The Cultural Enigma in a Multi-Task Experiment

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Abstract

When the world's markets become more globally integrated there is a need for a multi-tasking theory which takes cultural differences into consideration as this has been overlooked in the research done, until now. As a result of this, the purpose with this dissertation has been to clarify whether cultural differences have an effect on designing contracts in a multi-task environment.

This dissertation describes the differences between the cultures of Sweden and China and how these differences might influence their preferences of the two contracts, price and trust, which act as control mechanisms in a multi-task-environment. Based on assumptions and predictions, the MMA-model has been developed and tested through both a questionnaire and an experimental study and received strong support. The conclusion of the conducted research is that culture influences the choice of the preferred contract in a multi-task environment.

Foreword

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With this dissertation we are completing our studies here at Kristianstad University. During our time as international business students we have gained great knowledge and competence about various economical subjects. We have used this knowledge when writing this dissertation.

It was very interesting to design and perform our own experiment, an experiment which we came to call, the MMA-experiment. We have seen differences between cultures but also a lot of similarities.

We would like to express our gratitude to our tutor Håkan Pihl, who has supported and helped us in the development of our dissertation.

We would also like to thank Viveca Fjelkner for all her support and guidance, which she has given us throughout the process.

Also we would like to thank all of the students who participated in the experiment. Special thanks go to Gao Qi for all her help organising the Chinese participants in the experiment.

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Chapter 1

Introduction

In the first chapter the background of the dissertation is introduced. The research problem and purpose are discussed and then the limitations, definitions and research questions are defined. Finally, the outline of the dissertation is presented.

1.1 Background

Our main interest in the multi-task problem comes from the book *"A modern firm"* by J. Roberts. Multi-task takes place when an agent has two or more activities to pay attention to. This is a problem in most organisations and is closely linked to the Principal-Agent theory. The difficulty lies in the principal's ability to motivate the agent to perform tasks according to his desires. The theory about the principals and agents has been recognized as a phenomenon for a long time. One person who wrote about it about 250 years ago was Adam Smith; he observed the conflict between the interests of the master and the worker and how the bargaining power was unequally distributed (Smith, 1776). The Principal- Agent theory combined with a cultural factor is becoming more and more relevant as an increased amount of companies become international and the world's markets become more globally integrated with each other. All organisations and firms need to take into account cultural differences and how they affect multi-tasking and incentives schemes. In order for principals (or superiors of any kind) to apply the correct incentives there is a need to thoroughly explore the cultural differences and preferences of incentives between diverse cultures.

In our study we will focus on the Swedish and Chinese culture as lately many Swedish companies choose to outsource their production to China. "*Right now there are 250 Swedish companies established in China and the number just keeps growing"* (http://www.civilingenjoren.se). Also, for a number of years predictions have been that; "*If the Chinese economy continues to double every eight years, the pace it has maintained since 1980, it will overtake the United States by 2010, becoming the world's*

largest economy" (Brown, Lester R. & Christopher Flavin, 1996) and there have also been reports of a very rapid economic growth in China since the early 1980s (http://www.omvarldsbilder.se/1996/961218.html). These statements about the Chinese and the country's present and future economic prosperity show the significant importance of the country to the world economy. In addition to this *"The Chinese are the world's largest racial, linguistic and cultural group and are spread all over the world"* (Schlewogt, 2002). This makes the Chinese culture even more appealing to compare to the Swedish one.

Since we are dealing with eastern and western cultures we can presume that there are significant differences between them both and what kinds of incentives are preferred in each. Swedish managers in China need to know if the incentives systems used domestically can be used abroad as well and vice versa. Companies are always in pursuit for economies of scale and competitive advantages, by moving the production abroad this can be accomplished. But there is always a negative aspect of it, the problem of cultural and local adaptation; what works in Sweden does not necessarily have to work in China.

In the works of prominent researchers as for example J Roberts and E Fehr, which have been trying to uncover the multi-task problem (and related issues) the cultural aspect has been widely ignored. Through mail contact with Bengt Holmstrom we have concluded that there is very little (or no) research conducted on multi-tasking with cultural differences as an influencing factor (Holmstrom, 2005). In most economic theories researchers generalize the models and exclude the cultural aspect as an affecting part. Therefore, it would be very interesting to study the differences in the multi-task problem, combined with a variation of nationalities to cover the cultural aspect.

The study of the cultural aspect in the multi-task phenomena will be done by performing an experiment. By conducting our research through an experiment we can see how the participants react to different contracts and

also if they react as we predict according to theories of differences in behaviour due to culture. With an experimental design of our own we have the possibility of creating and testing our own model in a field that researchers have until now overlooked.

1.2 Problem

Very little research has been performed with the cultural aspect in mind when dealing with a multi-task problem. In our multi-task experiment we have chosen to concentrate on two kinds of contracts which act as control mechanisms in the principal agent model. The problem lays in which one of the price and trust contract that is preferred in the Swedish respectively the Chinese culture when acting in a multi-task environment?

1.3 Purpose

The purpose with this dissertation is to investigate if culture is a factor to be considered when designing incentive systems in a multi-task environment? And also, to examine if our model based on cultural assumptions and stereotypes can explain if and why the Swedish and Chinese cultures prefer a specific contract.

1.4 Limitations

Because we are dealing with two large fields of research we limit ourselves to two separate factors within each field and we will focus our study on these two factors. The factors are namely, the multi-task issue in the principal agent theory and the specific culture of each country we have chosen to investigate in the field of culture. However, due to time constraints we have further limited our examination in the cultural factor to concentrate on the most commonly known and supported theories. Furthermore, we will limit the scope of our investigation to include only Swedish and Chinese students. Because of the limited Chinese population in Kristianstad the max population in each experiment group will be set at 10 Chinese students and 10 Swedish students.

1.5 Research Questions & Objectives

- Do the two cultures Sweden and China prefer different contracts in a multi-task environment? If so which one of the two contracts price and trust are preferred in each culture considering the cultural differences.

1.6 Definitions

Here follows a presentation of definitions of the most commonly used terms in the dissertation. Apart from these, other definitions are found throughout the text.

Principal: A superior person, for example a manager in a company.

Agent: A subordinate person, for example a salesperson or a worker in a company.

In the dissertation the agent will be known as "he" and the principal known as "she".

Multi-task: When a person, usually the agent, has two or more activities to pay attention to but only a limited amount of time and resources.

The MMA-model: the model created for the purpose to predict what kind of contract (price or trust) the two cultures (the Swedish and Chinese) will prefer.

The MMA-experiment: the experiment designed to investigate if the MMA-model is valid or not.

1.7 Outline

The dissertation has the following outline:

Chapter 2: The method and research approach are presented.

Chapter 3: The theoretical framework is presented. First we investigate what the researchers in the field of principal-agent theory have written: and their thoughts about multi-tasking. Secondly we present what kind of control systems and contracts we are going to use in the experiment.

Chapter 4: The theoretical framework is continued to cover the Cultural aspect. We start by writing about country specific features of each country. Moreover, we discuss the differences between the Swedish and the Chinese cultures according to several important cultural researchers. Furthermore we discuss cultural assumptions and our MMA-model is presented. Finally we present our summarised hypotheses.

Chapter 5: The questionnaire is presented. We describe our selection and questionnaire design. This is followed by the questionnaire and the answers from the participants. Furthermore, there is a conclusion with an analysis of the answers is presented.

Chapter 6: Our experiment is presented. The experimental outline and outline in depth are presented. They are followed by the experimental data and the chapter is concluded by an analysis and a conclusion.

Chapter 2

Method

The methodological strategy is presented. Research philosophy and approach are discussed in two parts and the chapter is finished with a description of the resources needed.

2.1 Choice of Methodology

Our goal was to see if there existed a cultural aspect of the multi-task problem given the two contracts price and trust. Therefore, we studied researchers within the field of principle-agent theory but also researchers who studied the differences between the two cultures Sweden and China. Of the material found in the area of the multi-task problem none could tell us if there existed a cultural aspect when deciding upon contracts to motivate the agent. All researchers within the field seemed to think that people from all over the world think and act the same no matter what culture they belong to. So we created the MMA-model which function was to uncover if there was a cultural aspect to be considered and to see if our predictions were valid. In the MMA-model we assumed what contract would be preferred in the Swedish group and in the Chinese group.

2.2 Data Collection

2.2.1 Secondary Data

Since the multi-task phenomenon is a rather unknown one, we had to search extensively for useful literature. Despite the fact that the multi-task problem is quite old, there is not much written about it. The researchers Holmstrom and Milgrom were two of the first to document it in 1991. Still, there is nothing (or very little) written about a cultural aspect of the problem. Researchers tend to generalize all individuals to react the same no matter of what culture they belong to. Because of this we followed four criteria which the literature had to meet. The research had to be up to date, written in English or Swedish, topic related and also listed in references of other studies with similar aspect as our own. Some of the most cited researchers in our theoretical framework about multi-tasking and agency theory are

Roberts (2004) and Fehr & Schmidt (2001, 2004) For our chapter about cultural differences we collected data from several researchers including Hofstede (1994), Schlewogt (2002) and Fukuyama (1995). After our theoretical framework we could conclude that were significant cultural differences between China and Sweden, but not how they affected multi-tasking.

2.2.2 Primary Data

2.2.2.1 Questionnaire

We collected a part of our primary data through a questionnaire. The purpose of the questionnaire was to see whether the participants fitted our predicted stereotype and if not, then how our assumptions would be revised. The questionnaire was handed out to the participants before the experiment. Because we had all our participants gathered for the experiment we got an answer frequency of 100%. The answers were statistically analyzed and described using the program SPSS.

2.2.2.2 The Experiment

We also conducted an experiment to collect primary data in order to see if the culture affected the preferences of contracts in a multi-task environment. The experiment was titled the MMA-experiment because of our names Marcus, Marianne and Andreas. Our objective with the MMA-experiment was to test our hypothesis that the Swedes would prefer the trust contract whereas the Chinese would prefer the price contract. In the MMA-experiment half of the participants were given the role of the principal and the other half had the role of the agent. Two experiment rounds were held, one for the Chinese participants and one for the Swedish. Each of the rounds lasted for six periods and each period lasted for five minutes. During the periods the agent had to concentrate on three tasks predefined by us as experiment supervisors. In order to test our hypotheses the principals were given the options of offering the agents either the trust or the price contract. The agent had the possibilities of either accepting or rejecting the contracts. If the agent accepted the contract, the period would begin.

2.3 Research Philosophy

Our study is based on the principles of positivism. Researchers connected to this tradition have the role of an objective analyst and try to collect information in a free manner. Researches who adopt a positivistic view strive to be independent, which that means they do not want to affect or be affected by the subject or the research (Saunders, 2003).

2.4 Research Approach

We adapted a mix of both the inductive and deductive approach. The deductive theory is when you begin with a theory and then perform an investigation in order to confirm or reject the specific theory as we did with the MMA-model. On the other hand the inductive approach is when you observe a phenomenon and tries to explain it in a theoretical manner, in other words the deductive approach reversed (Saunders, 2003). When we started to investigate the principal-agent theory and its multi-task problem we saw that the cultural aspect was lacking. Therefore, we created a model which purpose was to explain how the cultural aspect influenced the principals' choice between the two contracts price and trust.

2.5 Research Strategy

We used a survey and an experiment in our research strategy. Saunders (2003) claims that a survey is popular because it allows a collection of large amount of data from a sizeable population in a highly economical way. Often obtained by using a questionnaire, these data are standardised and allows for easy comparison. We used the experiment as a strategy because it is a classic form of research. An experiment usually involves the definition of a theoretical hypothesis and the selection of samples from a known population. One or a few variables are independent whereas the rest are controlled (Saunders, 2003).

Also our study can be seen as a mix between the exploratory and explanatory study since we wanted to explain multi-tasking from a different view. An exploratory study tries to seek new insights, ask questions and see phenomena in a new light. According to the explanatory approach we tried

to establish causal links between the different variables in the experiment (Saunders, 2003).

2.6 Resources

The experiment was accommodated at the University of Kristianstad. To motivate the participants in the experiment we compensated them for their time and effort. To calculate and compile the data we got from the experiment we needed a computer with the program SPSS.

Chapter 3

Theoretical Framework

In this chapter we discuss the basic Principal- Agent model, the control mechanisms and the contracts used in the experiment. We define the concept of multi-tasking and how it is connected to the principal-agent theory. We also present some criticism which is directed towards the principal-agent theory.

3.1 Principal-Agent Theory

The Principal-Agent theory as we know it today has been recognized as a phenomenon for a long time. One person who wrote about it about 250 years ago was Adam Smith. He observed the conflict between interests of the master and the worker and how the bargaining power was unequally distributed (Smith, 1776).

The researchers Jensen and Meckling later defined the agency relationship to be *"...a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some services on their behalf which involves delegating some decision making authority to the agent"* (Jensen & Meckling, 1976). The agency theory explores how contracts and incentives can be designed to motivate individuals to achieve desired goals. It tries to describe the major factors that should be considered when writing incentive contracts (Anthony & Govindarajan, 2003). *"The principal-agent paradigm concentrates on the incentives to bring forth a desired amount and intensity of work. The theory sees industrial relations to be dominated by distrust. As a result, the analysis focuses on the principals' need to monitor and control the agents*" (Sappington, 1991).

The simplest agency model involves a single person called the agent, who acts on behalf of another person called the principal (Roberts, 2004). For example, in a corporation the managers are principals and the sales persons are their agents. The managers hire workers and expect them to act in the principals' interest.

In the agency theory model, one of the key elements is that principals and agents have different preferences and objectives. Incentives can reduce these differences (Anthony & Govindarajan, 2003). Economists take for granted that people will not work if they are not compensated (Lane, 1991). The basic assumption is that all individuals act in their own self-interest. Agents are assumed to receive satisfaction not only from financial compensation but also for attractive working conditions, flexible working hours etc. Principals on the other hand, are assumed to be interested only in the financial returns due to their investment in the firm (Anthony & Govindarajan, 2003).

3.2 Information Asymmetry

In the Principal- Agent theory there is a part called information asymmetry; it is when one of the individuals in the principal-agent relationship knows more about a task than the other. Since the principals are not in the position to monitor and observe the agents activities on a daily basis they cannot ensure that the agents are working in their best interest. This illustrates the information asymmetry problem. The principal has not enough information about the performance of the agent; she can never be certain of how the agent's effort contributes to the company's results. The problem of information asymmetry can take several forms. Without monitoring, only the agent knows whether he is working in the principal's best interest or not. And also he may be the one that has more knowledge about the task in comparison to the principal. This additional information that the agent may have is called private information. The difference of preferences between the principal and the agent, and the agent's private information, may lead the agent to misrepresent information to the principal (Anthony & Govindarajan, 2003). On the other hand, the principal might know something the agent has no knowledge about. For example the difference between the amounts of salary she is willing to pay the agent and what she actually pays him.

3.3 Agency Costs

Agency problem can occur if contracts are not written with concern to costs and if they are not properly enforced. Agency costs include the costs of structuring, monitoring and bonding a set of contracts among agents with conflicting interests (Fama & Jensen, 1983). If both parties in the relationship are individuals that want to make the best out of the situation, there is a good reason to believe that the agent will not always act in the best interest of the principal and this will thus create information asymmetry. To prevent this, the principal can limit the differences in interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the undesired activities of the agent (Jensen & Meckling, 1976).

3.4 Control Mechanisms

There are many ways of controlling people, the authors Bradach & Eccles (1989) have observed and documented three of them: price, authority and trust.

Price is when you make someone do a task with financial incentives as motivation. Authority is when a superior commands a subordinate to perform a task. And finally, when a task is performed because of a shared system of values and beliefs this is said to be due to the control mechanism of trust.

In our study we focus on two different control mechanisms and their corresponding contracts.
The two mechanisms we have chosen are price and trust. From the price control mechanism we have developed a price contract, the price mechanism is used to control a piece-rate incentive system. In the control mechanism of trust we have combined the factors of trust and authority because they are similar in nature. We have based our definition of the trust contract on this assumption. The trust as well as the price contract is discussed below in this chapter.

3.4.1 Price

Price refers to the exchange between independent parties (Pihl, 2003). It is when a principal controls the agent or agents by using purely financial means. For example, the principal can compensate the agent with a fixed return for every product he produces, which is also known as a piece rate contract. *"The piece rate provides a strong incentive to produce lots of output*" (Roberts, 2004). Because of this, the price control mechanism fits best in a manufacturing environment where standardized products are produced for homogenous markets.

3.4.2 Trust

The trust control mechanism is a combination of trust and authority. Authority is a social relation where one individual has influence over another individual and the influence is perceived as rightful or legitimate (Nationalencyklopedin, 1999). The authority mechanism fits best in small companies were the principal acts as a middleman and have close access to information, design and control. Because of the principal's central position and close relations to the employees in smaller firms, this makes authority a good control mechanism for small firms (Bergstrand, 2003). Furthermore, when individual contributions are difficult to separate from the group effort, an authority can act as a centre for communication, decision making and give sanctions. By introducing an authority, transaction costs for information and misdirected incentives can be reduced (Alchain & Demsetz, 1972, Williamson, 1975, Alchain & Woodward, 1987). Since authority is most active in small companies the relation involving the principal and the agent will most probably develop over time and so will also the trust between them both. For example, if a small company decides to hire a new employee there will most probably be no trust at first but there will be an authoritarian aspect. As Bradach & Eccles (1989) mention, trust often develops out of social norms and personal relationships. Also, common values and beliefs provide the harmony of interests that erase the possibility of opportunistic behaviour. If all members of the organization have been exposed to some kind of socialization period they will share personal goals that are compatible with the goals of the organization (Ouchi, 1980). From

our own experience with the control mechanism of trust we believe that it is a product stemming from authority as employees trust the employer to make the right decisions.

3.5 Contracts

In our experiment we have identified two different contracts which we will include; the price contract and the trust contract. The contracts were chosen to fit the control mechanisms of price and trust. The idea to choose these contracts was inspired by Roberts (2004) discussions about the piece rate and the bonus contracts when handling a multi-task environment.

3.5.1 Price Contract

In our experiment we use a contract which we will define as a price contract. The contract can be tied to the control mechanism of price which was discussed earlier in this chapter. In this contract there is a fixed amount of gold for each product made by the agent. The contract is more commonly known in the workplace as a provision based salary or a piece rate contract. By using price as a control mechanism the principal has a better control of what the agent actually produces.

3.5.2 Trust Contract

The trust contract differs from the price contract in the sense that the principal does not only control the agent by using financial means but also by the relationship between them. In the trust contract the principal offers the agent a fixed wage for activities which he wants performed; a sum independent of how much work effort the agent puts down on the tasks. Because the trust contract is based on the relationship between the principal and the agent; the principal can if she is satisfied with the agent's performance reward him with a bonus.

3.6 Multi-Task

Multi-task is a problem within the Principal Agent theory. It arises when the agent has to spend his time on more than one activity (Roberts, 2004). As a result the principal has to induce the agent to engage in several tasks

simultaneously. The agent's performance can often be measured fairly accurately on some tasks. In others however, the available measures that can be used to provide explicit incentives to the agent may not even exist (Fehr & Schmidt, 2004). For example, a worker may have to produce a certain amount of output which is easily measured. However, he also has to make sure that the quality is high and that the machinery is properly maintained (Holmstrom & Milgrom, 1991).

This creates a problem for both parties. On one hand it becomes a problem when the desired activities compete for the agent's time and attention; doing more of one activity decreases the possibility of doing the other. It also raises the costs for the principal to offer incentives to obtain the required activities. To get the agent to pay attention to two activities, the returns for the agent to increase the work effort in each activity must be equal. Strengthening the incentives for one activity makes it more attractive to strengthen it for the other one as well, or else the second activity will be ignored by the agent. So, if the incentives are not balanced the agent will cut back on the underpaid activity. Therefore, the incentives offered in a multi-task environment should be either intense or muted on both tasks. The second problem in multi-tasking is when there is no separate way of measuring the performance between the two tasks. Inducing the agent to do a good job on one task requires very different incentives than are required for the other tasks. So, by improving incentives for one activity it may worsen the incentives for the other one. The desired solution is to induce the agent to devote effort to both activities in appropriate amounts. For example, suppose that the most important thing for the agent is the total time and effort spent on the two activities together. And that rewards are proportional to performance while expected performance in each activity is proportional to the effort exerted on it. Then, if the rewards for spending extra time on each activity are not identical, the optimal solution for the agent will be to spend all his time on the better compensated activity (Roberts, 2004).

A solution to the problem can be to separate the two activities between two different agents. If there is no multi-task issue, one agent can be given

strong incentives and the other one can be given more muted ones. This can also be the best solution when the diverse activities call for different skills. However, it can be very cost-inefficient. Not only does a second agent need to be paid but also synergies between the activities can be lost. For instance sales representatives may have opportunities to learn about customer needs, and thus learn about new opportunities that lead to product development. It would be useful to ask them both to sell the current products and to bring such ideas back to the company. In the extreme case separating activities is simply impossible. For example, the principal cannot make one agent responsible for volume while holding another one responsible for quality of the output. (Roberts, 2004).

3.7 Criticism against Principal-Agent Theory

Agency theory was developed in the 1960s and has been written about extensively. However, since many principals does not know it exists they have not been able to use it in their compensation decisions. The theory also implies that principals in none-profit organisations, such as governmental institutions, who cannot receive incentive compensation lack motivation to strive to achieve the same goal (Anthony & Govindarajan, 2003).

Others say that the theory is no more than statements of obvious facts and the elements in the model cannot be quantified. For example, how do you define the cost of information asymmetry? Another criticism is that the model oversimplifies the real-world relationship between superiors and subordinates. More factors that are not accounted for are for example personalities of the participants, non financial motives and finally trust (Anthony & Govindarajan, 2003).

The model is also inconsistent with the fact that work itself may convey pleasure. One just has to see all the volunteer work being performed around the world (Frey, 1997). Also, payments related to performance are a much debated method to raise worker productivity but in reality they often turn to be more of a declaration than actual firm policy (Nalbantian, 1987). The studies performed show what many economists have expected; financial

incentives work and raise productivity on average. However, there is such a large variance of results that this effect is not statistically significant. In many cases, a positive effect of productivity is noted, but in a number of cases it is zero or negative (Guzzo & Katzell, 1987).

3.8 Summary

In this chapter we have studied the Principal- Agent theory and the different aspects it contains. We have introduced the principal as the superior and the agent as the subordinate. Information asymmetry (which is a part of the principal agent theory) can occur between the principal and the agent if one of them knows more about a task than the other. This information asymmetry can for example be the knowledge the principal has on the amount of wage he can compensate the agent for. That is, the agent is unaware of the amount of salary the principal can offer him until the principal reveals this for him. Furthermore, we have identified the control mechanisms we wish to use, namely the price and trust mechanism and then defined the contracts; price and trust. The contracts defined, stem from the control mechanisms discussed earlier. The control mechanism of price is connected to the price contract, while the trust mechanism is connected to the trust contract. A price contract is a piece rate contract, were the agent is compensated for each product he produces. The trust contract is similar, but here the principal offers the agent a fixed wage with a possibility to get a bonus if the principal finds his performance satisfying. The contracts defined are later used in the multi-task experiment discussed in chapter six. Multi-tasking occurs in the principal-agent setting, when an agent has more than one activity to pay attention to. For example, an agent has to produce output, which is one activity, but he must also pay attention to quality and that the machinery is properly maintained. Finally we discuss some criticism that has been presented towards the principal-agent theory.

Chapter 4

Culture

In this chapter, generalizations about each culture are made. Country specific features are discussed and Hofstede's five different cultural dimensions are presented and examined. The hypothesis about what contract the specific culture will prefer is presented and summarised in the MMA-Model.

4.1 Generalizations about Cultures

National characteristics are sometimes referred to as stereotypes. These characteristics do not describe individuals but simply the behavioural norms of particular groups. Within these groups there can, of course, be exceptions from the norm but individual exceptions are never as evident (Phillips-Martinsson, 1991). A stereotype is usually based on a combination of simplification, exaggeration/distortion and generalization of a culture, as well as a presentation of cultural/social attributes. In order to examine the Swedish and Chinese cultures we need to generalize and look at the stereotypes of each specific culture. Little notion is given to the individual as we look at the culture being a product stemming from a large group of people.

Even though generalizing and using stereotypes can be questionable in use, they can sometimes also be the only way to examine specific cultures or societies. Several scientific studies show that there is a lot of truth in stereotypes even if stereotyping about cultures is most commonly perceived very negatively (Phillips-Martinsson, 1991).

4.2 Country Specific Features

To be able to separate the cultures we have to find some specific features of each one so that we can create our own stereotype of each culture. We then can use this as a base in order to help us in understanding why the specific culture chooses a particular contract.

4.2.1 The Concept of ”Jantelagen”

“Jantelagen” is a set of conservative laws which only function to restrain individuals from making changes in society. “You shall not think that you are better than anyone else” is a summary of the content of the laws. It was developed by the Norwegian author Aksel Sandemose who first used it in his book "*En flykting korsar sitt spår*". In the book he uses the name “Jante” for his hometown Nyköping. A son or a daughter from the hometown cannot be regarded as unique or special. The law is applicable in most environments as for example in; the workplace, school and even family (Sandemos, 1968). It is a law most commonly known and widespread throughout Sweden.

4.2.2 Egalitarianism

Closely related to the concept of Jantelagen is the theory of Egalitarianism. Egalitarianism is a moral doctrine based on the notion that equality ought to prevail throughout a society or a culture (Phillips-Martinsson, 1991). There are several different forms of egalitarianism such as; economic, moral, legal, democratic, political gender and opportunity egalitarianism.

In Sweden the concept should be seen as regarding to the entire society. The levelling of peoples’ standards’ of living, the fact that people should have equal rights and that competition between people is not accepted and discouraged are all part of the concept. Egalitarianism has been one of the most predominant themes in the Swedish society for a very long period of time (Phillips-Martinsson, 1991).

4.2.3 The Concept of ”Losing Face”

The concept of losing face is a deeply rooted concept in the Chinese culture and thus very important to its people. Many other cultures do not understand the principle of losing face, which is what happens when something is made public which people perceive as being private (Hampden-Turner, Trompenaars, 2003). Face also deals with the perception and/or credibility of a person. If you insult, embarrass or in any other way bring shame over person this means a loss of “face” for him (Schlewogt, 2002).

"Losing face is thought to be more consequential for a Chinese manager than for a Western one, leading some social actors in China to become experts in power games based on face." (Hwang, 1987, cited by Schlewogt, 2002) In theory the concept of face can have organizational implications, such as more hierarchical and centralized structures (Schlewogt, 2002).

4.3 Business Culture of Both Sweden and China

The Swedish businessman is said to be inflexible in his negotiations and behaviour. Unwilling to discuss and adjust, a slow decision maker and over-cautious. He avoids conflict at all costs and is a pedant for punctuality. Additionally he is difficult to get to know and hard to work with (Phillips-Martinsson, 1991). The Swedish management style is perceived to be less hierarchical than in other cultures. The Swedes have a greater ability to accept that the boss (principal) does not have the answer to all questions. Thus, Swedes perceive it much easier to bypass the hierarchical line and look for answers not in authorities but where they are most likely to find them. In other cultures this could be seen as an act of insubordination (Phillips-Martinsson, 1991).

There is a lack of specialized roles in Chinese companies. The structure is simple: the superior is in the upper box and all subordinates are at the next level. The Employees are required to do whatever their superior asks them do to. This makes the Chinese to quickly become valuable, multi-skilled and versatile contributors since they are exposed to wide variety of tasks. Formal means of control are less needed in the Chinese organisations given that the CEO or superior exerts personal control, also known as authority. (Schlewogt, 2002)

"The Chinese build large "enterprise cities" that they glue together through ties based on family lineages and trust. Personal connections (guanxi) serve as their linchpin. ...In contrast, state enterprises are often vertically integrated and form part of hierarchally organized governmental industry bureaus or ministries." (Schlewogt, 2002)

Schlewogt stresses 4 different factors that influence Chinese management; respect for age and hierarchy, group orientation, face and the importance of relationships. (Schlewogt, 2002)

4.4 Trust in China and Sweden

China is a family centred, low-trust society. By history the extension of immediate trust beyond the immediate family has not been provided in China. Chinese tradition also has it that a father must divide his estate equally between all his sons. It is only by state intervention that it is possible to form a large business. This has led to a seething mass of small businesses in China and Taiwan. Knowing that other Chinese people shared the same values meant the presumption that they always looked out for their own family and could therefore not be trusted. People in low-trust societies consider trust to end at the border of the family (Fukuyama, 1995).

Since Fukuyama does not write about Sweden specifically we examine the closest country in culture and geography, which is Germany. In Germany trust has been more extended through time, it is a high-trust, institution centred society. Medieval guilds have continued in existence up to present time by changing their form to meet the exigencies of modernity. This has developed the abilities for non-kin to cooperate for mutual benefit. Also pride in work and professionalism has evolved. Characteristics for an institution centred society are for example that trust is extended beyond the family, there are large companies and there is an extensive civil society with strong bounds between group members (Fukuyama, 1995).

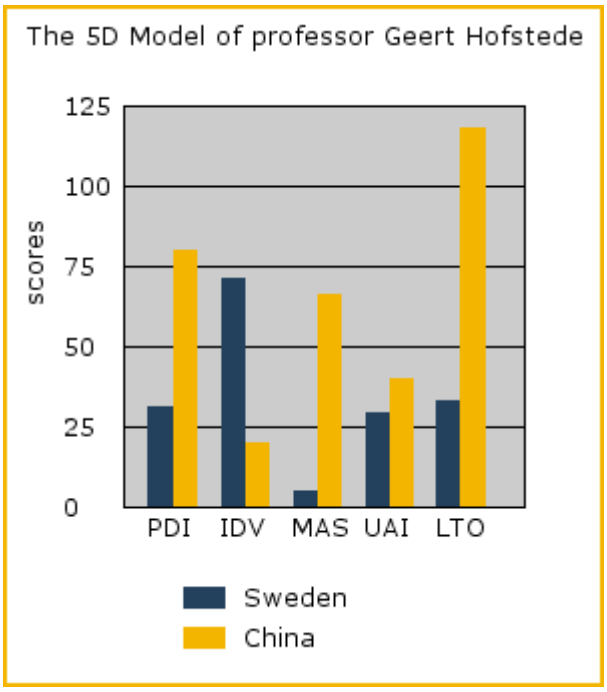
4.5 Hofstede's Dimensions

To further distinguish between the two cultures we have used the different dimensions which Hofstede recognized in his research. The dimensions identified are as follows;

- Power Distance
- Individualism/Collectivism
- Masculinity/Femininity

- Uncertainty Avoidance
- Long-Term Orientation

Table 4.1 The 5 Dimensions Model[1]



PDI	Power Distance Index
IDV	Individualism
MAS	Masculinity
UAI	Uncertainty Avoidance Index
LTO	Long-Term Orientation

4.5.1 Power Distance

Power Distance is a measurement used to distinguish different nations on the base of their ways to deal with inequalities. That is, how specific cultures handle the fact that people are unequal (Hofstede, 1994).

Another way of defining power distance is, "*the extent to which the less powerful expect and accept that power is distributed unequally*" (http://homepage.psy.utexas.edu). Inequalities are differences between the physical and intellectual capabilities of people. In high power distance societies these inequalities are allowed to grow into differences of power

[1] http://www.geert-hofstede.com/graphs/5dgraph.php?

and wealth between people. While in low power distance societies the inequalities are tried to be evened out as much as possible (http://enbv.narod.ru). To be able to differentiate cultures a power distance index (PDI) is used.

The philosopher, Confucius, maintained that that the stability of society is based on unequal relationships between people. He differentiated between 5 different relationships; ruler-subject, father-son, older brother-younger brother, husband-wife and senior friend-junior friend. His ideas about different social relationships have survived for a long time in China and still influence the Chinese culture, especially the power distance aspect (Hofstede, 1994).
China is thus found high on the PDI while Sweden on the other hand can be found down low on the index. This shows that subordinates and superiors in an organization or society consider each other as equal and the hierarchical system is an inequality of roles just formed for convenience (Hofstede,1994).

Thus differences among countries along value dimensions like power distance help not only in understanding differences in thinking, feeling and behaving by the leaders and those led, but also in appreciating the theories produced or adopted in these countries to explain or prescribe thought, feeling, and behaviour (Hofstede, 1994 p.40).

How countries score on the PDI depends on the countries' history (if there is a history of single rulers and the people's ability to take orders from the centre) and social norms as well as behaviour. (Hofstede, 1994)

4.5.2 Individualistic/Collectivistic

In the collectivistic society identity is based on the social network to which one belongs, while in the individualistic societies identity is based on the individual (Hofstede, 1994). The Chinese culture is a highly collectivistic one as the concept of face illustrates. In the individualistic society, as the

Swedish, the counterpart characteristic of the concept of face is self-respect (Hofstede, 1994).

In collectivistic cultures people have a tendency to create family-like ties to persons who are not biologically related but part of one's social group, also known as the "ingroup". In a collectivistic society the workplace can become an "ingroup" to a person and the relationship between employer and employee is seen in more moral terms than in an individualistic society. The relationship between employer and employee can resemble more a family relationship with mutual obligations of protection in exchange for loyalty. In collectivistic societies poor performance of an employee is not enough reason for dismissal, it will however, help to determine what kind of task will be assigned to the employee (Hofstede, 1994).

In an experiment performed by Christopher Early, a management researcher from the USA, the Chinese, which are highly collectivistic, participants performed best when operating with a group goal, and anonymously. They performed worst when operating individually and with their name marked on the items produced (Hofstede, 1994).

In an individualistic society, management is more about the management of individuals. Employees can be moved around individually and if incentives or bonuses are used these should be linked to an individual's performance to achieve maximum performance (Hofstede, 1994).

In table 4.1 (see previously) we see that China is a highly collectivistic country as they score very low figures on the individualism index (IDV), while Sweden ranks very high in the IDV (Hofstede, 1994).

4.5.3 Masculinity/Femininity

This dimension is about how much the society reinforces the traditional masculine work role model of power, achievement and power. A high degree of gender differentiation results in a high masculinity ranking. Males dominate a remarkable part of the power structure in these cultures whereas

women are being controlled by the male domination. A low level of differentiation and discrimination results in a low masculinity ranking. Females in feminine cultures are treated equally to men in all aspects of society. Sweden is ranked as a feminine country whereas China is ranked as a masculine country (Hofstede, 1994).

There are some important factors emphasised in masculine cultures:
- *Earnings*: to have to the opportunity for higher earnings.
- *Recognition*: to get the recognition deserved for a performed task.
- *Advancement*: to have the option to advance to a better position.
- *Challenge*: to have a challenging job offering the opportunity of self fulfilment.

The corresponding factors for the feminine cultures are:
- *Manager*: to have a good relationship with the superior.
- *Cooperation*: to have the opportunity to work with people you function well with.
- *Living area*: to live in a good area.
- *Employment security*: to not risk of being made redundant.

Other key differences are that in masculine societies, material possessions, success and progress is important whereas caring for others and preservation is emphasized in a feminine society. In the masculine society money and things are central while the feminine society is more accentuating relationships and being modest (Hofstede, 1994).

4.5.4 Uncertainty Avoidance

Hofstede's fourth dimension was first discovered as a by-product of the power distance dimension. A country with a high ranking in uncertainty avoidance has a low tolerance for ambiguity and uncertainty. These factors have contributed to a creation of a rule-oriented society. To reduce the amount of uncertainty, rule-oriented societies emphasises laws, rules and regulations. On the other hand a low-ranked country has more tolerance towards uncertainty and ambiguity. In these countries people are willing to

take greater risks; they are also more accepting towards changes (Hofstede, 1994). We decided not to look at the uncertainty avoidance dimension when studying possible cultural differences between China and Sweden when it comes to multi-tasking, because the two countries rank so close in the uncertainty avoidance index.

4.5.5 Long-Term Orientation

The fifth and final dimension in Hofstede's research is called long-term orientation. It describes whether the society values, or not, long-term devotion to traditional forward thinking principles. Countries with a high rank in long-term orientation emphasises tradition and long-term commitment. Supposively, this supports a strong work ethic with expectations of long-term rewards. On the contrary a country with a low long-term orientation rank does not reinforce traditional orientation. In these countries things can change faster and commitments are no obstacles to this (Hofstede, 1994). Since the experiment spans over just a bit more than one hour we decided not to use the Long-Term Orientation index when analyzing the differences.

4.7 Cultural Assumptions/Stereotypes

4.7.1 Jantelagen

We assume that the concept of Jantelagen will affect the Swedes in the way that they will not want to stand out from the crowd. They will not want to perform (generate output) neither better nor worse than the rest of their group. The Chinese participants will also be affected by the concept but not to the same extent as the Swedes. And thus, the performance (output) of the Chinese agents will differ more than in the Swedish group. We presume that the concept of jantelagen will not affect the agents' choice of contracts. To sum it up, we believe that jantelagen will influence the Swedes (and maybe the Chinese work effort) in the sense that they will not want to perform better or worse than anyone else in their group.

4.7.2 Losing Face

If the principal presented the agent with a contract that would be perceived as being unfair, the concept of face could influence the Chinese in our experiment in a way that they would reject the contracts to a higher degree than the Swedes, as it would mean a loss of face for them. However, if the agent rejected the offered contract it might instead mean a loss face for the principal and they would thus chose to offer another contract the next time. Because of these various assumptions of how the Chinese will react we cannot make a reliable prediction. The Swedish participants will probably not be affected by the concept to the same extent as the Chinese as the concept is especially rooted in the Chinese culture.

4.7.3 Trust

We believe that coming from a low-trust society the Chinese principals will not trust their agents to the same extent as the Swedish principals will. This will lead the Chinese principals to use the price contract to a higher degree, forcing their agents to perform more output. Also, the Chinese agents will be able to control their own salary more under the price contract as they themselves decide how much to produce and thus their final wage. While under the trust contract factors like the bonus are outside of the agent's abilities to affect. On the other hand, the Swedish principals coming from a high-trust society, will have more trust in their agents' performance allowing them to work under a trust contract. The Swedish agents will also prefer the trust contract having more faith in their principals to give them fair salaries and bonuses.

4.7.4 Power Distance

As discussed before, power distance is a measurement used to distinguish different nations on the base of their ways to deal with inequalities. Sweden is found down low on the power distance index. This shows that subordinates and superiors in an organisation consider each other as more equal. With this information in mind, we assume that since they are considering themselves to be more equal there is a certain amount of trust between them. Therefore, the Swedes should prefer the trust contract as it

shows that the principal has more confidence in the agent. So, the principal feels that he is closer to the agent as they are more on the same level. China on the other hand, is viewed as a high power distance culture and should therefore prefer the price contract instead.
Because the trust contract requires a close connection between the principal and the agent, which is achieved with a low power distance, the Swedish agents may feel more comfortable in the presence of their superiors and according to the trust concept therefore chose the trust contract.

When the Swedish agents discuss their optional bonus in the trust contract with their principals it might result in that the Swedish principals will give higher bonuses than the Chinese principals. China's high power distance will lead to the agents not being so persistent when bargaining about a possible bonus.

4.7.5 Individualistic/Collectivistic

Since Sweden is stated to be one of the most individualistic countries in the world, this will affect the Swedes in their choice of contracts. The contract preferred by an individualist should be the price contract, as Hofstede claims *"In an individual society, management is more about the management of individuals. Employees can be moved around and if incentives or bonuses are used these should be linked to an individual's performance to achieve maximum performance"*
Our assumption related to this prediction is that an individualistic person is more interested of rewards according to his own personal performance. We believe that an individualistic principal will not be interested in giving a bonus to her subordinate and therefore prefer the price contract. On the other hand the Chinese as being a collectivistic society will choose the trust contract. These assumptions contradict our previous predictions of what contract each culture will prefer. However, we do not believe that this single variable will affect the outcome of our MMA-model.

4.7.6 Masculinity/Femininity

Because of Sweden being a feminine culture we assume that the Swedish participants will choose a trust contract in a higher degree than the Chinese participants. This is because of the trust contract offering greater payment security and a better working environment, factors emphasised in a feminine culture. Also the Trust contract is to prefer for the principals when their agents are productive making them able to control their salary. On the contrary the Chinese participants will be likely to prefer the price contract giving them the opportunity for higher earnings and challenge, which are factors important in a masculine culture.

4.8 MMA-Model

In our analysis of the Chinese and Swedish cultures we have concluded some statements to why the cultures will choose the different contracts. We have developed a model we chose to call the MMA-model (taken from the first letters of our names).

Table 4.3 The MMA-Model

	Swedish	Chinese
Price		X
Trust	X	

The Swedes will prefer the trust contract because Sweden is a:

- High trust culture
- Low power distance culture
- Femininity culture

The Chinese will prefer the price contract because China is a:

- Low trust culture
- High power distance culture
- Masculinity culture

4.9 Summary

In order to examine the Swedish and Chinese culture we generalize about each specific culture and create an outline of a stereotype that we will compare with each cultural group. Little notion is given to the individuals of each culture as we look at the culture being a product stemming from a larger group of people. National characteristics are sometimes referred to as stereotypes, which do not describe individuals but simply the behavioural norms of particular groups. Within these groups there can be exceptions from the norm but individual exceptions are not as apparent.

Presented country specific features include; the concept of jantelagen, egalitarianism and the concept of losing face. The concept of jantelagen and egalitarianism are more applicable to Sweden while the concept of losing face is more relevant to the Chinese culture.

Furthermore, comparisons between the Swedish and Chinese cultures are carried out. The comparison between the two countries' business cultures reveals that the Swedes are less hierarchical than the Chinese even though there is a lack of specialized roles in Chinese companies. Another comparison between the two nations is done, but it is based on the difference of the levels of trust. The conclusion is that China is a low-trust society while Sweden is a high-trust society.

To additionally differentiate between the cultures we have used Hofstede's five dimensions:

- Power distance deals with the differences between the physical and intellectual capabilities of people and how hierarchal a culture is.

- Individualistic vs. Collectivistic: In a collectivistic society the groups' wellbeing and group consensus is stressed while the individual fulfilment and performance is the most important in an individualistic culture.
- Masculinity vs. femininity: Feminine cultures emphasise the quality of life, interpersonal relationships and concern for others while masculine cultures value competitiveness and assertiveness in order to achieve higher material success.
- Uncertainty avoidance: expresses the extent to which people within different societies handle unclear rules and ambiguity.
- Long term orientation describes the values of commitment and respect for tradition.

We have summarised our assumptions on how each dimension/feature will affect the outcome of our experiment in the following table.

Table 4.2 Summary of the Hypotheses

Theory/Country	**China**	**Sweden**
Concept of Jantelagen	**-**	**Affect work effort**
Concept of Losing face	**Affect accepting/rejecting**	**-**
Concept of Trust	**Price**	**Trust**
Concept of Power Distance	**Price**	**Trust**
Individualistic/Collectivistic	**Trust**	**Price**
Masculinity/Femininity	**Price**	**Trust**

The assumptions of what contract each culture should choose under the individualistic and collectivistic dimension contradicts our MMA-model but since three other dimensions support it, we do not think it will affect the outcome to a great extent. We also believe that the concept of losing face will not influence the principals to a great extent when choosing contracts. However, we think it will affect the agents when deciding upon the offers whether to accept or reject the contracts. The concept of losing face will influence the agents to the extent that they will not accept a not appealing

contract. Furthermore, we believe that the concept of jantelagen will not influence the choice of contracts but the work effort. The agents will not distinguish themselves in excessive production.

By studying the table above were we state what kind of contract the different country might choose according to its preferences. In the MMA-model we state that according to the Swedish culture the Swedes will primary chose the trust contract and the Chinese will chose the price contract.

4.10 Concluded Hypotheses

According to our MMA-model we created for this experiment the different participants would prefer different contracts.

The Swedish participants would prefer *the trust* contract in a multi-task environment because:

- **Sweden is a high trust, low power distance and feminine culture.**

The Chinese participants will prefer *the price* contract in a multi-task environment because:

- **China is a low trust, high power distance and masculine culture.**

We discussed earlier that the dimension of individualistic/collectivistic contradicts our other presumptions of the preferred contract for each culture. We believed that this dimension would not have a stronger impact alone than the other three variables together. We also believed that the concepts of losing face and jantelagen would not influence the different cultures in their choice of contract. Losing face would influence the acceptance or rejection of contracts and jantelagen the work effort.

Chapter 5

Questionnaire Research

In this chapter the selection of participants, questionnaire method and design is presented. The statistical data and outcome of the questionnaire is also presented and then carefully examined. The cultural stereotypes are compared to the result and then revised.

5.1 Questionnaire Method

5.1.2 Selection

Because of the small number of Chinese students at the University of Kristianstad, about 50 persons, we based our selection of individuals on quota. We selected ten students from each cultural group to participate in the experiment giving a total of 20 participants. Quota selection is a well known method that is not based on the probability selection. The main idea with this method is to have the same distribution in the selection as in the population. In our case we had to adapt our Swedish group to our Chinese group, so we would get the same amount of individuals with the same preferences. However due to the fact that the individuals were not picked randomly this could affect the possibility to estimate the size of the selection error. The result of this was that the reliability could not be estimated (Korner & Wahlgren, 1996).

5.2 Questionnaire Design

The questions in the questionnaire (see appendix 1) were of two different kinds; one where the participant could choose between two different options and the other type a likert-style rating scale question. In the scale question the participants could fill in their opinion on a range from one to seven. Usually one represented not at all and seven very much and on some questions the scale went from one as being not at all and seven being very easy. When discussing the lower bound we talk about the figures from one to four, while the higher bound corresponds to the figures from four to seven. The questions in the questionnaire were based on Hofstede's and

Fukuyama's research but also our own assumptions and the country specific features as well.

With the help of the questionnaire we generalized about the cultures and extended our knowledge of them both. We asked the participants questions that helped us to create and to compare the existing stereotypes in each culture and if and how individuals could be labelled to be of a typical Chinese or Swedish culture. We also wanted to test if our culture hypotheses were correct and if not, how they differed.

5.3 Questionnaire Data

5.3.1 Questions 1, 2, 3 and 6 (Individualistic/Collectivistic)

These questions where asked in order to determine if the participants had a collectivistic or individualistic orientation.

In our stereotype of the Chinese culture we assumed that the Chinese would give answers to match collectivistic preferences, as Hofstede's analysis suggests that the Chinese are a highly collectivistic society. Swedes on the other hand, are classified as individualistic in Hofstede's dimensions and should therefore give answers that reflect this in the questionnaire.

1. On any given task, do you prefer to work in a group or individually?

The expected answers were as follows; Swedes should answer that they preferred to work individually and the Chinese that they preferred group work.

Table 5.1a Question 1 Individualistic/Collectivistic (China)[2]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Group	6	60,0	60,0	60,0
	Individually	4	40,0	40,0	100,0
	Total	10	100,0	100,0	

[2] The program SPSS (used when creating these tables) automatically uses a comma instead of a dot in the figures.

Table 5.1b Question 1 Individualistic/Collectivistic (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Group	5	50,0	50,0	50,0
	Individually	5	50,0	50,0	100,0
	Total	10	100,0	100,0	

A majority (60 %) of the Chinese preferred to work in a group (as seen in table 5.1a). And in the Swedish group there was an equal amount of answers for each alternative, as 50% favoured group work and the other 50% favoured individual work.

2. In your workplace, do you consider yourself to have close family like bonds with your colleges?

This was a question where you could answer on a scale from one to seven with one being not at all, and 7 very much. Here the Chinese should have answered in the upper bounds of the scale, i.e. between four and seven and the Swedes should have answered between one and four so that we could be able to classify them as either collectivistic or individualistic.

Table 5.2a Question 2 Individualistic/Collectivistic (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q2	10	1,00	7,00	5,0000	1,6330
Valid N (listwise)	10				

Table 5.2b Question 2 Individualistic/Collectivistic (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q2	10	1,00	4,00	2,7000	,9487
Valid N (listwise)	10				

We can see from the tables that the Chinese answers fell in the upper bound with a mean of 5 while the Swedish participant's answer gave a mean of 2.7. This indicates that the Chinese form closer and stronger bonds to their colleagues at work than the Swedes do.

3. What do you consider to be most important: individual achievements or group performance?

As Sweden is labelled as an individualistic country the Swedes should answer that they prefer individual achievement. While the Chinese labelled a collectivistic country, should answer group performance.

Table 5.3a Question 3 Individualistic/Collectivistic (China)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Individual achievement	3	30,0	30,0	30,0
	Goup performance	7	70,0	70,0	100,0
	Total	10	100,0	100,0	

Table 5.3b Question 3 Individualistic/Collectivistic (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Individual achievement	8	80,0	80,0	80,0
	Group performance	2	20,0	20,0	100,0
	Total	10	100,0	100,0	

Here both groups answered as predicted, 70% of the Chinese chose group performance over individual achievement while 80% of the Swedes answered that individual achievement was more important.

6. When it comes to decision making do you prefer group consensus or a single leader?

Because of the collectivistic orientation of the Chinese they should have checked the box for group consensus, while the Swedes should prefer a single leader.

Table 5.6a[3] Question 6 Individualistic/Collectivistic (China)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Group consensus	6	60,0	60,0	60,0
	Single leader	4	40,0	40,0	100,0
	Total	10	100,0	100,0	

Table 5.6b Question 6 Individualistic/Collectivistic (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Group consensus	4	40,0	40,0	40,0
	Single leader	6	60,0	60,0	100,0
	Total	10	100,0	100,0	

A majority (60%) of the Chinese favoured group consensus and a majority of the Swedes (60%) preferred a single leader. The difference between the cultures was not overwhelming but there was still a small difference.

By asking the questions above we broadened our knowledge of how the collectivistic and individualistic dimension affect the Swedish and Chinese cultures. The Swedes and Chinese reacted as predicted when confronted with questions related to Hofstede's research. With the help of this first part of the questionnaire we proved that this dimension is an important and accurate part.

5.3.2 Questions 4, 5 and 15 (Power Distance)

These questions were asked in order to determine where the participants stood in relation to the power distance index.

4. Do you feel that you and your superiors are on the same level?

Because the Chinese are a high power distance culture and the Swedes a low power one, we expected the Chinese to give answers that fall in the lower boundaries of the scale and the Swedes to give answers that fall in the higher boundaries. In other words, the Swedes should feel that they are on

[3] The table number comes from the question number the question had in the questionnaire.

the same level as their superiors while the Chinese should feel just the opposite because of the deeply rooted hierarchic systems in the Chinese culture.

Table 5.4a Question4 Power Distance (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q4	10	1,00	7,00	3,6000	1,7764
Valid N (listwise)	10				

Table 5.4b Question4 Power Distance (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q4	10	1,00	6,00	3,5000	1,5811
Valid N (listwise)	10				

The mean values show that there is almost no difference between the two groups.

5. How at ease do you feel in the presence of your superiors?

Comparative to the previous question of power distance it follows that the Swedes should feel more at ease with their superiors than the Chinese do. So the Chinese answers should be in the lower bounds of the scale and the Swedish answers in the higher bound.

Table 5.5a Question 5 Power Distance (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q5	10	3,00	6,00	4,4000	1,1738
Valid N (listwise)	10				

Table 5.5b Question 5 Power Distance (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q5	10	3,00	6,00	5,0000	,9428
Valid N (listwise)	10				

Again it is rather even but not as even as in the previous question. With a mean score of 5.0 the Swedish group places itself within the higher boundaries, as expected. However, the Chinese also rank themselves rather

high. So with guidance from this question we can see that the Swedes answers are as predicted and also are the Chinese. The Chinese are a bit more affected by the power distance dimension than the Swedes.

15. Do you find it easy to follow orders without knowing why they should be performed? How countries score on the PDI depends on the history of the country , if it has a history of single rulers but also on the people's ability to take orders from superiors. The score also depends on social norms as well as behaviour (Hofstede, 1994). The Chinese have a long history of authoritarian rulers and we could therefore expect that they would find it easier to follow orders without any direct explanation compared to the Swedes. So the Chinese answers should be in the higher bounds of the scale and the Swedish answers in the lower bounds.

Table 5.15a Question 15 Power Distance (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q15	10	1,00	7,00	3,5000	1,9579
Valid N (listwise)	10				

Table 5.15b Question 15 Power Distance (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q15	10	1,00	7,00	4,1000	1,7288
Valid N (listwise)	10				

The results of this question were not coherent with Hofstede's research and our own hypothesis of what the Swedes and Chinese would choose. We expected the Chinese to score a high mark and the Swedes to score a low mark because of their cultural preferences. Instead the results showed the opposite.

In this part we have discussed the results from the power distance dimension, the results showed that the Chinese were a bit more concerned with this aspect. However the Swedes showed tendencies of also being affected as much as the Chinese.

5.3.3 Questions 7, 8, 9 and 10 (Concept of Losing Face)

This concept was a country specific one and when asking questions about it we initially wanted to compare if there was a difference between the familiarity of the concept between the Swedish and Chinese participants and then secondly, if there was any difference in how much it affected them. The phenomenon of losing face is not solely a Chinese one and both the Swedes and the Chinese could be aware of the concept to the same degree, but as the concept has deeper roots in the Chinese culture the assumption was that the Chinese should be more affected by it than their Swedish counterparts.

7. Are you familiar with the concept of "losing face"?

This was a test if the participants were aware of the concept and if the Chinese would prove to be more conscious of it than the Swedes for historical reasons.

Table 5.7a Question 7 Concept of Losing Face (Chinese)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	90,0	90,0	90,0
	No	1	10,0	10,0	100,0
	Total	10	100,0	100,0	

Table 5.7b Question 7 Concept of Losing Face (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	90,0	90,0	90,0
	No	1	10,0	10,0	100,0
	Total	10	100,0	100,0	

This question showed us that both groups were familiar to the concept of losing face and giving no consideration to the cultural heritage.

8. To what extent does the concept (of "losing face") affect you in your daily life?

Once again, the Swedish mean should fall in the lower bounds and the Chinese in the upper bounds of the scale to represent the answers of each preset cultural stereotype.

Table 5.8a Question 8 Concept of Losing Face (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q8	10	3,00	7,00	5,0000	1,4907
Valid N (listwise)	10				

Table 5.8b Question 8 Concept of Losing Face (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q8	10	2,00	5,00	3,2000	,9189
Valid N (listwise)	10				

The mean for the Chinese group was 5.0 and for the Swedish group 3.2. The answers showed that the concept of losing face affects the Chinese more than the Swedes, which in turn was consistent with our presumptions.

9. If your superior/superiors gave you a very low wage offer would you feel that this would mean a loss of face for you?

According to our hypothesis of the concept of loosing face the Chinese should react to this question more than the Swedes.

Table 5.9a Question 9 Concept of Losing Face (China)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	60,0	60,0	60,0
	No	4	40,0	40,0	100,0
	Total	10	100,0	100,0	

Table 5.9b Question 9 Concept of Losing Face (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	70,0	70,0	70,0
	No	3	30,0	30,0	100,0
	Total	10	100,0	100,0	

Both the Swedish and the Chinese felt that a low wage offer would mean a loss of face. We expected that there would be a more significant difference between the groups. This implied that both groups purposively would reject a low wage offer in the MMA-experiment, to the same extent.

10. If your superior would give you a reprimand in front of your colleagues, how embarrassing would this be for you?

Since the Chinese were more influenced by the concept of loosing face than the Swedes they should rank themselves in the higher bounds and the Swedes in the lower bounds according to our preset stereotypes.

Table 5.10a Question 10 Concept of Losing Face (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q10	10	4,00	7,00	5,6000	,9661
Valid N (listwise)	10				

Table 5.10b Question 10 Concept of Losing Face (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q10	10	1,00	7,00	4,5000	1,6499
Valid N (listwise)	10				

Both groups leaned towards the higher end of the scale but still there was a small difference in the sense that the Chinese found it a bit more embarrassing than the Swedes did.

In this part of the questionnaire about losing face we have clearly seen that the Chinese are more affected by this concept than the Swedes. This can be explained by the fact the losing face is a Chinese concept.

5.3.4 Questions 11, 12 and 16 (Trust)

China is a family centred, low-trust country whereas Sweden is a high-trust, institution centred country. The questions are asked in order to see if the Chinese are of low trust and Swedes are of high trust.

11. Do you feel that the Chinese government works in the best interest of its people?

According to Fukuyama's research on trust the Chinese are supposed to have a low trust perception of their government.

Table 5.11a Question 11 Trust (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q11	10	1,00	7,00	4,4000	2,3190
Valid N (listwise)	10				

Table 5.11b Question 11 Trust (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q11	10	2,00	4,00	2,9000	,7379
Valid N (listwise)	10				

The Chinese mean was in the higher boundaries whereas the Swedish mean was in the lower ones. Apparently the Chinese group trusted the Chinese government more than the Swedes.

12. Do you feel that the Swedish government works in the best interest of its people?

This was the same question as above but for the Swedish population. Since the Sweden was a high trust society their answers should be given in the higher boundaries according to our research.

Table 5.12a Question 12 Trust (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q12	10	3,00	7,00	5,7000	1,4181
Valid N (listwise)	10				

Table 5.12b Question 12 Trust (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q12	10	3,00	6,00	4,8000	1,1353
Valid N (listwise)	10				

The mean for the Chinese group was 5.7 and the mean for the Swedish group was 4.8. Once again the Chinese had more trust for the government even if it was not their own government.

16. How easy do you find it to trust people outside the immediate family?

As china being a low trust culture and Sweden being a high trust culture we expect a result according to this. The Chinese should place themselves in the lower boundaries and the Swedes in the higher.

Table 5.16a Question 16 Trust (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q16	10	1,00	6,00	3,2000	1,8738
Valid N (listwise)	10				

Table 5.16b Question 16 Trust (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q16	10	1,00	6,00	4,1000	1,5951
Valid N (listwise)	10				

The Swedes have answered in the upper boundaries and the Chinese in the lower. Being a high-trust nation the Swede's mean should be slightly higher. Moreover, the Chinese should have a lower mean being a low-trust society.

In this part we have seen tendencies of that the Swedes were more concerned about trust than their Chinese counterparts. This result fitted to some extent the research made of the subject that Swedes are a high trust society and the Chinese a low trust society.

5.3.5 Questions 13 and 14 (Jantelagen)

This concept is a country specific one and we presume that the Swedes are more affected by it than the Chinese.

13. Do you feel uncomfortable when standing out from the crowd?

If the Swedes are affected by the concept they should give answers that fall in the lower boundaries of our scale.

Table 5.13a Question 13 Concept of Jantelagen (China)

	N	Minimum	Maximum	Mean	Std. Deviation
Q13	10	1,00	6,00	3,7000	2,0575
Valid N (listwise)	10				

Table 5.13b Question 13 Concept of Jantelagen (Sweden)

	N	Minimum	Maximum	Mean	Std. Deviation
Q13	10	1,00	6,00	3,3000	1,4181
Valid N (listwise)	10				

As shown in the result and as predicted the Swedish answers were in the lower boundaries and the Chinese mean score were slightly higher. This result showed that the Swedes were more affected by jantelagen than the Chinese, not much, but the difference existed.

14. Would you adjust your own work in order to not perform better or worse than anyone else, when working together in a group?

This was a typical jantelag's question which purpose was to find out if in particular the Swedes but also if the Chinese were affected by the concept of not being better or worse than anyone else.

Table 5.14a Question 14 Concept of Jantelagen (China)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	8	80,0	80,0	80,0
	No	2	20,0	20,0	100,0
	Total	10	100,0	100,0	

Table 5.14b Question 14 Concept of Jantelagen (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	10	100,0	100,0	100,0

80% of the Chinese admit that they would change their work effort to match the collective level of work effort. We supposed that only the Swedish participants would answer this as we presumed that the concept of jantelagen would affect them in this way. A possible explanation to why a Chinese majority answered yes is that the concept of losing face plays in as an affecting factor in this group.

In this part we have seen that the Chinese were as much affected by jantelagen as the Swedes. in some results we could se that the Chinese were more affected by jantelagen than the Swedes. an explanation to this could be that jantelagen and the concept of losing face were rather similar.

5.3.6 Questions 17 and 18 (Masculinity, Femininity)

Too see whether the participants were from a masculine of feminine society we asked two questions where the participants were given two alternatives, one masculine and one feminine.

17. What is more important, a high salary or feeling satisfied about your job?

For this question “a high salary” was the masculine factor and “feeling satisfied about your job” was the feminine factor. According to Hofstede’s

research the Swedes should chose “feeling satisfied” and the Chinese should go for “a high salary”

Table 5.17a Question 17 Masculinity/Femininity (China)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High salary	3	30,0	33,3	33,3
	Feeling satisfied	6	60,0	66,7	100,0
	Total	9	90,0	100,0	
Missing	System	1	10,0		
Total		10	100,0		

Table 5.17b Question 17 Masculinity/Femininity (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Feeling satisfied	10	100,0	100,0	100,0

A majority of the Chinese participants chose “Feeling satisfied” but still 30% chose a “High salary”. For the Swedish participants the whole population chose “Feeling satisfied” and this result corresponded well with Sweden being a feminine culture.

18. What is more important, to have the option to advance to a better position or employment security?

For this question “Advancement” was the masculine factor and “Employment security” was the feminine one. The masculine alternative should be picked by the Chinese participants and the feminine alternative by the Swedes to match our predictions.

Table 5.18a Question 18 Masculinity/Femininity (China)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Advancement	5	50,0	50,0	50,0
	Employment security	5	50,0	50,0	100,0
	Total	10	100,0	100,0	

Table 5.18b Question 18 Masculinity/Femininity (Sweden)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Advancement	5	50,0	50,0	50,0
	Employment security	5	50,0	50,0	100,0
	Total	10	100,0	100,0	

Both the Swedes and the Chinese have answered alike a frequency of 50% for each alternative. Therefore this question gives us help in defining the cultural belongings. But it gives us information of that it is equally important in both cultures to both have security and a possibility to advancement.

The Swedes showed in these questions a tendency to be a more feminine culture, than the Chinese. The Swedes preferred the feeling satisfied choice while the Chinese were a bit divided in their opinions.

5.4 Conclusion

In our comparison of the Swedish and Chinese cultures we have stated a number of factors that differ between the two cultures.

We have initially introduced a couple of country specific features like: jantelagen, egalitarianism and the concept of losing face. In our cultural hypothesis we presumed that the Swedes were affected by jantelagen on a daily basis. Based on this assumption we predicted that the Swedes do not want to be better or worse compared to anyone else. The egalitarian concept that everything in the society should be equal was closely linked to the theory of jantelagen and. While the concept of losing face, we presumed, would affect the Chinese individuals' behaviour to a high degree as it is a widespread and well known cultural concept. When it comes to jantelagen we have seen that the Chinese are more affected by this concept than the

Swedes, a possible explanation to this can be that the jantelagen and the concept of losing face were very similar.

After carefully reviewing Hofstede's (1994) five dimensions (power distance, individualism/collectivism, masculinity/femininity, uncertain avoidance, long-term orientation) we have excluded the two dimensions uncertainty avoidance and long-term orientation from our investigation. Uncertainty avoidance was excluded because China and Sweden were very close to each other on the uncertainty avoidance index (see table 4.1), there were no significant difference in how the two cultures perceived the concept. The long-term orientation was removed because of the limited time factor in the questionnaire and experiment and that it could not be used in a proper way. The three dimensions we choose to study were the power distance, individualism/collectivism and masculinity/femininity. Sweden is presented as a feminine culture with a low power distance and high ranks on the individualism index. China on the other hand, is perceived to be quite the opposite as it is a masculine culture with a high power distance and a highly collectivistic society.

What follows in the tables is a review of the answers from the questionnaires. We have compared the mean values of the likert-style rating scale questions and calculated a difference. This shows what cultural factors where the most influencing in each culture and what concept was the most different in how it affected the culture.

Table 5.19 The Likert-Style Grading Questions Summarised[4]

Question	Sweden	China	Difference
Coll/Ind			
2	2.7	5.0	2.3
Pow Dis			
4	3.5	3.6	0.1
5	5.0	4.4	0.6
15	4.1	3.5	0.6
Lose Face			

[4] We are unable to create certain tables in the academic format as used in most of the tables throughout the dissertation.

8	3.2	5.0	1.8
10	4.5	5.6	1.1
Trust			
11	2.9	4.4	1.5
12	4.8	5.7	0.9
16	4.1	3.2	0.9
Jantelagen			
13	3.7	3.3	0.4

Table 5.20 The Two Options Questions Summarised

Question	Majority Sweden	Majority China
Coll/Ind		
1	50 / 50	Collectivistic
3	Individual	Collectivistic
6	Individual	Collectivistic
Lose Face		
7	Yes	Yes
9	Yes	Yes
Jantelagen		
14	No	Yes
Masc/Fem		
17	Feeling Satisfied	Feeling Satisfied
18	50 / 50	50 / 50

By combining our knowledge from Hofstede and the knowledge we collected from the questionnaire we have refined our picture of a typical person from a Chinese or Swedish culture.

According to Hofstede there should be significant difference between the countries in the three dimensions we have chosen to study. Sweden is a feminine culture with low power distance and highly individualistic. China is a masculine society with high power distance and a collectivistic orientation. From the answers in the collectivistic/individualistic dimension we saw that there was a major difference between the two cultures. The Chinese individuals in our questionnaire preferred to work in a group while the Swedish participants wanted to work alone. This kind of strong response to the question was not expected from our side. How this affected our MMA-experiment and the MMA-model was unknown at this point.

In the power distance dimension there was only a small difference between the cultures. The Chinese felt a bit more uncomfortable in the presence of a superior than the Swedes. In general, the results show that both the cultures are similarly affected by this dimension.

A majority in both groups knew what loss of face meant, but the Chinese were more affected by this concept than the Swedes. The analysis of the likert-style rating scale question showed that the Chinese were much more concerned about pride and honour since the calculated differences were rather big.

According to the results in our questionnaire the Swedes had more trust towards people outside of the immediate family than the Chinese. This showed that the Swedes were as predicted more affected by trust than the Chinese.

Answers from questions regarding the concept of jantelagen has shown that the concept affect the Chinese to a higher extent than the Swedes when it comes to work effort. This could help us to explain why the Chinese produced more output than the Swedes, simply because they did not want to be worse than the agent sitting next to them.

In the masculinity/femininity dimension we obtained the same results as in the questions of the power distance aspect. To be precise, there was no significant difference. Both the Swedes and the Chinese preferred satisfaction at work and in the final question about advancement and employment security it was an even score.

From our theoretical exploration and studies of the questionnaire we have increased our knowledge of the Swedish and the Chinese culture. The information we have received by doing this questionnaire has helped us to better comprehend what factors control the behaviour in the Swedish and Chinese population. From the studied dimensions there were a lot of similarities but also big differences. The major difference was that the

Chinese prefer to work in group while the Swedes want to work alone. The assumption based on the individualistic/collectivistic dimension, that Swedes (individualistic) will prefer the price contract and Chinese (collectivistic) the trust contract, contradicts our MMA-model. If one single variable influenced the choice of contracts more than any of the other three variables we could not tell at this point, but it seemed highly unlikely.

With the help of this questionnaire we have revised our picture of the Swedes and the Chinese.

- The Swedes are individualistic, feminine and a high trust culture and to some extent influenced by power distance.

- The Chinese are collectivistic, affected by the concept of losing face, jantelagen and masculinity. They are also to some extent a low trust society.

5.4.1 Validity for the Questionnaire

Validity is concerned with whether the findings were really about what they appear to be about (Saunders, 2003). The validity in the questionnaire can be threatened by the fact that the settings could have influenced the given answers and that the participants could have been exposed to group pressure and also that they could have been influenced by each other. These factors could skew the figures in the collected data and the answers might thus not be representative for the groups. Even though these aspects could have influenced the answers we feel that trough extensive control and monitoring of the participant we eliminated most of these factors.

5.4.2 Reliability for the Questionnaire

"Reliability is the degree to which data collection will yield consistent findings, similar observations would be made or conclusions reached by other research or there is transparency in how sense was made from the raw data" (Saunders, 2003). The questions asked in the questionnaire can be misinterpreted by the participants and thus the given answers will not reflect the reality. It might also be that when asking another group of people they

(even when they are from the same culture) will give different answers due to the fact that they have their own values and beliefs different from the ones found in the cultural stereotype.

5.4.3 Generalisability for the Questionnaire

Generalisability is if the study can be generalised to a larger population and also to what extent. In order to generalise a study, the sample has to represent the whole study population (Saunders, 2003). The question is whether our selection of participants for the questionnaire is representative for the Swedish and Chinese population. Since we are not in the position of assuming that a sample only consist of 20 individuals the generalisability of the questionnaire does not meet the standards of generalisation.

5.5 Summary of the Questionnaire

In the questionnaire we used a selection of 20 individuals, 10 Chinese and 10 Swedish. All participants had to answer a set of questions which purpose was to see if the participants fitted our assumed stereotypes. We based our stereotypes on three of Hofstede's dimensions namely the collectivistic/individualistic, power distance and masculinity/femininity dimensions. We also discussed the variable of trust developed by Fukuyama's research and we introduced two country specific features, namely jantelagen and losing face. Our Swedish stereotype were that a Swede should be individualistic society, have a low power distance, high trust and be of a feminine culture and affected by jantelagen. The Chinese on the other hand, should be collectivistic society, have a high power distance, low trust and be of a masculine culture and affected by losing face.

The questionnaire design was based on two different types of questions. One was a simply yes or no question and the other a likert-style rating scale where the participants could fill in their opinion on a range from one to seven. After collecting the questionnaires and compiling all the data we drew conclusions of how the participants had answered and if it fitted our predefined stereotype. The collectivistic/individualistic dimension had a very strong impact and it was seen very clearly that this was an important

factor. The power distance, trust and masculine/femininity dimensions were not as clear but differences were evident. For example, it was visible that the Swedes were more feminine than the Chinese and the Chinese had a higher power distance than the Swedes. We also saw in the result that the country specific features jantelagen and losing face were very similar. The Chinese were more affected by losing face than the Swedes, as predicted, but they were also affected by jantelagen to a higher extent than the Swedes. Assumptions were made according to our stereotype and modifications were added to our hypotheses.

The questionnaire possesses a relatively high amount of validity due to our monitoring and control of the experiment. The reliability is not possible to tell as we conducted our questionnaire on a limited amount of participants and only once. Neither can the questionnaire result be generalised to a larger population as the questionnaire sample was rather small.

Chapter 6

Experimental Research

The MMA-Experiment is presented. A description is given of the experimental method and procedure. Furthermore, the results are presented and discussed which are followed by a conclusion.

6.1 Experimental Method

The reasons to why we chose to look at the Swedish culture is because the choice fell naturally upon Sweden as we ourselves are Swedish but also because more and more Swedish companies are moving and outsourcing to China. The reason to why we chose China is because it is the world's largest racial, linguistic and cultural group and is spread all over the world (Schlewogt, 2002). As well as, it is predicted that in the year 2010 China will be the world's largest economy. Because of these facts it would not be wise not to pick China as a part of this study because China's influence over the world will keep growing for each year to come.

6.1.2 The MMA-Experiment

At first we were going conduct the experiment with the help of the z-tree program from the Zurich Institute of Economics but after waiting several weeks for the program delivery we understood that we had to start thinking of an outline for a new experiment. Due to a late delivery of the z-tree program we lacked the time to fully comprehend its manual and therefore master the program so we decided to create our own experiment. By creating our own experiment we were able to better look at the factors we intended to study. The creation of our own experiment was inspired by several experiments conducted by for example E Fehr and K M. Schmidt. We named the experiment the MMA-Experiment after our names; Marcus, Marianne and Andreas.

6.2 Experimental Design

6.2.1 Roles in the Experiment

Principal

The Principal had the role of a manager offering the agent contracts. She also decided which of the agent's products she approved.

Agent

The Agent had the role of a worker, accepting/rejecting contracts and performed tasks.

Customer

We as experimental supervisors had the role of a customer deciding which products to buy from the principal.

6.2.2 Experimental Outline

The participants were divided into pairs were one was the principal and the other the agent. There were a total of five pairs each session making a total of 20 participants, 10 from each country. We had one session for the Swedish students and one for the Chinese students. There were two different contracts for the principal to choose from; one price contract and one trust contract. The principal presented the agent with a contract giving him the option of either accepting or rejecting. If the contract was rejected there was a status quo and thus no task was performed. A new contract was not be presented until the next time period. Each time period lasted five minutes and during these time periods the agents performed a number of tasks. The game consisted of six time periods altogether. After each time period the quality and quantity of the achieved work were checked by the principals and also by us as customers. At the end of the game we summarized the results and announced two winners, one principal and one agent. The winners were given awards for their excellence.

6.2.3 Experimental Outline in Depth

In the beginning of the game each agent was handed a set of watercolours and a brush. He also had a glass of water and a paper towel for cleaning the production equipment at his disposal. Before each period the principal had the possibility to choose between two different contracts to offer the agent. The first contract was the price contract, it had a fixed amount of compensation for each activity performed by the agent. More known as a provision based salary: a piece rate. The second contract that was available for the principal was the trust contract, it had a fixed wage for activities performed and also an optional bonus.

6.2.4 Selection of Participants

Because of the small number of Chinese students at the University of Kristianstad, about 50 persons, we based our selection of individuals on quota. We thus chose 10 individuals in each cultural group giving a total of 20 participants. Quota selection is a well known method that is not based on the probability selection. The main idea with this method is to have the same distribution in the selection as in the population. In our case we had to adapt our Swedish group to our Chinese group, so we would get the same amount of individuals with the same preferences. However, because of the fact that the individuals were not picked randomly this could affect the possibility to estimate the size of the selection error. The result of this will be that the reliability can not be estimated (Korner & Wahlgren, 1996).

6.2.5 Choosing the Product

Our first choice of pictures to be coloured was two rather big and detailed models. After a couple of test runs we realized that they were too big and too detailed as it took too long a time to colour them. We decided to make them smaller and less detailed so we decided upon a simple model of two bears. However, during further investigation of the choice of models we had to reject the simple model, and choose an even simpler one. The final decision of the model was as simple as it could be, the product became just a model of a circle. Because the circle was easy to make, many could be made

during the time period but it was also tricky to keep the paint within the lines, thus both a quantity and a quality product.

6.3 Multi-Tasking Activities

6.3.1 Primary Task

The agent's primary task was to produce a unit using his equipment. It was done by painting the areas of an outlined model in specific colours. Several papers with 28 printed outlined circles on each were handed to the agent. The colours of the circles produced were red and blue. Every other had to red and then blue, it was not allowed to produce circles of the same colour after one another. This was done to make the agents engage in what we later call the third task.

6.3.2 Secondary Task

The concern for quality was the second task, a minimum level of quality had to be reached for each product. Unless this level was reached the product would not be counted as an output. Quality was measured according to a product produced by us. To pass the quality control the whole circle had to be coloured and the coloured area had to be in the right colour. The water colour had to cover the area well and too much colour outside the lines was not allowed. Before the start of the experiment a quality product was shown to the participants.

6.3.3 Third Task

Apart from the production, which was the primary task, a third task was added. This task was to make sure the production equipment was properly maintained. In the experiment this activity was represented by keeping the colours and the brush clean. The agent did also have to change the water and paper towels for cleaning the brush each period. By not keeping the production equipment clean the colours would mix and result in a bad quality product. This task did not give any return to the agent but it had to be done each time period to ensure quality.

6.4 Contracts of the Experiment

6.4.1 Price Contract

For the price contracts a piece rate of 4g was given to the agent for each accepted product by the principal. The principal was given a return of 12g per unit sold to the customers.

Table 6.1 Calculations for Returns/Costs and time Estimated

	Agent		Principal	Principal
	Return/unit	Approx. Time/Effort	Return/unit	Cost/unit
Output	4	15-25 Seconds	12	4

6.4.2 Trust Contract

The trust contracts meant that the principal offered the agent a fixed wage for the period. It could range between 20-40g per period. An optional bonus of 0-30g could also be given depending on the agent's performance. After each time period the principal decided whether she was satisfied or not with the outcome of the agent's work and based on this assumption he decided whether to give a bonus or not. When we decided the intervals for the trust contract we based it on several trial runs where we tried to find out how many circles that could be produced in one period. In test runs we found that it was possible for an average agent to produce about ten circles in one period. When all periods had passed the results were summarized and the winners were announced. The agents and the principals competed separately.

6.4.3 Accepting or Rejecting the Contract

The agent had two choices; accepting or rejecting the contract offered. If he accepted the contract the game began with the first time period. The agent had no real cost but the time spent on the task. On the other hand if the agent chose to reject the contract there would be a status quo. Then the game proceeded to the next period with the principal offering a new contract. The rejection of a contract meant a loss of income for both parts. If there was no contract agreement the agent was given a return of 25g for the period

whereas the principal had no return at all. The 25 gold paid to the agent came from the principals own income. The numbers were set in this way to make it possible for the agent to reject a contract and not get too far behind in the competition. A rejection of a contract had greater negative impact for a principal because no products were produced meaning no returns and she still had to bare the cost for the agent.

6.5 Experimental Data

We compiled the raw data from our MMA-experiment into a couple of tables. First we put together the results of the participants of each cultural group and then we studied the amount of discarded products. Secondly we made a table containing what contract was most commonly used in each culture. Finally we listed a couple of observations we made during the experiment.

Table 6.2a Experiment Outcome (Chinese)

Chinese										
Period	**P1**	**P2**	**P3**	**P4**	**P5**	**A1**	**A2**	**A3**	**A4**	**A5**
1	24	-30	36	16	26	12	30	24	8	30
2	32	32	40	64	40	16	16	20	32	20
3	32	28	32	87	48	16	20	28	45	24
4	54	48	64	46	52	30	24	32	50	32
5	64	41	72	72	82	32	43	36	60	26
6	80	56	104	65	84	40	40	52	55	48
Sum	286	175	348	**350**	332	146	173	192	**250**	180

Table 6.2b Experiment Outcome (Swedish)

Swedish										
Period	**P1**	**P2**	**P3**	**P4**	**P5**	**A1**	**A2**	**A3**	**A4**	**A5**
1	0	0	-9	12	44	12	12	33	4	28
2	-25	-25	13	17	49	25	25	35	31	35
3	22	20	25	32	13	26	40	35	40	47
4	25	37	65	23	42	35	59	43	49	42
5	34	7	70	56	58	50	63	50	52	50
6	44	65	85	32	46	52	55	59	40	50
Sum	100	104	249	172	**252**	200	254	**255**	216	252

The first sets of tables show the results of the earnings of each participant for each period in the experiment. The figures in red represented a negative sum i.e. a loss of gold for the principal. This loss can for example be if the

agent rejected the offered contract and the principal had to pay him the fixed amount preset to 25 gold. Or as in the Chinese group a principal rejected the entire agent's output but still had to bare the fixed wage decided in the trust contract.

Table 6.4 Total Amount Discarded

	China	Sweden
Produced	274	242
Accepted	211	215
Sold	201	168
Total Amount Rejected	73	74

This table showed the total amount of discarded products for each of the groups. It also showed the difference between what was produced and what was sold. Both the discarded product by the principal and the customer was included in the total amount rejected.

Table 6.5 Sweden and China Amount Discarded

	Sweden			China		
	Total	Discard	% Discarded	Total	Discard	% Discarded
Trust	222	63	28%	124	32	26%
Price	20	11	55%	150	41	27%

This table showed how many units were was produced under each specific contract in each group. Furthermore, it showed the amount of discarded and the percentage this represents under each contract in each group.

Table 6.6a Mean Output of the Chinese Agents

OUTPUT		
N	Valid	30
	Missing	0
Mean		9,1333

Table 6.6b Mean Output of the Swedish Agents

OUTPUT		
N	Valid	30
	Missing	0
Mean		8,0667

Table 6.6a and 6.6b showed figures of the mean output produced for each of the groups in the MMA-experiment. The mean output for the Chinese and Swedish agents were 9 and 8 circles, respectively.

Table 6.7a Contract Preferred by the Chinese

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	trust	12	40,0	40,0	40,0
	price	18	60,0	60,0	100,0
	Total	30	100,0	100,0	

Table 6.7b Contract Preferred by the Swedish

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	trust	24	80,0	80,0	80,0
	price	6	20,0	20,0	100,0
	Total	30	100,0	100,0	

Table 6.7a and 6.7b showed what contract was preferred in each cultural group during the MMA-experiment. The amount used for each contract and what percentage this represents is also visible in the tables. From the tables we saw that a majority (60%) of the Chinese chose the price contract and a majority (80%) of the Swedes chose the trust contract.

Table 6.8 Amount Accepted or Rejected Contract

	China			**Sweden**		
	Total	**Accepted**	**Rejected**	**Total**	**Accepted**	**Rejected**
Trust	12	12	0	24	24	0
Price	18	18	0	6	4	2

Table 6.8 showed to what extent which contract were rejected. It was a concluded table of the tables 6.10a and 6.10b.

Table 6.9 The Principal with the Highest and Lowest Earnings and what Contract Chosen

	Principal with highest earnings	Principal with lowest earnings
China	2 Price 4 Trust	3 Price 3 Trust
Sweden	1 Price 5 Trust	2 Price 4 Trust

This table show what contract the principal with the highest and lowest earnings chose.

We noticed that the highest earning principal in the Chinese group and the lowest earner in the Swedish group chose the same mix of contracts.

Table 6.10a Contracts in Each Period

Chinese					
Period	**P1**	**P2**	**P3**	**P4**	**P5**
1	Price	Trust	Price	Price	Trust
2	Price(rej)	Price(rej)	Price	Price	Price
3	Price	Price	Price	Trust	Price
4	Trust	Price	Price	Price	Price
5	Trust	Trust	Price	Trust	Trust
6	Trust	Trust	Price	Trust	Price

Table 6.10b Contracts in Each Period

Sweden					
Period	**P1**	**P2**	**P3**	**P4**	**P5**
1	Price	Price	Trust	Price	Price
2	Price	Price	Trust	Trust	Trust
3	Trust	Trust	Trust	Trust	Trust
4	Trust	Trust	Trust	Trust	Trust
5	Trust	Trust	Trust	Trust	Trust
6	Trust	Trust	Trust	Trust	Trust

These two tables show what contracts were chosen during the MMA-experiment for each principal in each group during each period.

6.5.1 Observations

6.5.1.2 Additional Multi-Tasking

We observed several activities which were not required to be done by the agent. The agents figured out activities on their own to improve quality. For example both the Swedish and the Chinese agents drew their thumbs along the lines of the models. This was done to even out the paint and also remove any excess paint.

6.5.1.3 The Fastest is not the Winner

In the Swedish group we observed one participant who was very fast in colouring the models. His principal noticed this and gave him large amounts of bonus to motivate him. As time passed by the agent got sloppy, however, the principal continued to feed him bonuses and approved the bad quality products at the expense of his own earnings.

6.5.1.4 Cultural Differences

We observed that the Swedes were much calmer than the Chinese. The Chinese participants were very excited and the principals showed very clearly what they felt about their agents' productivity. The Chinese were also happier and more positive than their Swedish counterparts.

What we also noticed and what is shown in the figures was that in the Chinese group the principals were the ones in control while in the Swedish group it was the opposite. The figures showed this, as the sums of the total earned gold for the Swedish principals were lower than the ones for the Chinese group. The agents controlled the Swedish principals and simply refused to work if the principals did not follow their terms in the contracts.

In the Chinese group we felt that the agents worked more as a team than the Swedes did. The Swedish agents were also more suspicious towards their principals and felt that the principals exploited them and vice versa, the Swedish principals thought that the agents would cheat them.

6.6 Experiment Analysis

In this chapter we discussed if culture had an impact on the choice between the two contracts of price and trust in a multi-task environment.

6.6.1 Experiment Outcome

We saw in table 6.2a that the highest earners, both principal and agent were in the same group. If that was a coincidence was impossible to tell, but after further studies of the table 6.11a and 6.11b (which were a further compilation of the tables 6.2a and 6.2b from where we see the experiment outcome) we saw that the Chinese principals and agents worked more as a team than the Swedes did. This collaboration was also observed during the experiment. This collectivistic behaviour from the Chinese was expected but not to the extent as seen in the tables.

Table 6.11a The Rank of Principal x and Agent x

Rank	Chinese			
1	350	P4	250	A4
2	348	P3	192	P3
3	332	P5	180	A5
4	286	P1	173	A2
5	175	P2	146	A1

Table 6.11b The Rank of Principal x and Agent x

Rank	Swedish			
1	252	P5	255	A3
2	249	P3	254	A2
3	172	P4	252	A5
4	104	P2	216	A4
5	100	P1	200	A1

Out of five teams, three were positioned in the same ranking. Table 6.11a shows that the Chinese were much more concerned about their teams' performance. On the other hand, in table 6.11.b we saw that the Swedes

showed more of an individualistic behaviour; it was every man for himself, which we saw in table 6.2b as well. The principal and agent with the highest earnings were not in the same team and only one pair of principal and corresponding agent positioned themselves on the same ranking that is, in the last place.

Of the Chinese participants it was the principals who earned the most gold while it was the opposite in the Swedish group. The agents ruled over the principals and claimed high bonuses for little work. In table 6.4 it is shown that the Chinese produced more than the Swedes but still the Swedish agents earned more gold. The statistical data show that in the Chinese group the principals were the ones in control and did not give the agents too much gold. Because of this the Chinese principals earned more gold than the Swedish principals.

In the following table, 6.12, we have compiled a summary of which contracts were preferred by the winning principal as well as the losing one.

Table 6.12 Principal with the Highest and Lowest Earnings and what Contract was used

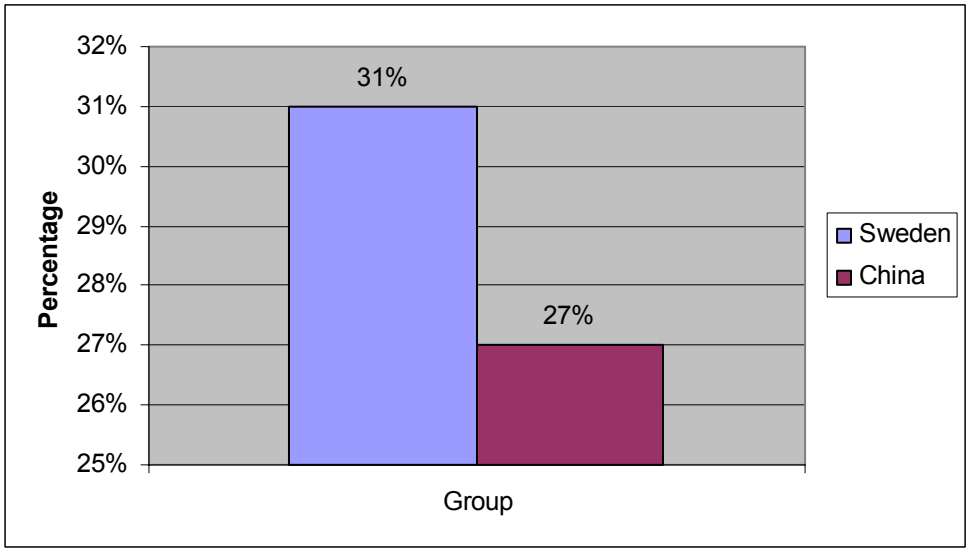
	Principal with Highest Earnings	Principal with Lowest Earnings
China	2 Price 4 Trust	3 Price 3 Trust
Sweden	1 Price 5 Trust	2 Price 4 Trust

What was interesting to notice was that the best performing principal in China (P4) used the same mix of contracts as the principal with the lowest earnings in Sweden (P1). When we looked at this table we realised one thing, a mix of contracts that worked in the Chinese group does not have to work in the Swedish group. The principal who won in the Chinese group used the same mix of contracts as the loosing one in the Swedish group and got a completely different result. This was a matter which we could not explain.

6.6.2 Discarded Products

From the table 6.4 we saw that the figures of the total amount of rejected products were even between the two groups. As both groups produced different amounts of total output we had to compare the total sum of rejected products (both by principal and customer) with the total output of each group in order to obtain comparable figures.

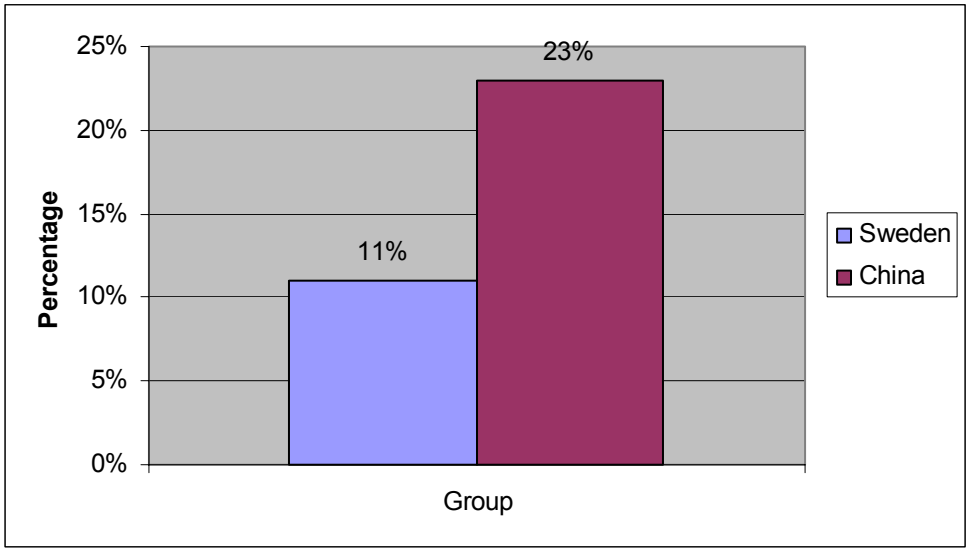
Table 6.13 Total Amount of Products Rejected by both Principals and Customers



And thus, we could see that more products in the Swedish group, 31% (74 circles), were rejected than in the Chinese group, 27% (73 circles). These figures applied to the output discarded by both the principal and the customers.

Furthermore, the Chinese produced 32 more circles than the Swedes. The Chinese principals were much more concerned about the quality they offered the customers than the Swedes. This can be seen in the following table. Their concern about quality was also a contributing factor to the earlier statement that they earned more gold than the Swedish principals.

Table 6.14 Total Amount of Products Rejected by the Principals



The Chinese principals rejected 23% (63 circles)[5] of their agents output while the Swedish principals only rejected 11% (27 circles)[6]. In the Chinese group the agents were the ones who lost gold while in the Swedish group the principals lost gold due to their higher rate of acceptance of the agents' output. Because of the Chinese principals' higher standards and a higher rejection of their agents' products, they did not lose as much gold as the Swedish principals did.

6.6.3 Mean Production

As seen in table 6.6a and 6.6b the Chinese agents produced one circle more per period in average than the Swedish agents. According to our review of the literature we had two possible explanations of why the Chinese were more eager to produce than the Swedes. First of all, the concept of losing face could be an influencing factor as the Chinese agents might not want to let their principal down. Furthermore, they could also have been better on sharing knowledge on how to increase output because of their more collectivistic orientation in relation to the Swedes. Jantelagen could have influenced the Swedes in the way that the agents did not want to perform

[5] Produced amount (274) minus the accepted amount of (211) gives us the amount of 63 rejected circles by the Chinese principals.
[6] Produced amount (242) minus the accepted amount of (215) gives us the amount of 63 rejected circles by the Swedish principals.

better nor worse than anyone else. On the other hand, in the questionnaire we saw that the Chinese were much more affected by the concept.

According to Hofstede, masculine cultures prefer challenging work while feminine ones are more concerned with having a satisfactory working environment. Since it was shown in the theory that the Chinese were masculine and the Swedes feminine this could have influenced both of the groups, in the way that the Chinese concentrated on their output while the Swedes focused on a better working atmosphere. This was also an observed phenomenon; the Swedes were much more quiet and calmer than the Chinese when participating in the MMA-experiment. They wanted to make a peaceful and comfortable environment were they could concentrate on the task. However, it was not shown in the results from the questionnaire, so the question if the dimensions of masculinity/femininity had an affect sill remains.

6.6.4 Contract Preferred by Each Culture

In our MMA-experiment we chose to measure the multi-task problem through quality, quantity and the maintenance of the machinery. The maintenance of the machinery, in this case the upholding of clean water-colours and water, was a factor which was immeasurable to us. The only possible way of ensuring that the agents performed this task was through monitoring, which was conducted by us as experiment conductors.

Since we could not measure the maintenance activity we studied the amounts of discarded outputs for both of the activities. The total amount of discarded output describes to what extent a product got rejected by both the principal and the customer. Because the third activity contained tasks connected to quality, this indirectly influenced the principal's decision on what output to accept or reject. For example, if the brushes were not clean then the agent could not paint the models in the right colour resulting in principal not approving the output.

To conclude, we had two measurable factors in our MMA-experiment, namely quantity and quality. Quantity measured by the output and quality by the amount of discarded products. Logically, the most suitable contract for a multi-task environment must be the one where we got the highest output combined with the smallest amount of discarded products. By comparing the mean value of the amount produced under each contract in each group we obtained which contract were the most efficient in generating output.

Table 6.15a Mean Output of the Chinese under both Contracts

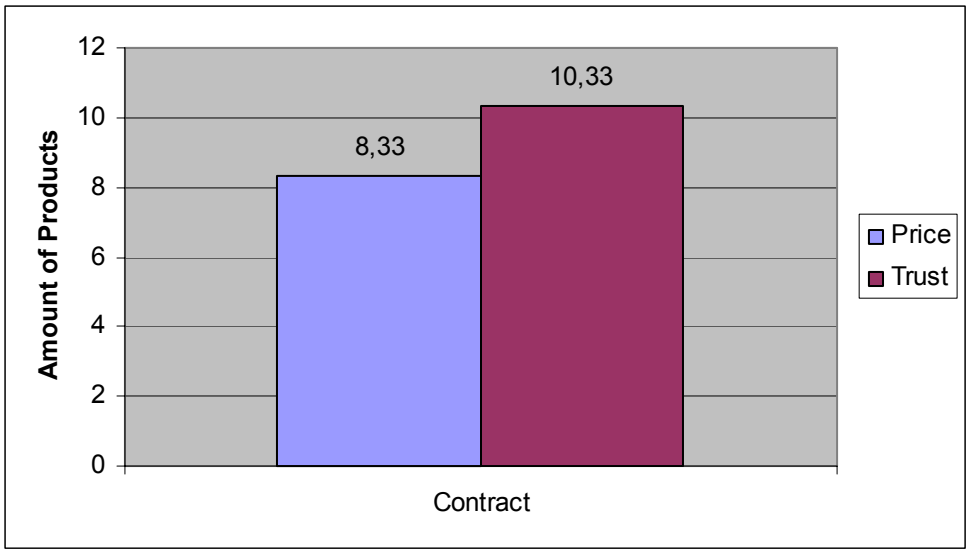
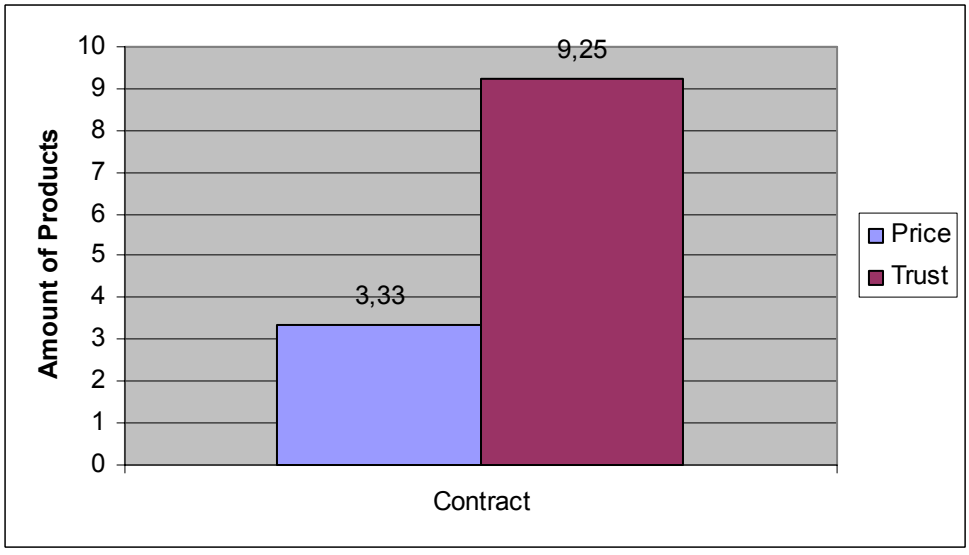


Table 6.15b Mean Output of the Swedes under both Contracts



In the Chinese group the trust contract generated a mean of 10.33 circles produced while the price contract generated 8.33 circles per period. In the Swedish group on the other hand the trust contract generated a mean output of 9.25 products while the price contract generated a mean of 3.33. *This tells us that the trust contract induced a higher production of circles in both groups.*

Furthermore, we looked at what contract gave us the smallest amount of discarded products in each group.

Table 6.16a Percentage of Discarded Products for the Chinese under both Contracts

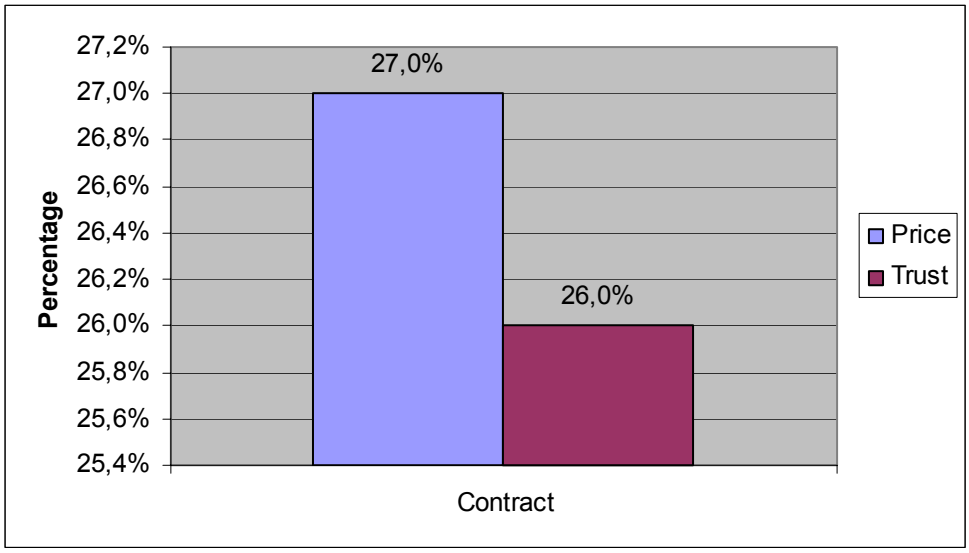
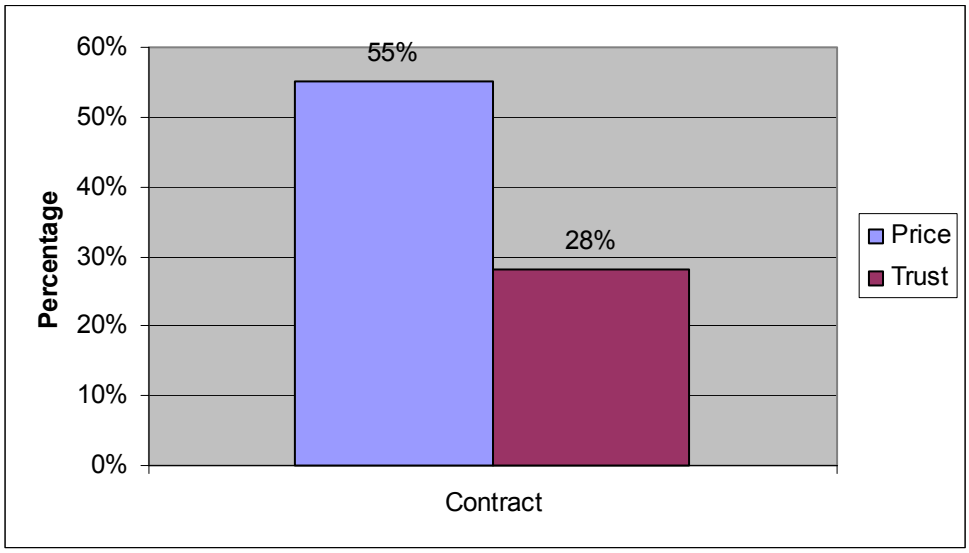


Table 6.16b Percentage of Discarded Products for the Swedes under both Contracts[7]



From table 6.16a (discarded products) we concluded that the trust contract gave the lowest amount of discarded products in the Chinese group, but the difference between the two is very small and no conclusion could be drawn from this. While in the Swedish group only 28% of the output produced under the trust contract was discarded in comparison to 55% of discarded products under the price contract. *Most efficient in generating the best quality product (i.e. the smallest amount of discarded products) was the trust contract for both groups.*

From the experiment data and analysis we drew the conclusion that Swedes preferred the trust contract while the Chinese preferred the price contract. (See following tables 6.17a and 6.17b)[8]

[7] Note that the large amount of discarded products in the Swedish group under the price contract could have been caused because the contract was only used in the beginning of the MMA-experiment when the agents where not used to how to handle the production equipment properly. This can also be seen in table 6.10b, where you see what contract has been used during what period.

[8] By conducting several test runs we set the boundaries of the trust contract to high in comparison to the actual output of the groups because we calculated on a mean production of 11 circles per agent. This error could have lead to that a majority of the participants preferred and chose the trust contract. On the other hand, this error was possible for the principal to even out at any time during the MMA-experiment as she had the possibility to pay the agent a lower wage because the wage boundaries were set both higher and lower than the corresponding mean output.

Table 6.17a The Preferred Contract in the Chinese Group

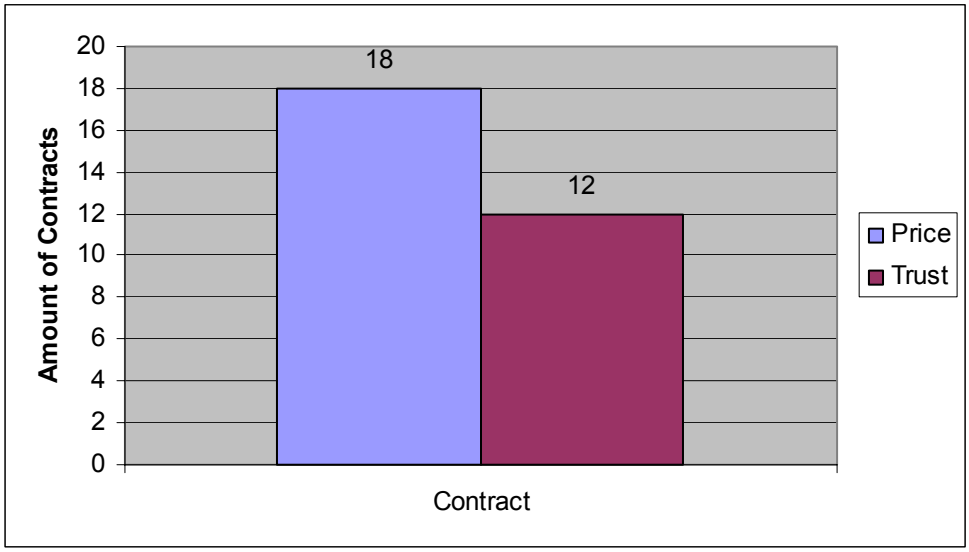
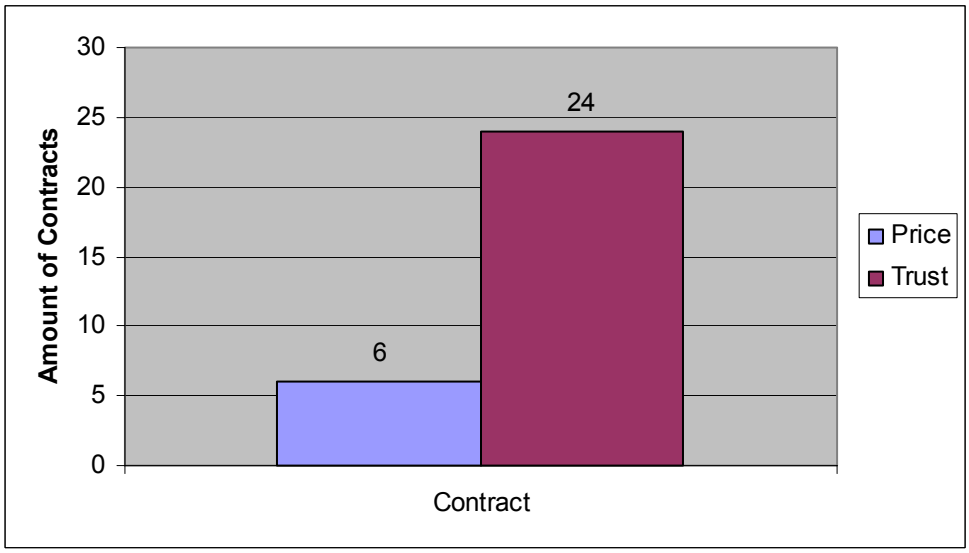


Table 6.17b The Preferred Contract in the Swedish Group



From this analysis we can draw the conclusion that the trust contract was the better suited one in our multi-task experiment as it motivated to both produce more and to produce of better quality. But as seen in the MMA-experiment there was a difference of what contract each cultural group preferred.

6.7 Final Conclusion

Since we have seen that the collectivistic orientation was a very strong dimension and that it is clearly applicable to the Chinese group and in our hypothesis we concluded that if this aspect had a strong impact on the

Chinese they would prefer the trust contract. However, as seen in our analysis a Chinese majority preferred the price contract. Therefore, we make the conclusion that despite the fact that the collectivistic variable was strong, the other three variables; trust, masculinity and high power distance are stronger altogether. The same logical way of thinking can be used for the Swedish group. The individualistic variable was very strong, as seen in the results from the questionnaire, but it was not stronger than the other three combined.

Therefore we concluded that our hypotheses were to some extent accurate. However, we have not found out how the three variables of trust, masculinity/femininity and power distance affect the choice of contract but this is not the purpose of our dissertation; we can only conclude that they had an impact.

The Swedes obtained the highest output and the lowest factor of discarded products when using the trust contract. The trust contract was also the most preferred contract among the Swedish participants. This result fitted our cultural assumptions and stereotypes, our conclusions and our predictions in the MMA-model.

The Chinese on the other hand preferred the price contract but they had the highest mean output and lowest discard rate while using the trust contract. These findings showed two things: the preferred contract was as predicted by us the price contract but the most efficient contract for the Chinese was the trust contract. This presented a dilemma for us; on one hand our hypotheses were accurate because the Chinese preferred the price contract and on the other hand the best contract in dealing with multi-tasking proved to be the trust contract.

The Swedish participants would prefer *the trust* contract in a multi-task environment because:

- **Sweden is a high trust, low power distance and feminine culture.**

The Chinese participants would prefer *the price* contract in a multi-task environment because:

- **China is a low trust, high power distance and masculine culture.**

Thus we can conclude that our MMA-Model of what contract each culture prefers is accurate, as seen in tables 6.16a and 6.16b. As a by-product of our MMA-experiment we have discovered that the trust contract, in the shape we designed, is the best contract in both cultures when it comes to dealing with a multi-task environment. This is because it stimulates the agents to produce both highest output and best quality compared to the price contact.

Table 4.3 The MMA-Model

	Swedish	Chinese
Price		X
Trust	X	

6.7.1 Validity for the Experiment

Validity is concerned with whether the findings are really about what they appear to be about (Saunders, 2003). The validity in the experiment can be threatened by the fact that the experimental settings could have influenced the result. Because of this fact, the participants might have been influenced by each other and by an artificial environment, thereby misleading the statistical data. Furthermore, we as observers and experimental supervisors might have let our own expectations influence the investigation. Although the validity of the experiment could have been threatened, we feel that we have managed to keep the validity rather high as we controlled and supervised the experiment to a very high degree.

6.7.2 Reliability for the Experiment

"Reliability is the degree to which data collection will yield consistent findings, similar observations would be made or conclusions reached by other research or there is transparency in how sense was made from the raw data" (Saunders, 2003). Due to the limited time and availability of possible participants, we have not been able to test our model more than once on both groups. This fact makes the reliability of the test results rather low.

6.7.3 Generalisability for the Experiment

Generalisability is if the research can be generalised to a larger population and also to what extent. In order to generalise research, the sample has to represent the whole study population (Saunders, 2003). The question is whether our selection of participants is representative for the Swedish and Chinese culture. Since we cannot assume that a sample of 10 individuals in each group represent this population, the generalisability of the experiment does not meet the standards of generalisation.

6.7.4 Summary of the Experiment

We designed our own experiment (called the MMA-experiment) to test a model (the MMA-model) where we had made assumptions based on cultural preferences on what contract the Chinese would prefer and what contract the Swedes would prefer. The MMA-experiment consisted of 20 participants divided into two groups. One group of ten participants were Chinese and the other group of ten were Swedes. In each group we divided up the members into five pairs, were in each pair one was a principal (superior) and the other one an agent (subordinate).

In the MMA-eperiment the agent had to paint circles (generate output) while at the same time keeping the water colours and water clean (maintaining the machinery). The principal chose what contract she wanted to present the agent in order to stimulate him to produce output. The agent had the choice of either accept the contract or reject it. If he accepted then he could start painting otherwise he would have pass over one time period. The entire MMA-experiment consisted of six time periods of five minutes each. One

principal and one agent were selected as winners based on the highest earnings which were calculated in the amount of gold.

From the data we collected in the experiment we draw the conclusion that the individualistic/collectivistic dimension seemed to play in as an affecting factor. This could especially be seen in the rankings of each cultural group (three Chinese principal-agent pairs were ranked the same to compare with only one pair in the Swedish group) and also from our observations. However the individualistic/collectivistic did not influence the predicted preferred choice of contract. The other cultural dimensions/features did not appear that clearly in the experiment data. Furthermore, we calculated the amounts discarded (totals, as well as amount discarded for each group) because this was the only possible way to measure the multi-tasking aspect of the MMA-experiment, as the two task were quality and quantity. We also looked at the frequencies of used contracts and concluded that the contract best suited for a multi-task environment was the trust contract. The preferred contract in the Swedish group was the trust contract and the in the Chinese group the price contract, even though both performed best under the trust contract. We also observed that the agents added their own additional tasks in order to increase the quality of the output and that cultural differences existed in the behaviour of the participants between the two groups.

The validity of the experiment might have been threatened but by controlling and monitoring extensively we feel that we managed to keep it high. As the model has only been tested once the reliability of our data is rather low. The MMA-experiment and the MMA-model can also not be generalised to the universal population.

Chapter 7
Conclusion

In this chapter we summarise the dissertation. Secondly we suggest what modifications could have been made for improving the results and finally we discuss practical implications and further research.

7.1 Summary of the Dissertation

As the world's markets are getting more and more integrated and companies are outsourcing to other countries to a greater extent than before it is important for them to take cultural aspects into consideration. Being Swedish students, we chose to look at Swedish companies moving to China since lately this has been a trend for companies and organisations (www.civilingenjoren.se). We wanted to study if the different cultures affect the agent's behaviour in a principal-agent relationship. When looking for research in this field we found that the cultural aspect of the principal-agent theory had been neglected.

Multi-tasking is when a person has several activities pay attention to but only a limited amount of time and resources. The theory is closely linked to the principal-agent theory. In this theory a principal tries to control the actions of an agent by giving him different incentives (Jensen & Meckling, 1976). The agent can be controlled by control mechanisms such as price and trust. In turn these mechanisms are linked to contracts. In our dissertation we chose to use a price contract and a trust contract. Even though there a quite few researchers in the field of multi-tasking none of them has taken the cultural factor into consideration.

To study the cultural differences between China and Sweden we used material from several researchers including Hofstede, Fukyama and Schlewogt. We found that there were large cultural differences between China and Sweden, but also similarities. One difference was that Swedes are of high trust whereas Chinese are of low. Furthermore, Sweden is a feminine country and China is a masculine one. The Chinese are collectivistic and the Swedish are individualistic. Also, the Swedes have a low power distance whereas the Chinese have a high one. Finally, we

concluded our hypotheses on the different cultural differences we linked to the variation of preferences in contracts. These hypotheses were used when we created our model, the MMA-model. In this model we stated that the Chinese would prefer the price contract and the Swedes would prefer the trust contract in a multi-task environment.

In order to test if our cultural generalizations based on the theoretical framework were true we let the participants fill out a questionnaire before the experiment. We asked the participants questions that helped us to create and to compare the existing stereotypes of each culture and if/how individuals could be labelled to be of a typical Chinese or Swedish culture. When we analysed the answers we saw that the biggest difference between the cultures was in the individualistic/collectivistic dimension. The assumption of what contract each cultural group would prefer when influenced by this dimension contradicted the created MMA-model, but this dimension was not thought to influence the choice of contracts anymore than the three other variables combined together.

To test our MMA-model we conducted an experiment which we came to call the MMA-experiment. The experiment was conducted at two occasions, first with Chinese participants and then with Swedish ones. Half of the participants were given the roles of principals and the other half was given roles of agents. The principals had the option of offering the agent two different contracts, the price and the trust contract. The agents had the option of either accepting or rejecting the contract. If the contract was accepted the game started. In short the point of the experiment was to study how the cultural differences affected the choice of contracts in a multi-task environment.

The result of our experiment concluded that the MMA-model was accurate. We also found that the trust contract, in the way it was designed, was best when dealing with a multi-task environment.

We felt that we managed to keep the validity rather high as we controlled and supervised the experiment to a very high degree. Because of the limited time and availability of possible participants, we were not able to test our model more than once on both groups. This fact makes the reliability of the test results rather low. The generalisability of the experiment does not meet the standards of generalisation because of our low number of participants.

7.2 Modifications

Modifications that could have improved the result of our study:

- Modify the trust contract to more appropriate boundaries.
- Been stricter with the information asymmetry, which means that we could have isolated the principal and the agent, they should have had even less contact with each other.
- The agents could have been placed alone in a room while working and not keeping all the agents together.
- Designed an activity in which the third task could be measured more accurately.

7.2.1 Self-Criticism

Since we are not fluent in Chinese we could not control the information asymmetry between the principals and agents. We do not know if there were any bargaining between the Chinese principals and agents but we assume there was the same kind of activity that took place in Swedish group. The outcome of the experiment ultimately comes down to the fact of how good the agent is at colouring the circles.

In order to improve the experiment we could have isolated the agents from the principals, forbidden all conversations and kept them anonymous towards each other. If this could have been done perhaps we could have had collected more unanimous data.

7.2.2 Future Research

Since our created MMA-model gained support both in the questionnaire and the MMA-experiment we have assumed that it is applicable in a multi-task

environment. To additionally test the model and extend the factors included the further research could concern issues like:

The experiment should be repeated with the same design but with a bigger sample of participants. There should be at least 30 individuals in each group in order to increase the reliability of the findings.

Another suggestion is that other variables such as gender of the participant could be introduced and studied. This variable was not investigated by us due to time limitations but the variable would most likely play a part in the masculinity/femininity dimension. Also, an extension of studying more cultures than the Swedish and the Chinese could have been made. Like for example to see if the MMA-model can be applicable on the US culture.

7.2.3 Practical Implications

Our study and created model is most important for companies outsourcing their production to China. The MMA-model can give guidance when deciding of how to deal with different incentive contracts in a multi-task environment, in our case the price and trust contract.

We hope that our new MMA-model will shed new light over the fact that all people from different cultures do not act the same when ic comes to economic activity and theories. They all have different preferences and prefer different conditions for good performance.

With the MMA-model and the MMA-experiment we have proven that culture is an important factor that cannot be ignored when dealing with economic theory and more specifically the multi-task environment.

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Appendix 1

Questionnaire

Please answer the following questions by checking the box that most accurately represents your opinion.

1. On any given task, do you prefer to work in a group or individually?

Group ❑$_0$ Individually ❑$_1$

2. In your workplace, do you consider yourself to have close family like bonds with your colleagues?

❑$_1$ ❑$_2$ ❑$_3$ ❑$_4$ ❑$_5$ ❑$_6$ ❑$_7$
Not at all Very much

3. What do you consider to be most important: individual achievements or group performance?

Individual achievement ❑$_0$ Group performance ❑$_1$

4. Do you feel that you and your superiors are on the same level?

❑$_1$ ❑$_2$ ❑$_3$ ❑$_4$ ❑$_5$ ❑$_6$ ❑$_7$
Not at all Very much

5. How at ease do you feel in the presence of your superiors?

❑$_1$ ❑$_2$ ❑$_3$ ❑$_4$ ❑$_5$ ❑$_6$ ❑$_7$
Not at all Very much

6. When it comes to decision making do you prefer group consensus or a single leader?

Group consensus ❑$_0$ Single leader ❑$_1$

7. Are you familiar with the concept of "losing face"?

The concept of "losing face":
Losing face is when something which people perceive as being private is made public. Face also deals with the perception and/or credibility of a person. If you insult, embarrass or in any other way bring shame over person this means a loss of "face" for them.

Yes ❑$_0$ No ❑$_1$

8. To what extent does the concept (of "losing face") affect you in your daily life?

❑$_1$ ❑$_2$ ❑$_3$ ❑$_4$ ❑$_5$ ❑$_6$ ❑$_7$
Not at all Very much

9. If your superior/superiors gave you a very low wage offer would you feel that this would mean a loss of face for you?

Yes ❑$_0$ No ❑$_1$

10. If your superior would give you a reprimand in front of your colleagues, how embarrassing would this be for you?

❑1 ❑2 ❑3 ❑4 ❑5 ❑6 ❑7
Not at all Very much

11. Do you feel that the Chinese government works in the best interest of its people?

❑1 ❑2 ❑3 ❑4 ❑5 ❑6 ❑7
Not at all Very much

12. Do you feel that the Swedish government works in the best interest of its people?

❑1 ❑2 ❑3 ❑4 ❑5 ❑6 ❑7
Not at all Very much

13. Do you feel uncomfortable when standing out from the crowd?

❑1 ❑2 ❑3 ❑4 ❑5 ❑6 ❑7
Not at all Very much

14. Would you adjust your own work in order to not perform better or worse than anyone else, when working together in a group?

Yes ❑0 No ❑1

15. Do you find it easy to follow orders without knowing why they should be performed?

For example; your superior wants you to carry out a task but gives no reason to why it should be done.

❑1 ❑2 ❑3 ❑4 ❑5 ❑6 ❑7
Not easy Very easy

16. How easy do you find it to trust people outside the immediate family?

❑1 ❑2 ❑3 ❑4 ❑5 ❑6 ❑7
Not easy Very easy

17. What is more important, a high salary or feeling satisfied about your job?

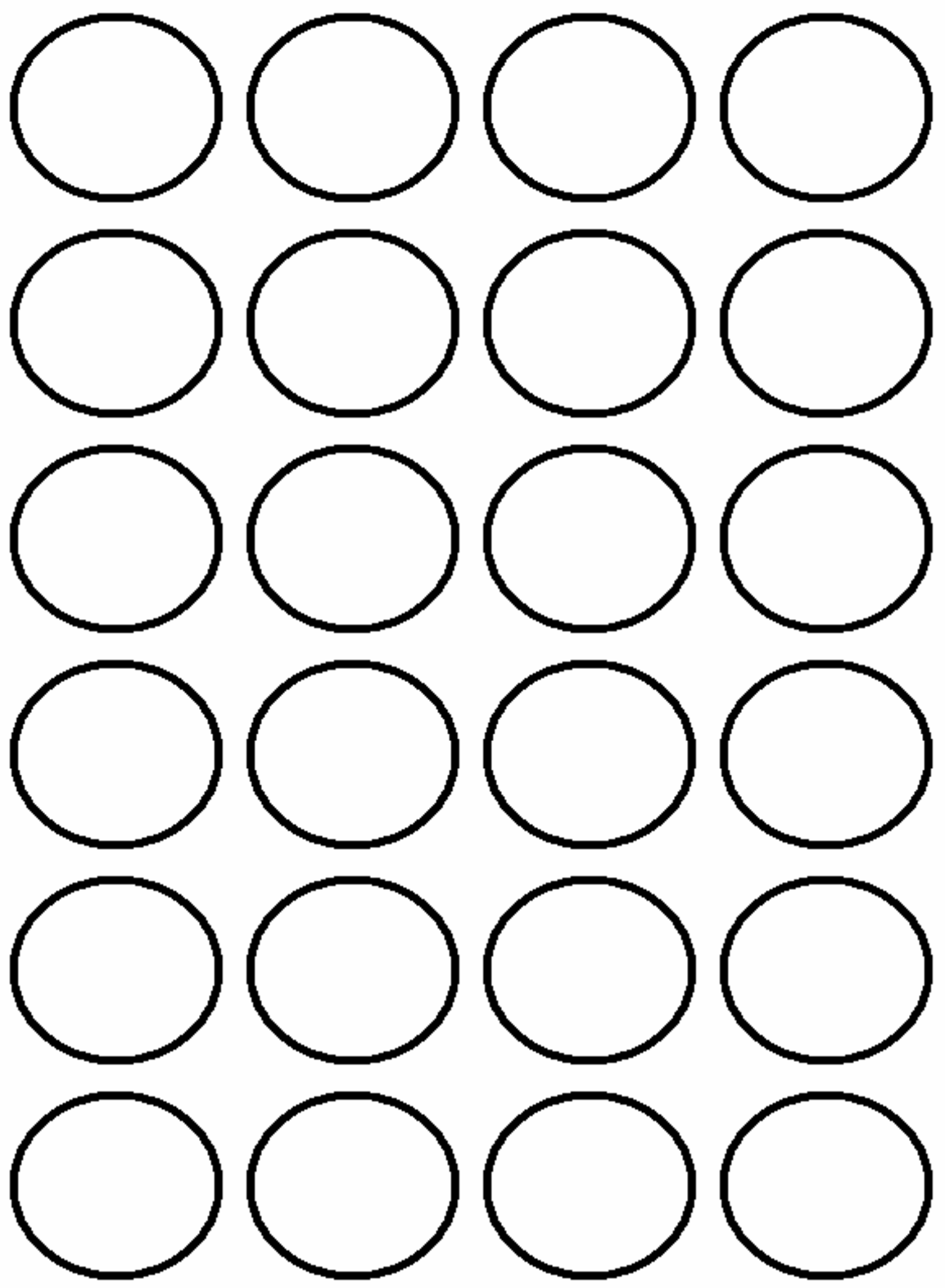
High salary ❑0 Feeling satisfied ❑1

18.What is more important, to have the option to advance to a better position or employment security?

Advancement ❑0 Employment security ❑1

Thank you for your participation!

Appendix 2



Appendix 3

Instructions for the principal

Your aim:

You are the superior and your task is to offer your agent a contract to make him maximize the output at the best possible quality.

To do his you have the opportunity to offer either a price contract (4 golds/unit) or a trust contract (fixed salary of 20-40 gold + optional bonus from 0-30 gold). If the agent chooses to reject the given contract he will get 25 gold, a cost which you as the principal have to bear.

The contracts are not binding; you can not force the agent to produce as many units as you would like.

The experiment:

You decide upon what contract you wish to present to the agent and give it to him. The agent will then decide if he accepts or rejects your offer. If he rejects it you will have to pass a time period before you can offer the agent a new contract. If he instead accepts it the game begins. During the time when the agent works the principal will have to go to another room. The experiment is divided up into 6 time periods of 5 minutes each where the agent will be colouring circles as a work task.

You are the one who decides if the produced items are of correct quality and how much gold the agent will receive. You have to keep in mind that the items you check for quality you will sell to customers and if the customers are not satisfied with the quality they can choose to not buy them.

*For example; if you have chosen a price contract and the agent produces 10 circles but only 8 are of good quality, you will pay the agent for 8 (4 gold*8 units = 32gold).*

The primary task of the agent is to colour circles according to a given colour scheme. The agent has to paint one red, one blue and then a red again and so forth. The secondary task is to make sure that the production equipment is properly maintained. Keeping the brush and water clean etc.

You pay the agent with your own gold. If you accept a product of poor quality which we later as customers reject, you will bear the cost of these products. It is in your interest not to tell the agent of the existing contracts.

The outcome:

At the end of the experiment we will announce one Principal and one Agent who have earned most gold and they will receive a reward.

Important:

You should no reveal what intervalls there are for the Trust contract (20-40gold), only the amount you propose.
You should not tell the agent what kind of contracts you are allowed to choose from.
You should stress to the agent that the quality of the produced items should be high.

Appendix 4

Instructions for the agent

Your aim:

You are the subordinate (agent) and you will receive a contract offer from your superior (principal) which you can either accept or reject. When you have accepted a contract your aim is to paint circles of prime quality.

If you decide to reject the contract you will receive a fixed amount of 25 gold and you will have to wait for a new time period to get a new offer from the principal.

The contracts are not binding; the principal cannot force you to produce as many units as he wants you to do.

The experiment:

At the beginning you will receive a contract from the principal. You will then have to decide if you accept or reject his offer. If you reject it you will have to pass a time period before the principal can offer you a new contract. If you accept it instead then the game begins. During the time when the agent works the principal will have to go to another room. The experiment is divided up in 6 time periods of 5 minutes each where the agent will be colouring circles as a work task.

Your primary task is to colour the circles red and blue (which will be shown on a sample paper before). You have to paint one red, one blue and then a red again and so forth.

Your secondary task is to make sure that the production equipment is properly maintained. This means, changing the water in each time period, keeping the brush clean and changing the paper towels. (For example, it does not matter if you change the water in the beginning or end of each period as long as it is done.)

The principal is the one who decides if the produced items are of correct quality and how much gold you will receive. The principal has to keep in mind that the items he checks for quality he will have to try to sell to the customers. If the customers are not satisfied with the quality they can choose not to buy them and then the cost of them will fall on the principal.

Appendix 5

Numbers of the game

If the agent rejects he receives: 25 gold/time period

Trust contract:

Fixed salary between 20-40 gold

Bonus optional, between 0-30 gold

Price contract:

Piece rate of 4 gold/output produced

Customers:

12 gold/output for the principal

Appendix 6

Price Contract

This contract gives the agent a fixed piece rate of 4 gold per produced and accepted output.

Period nr_____

Principal nr_____

This box is for the **agent** to fill in. (*Please check the box that matches your answer and hand it back to the principal*.)

Accept the contract ❑ Reject the contract ❑

This box is for the **principal** to fill in. *(At the end of the period please fill this in and hand it to the "customers".)*

Produced circles by the agent_____

Accepted circles by the principal_____

The agent's total earnings: 4 gold * _____=_____

This box is for the **customers** to fill in.

Bought circles by the customers_____

The principal's earnings_____- the agent's earnings_____sum:_____

The sum of the principal's earnings_____

Appendix 7

Trust Contract

This contract gives the agent a fixed salary and a bonus depending on if the principal is satisfied with the work or not.

Period nr_____

Principal nr_____

This box is for the **principal** to fill in. *(Fill in the fixed salary and hand it to the agent.)*

Fixed salary of:

❑ _____ *(fill in the fixed salary offer)*

This box is for the **agent** to fill in. (*Please check the box that matches your answer and hand it back to the principal*.)

Accept the contract ❑ Reject the contract ❑

This box is for the **principal** to fill in. *(At the end of the period please fill this in and hand it to the "customers".)*

Fixed salary Bonus

❑ _____ and _____ (*fill in the fixed salary and the optional bonus*)

Produced circles by the agent_____

Accepted circles by the principal_____

The agent's total earnings_____

This box is for the **customers** to fill in.

Bought circles by the customers_____

The principal's earnings_____- the agent's earnings_____sum:_____

The sum of the principal's earnings_____