

Correlation between Individualistic-collectivistic culture and entrepreneurial decision-making

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ABSTRACT: Scholars have distinguished two different approaches to examine the decision making processes in new venture creation, namely causation and effectuation. The first approach holds in belief that entrepreneurial decision-making happens because of planned behavior, while the second approach argues that it is the result of a more intuitive way of thinking. Individualistic-collectivistic culture introduced by Hofstede is one of the influencers that affects entrepreneur's selection from the two approaches. However empirical research on this issues is lacking. To compensate, this study is aimed at exploring that to what extent the degree of individualistic culture correlated with the entrepreneurial decision-making. This research employed the think aloud method and questionnaire study from Hofstede's Values Survey Module for data collection. Fifty Chinese student entrepreneurs and entrepreneurs who graduated from university within five years were selected as the sample for the study. The empirical results supported a moderate relationship between individualistic-collectivistic culture and causation. However there is no significant result that indicate a relationship between individualistic-collectivistic culture and effectuation.

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Keywords

Entrepreneurial decision-making, Causation, Effectuation, Individualistic-collectivistic culture.

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1. INTRODUCTION

1.1 Entrepreneurship and the entrepreneurial process

Entrepreneurship is one of the best understood subjects studied in business school by a visitor from another planet who came to the earth for the first time, because there are huge numbers of people all around the world involved in entrepreneurial activities, and it provides almost every explanation for business (Shane, 2000). What is entrepreneurship? One of the many definitions by scholars referred it as the ability and willingness to create new market opportunities and make contributions to the growth of GDP and employment (Wennekers & Thurik, 1999). Another important concept worth mentioning is the entrepreneurial process, which refers to the creation of new value by identifying new opportunities, attracting the required resources to obtain those opportunities, and building an organization to manage those resources (Wickham, 2006).

Wickham (2006) emphasized the significance of understanding the entrepreneurial process, which provides a framework for understanding how entrepreneurial decisions are made. For example, many people are interested in the success of Yun Ma, the founder of the Alibaba Group, which is the world's largest e-commerce company that is even larger than Amazon and eBay combined (Yueh, 2013). As a decision maker, how did Ma make decisions during the entrepreneurial process and eventually built such a business empire? Why did he define Alibaba as an e-commerce company, but not a logistics company? What drove Alibaba to enter the Indian market on September 2014? Was it regarded as a long-term plan or a flashed new opportunity? All the decisions related to these questions are vital for the success of Alibaba. To further elaborate on different entrepreneurial decision making styles, Sarasvathy (2001) introduced two distinct approaches: causation and effectuation. Causation is a more planned approach while effectuation is more intuitive. The detailed descriptions of the two approaches will be illustrated in chapter 2.

1.2 Culture

Entrepreneurial decision-making behavior is affected by the institutional context in which the start-ups have been established (Welter, 2011). The institutional context consists of not only formal political and economic regulations which generate and limit opportunities for new ventures, but also the informal norms and attitudes of the society like culture, which affect recognition and exploitation of opportunities by entrepreneurs and potential entrepreneurs (Welter, 2011). Mueller and Thomas (2001) pointed out the significance of culture for entrepreneurship because culture could develop the mind and character of entrepreneurs. They also mentioned that the extensive study of culture by Hofstede could be helpful to identify the key aspects of culture associated with the potential behaviors of entrepreneurs.

According to Hofstede (2001), culture is "the collective programming of the mind that distinguishes the members of one group or category of people from another". To show the distinctions among people more clearly, Hofstede (2001) introduced the prestigious culture's five dimensions: Individualism (from now on: IDV), Uncertainty Avoidance, Power Distance, Masculinity & Femininity and Long-Versus Short-Term Orientation. The introduction of the five dimensions of culture was based on the paper-and-pencil survey results collected from 76 countries. It is needed to stress that the word 'culture' here refers to national culture. Among the five dimensions, the IDV is considered as the most significant cultural difference among cultures (Triandis, 1995). However, Hofstede did not specify the relationship between IDV and entrepreneurial

decision-making (Mueller & Thomas, 2001). This paper attempts to build on the pioneering studies and strike for making a contribution to the field of research on the role of culture in entrepreneurial process.

1.3 Research Question

Based on all the previous discussions, the research question is:

To what extent does the degree of individualistic culture correlated with entrepreneurial decision-making?

1.4 Research Method

This paper analyzed both international literature and data collected from China. Two approaches were applied for gathering data: a case study and a questionnaire of Values Survey Module (VSM) (Hofstede, Hofstede, Minkov & Vinken, 2008). In chapter 3, there will be an in-depth illustration on the methodology deployed in this paper.

2. LITERATURE STUDY AND HYPOTHESES

The purpose of the study is to explore that to what extent the degree of individualistic culture correlated with the entrepreneurial decision-making. In this chapter, the two entrepreneurial decision-making approaches and individualistic culture will be further defined into different aspects. Afterwards four hypotheses are derived by linking each aspect of the two.

2.1 Causation and effectuation

There are two approaches have been distinguished with regards to decision-making processes in new venture creation: causation and effectuation (Sarasvathy, 2001). Sarasvathy (2003) used two vivid contrasting metaphors to capture the distinctions between causation and effectuation. Causal entrepreneurial decision-making is like playing a jigsaw puzzle game, in which each piece of the picture were already there and need to be assembled to the pre-set picture. The final result of the game is predictive and the goal was established at the beginning. Put this into an entrepreneurial field, causal entrepreneurs usually use existing resources to reach a pre-determined goal. The effectual decision-making is like the patchwork quilt approach, in which the patchwork quilters consider the quilter is still in-the-making and the final work is heavily depending on the imagination of the quilter. Based on this approach, effectual entrepreneurs use a set of means as given and focus on choosing among different possible effects which could be created by that set of means. The metaphors shed light on two categories of distinction between causation and effectuation: view of the future (prediction or creation) and basis for taking action (goal-based or means-based).

In addition, there are three more categories of difference between the two approaches. Firstly, predilection towards risk and resources: expected return or affordable loss. The approach of causation concentrates on pursuing the risk-adjusted maximum opportunities and scooping in required resources to implement it, while the effectuation approach seeks for acceptably satisfactory opportunities by using investment, which is within the scope of affordable loss. On other words, it is the opposite of upside potential and downside potential. The following difference between causal and effectual is attitude towards outsiders. In effectual logic, relationship, especially partnerships as equals shape the establishment of a new venture. On the contrary, the causal logic considers that relationships are driven by competition. The outsiders are more likely to be considered as competitors rather than partners. The last category of difference is attitudes toward contingencies: avoid or embrace. As for the causal decision maker, contingencies are recognized as obstacles and should be carefully avoided, while the effectual decision maker believes contingencies are opportunities to create new

values and therefore should be effectively used (Dew, Read, Sarasvathy & Wiltbank, 2009; Perry, Chandler & Markova, 2012; Read & Sarasvathy, 2015).

The Table 1 summarizes the categories of distinction between causation and effectuation:

Table 1: Distinctions between causal and effectual

Categories	Causal	Effectual
View of future	Prediction	Creation
Basis for taking action	Goal-oriented	Means-oriented
Predilection towards risk and resources	Expected returns	Affordable loss
Attitude towards outsiders	Competitive analysis	Partnerships
Attitudes toward contingencies	Avoid	Embrace

2.2 IDV and hypotheses

IDV means the degree (it can be low or high) of individualistic culture but not only individualism in this paper. A low IDV refers to a collectivistic culture while a high IDV represents an individualistic culture. IDV describes the relationship between individuals and collectives that exists in a given society (Hofstede, 2001). Oyserman and Lee (2008) explained IDV as the distinctions how the relationships between societies and individuals are established, and whether groups or individuals should be considered as the basic unit of analysis. In a high individualistic culture, the individual is the core unit and societies exist to pursue the individuals' well-being. In a low individualistic culture, the group is the core unit, and individuals must accord with the existing society.

2.2.1 IDV with view of future

People with a high individualistic cultural background (from now on: individualists) are more modern and the ones with a low individualistic cultural background (from now on: collectivists) are more traditional (Hofstede, 2001). From the view of Triandis (1971) modern men are those who embrace new experiences and hold an optimistic believe of themselves being master of controlling; and they prefer to create future by their own hands than to follow a pre-established path. But the future of traditional men is predictable based on the characteristics of their parents because they usually just follow the direction of parents. In addition, Hofstede (2001) also stated that under high individualistic culture, education is a process of learning to deal with unforeseen situations, while in a low individualistic society people are educated in order to meet the group expectations and therefore to be accepted by the group. Therefore, it could be expected that high individualistic entrepreneurs put more focus on creating the future, while collectivists focus on prediction of the future. Based on this, two related hypothesis can be developed:

Hypothesis 1a: The more individualistic a culture is, the more the entrepreneurs' attitude towards the future is focused on creation of the future

Hypothesis 1b: The less individualistic a culture is, the more the entrepreneurs' attitude towards the future is focused on prediction of the future.

2.2.2 IDV with basis of taking action

Collectivists and individualists can be distinguished via people's different purposes of learning (Hofstede, 2001). As for high individualistic culture, learning is aimed at knowing how to learn. What needs to be adopted in this kind of culture is the means of learning, by which people can get along in the modern world to create different effects. Under low individualistic culture, education focuses on learning how to do. In order to obtain certain effects, people are educated to obtain the related skills and virtues. When it is related with basis of taking action, it is expected that under high individualistic culture, entrepreneurs are more likely to be means-oriented, while collectivists are more goal-oriented.

Hypothesis 2a: The more individualistic a culture is, the entrepreneurs' basis of taking action will be more focused on means.

Hypothesis 2b: The less individualistic a culture is, the entrepreneurs' basis of taking action will be more focused on goals.

2.2.3 IDV with predilection towards risk and resources

People in high individualistic culture prefer work with higher earning than one with more fun, given the fact that they consider expected return important. But for collectivists, the importance of the degree to which work is interesting is not less than earnings. The phenomenon here can indicate that individualists have more preference on expected return than collectivists.

In addition, Carmichael (2002) pointed out that Asians, mostly affected by collectivistic culture, are more often to calculate the loss when making decisions, and they are not willing to waste time to fight for an loss when it is affordable. This supports a link between collectivistic culture and the affordable loss.

Moreover, direct criticism are more common in individual culture because it is viewed as an efficient method to inform employees about the unsatisfactory behaviors. Therefore it can provide employees direction on better performance, which eventually can result in increased profits for the company. But collectivists treat direct criticisms as threats to harmony and will cause the vicious relationship, therefore it should be avoided (Hofstede, 2001). When facing the same problem, the starting point of individualists is focused on what they can obtain if they do so, while collectivists on what they will lose if they do so.

Therefore, two hypotheses can be formulated:

Hypothesis 3a: The more individualistic a culture is, the entrepreneurs' predilection towards risk and resources is more focused on expected return.

Hypothesis 3b: The less individualistic a culture is, the entrepreneurs' predilection towards risk and resources is more focused on affordable loss.

2.2.4 IDV with attitude towards outsiders

Individualists lay more emphasis on competitive spirit (Triandis, 1990; Triandis, Leung, Villareal & Clack, 1985), since they consider withholding information as a key for organizational success, and are therefore more likely to keep it as a competitive edge (Hofstede & Hofstede, 2001). On the contrary, Collectivists are more willing to cooperate with others (Triandis, 1990; Triandis, et al., 1985) because they believe that information sharing is attributed to organizational success (Hofstede & Hofstede, 2001). Hence, the following hypotheses can be sketched:

Hypothesis 4a: The more individualistic a culture is, the entrepreneurs' attitude toward outsiders is more focused on competitive analysis.

Hypothesis 4b: The less individualistic a culture is, the entrepreneurs' attitude toward outsiders is more focused on partnership.

3. METHODOLOGY

3.1 Introduction

This chapter elaborates on the sample, the research methods and method of data analysis for finding out the answer to the research question. Two distinct research methods are used to collect data: a case study based on the think aloud method for entrepreneurial decision making approaches (causation and effectuation), and a questionnaire study from the VSM 08 (Hofstede, et al., 2008) for IDV. Subsequently, a correlation analysis is applied for finding out the linear relationship between the data of entrepreneurial decision-making and IDV.

3.2 Sample

The sample for this research consists of a group of 50 Chinese student entrepreneurs and entrepreneurs who graduated from university within five years. During the research, all of the 50 participants took part in both a case study and a questionnaire study.

3.3 Research methods

3.3.1 The think aloud protocol

Ericsson and Simon (1993) stated that expressing one's thinking process while he/she is performing a given task will significantly increase the amount of behavior that can be observed than the same subject working in a silent environment. This results in a sequence of thoughts that reflect what happens cognitively during a working process. Based on this, the think aloud protocol, which is a method to know the thought processes of others has been introduced. During problem-solving, the subject needs to perform the task at hand and to speak out loud all thoughts that come to her/his mind simultaneously. No interruptions from the experimenter are allowed and the subjects have to just focus on the task. The whole session is recorded by audio recording and then transcribed to text for providing a permanent record for future analysis (Ericsson & Simon, 1993). Thinking aloud is a valid data collecting method because of the strong timeliness. There is just a small time lag between one's thought occurs and the verbalization, therefore, the retrospection and introspection biases are minimized (Dew, et al., 2009).

3.3.2 The case

The case study requires participants to solve ten decision problems, which arise in the context of establishing a coffee-corner, and are designed to follow different phases the company is going through. The themes of the problems are: identifying the market, defining the market, meeting payroll, financing, leadership/vision, product re-development, growing the company, hiring professional management, goodwill and exit. It can be seen that the whole process of entrepreneurship is included in the case study, and the answers of the problems are expected to display the decision-making traits of the sample entrepreneurs.

3.3.3 Coding

To know the entrepreneurs' cognitive processes by analyzing the transcripts from the think aloud method, the protocols need to be coded. In this study, the codes for coding the transcripts will be based on the study of Sarasvathy (2008), which is depicted in Table 2.

Table 2: Causal and effectual codes

Causal	Effectual
P-Prediction of the future	C-Creation of the future
G-Goal-driven	M-Means-based
R-Expected returns	L-Affordable loss
B-Competitive analysis	A-Use of alliances or partnerships
K-Avoid contingencies	E-Embrace contingencies
X-Causal (no subcategory given)	N-Effectual (no subcategory given)

As Table 2 showed, there are some codes representing causation and effectuation. By reading the transcripts and comparing the protocols with the codes carefully, the protocols that reflect any code in the table are marked with the related code. The quantity of marks for each codes are counted. For instance, a subject may say: 'the coffee bar is the strongest competitor of my shop', 'low price is my competitive advantage' and 'I need improve my competitiveness'. Under the circumstances, the code B will be labelled three times. Since there is no hypothesis related to K, X, E, and N, only numbers of the codes for causation P, G, R, and B, as well as that of effectuation: C, L, M and A will be counted respectively from the recordings of the participants.

According to Van Someren, Barnard & Sandberg (1994), it is necessary to find the correspondence between codes assigned by different coders to the same data. Before this study the coding task was already finished by Chen Lu and Chen Anni, who are the former master students of the University of Twente. In order to ensure the reliability of the coding, two IBA bachelor students respectively coded them again. In this study, recommended by Van Someren, et al. (1994), Kappa-which is a frequently used measurement of intercoder reliability-will be applied to check the data. The Table 3 shows the convention for the value of Kappa (Cicchetti, 1994).

Table 3: Intercoder reliability by Kappa

Kappa	Intercoder reliability
0.75-1.00	Excellent
0.60-0.74	Good
0.40-0.59	Fair
< 0.40	Poor

3.3.4 The Values Survey Module 2008

In order to collect data of IDV, the VMS 2008 (see Appendix) (Hofstede, et al., 2008) will be applied to investigate the Chinese national culture (in this case, IDV only). The VSM 08 was a paper-and-pencil questionnaire with 34 questions developed by Hofstede. The questions are scored on five-point-likert-scales about business issues. The participants can choose from 1 to 5 to each statement, running from 'I do not agree with it' to 'I fully agree with it'. Scores for each cultural dimension can be computed based on the answers of different questions, and each scores reflect the degrees of culture in the certain dimension. As for IDV, the results of question No.04, No.01, No.09 and No.06

will be collected for analyzing. It is important to mention that the IDV can only represent national culture but not individual personality (Hofstede, et al., 2008). Although the mean of all the individual scores is the IDV for the group of people, each score can only be considered as the element of IDV. These elements will be used as the variable to be analyzed together with the quantity of different codes per hypothesis.

3.3.5 Method of data analysis

In order to find out the suitable analysis, the normality of data needs to be checked. It indicates Pearson correlation analysis when the data is normally distributed; otherwise, spearman is applicable (Field, 2013).

Then correlation analysis between IDV and the elements of entrepreneurial decision-making (causation and effectuation) will be implemented. Correlation analysis is used for finding out the relationship between two items, for example, adverts watched and packets bought. A correlation coefficient reflects the degree of association between two variables tend to change together and it indicates both the direction and strength of the relationship between two variables. The value of correlation coefficient ranges from -1 to +1. A positive coefficient implies that two variables tend to vary in the same direction simultaneously: as the increase in one variable will result in increase in the other variable as well; And negative coefficient indicates that two variables systematically vary in opposite directions. A coefficient of zero indicates the absence of association between the variables. The absolute value of coefficient means the strength of relationship: weak (0.1), medium (0.3) and strong (0.5). A significance level of 5% will be used in this study. That means if the p-value is lower than 0.05, the hypothesis should be rejected. The outliers will be checked and replaced by means. (Field, 2013). In this research, the correlation between the numbers of each codes (causation and effectuation) and the elements of IDV will be found.

4. RESULTS

4.1 Intercoder reliability and normality

The intercoder reliability was checked with Kappa, the results for the two IBA bachelor students with the former master students are both larger than 0.74. Therefore the data from coding is highly reliable.

As for normality checking, because the sample size (50) of this study is larger than 30, it can be assumed that the sampling distribution is normally distributed. Since the most importance assumptions are met, Pearson correlation can be conducted. The first variable is the quantity of different codes which represent different entrepreneurial decision-making behaviors. The second one is the data from IDV.

4.2 The Hofstede's questionnaire

According to Hofstede's database ("the Hofstede centre, "), the IDV index of China is 20, which represents a highly collectivist culture. Based on the formula in VSM 08, the index of IDV from the 50 student entrepreneurs and entrepreneurs who graduated from university in five years was calculated. The result is 13.3, which also reflect a highly collectivist culture like Hofstede. Although the difference between the two results should not be ignored, we at least proved that Chinese culture is collectivistic (low IDV). As the reason for the difference, it could be that culture is changing all the time (Olivas-Luján, Harzing & McCoy, 2004; Ralston, et al., 2006), and the score by Hofstede was calculated many years ago.

4.3 Hypotheses

4.3.1 Hypothesis 1

Hypothesis 1a: The more individualistic a culture is, the more the entrepreneurs' attitude towards the future is focused on creation of the future

Hypothesis 1b: The less individualistic a culture is, the more the entrepreneurs' attitude towards the future is focused on prediction of the future.

Hypothesis 1a expects a positive relationship between IDV with the number of code C while hypothesis 1b suggests a negative relationship between IDV with the quantity of code P. As for the former one, the result of the Pearson correlation analysis between the quantity of code C and the value for IDV is 0.196, showing a positive correlation between the two items. However, the significance of the correlation is 0.172, which is higher than 0.05. Hence, the correlation has no statistical significance.

As for hypothesis 1b, the Pearson correlation value for IDV and the quantity of code P is 0.366. This also reflects a positive correlation between the two items, and the strength of the relationship is medium. The value of the significance is 0.009, which is less than 0.05, therefore it is proved to be statistically significant. Although the relationship was proved, it is not consistent with hypothesis 1b.

To summarize, hypothesis 1 is rejected.

4.3.2 Hypothesis 2

Hypothesis 2a: The more individualistic a culture is, the entrepreneurs' basis of taking action will be more focused on means.

Hypothesis 2b: The less individualistic a culture is, the entrepreneurs' basis of taking action will be more focused on goals.

The hypotheses expect a positive relationship between IDV with the counts of code M and a negative relationship between IDV with the number of code G. The value of the two Pearson correlations are -0.021 and -0.029 respectively, which both represent negative correlation. Nevertheless, the value of the two significance are both higher than 0.05 (0.886 and 0.843). That means both the two negative correlation are not statistically significant.

Therefore, hypothesis 2 is rejected.

4.3.3 Hypothesis 3

Hypothesis 3a: The more individualistic a culture is, the entrepreneurs' predilection towards risk and resources is more focused on expected return.

Hypothesis 3b: The less individualistic a culture is, the entrepreneurs' predilection towards risk and resources is more focused on affordable loss.

Hypothesis 3a and hypothesis 3b predict a positive correlation between IDV with the counts of code R, and a negative correlation between IDV with the number of code L. However, the data analysis shows the two correlations are negative (-0.065) and positive (0.049) respectively, which is in contrast with the hypothesis. The statistical significances are checked as well, both of them are higher than 0.05 (0.652 and 0.735). Hence, both of the R and L are not correlated with IDV.

Therefore, hypothesis 3 is rejected

4.3.4 Hypothesis 4

Hypothesis 4a: The more individualistic a culture is, the entrepreneurs' attitude toward outsiders is more focused on competitive analysis.

Hypothesis 4b: The less individualistic a culture is, the entrepreneurs' attitude toward outsiders is more focused on partnership.

According to hypothesis 4a and hypothesis 4b, IDV should be positively correlated with the quantity of code B and negatively related with the number of code A. The data analysis shows that the correlation value of the former one is 0.314, displaying a positive relationship between the two items, which is in line of the hypothesis. The correlation value of the latter is 0.057, which also represents a positive association. The significance levels are checked. They are 0.026 and 0.697 respectively.

On the basis of the data analysis, hypothesis 4 is partially supported, and the strength of the supported relationship is medium.

The Table 4 summarized the results from data analysis for each hypothesis:

Table 4: Data analysis results of Pearson correlation

	H1a: IDV&P	H2a: IDV&G	H3a: IDV&R	H4a: IDV&B
Expected correlation	-	-	+	+
Pearson correlation	0.366	0.029	-0.065	0.314
Significance	0.009	0.843	0.652	0.026
Empirical correlation	+ medium	No	No	+ medium
	H2a: IDV&C	H2b: IDV&M	H3b: IDV&L	H4b: IDV&A
Expected correlation	+	+	-	-
Pearson correlation	0.196	-0.021	0.049	0.057
Significance	0.172	0.886	0.736	0.697
Empirical correlation	No	No	No	No

5. DISCUSSION AND CONCLUSION

This paper aims to examine the relation between IDV and entrepreneurial decision-making. The data are collected from Chinese student entrepreneurs and entrepreneurs who graduated from university within five years. The results show that only one hypothesis is partially supported. As for the other three hypotheses, no significant correlation could be identified. The significant results of hypothesis 1 and hypothesis 4 suggest that the more individual a culture is, the entrepreneurs are more likely

to plan the future and make competitive analysis. These two features are both reflections of causal decision-making.

Hypothesis 1

As for view of the future, the results of data shows that the more individualistic a culture is, the more prediction of the future entrepreneurs will use. It may suggest that the selection of the two directions of the attitude towards the future (P or C) is not an either-or question: in a nation with a low individualistic culture, entrepreneurs have less probability to predict the future than a nation with an individualistic culture, but this does not mean that they believe more that they can create the future.

Hypothesis 2&3

As for the field of entrepreneurs' basis of taking action and predilection towards risk and resources, the IDV cannot affect what kind of decision-making approach the entrepreneur will select since there is no correlation between them.

Hypothesis 4

With regard to the attitude towards outsiders, as the sample indicated, the more individualistic a culture is, entrepreneurs are more likely to make a competitive analysis in the entrepreneurial process. This is in line with hypothesis 4. However, the relationship between IDV and pursuit of partnerships was not significant. This result suggested that in a highly individualistic country, entrepreneurs are more sensitive to recognize competitors than in a collectivistic country. But it cannot predict that the former has less willingness for making partnerships than the latter.

On the basis of the data results, now the research question of the study can be answered:

To what extent does the degree of individualistic culture correlated with entrepreneurial decision-making?

Since none of the hypotheses is fully supported, there is no significant correlation between the level of IDV in national culture and entrepreneurial decision-making. However, it is worth noting that the results also indicate more individual a culture is, the entrepreneurs is more likely to plan the future and make competitive analysis. The two correlations are both in medium level. By recalling knowledge from literature study, these two features are both reflections of causal decision-making. Therefore, we can say that there are certain levels of correlation between IDV and causal decision-making of entrepreneurs.

The research question was answered through testing four hypotheses. However, there exists some limitations as well. First of all, in this study, each hypothesis is related to one category of entrepreneurial decision making. Nevertheless, according to the literature study, there are more than four indicators for effectuation/causation decision making styles. The category 'attitude towards contingency' is absent in this research due to data unavailability. Secondly, two significant relationships are shown in the Pearson correlation analysis. But the correlation does not equal to causation. It has not been proved that the level of IDV is the causal factor for entrepreneurs' preference of planning the future and analyzing competitors. It is possible that the correlation between them is on account of a third variable, which also sheds light on the further research. Last but not least, this research study just focuses on one country China. Therefore, future research could introduce more control variables and provide more empirical evidences with different cultural backgrounds.

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Appendix: The questionnaire of VSM.

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

- 1 = of utmost importance
- 2 = very important
- 3 = of moderate importance
- 4 = of little importance
- 5 = of very little or no importance

01. have sufficient time for your personal or home life

1 2 3 4 5

02. have a boss (direct superior) you can respect

1 2 3 4 5

03. get recognition for good performance

1 2 3 4 5

04. have security of employment

1 2 3 4 5

05. have pleasant people to work with

1 2 3 4 5

06. do work that is interesting

1 2 3 4 5

07. be consulted by your boss in decisions involving your work

1 2 3 4 5

08. live in a desirable area

1 2 3 4 5

09. have a job respected by your family and friends

1 2 3 4 5

10. have chances for promotion

1 2 3 4 5

In your private life, how important is each of the following to you:
(please circle one answer in each line across):

11. keeping time free for fun

1 2 3 4 5

12. moderation: having few desires

1 2 3 4 5

13. being generous to other people

1 2 3 4 5

14. modesty: looking small, not big

1 2 3 4 5

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

- 1. always save before buying
- 2. usually save first
- 3. sometimes save, sometimes borrow to buy
- 4. usually borrow and pay off later
- 5. always buy now, pay off later

16. How often do you feel nervous or tense?

- 1. always
- 2. usually
- 3. sometimes
- 4. seldom
- 5. never

17. Are you a happy person ?

- 1. always
- 2. usually
- 3. sometimes
- 4. seldom
- 5. never

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

- 1. quite the same
- 2. mostly the same
- 3. don't know
- 4. mostly different
- 5. quite different

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

- 1. yes, always
- 2. yes, usually
- 3. sometimes
- 4. no, seldom

5. no, never

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

- 1. very good
- 2. good
- 3. fair
- 4. poor
- 5. very poor

21. How important is religion in your life?
 of utmost importance
 very important
 of moderate importance
 of little importance
 of no importance

thinks breaking the rule would be
 in the organization's best interest 1
 2 3 4 5

22. How proud are you to be a citizen of your country?
 not proud at all
 not very proud
 somewhat proud
 fairly proud
 very proud

28. We should honour our heroes from the past
 1 2 3 4 5

Some information about yourself (for statistical purposes):

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

1. never
2. seldom
3. sometimes
4. usually
5. always

29. Are you:

1. male
2. female

30. How old are you?

1. Under 20
2. 20-24
3. 25-29
4. 30-34
5. 35-39
6. 40-49
7. 50-59
8. 60 or over

24. To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):

- 1 = strongly agree
 2 = agree
 3 = undecided
 4 = disagree
 5 = strongly disagree

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

1. 10 years or less
2. 11 years
3. 12 years
4. 13 years
5. 14 years
6. 15 years
7. 16 years
8. 17 years
9. 18 years or over

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 1
 2 3 4 5

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

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

25. Persistent efforts are the surest way to results 1 2
 3 4 5

26. An organization structure in which certain subordinates have two bosses should be avoided at all cost 1
 2 3 4 5

27. A company's or organization's rules should not be broken - not even when the employee

33. What is your nationality?

34. What was your nationality at birth (if different)?

Thank you very much for your cooperation!