afford to lose	<input type="radio"/>				
I was careful not to lose more money that the company would be in real trouble financially if things didn't work out.	<input type="radio"/>				
I was careful not to commit more money than I was willing to lose with my initial business idea	<input type="radio"/>				
I have allowed the business to evolve as opportunities have emerged	<input type="radio"/>				
I adapted what I was doing to the resources I had	<input type="radio"/>				
I was flexible and took advantage of opportunities as they arose.	<input type="radio"/>				
I avoided courses of action that restricted my flexibility and adaptability.	<input type="radio"/>				
I used a substantial number of agreements with customers, suppliers and other organizations and people to reduce the amount of uncertainty	<input type="radio"/>				
I used pre-commitments from customers and suppliers as often as possible	<input type="radio"/>				
I tried to get resource commitments and sales commitments as early as possible	<input type="radio"/>				
It was impossible to see from the beginning where I wanted to end	<input type="radio"/>				
I evaluated the set of resources and means I had at my disposal and thought about different options	<input type="radio"/>				
My decision making has been largely driven by expected returns	<input type="radio"/>				
I started out very flexibly and tried to take advantage of unexpected opportunities as they arose	<input type="radio"/>				

Values

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, rank the following attributes to their importance:

	Very little/no importance			Of utmost importance	
	1	2	3	4	5
01 have sufficient time for your personal or home life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
02 Have a boss (direct superior) you can respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
03 Get recognition for good performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the following questions, please fill in the most appropriate answer.

15 If there is something expensive you really want to buy but you do not have enough money, what do you do?

Always save before buying	Usually save first	Sometimes save, sometimes borrow to buy	Usually borrow and pay off later	Always buy now, pay off later

In your private life, how important is each of the following to you: always 2 3 4 never

16 How often do you feel nervous or tense?

17 Are you a happy person?

18 Are you the same person at work (or at school if you're a student) and at home?

Quite the same	Mostly the same	Don't know	Mostly different	Quite different

19 Do other people or circumstances ever prevent you from doing what you really want to?

Yes, always	Yes, usually	Sometimes	No, seldom	No, never

20 All in all, how would you describe your state of health these days?

Very good	Good	Fair	Poor	Very poor

21 How important is religion in your life ?

of utmost importance	very important	of moderate importance	of little importance	of no importance

22 How proud are you to be a citizen of your country?

not proud at all	not very proud	somewhat	fairly proud	very proud
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		proud		

23 How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?)

Never	Seldom	Sometimes	Usually	Always

Please have a look at the following statements. Now, indicate to what extent you agree or not agree to the statement.

	Do not agree		Fully agree		
	1	2	3	4	5
24 One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work	<input type="radio"/>				
25 Persistent efforts are the surest way to results	<input type="radio"/>				
26 An organization structure in which certain subordinates have two bosses should be avoided at all cost	<input type="radio"/>				
27 A company's or organization's rules should not be broken not even when the employee thinks breaking the rule would be in the organization's best interest	<input type="radio"/>				
28 We should honour our heroes from the past	<input type="radio"/>				

31 How many years of formal school education (or their equivalent) did you complete (starting with primary school)?

___ years

32 If you have or have had a paid job, what kind of job is it / was it?

- No paid job (includes full-time students)
- Unskilled or semi-skilled manual worker
- Generally trained office worker or secretary
- Vocationally trained craftsperson, technician, IT-specialist, nurse, artist or equivalent
- Academically trained professional or equivalent (but not a manager of people)
- Manager of one or more subordinates (non-managers)
- Manager of one or more managers

Appendix C: Mann-Whitney U Test

Mann-Whitney Test

Ranks			
Disparitylevel	N	Mean Rank	Sum of Ranks
PDI	low disparity	5,30	26,50
	medium disparity	8,72	78,50
	Total		14
IDV	low disparity	10,40	52,00
	medium disparity	5,89	53,00
	Total		14
MAS	low disparity	7,80	39,00
	medium disparity	7,33	66,00
	Total		14
UAI	low disparity	5,90	29,50
	medium disparity	8,39	75,50
	Total		14
LTO	low disparity	9,00	45,00
	medium disparity	6,67	60,00
	Total		14

Mann-Whitney Test

Ranks			
Disparitylevel	N	Mean Rank	Sum of Ranks
PDI	low disparity	3,60	18,00
	high disparity	8,00	48,00
	Total		11
IDV	low disparity	7,60	38,00
	high disparity	4,67	28,00
	Total		11
MAS	low disparity	5,80	29,00
	high disparity	6,17	37,00
	Total		11
UAI	low disparity	4,70	23,50
	high disparity	7,08	42,50
	Total		11
LTO	low disparity	5,90	29,50
	high disparity	6,08	36,50
	Total		11

Mann-Whitney Test

Ranks			
Disparitylevel	N	Mean Rank	Sum of Ranks
PDI	medium disparity	7,28	65,50
	high disparity	9,08	54,50
	Total		15
IDV	medium disparity	7,94	71,50
	high disparity	8,08	48,50
	Total		15
MAS	medium disparity	6,94	62,50
	high disparity	9,58	57,50
	Total		15
UAI	medium disparity	7,50	67,50
	high disparity	8,75	52,50
	Total		15
LTO	medium disparity	7,22	65,00
	high disparity	9,17	55,00
	Total		15

Test Statistics^a

	PDI	IDV	MAS	UAI	LTO
Mann-Whitney U	11,500	8,000	21,000	14,500	15,000
Wilcoxon W	26,500	53,000	66,000	29,500	60,000
Z	-1,472	-1,957	-,202	-1,070	-1,024
Asymp. Sig. (2-tailed)	,141	,050	,840	,285	,306
Exact Sig. [2*(1-tailed Sig.)]	,147 ^b	,060 ^b	,898 ^b	,298 ^b	,364 ^b
Exact Sig. (2-tailed)	,157	,054	,872	,312	,346
Exact Sig. (1-tailed)	,079	,025	,430	,156	,170
Point Probability	,013	,008	,023	,016	,023

Test Statistics^a

	PDI	IDV	MAS	UAI	LTO
Mann-Whitney U	3,000	7,000	14,000	8,500	14,500
Wilcoxon W	18,000	28,000	29,000	23,500	29,500
Z	-2,201	-1,491	-,186	-1,200	-,093
Asymp. Sig. (2-tailed)	,028	,136	,852	,230	,926
Exact Sig. [2*(1-tailed Sig.)]	,030 ^b	,177 ^b	,931 ^b	,247 ^b	,931 ^b
Exact Sig. (2-tailed)	,028	,169	,903	,258	,926
Exact Sig. (1-tailed)	,017	,087	,450	,126	,461
Point Probability	,011	,026	,019	,009	,013

Test Statistics^a

	PDI	IDV	MAS	UAI	LTO
Mann-Whitney U	20,500	26,500	17,500	22,500	20,000
Wilcoxon W	65,500	71,500	62,500	67,500	65,000
Z	-,768	-,060	-1,145	-,533	-,833
Asymp. Sig. (2-tailed)	,442	,952	,252	,594	,405
Exact Sig. [2*(1-tailed Sig.)]	,456 ^b	,955 ^b	,272 ^b	,607 ^b	,456 ^b
Exact Sig. (2-tailed)	,473	,998	,283	,627	,434
Exact Sig. (1-tailed)	,237	,514	,144	,314	,218
Point Probability	,019	,053	,014	,022	,019

a. Grouping Variable: Disparitylevel
b. Not corrected for ties.

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