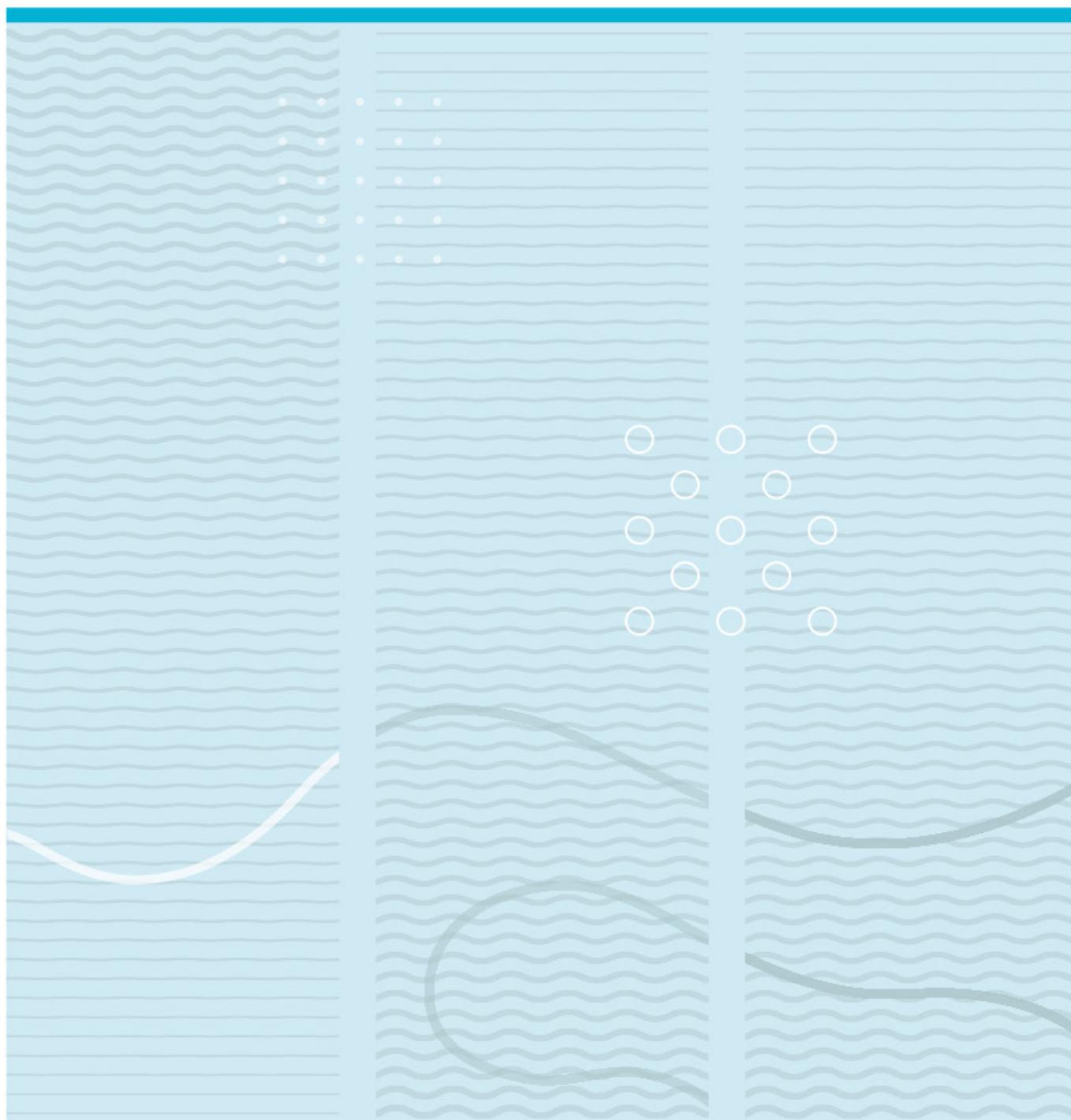


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# Negotiation

The impact of asking questions on negotiation outcomes



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This thesis is worth 30 study points

# Abstract

Negotiation has been a practically attractive and a theoretically interesting subject to study for a long time (Bazerman, Curhan, Moore & Valley 2000). Negotiation researchers have investigated the negotiation processes that can categorize negotiations as successful, and the psychology behind negotiation. However, there are still some factors that have not been fully understood and/or researched on. One such factors is *the amount of questions asked during a negotiation*. Negotiation researchers and practitioners often encourage the use of questions in negotiation and mention the importance of using questions but do not mention how important it might be for the negotiation.

I will use my master thesis to systematically examine the connection between the amount of questions asked during a negotiation and the negotiation outcomes. In order to see how questions can affect negotiation outcomes, I have decided to examine both objective- and subjective outcomes. Regarding objective outcomes, I investigate if individual- and joint profits are affected by the amount of questions asked in a negotiation. Regarding subjective outcomes, I examine if asking questions in a negotiation affect the satisfaction level of the negotiator. I have reviewed negotiation, communication, and questions literatures to obtain information about my research topic, design, and data collection.

The data collection has been conducted with an experimental research design approach within quantitative research. As participants, I used students enrolled in a bachelor-level negotiation course at the University of South-Eastern Norway, Campus Ringerike, for my research. They were divided into two groups; experimental and control. Both groups were given the same negotiation scenario and were given a role of either buyer or seller. The participants in the experimental group were manipulated by being told to view the negotiation as an opportunity to learn more about their counterparts and were encouraged to ask as many questions as possible during the negotiation process. The participants in the control group, however, were not given any such instructions. The participants were afterwards were asked to answer a survey that I had developed in Qualtrics. The questionnaire in the survey was divided into five parts; (1) Control questions for finding out which group they were in, age, sex and what kind of role they were given, (2) Preparation-related questions for finding out how the participant prepared for the negotiation, (3) Process-related and agreement-related questions for capturing the amount of questions asked, information exchanged, and the details of their final negotiated agreement, (5) Satisfaction-related questions for measuring how satisfied they were with their agreement, and (6) Exploratory questions for checking their attentiveness, effort, and language problems during the negotiation.

The results from my research has shown that asking questions in a negotiation has a positive effect on the objective outcome, especially in terms of joint profits. However, it does not have a significant effect on the subjective outcome, measured by satisfaction. Overall, the research results indicate that asking questions in a negotiation can be useful for facilitating information exchange and for establishing an agreement that benefits both parties.

# Acknowledgement

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# 1. Introduction

Negotiation is usually associated with companies or different business situations but can also be seen in daily life. We use negotiation whenever we decide where to eat, what movie we should watch, which company we should collaborate with or which supplier to choose (Lewicki, Saunders, & Barry 2015 p. 3). Even if negotiation is a part of our life, researchers have used years to understand the process behind negotiation. This has provided that the negotiations study has had a dramatic shift in the last 25 years. Researchers and psychologists have tried to understand the negotiation process and how negotiation can categorize as successful but also, simultaneously, understand the psychology behind negotiation (Bazerman, Curhan, Moore & Valley 2000).

Nevertheless, there are still some factors in negotiation that have not been understood and researched on. One of those factors is *questions during a negotiation* - questions during a negotiation may be a natural factor to study on. There is not a lot of information on how important it may be, nor if there is really a connection between asking questions and the outcome of a negotiation. However, Barry, Lewicki and Saunders (2010, p. 190) have stated that questions are essential to collect and synthesize the information during a negotiation. Asking questions may help to develop information about the opponent's position and needs. Therefore help the negotiator to develop supportive arguments that can be used in the negotiation process.

There is still a small amount of research on how questions have an impact on the negotiation outcome. However, researchers like Fisher and Ury (1992) encourage using questions as a technique to obtain information. In negotiation, obtaining information and the exchange of information between the partners would help them share the bargainers preferences and priorities for particular issues they are negotiating about. Walton and McKersie (1965) have stated that gathering information will lead to increasing the bargainer knowledge about the opposite opponent, that could help the bargainers to position themselves for making an accurate judgment. That could help them find an integrative agreement that is benefiting both parties.

Asking questions, as Dillion (cited in Huang, Yeomans, Brooks, Minson & Gino 2017) mentions, can be used as a tool for gathering information. Question-asking directs conversation by encouraging the other person to replay on the question and can increase the liking. Putnam (2010) have also stated that questions during a negotiation is an effective method also for resolving problems within negotiation.

## 1.1 Research Question

Social psychological study of negotiation has had a dramatic shift in the last 25 years, where the researchers and psychologists have tried to understand the process (Bazerman, Curhan, Moore & Valley 2000). But as mentioned earlier, there are still some factors in the negotiation process that have not been understood or researched. Which may have an important impact on the outcome of negotiation. Barry, Lewicki and Saunders (2010, p. 190) has stated that questions are essential to collect and synthesize the information during a negotiation. Asking questions may help to develop information about the opponent's position and needs. Where it gives the opponent opportunity to develop supportive arguments, that can be used in the negotiation. However, there is not a lot of information and research on how questions can affect the negotiation. But despite that, researchers encourage use of questions in negotiation. Fisher and Ury (1992) argues compellingly in favor of this. They believe that question can be used as a technique to obtain information. That can help the opponent gather information it needs for developing arguments or find a negotiation that can benefit both parties.

In view of all the above, I find it interesting how researchers consider questions during a negotiation as interesting. I will therefore investigate deeper on the relationship between asking questions during a negotiation with the outcome. Based on this, I have developed the following research question:

*“How can the amount of questions during a negotiation have an impact on the outcome of the negotiation?”*

The purpose behind the research question is to find out if there is a connection between the amount of questions asked during a negotiation and the outcome. At the same time see how substantial the impact actually is. In my research question there are two focal constructs; *questions* and *negotiation*.

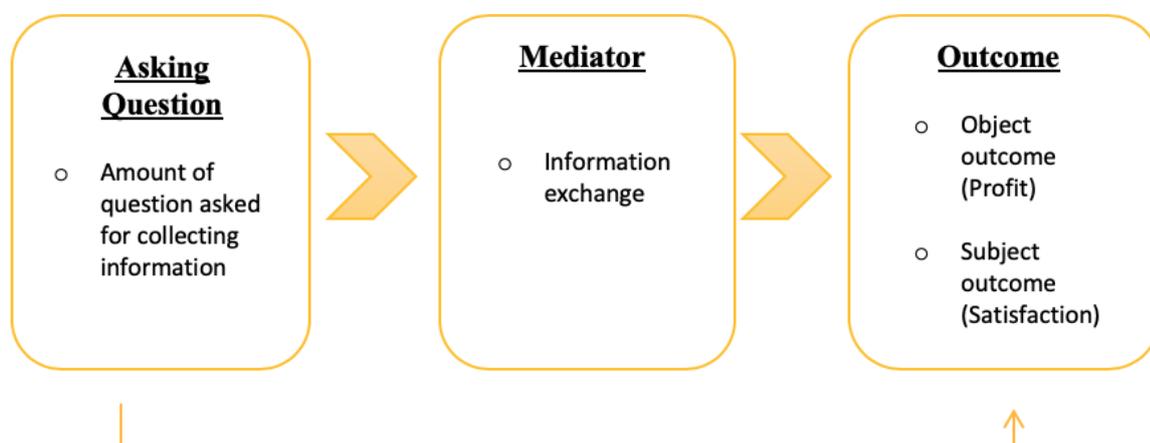
*Questions* can be a difficult focal construct to define. However, Cambridge Dictionary (2019a) has developed a definition I find clear, consistent and avoids tautology. They define a question as “*a sentence or phrase used to find out information*”. I find this definition applicable for my master thesis.

Thompson, Wang & Gunia (2010) has defined *negotiation* as “*Negotiation occurs whenever people cannot achieve their own goals without the cooperation of others*”. This definition can be seen as clear and consistent, where it does not use tautology for explaining the word *negotiation*. I therefore find Thompson, Wang & Gunia (2010) definition suitable for my master thesis.

## 1.2 The research model

In this research, I aim to explore how asking questions can affect negotiation outcomes. Can question be a technique to obtain information as Fisher and Ury (1992) stated? Or as Lewicki and Saunders (2010, p. 190) stated, it can help for the negotiator to collect and synthesize all the information? Can questions asked during a negotiation be influenced by the bargainers gender? Can the amount the questions asked have an impact the satisfaction level of the negotiator?

The research model aims to show if there is a connection between asking a question during a negotiation with the outcome, and how the amount of questions asked during a negotiation can affect the negotiation outcome. And if there are other factors, as types of question and gender, that can affect the relationship. Through the model, I will be gathering information about the relationship. The model consists of three different variables; asking questions, information exchange, and outcome. Here the outcome will be divided into two parts; objective- and subjective outcome. Where I am going to analyze how asking questions can affect the profit of the objective outcome, individually and at a dyad level. And how it could affect the satisfaction level of the negotiator. I have therefore constructed three variables which are divided into two independent and one dependent variable.



**H1a:** Amount of questions will have a positive impact on the individual profits achieved in a negotiation.

**H1b:** Amount of questions will have a positive impact on the joint profits achieved in a negotiation.

**H2a:** Amount of questions will have a positive impact on the individual satisfaction experienced in a negotiation.

**H2b:** Amount of questions will have a positive impact on the joint satisfaction experienced in a negotiation.

**H3:** Negotiators who ask a high (vs. low) number of questions will collect more information, which will lead to higher (vs. low) profits.

**H4:** Negotiators who ask a high (vs. low) number of questions will collect more information, which will lead to higher (vs. low) satisfaction.

## 2 Literature Review

### 2.1 Negotiation

*The art of negotiation is perhaps what most deeply distinguishes man from the animal, and it is this art and will to negotiate that has brought man forward, elevated him beyond the animal - Harry Martinson (1904-1978)*

Negotiation is required more and more in people's daily life - everyone negotiates about something during a day (Fisher & Ury 1992, p. 9). It can be from deciding where to eat to whom should be our supplier to which company we should collaborate with. Lewicki, Saunders & Barry (2015, p. 7) has stated that negotiation occurs when two or more parties attempt to resolve their opposing interest. However, negotiation is usually linked with business situations (Lewicki, Saunders, & Barry 2015 p. 3). Negotiation is required whenever there is a conflict or disagreement between two parties about the interest which can affect the result. Although negotiation is a part of our life, it is not easy to do well in a negotiation (Fisher & Ury 1992, p. 9-10).

Despite that negotiation is required more and more in people's lives, social psychologists have had difficulties understanding how negotiation works. And what element should be considered to make a negotiation successful. Therefore, negotiation has been seen as an attractive and interesting subject to study. Especially during the 1960s and 1970s. However, because of the cognitive revolution late in the 1970s, the study of negotiation declined. Nevertheless, in the 1980s and 1990s the study interest in the field grew and there was a lot of research on the decision maker. At the same time, they were critical to the behavior decision paradigm of negotiation as too restrictive (Bazerman, Curhan, Moore & Valley 2000, s.280).

In the 1960s and 1970s the social psychologies focused on two dimensions; individual differences and structural variables. Rubin & Brown (1975, s. 38) stated that these two dimensions explain the bargaining behavior. Bargaining and negotiation are words that frequently are used in our daily life but Rubin & Brown (1975, s 1-2) distinguish the words by using the dictionary. The dictionary distinguishes the words by saying that bargaining is *“to negotiate over terms of a purchase, agreement, or contract... to establish an agreement between parties settling what each shall give and take or perform and receive in a transaction between them”*. And negotiation is a *“deal or bargain with another or others . . . to confer with another so as to arrive at the settlement of some*

*matter*". Lewicki, Saunders & Barry (2015, s. 3) uses the word bargaining to describe the competitive situations, win-lose situations. On the other hand, negotiation is used to a win-win situation where the parties try to find a mutually acceptable solution for them both in a complex conflict.

Individual differences in negotiation are important determinants of bargaining behavior. Where personality variables and the individual characteristics affect the individual differences (Rubin & Brown 1975, p. 37). However, it has been shown that these factors do not usually explain the variance in negotiators behavior (Thompson 1998; Bazerman, Curhan, Moore & Valley 2000, p. 281). The reason behind this is because influence on the negotiated outcome by individual differences can lead to the situational features replacing the effect that occurs within the small changes. In 1987, Bazerman & Carroll (1987) stated that the individual differences are limited because they are not under a negotiator's control. Lastly, in the late 1990s they discovered that not even experts in negotiating are good at making clinical assessment about another person's personality in order to formulate a suitable strategy (Morris et al 1999 cited in Thompson 1998; Bazerman, Curhan, Moore & Valley 2000, p. 281).

The structural variables refer to the social, physical, and issue characteristics of the bargaining situation that can explain the bargaining behavior (Rubin & Brown 1975, s. 41). The structural variables were primarily discovered and researched in the 1960s and 1970s. These are the variables that define the context of the negotiation. Variables can be, for example, presence of constituencies, parties' incentives and payoffs, power, deadline, number of people on each side and the presence of third parties. On the contrary, the research has shown that the object features of a negotiation is beyond the control of an individual object. However, it has contributed to get an understanding on how negotiation works (Bazerman, Curhan, Moore & Valley 2000, s. 281).

In the 1980s and 1990s there was a change in the study of psychology called the cognitive revolution (Bazerman, Curhan, Moore & Valley 2000, s. 282). The cognitive approach in psychology tries to understand how we think. The cognitive approach believes that our thought process has an effect on how and why we choose our behavior in different situations (Wilson 1984, s. 197). The psychology of negotiation also got influenced by cognitive approach. The influences change the direction of negotiation research towards a behavior decision research. Descriptive and prescriptive were seemed therefore as a facilitated research in the negotiations new turning point. Prescriptive research primarily focuses on game theory. Game theory is the mathematical analysis

for the fully rational negotiators. In spite of that, there was a key turning point that brings both of the concepts together. Prescriptives needed the descriptively to understand how negotiators actually make decisions. By using description to outline a strategy on how both parties in a negotiation ends up “winning”. At the same time make the focal negotiator understand that the outcome of possible partnership would benefit both of them (Bazerman, Curhan, Moore & Valley 2000, s. 282). However, many thought that only focusing on the behavior decision perspective in a negotiation could leave out other important factors. In addition to this they combined the social psychological variables with the behavior decision perspective (Bazerman, Curhan, Moore & Valley 2000, s. 283). Bazerman (stated in Bazerman, Curhan, Moore & Valley 2000, s. 283) highlight four questions built up with this new perspective by combining the social psychological variables and behavior decision perspective: (1) social relationship in negotiation, (2) egocentrism in negotiation, (3) motivated illusions in negotiation and (4) emotion and negotiation.

Recent research on negotiation is more focused on how negotiation perceives and constructs the negotiation problem. On the other hand, they tended to offer data on the impact in an objective alternative structure. It can be seen that the result was typically consistent with naïve intuition (Bazerman, Curhan, Moore & Valley 2000, s. 281).

There are still some factors that have not been understood and researched on. One of those factors are questions during a negotiation. Fisher & Ury (1992, p.10) has stated that the strategies that are being used in negotiation often leaves people “*dissatisfied, worn out, or alienated*”, sometimes all three. In light of Young (2001, p.1) definition on negotiation, the parties involved in the negotiation try to come to a mutual agreement on the division of resources and resolve their interest conflicts. Therefore, it is important for the negotiators to understand their opponent's interest by the negotiation, instead of trying to change their minds. The negotiator should try to figure out where their mind is now (Fisher & Ury 1992, p. 47). This can be done by asking questions during the negotiation process for figuring out their state of mind, since questions are essential to collect and synthesize the information during a negotiation (Barry, Lewicki & Saunders 2010, p. 190).

In a negotiation process, the negotiators; behavior, cognitions, emotions, and motivations can affect the outcome of the negotiation (Thompson, Wang & Gunia 2010, p. 493). Bazerman (cited in Bazerman, Curhan, Moore & Valley 2000, p. 283) mentions four categories that could also affect the outcome of the negotiation; social relationship-, egocentrism-, motivated illusions -, emotion in

negotiation. For my master thesis I have chosen to use Bazerman's category of social relationship and emotions to be able to understand how subjective outcome could be affected in a negotiation.

### 2.1.1 Social relationship

In negotiation the relationship between the bargainers could affect how the negotiation will proceed. The level for relationship in negotiation can be categorized into three levels: individual, dyad and the network. The first level is based on how the bargainers are influenced by the social context when it comes to their judgment and preferences towards their opponent. Loewenstein (cited in Bazerman, Curhan, Moore & Valley 2000, p. 284) made a study where the result was based on how the disputants reported preferences on the monetary payoffs were influenced by payoff to and relationship with their hypothetical counterparts. The second level for relationship in negotiation is called dyad. It is important to see how social relation within dyad influences negotiation process and outcome. For example, certain behavior could appear as irrational by the individual perspective but rational in dyad perspective. This can lead to an outperformance of the game theoretic model within the dyadic outcome. The last level of relationship in negotiation is network of actors. This level takes into consideration how the bargainer selects a negotiation partner. Bargainers within this level of relationship in negotiation are more satisfied if they negotiate with people they know, rather than new people, despite the fact of finding costs that are better-fitting matches.

### 2.1.2 Emotion

Emotion can be a very important factor in negotiation. Researchers have found out that positive mood tends to increase the bargainer selective cooperative strategy in negotiation. At the same time, enhance their ability to integrate gains. However, bargainers that operate with an opposite mood tend to make less accurate judgment of their opponents' interest, hence achieving a lower joint gain in the negotiation. Likewise, more self-centered with their preferences and might reject profitable offers in ultimatum games. Therefore, emotion can give the bargainers hints about the likely behavior of the opponent, at the same time, suggest and help understand the individuals own decisions may be biased (Bazerman, Curhan, Moore & Valley 2000, p. 285-286).

Brandenburger & Nalebuff (cited in Bazerman, Curhan, Moore & Valley 2000, p. 286) stated that how competitors defined the game is more important than the moves they make within the game.

Therefore, their understanding of the game is a key turning point on how they play the game. Based on this, it is important that during the negotiation the parties have to understand the actual preferences and mental models of their opponent, rather their utility structure. Understanding how both parties differentiate and define the game can lead to a better understanding on why they do not reach agreement where they think they should.

Thompson, Wang & Gunia (2010, p. 493) stated that the negotiation outcome agreement includes features like integrative and distributive. Integrative in a negotiation means that the outcome of the negotiation satisfies the interest of both parties involved in the negotiation. The distribution, on the other hand, is about how the parties involved divide the resource, or how they share the resources among themselves (Thompson, Wang & Gunia 2010, p. 494).

The negotiation outcome has recently widened within the economic perspective where they include investigations of subjective outcome. Negotiators with rational behavior equated the maximization of economic gain, joint or individual. However, there have been arguments that consider the consideration of social psychological outcome as well; quality of the relationship within the negotiation, degree of trust between parties, each negotiator's satisfaction and the willingness to negotiate again with each other in the future.

Curhan (cited in Thompson, Wang & Gunia 2010, p. 494) attempted to measure the subjective outcome of a negotiation by a survey on what people value in negotiation. There were four distinct considerations that emerged. The first one is negotiators' feelings about the instrumental outcome. Here they considered how profitable their gain in negotiation is, for example, "how much money they made or can make in a negotiation". Secondly, negotiators have feelings revolving themselves; negotiators are worried about their ability as bargainers. If they are or were competent during the negotiation. Thirdly, feelings concerning the negotiation process; how the conversation evolved, if they were constructive enough. Lastly, feelings concerning the relationship; analyzing if the negotiation preserved the relationship or strengthened it. This provides the opponents willingness to renegotiate with them in the future. However, the outcome can be affected by the negotiator multiparty nature. The inner experience of the bargainer during a negotiation may have an impact on the negotiation outcome. Therefore, influence as well the negotiation process, intrapersonal construct like gender and trust in negotiation has been an attractive and significant construct for the researcher to study. Since this could be factors that may affect the bargainer behavior during the negotiation process and outcome.

Rubin & Brown (1975, s. 18) mention five characteristics that are common in all negotiation situations: (1) Negotiation where there are at least two parties involved. (2) The negotiators have a conflict of interest with respect to one or more different issues. (3) The negotiation between the parties is regardless of the existence of prior experience, or acquaintance with one another. (4) The relationship between negotiators during negotiations arises from: (a) division or exchange of one or more specific resources and / or (b) resolution of one or more intangible issues among the parties. (5) Usually involves presentation of demands or proposals by one party, evaluation, concessions and counter proposals. It may seem as an activity that is more sequential rather than simultaneous.

### 2.1.3 Gender

Gender could be an intrapersonal construct that could affect the negotiation process and outcome (Thompson, Wang & Gunia 2010, p. 494). The term *gender* is normally used to refer to cultural and psychological markers of the sexes, where the aspect of the gender role is differentiating from each other in a given culture or society, and from people's belief. Sex refer to the biological categories of male and female. This means that they are classified based on their reproductive organs and functions (Lewicki, Saunders & Barry 2015, p. 436). Despite gender roles being developed by people's belief, it can also be developed from stereotypes that are associated with gender. Stereotypes usually arises from observing the sex differences and similarities. Hence, people that carry the expectations connected to the gender roles characteristics and reinforcement the role behavior is more likely to be seen as successful in that role (Stuhlmacher & Linnabery 2013, p. 222).

### 2.1.4 Trust

Trust is an inherent part in negotiation. The parties involved in the negotiation depend on each other to obtain an agreement that benefits both parties. Therefore, the accurate information being exchanged and the willingness to implement an agreement suitable for both parties, are essential for improving their current situation and achieving a successful negotiation. Hence, the parties involved in a negotiation and the information being exchanged in the negotiation process is integral in how the parties trust one another (Lewicki & Polin 2013, p. 161). Similarly, Kumar & Paddison (2000, p.208) also believed that trust is fundamental in a successful partnership. Because when the parties involved trust each other they wish to maintain an open dialogue and interaction.

Lewicki, McAllister & Bies (1998, p. 439) define trust as “*confident positive expectation regarding another’s conduct*”. Here they use the word “*another’s conduct*” to address another’s action, decisions, and action. And “*confident positive expectation*” is used to explain that trust is developed from the other intentions and willingness to act on the basis of another’s conduct. Likewise, Lewicki et al (1998) point of view, Mayer, Davis & Schoorman (1995, p. 712) define trust as the “*willingness of a party to be vulnerable to the action of another party based on the expectation that the other party will perform a particular action important to the trustor irrespective of ability to monitor or control that other party*”.

Lewicki & Polin (2013, p. 171) stated that a degree of trust is more likely to develop in face-to-face communication than telephone (audio only) communication or written communication. As a result, negotiation with face-to-face communication has more truthfully information exchanged than negotiation with audio or written communication.

Nevertheless, Fells (1993, p. 35) stated that when a person is in a situation calling for trust has to make a subject assessment of the trustworthiness of the other person. Trust is not developed instantly but incremental. Therefore, it may be more appropriate for a negotiator to believe that the other bargainer in negotiation is trustful, willing to take a risk and trust the other person. However, Butler (1999, s. 219) stated that taking a risk of trusting the other parties involved in negotiation could affect our own position. Since the information that is being shared could be used to take advantage of one’s vulnerability in a negotiation. Having said that, Kemp & Smith (1994) and Thompson (1991) found out that information quantity shared during a negotiation contributes to a mutually beneficial outcome. Therefore, in my thesis I am interested in how trust may affect the amount of questions being asked and formulated in the negotiation; what sort of impact could it have on the negotiation.

## **2.2 Integrative Negotiation**

Integrative negotiation provides a possibility for joint gain for both bargainers, where the situation has a non-zero encounter. When the negotiation is purely integrative, there will not be a conflict between the parties, if they find a solution that is appropriate for both parties. However, there are few negotiations that are purely integrative. Typically, there would be a mix of integrative and distributed aspects and are described as having a mixed motive with the bargaining (Barry &

Friedman 1988, p. 348). Fisher, Ury & Patton (cited in Barry & Friedman 1988, p. 348) has stated that within integrative negotiation, the negotiation would benefit more from the communication exchange between the parties. Since it gives an opportunity to exchange information and explore options that are satisfied by both parties. Lewicki, Saunders & Barry (2015, p. 77) claims that integrative negotiation is therefore known as being cooperative, collaborative, win-win, mutual gains, interest based or problem solving. This is because the negotiators work to overcome obstacles that are inhibiting factors for the bargaining and try to find a solution benefiting both parties. Research in integrative negotiation has shown that failure is often linked with low exchanged information between the parties.

Barry & Friedman (1988, p. 348) stated that bargainer with conscientiousness, as one of their personality factors, has the same impact in integrative (win-win) and distributive negotiation (win-lose). The reason is that as it helps to analyze and plan a suitable strategy for distributive negotiation, it also helps the bargainer in an integrative negotiation to think through the approach in the bargaining. Furthermore, by thinking through the approach in integrative bargaining, it requires the bargainer to understand their position and interest in the negotiation. At the same time sustain momentum through their process for gathering information from their opponent to be able to find a solution that meets the needs and objectives of both parties. Therefore, in the process of integrative negotiation it is important that the bargainer is firm and flexible. Meaning that the bargainer is persistent with his/her interest and presents them to the opponent, but also willing to compromise so both needs and interest are assured. (Lewicki, Saunders & Barry 2015, p. 80).

Lewicki, Saunders & Barry (2015, p. 80) present a model showing the process in integrative negotiation. In the process, they present four major steps called: (1) identify and define the problem, (2) surface interest and needs, (3) generate alternative solutions to the problem, and (4) evaluate those alternatives and select among them. The first of the three steps, creates value in the negotiation. Here they have to work together to understand the problem and identify their interest and need to find a solution benefiting both sides. The last of the four steps, evaluate those alternatives and select among them, claims the value in the negotiation.

In my master thesis I will conduct an experiment to see how questions can have an impact on negotiation. In integrative negotiation, as mentioned before, they are trying to provide a possibility for joint gain for both bargainers in the negotiation, where the situation has a non-zero encounter. For them both to be able to succeed, the information that is been exchanged is essential. In my

experiment, I want to see if questions can be used as a tool for gathering enough information that can provide a win-win solution for the bargainers.

## 2.3 Communication

Negotiation understanding has had an enormous development in the psychology study, however, there is not a clear understanding how a negotiation gets successful. There can be so many factors that can influence the negotiation, like the factor I want to investigate asking questions in a negotiation. Questions can be used as a form of communication in a negotiation. According to Fisher & Ury (1992, s. 33), without communication there is no negotiation. They go deeper in the subject by saying that communication is a part of the negotiation process. In this process the purpose is that the partners reach a joint decision (Fisher and Ury 1992, s. 33).

Culo & Skendrovic (2012, s. 325) define communication as a “two-way street that requires everyone involved to exchange a message”. In addition, they mention that the goal in communication is to make the other party understand your proposal and position. This is essential to a negotiation, since the negotiators during a negotiation have to resolve the “conflicts”, in another word, disagreements between the parties.

Foulger (cited in Lewicki, Saunders & Barry 2015, p. 230) created a model called “transactional”. The transactional model was created to show the bidirectional nature of a two-party communication in an ongoing conversation. In the model it treats the communicators as both creator and consumers

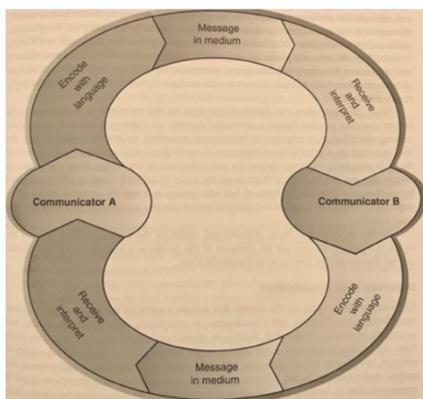


Figure 2, “Transactional model”

of the message, as shown in figure 2. The communicator in the model does not have a passive recipient of message. The receiver of the message takes an active role in several ways. Lewicki, Saunders & Barry (2015, p. 231) explains the model further by saying that the recipient receives the message (verbally or non-verbal) and tries to interpret the content and the other person's motives for transmitting the information. Then the recipient has to become a sender by responding to the message. Here the response may try to accomplish a number of things, like convey the information about the original message by nod for assent or have a quizzical look of confusion or having a grimace signal dismay. Then, the

communicator responds to the message like the one who sent the previous message, and has now an opportunity to choose how they would like to respond (Lewicki, Saunders & Barry 2015, p. 232).

Fisher & Ury (1992, s. 33) stated that there are three main problems that can occur in negotiation within communication that can affect negotiation between the negotiator's partners. The first problem is when the negotiators are not talking to each other, or at least not in a way they understand each other. The consequence of this problem is that the parties are not able to find a mutual agreement that can benefit both parts (Fisher & Ury 1992, s. 33). The second problem with poor communication is listening. In negotiation this can be a consequence of the negotiator focusing more on their next argument or what they are going to respond to the last point (Fisher & Ury 1994, s. 34). Fisher & Ury (1992, s. 34) mention that it can also occur if the negotiator is listening more to their constituency than to the other side. The third problem that can occur is misunderstanding. Misunderstanding in a negotiation can cause the other negotiator misinterprets what you say about the negotiation (Fisher & Ury 1992, s. 34). Fisher & Ury (1992) mention solutions on how to reduce the three problems that can occur with poor communication: (1) Listen actively and acknowledge what is being said, (2) Speak to be understood, (3) speak about yourself not about them; if there is a conflict or a problem you should try to explain how it impacted your business rather than what they did wrong. (4) speak for a purpose; sometimes the problem is not about lack of information, but too much. Therefore, it is important to narrow and find the purpose the information will serve.

However, Culo & Skendrovic (2012, s. 325) mention that decent communication requires skills that are both verbal and non-verbal, hence not only verbal. They also mention the ability of listening and understanding, but also the body language. Research studies have shown that seventy percent of our communication are non-verbal, body language. Where expressions like face expression, eye contact and how we move, reveals how we feel. The way we speak can also be a part of non-verbal communication called paralanguage. These include voice quality, emotion, intonation, the rhythm of speech and stress. Non-verbal communication can also reveal us. Therefore, it is important during a negotiation to be aware of our behavior, since non-verbal communication can cause misunderstanding. Another communication skill is oral communication. In oral communication, negotiators should organize their thoughts before speaking, by taking notes, planning the main point you should say and covering. This gives the opportunity for the negotiators to conclude a logical conclusion of an idea before presenting it, and evaluate the negotiator's opponent's possible reaction (Culo & Skendrovic 2012, s. 325). Therefore, it is possible to conclude that the communication in

the negotiation process, both verbal and non-verbal, are essential for a negotiation. Where the goal is to resolve the “difficultness”/ “problem” the partners can have and find a solution that fits both partners and are resolving for the conflict (Culo & Skendrovic 2012, s. 326).

Culo & Skendrovic (2012, s. 326) stated that negotiation depends on information because the more information the negotiators can get, the better is his/hers position to negotiate. According to Culo & Skendrovic (2012, s. 326), the lack of communication in negotiation can lead to a breakout and misunderstanding. Therefore, it is important to have an open communication between the partners in a negotiation. Since it can also lead to a better long-term agreement, hence a successful negotiation. These are important factors to beware of when using communication during the negotiation process. The communication process in negotiation has four main functions; (1) coordinate outcomes, (2) exchange information, (3) express strategic intentions and tactical actions, and (4) identify the pattern of behavior (Culo & Skendrovic 2012, s. 326).

Therefore, it is possible to see how verbal and non-verbal communication can affect the negotiation outcome. However, as Fisher & Ury (1992) stated in their solution guide for reducing the problems that can occur within poor communication in point 4. *Speak for a purpose*. It is important to narrow the information exchanging during a negotiation. Narrow in the sense of finding and telling information that serves a purpose for the negotiation. Since too much information can also have a downfall. My research question for my master thesis is “*How can the amount of questions during a negotiation have an impact on the outcome of the negotiation?*”. Questions, as mentioned earlier, can be a tool for information gathering. And since one of my focal constructs for my master thesis is *question*, and the other *negotiation*. I find it highly relevant to see how exchanging information in negotiation can affect the *negotiation*.

### 2.3.1 Exchanging information in negotiation

Information is defined as “*facts about someone or something*” by Cambridge dictionary (2019b). In negotiation there are exchanges of information between the partners. Where they shared their preferences and priorities for particular issues. In addition to this, the negotiators partners during the exchange’s information process is where they try to understand each other and come to a mutual agreement about what they are negotiating about (Lewicki, Saunders & Barry 2015, s. 79).

Thompson (1989, s. 163) specified that bargainers in general do not exchange a lot of information during a negotiation. Instead bargainers tend to constitute 10% of their communication, and the

information that has been exchanged is not strongly related to the quality of negotiated agreements between the partners. Thompson (1989) also stated that negotiators often assume that their opponent negotiator interests are completely opposed to their own. This assumption is called fixed-pie perception.

Fixed-pie perception is considered to be a judgment error as negotiators' interests are often not completely opposed to their opponent. This means that they can actually get to an agreement both partners would get benefit from (Thompson 1989, s.162). In addition to this, research shows that negotiators that maintained the fixed-pie perception through the negotiation were satisfied with lower outcome in terms of individual and joint gain, than the negotiators who did not have a fixed-pie perception judgment. Therefore, information seeking could be beneficial for the negotiators. Because gathering enough information of their opponent during a negotiation will increase their knowledge, that can help them make accurate judgment, and reach integrative agreements both partners would benefit and gain from (Walton & McKersie 1965, s. 140).

### 2.3.2 Questions in negotiations

Questions can be defined as “*a sentence or phrase used to find out information*”. In *Exchange information in negotiations*, I mention that gathering information in negotiation will increase their knowledge, that can help negotiators make accurate judgment, and reach integrative agreements both partners would benefit and gain from (Walton & McKersie 1965, s. 140), as mentioned in 2. 2 *Integrative negotiation* and in 2 .3 *Communication*, question can be used as a form of communication in a negotiation, since it can be used as a gathering tool for information. The questions that the negotiators ask is essential in the bargaining as it will help to understand each other's interests and needs. Questions can also be an effective method to resolve negotiations that have stalled because of frustration and lack of progress (Putnam 2010, p. 330-331). According to Taylor (cited in Kloda & Bartlett 2013, p. 55) the questions should be dynamic, open-ended and negotiable instead of static and unchanging. Taylor mentions four levels of expression of information needs: (Q1) visceral needs, (Q2) conscious needs, (Q3) formalized need and (Q4) compromised need.

Taylor's first level of expression of information needs, *visceral needs(Q1)*. Here the user remains vague and unexpressed of their needs, as a result of the users missing awareness of their needs. In the second level *conscious needs (Q2)*, the user acknowledged the information need but are still

equivocal about the information's need. Therefore, Tylor suggests that the user should get help focusing the question. The third level, *formalized need (Q3)*, here the user has expressed information need. In this level the user usually expresses knowledge about the information by making an interrogative statement. In view of this, Kloda & Bartlett (2013, p. 56) made this example as an explanation of the third level; "*I would like to know more about...*". In level four; *compromised need (Q4)*, the purpose for the user is to make a compromise. That is why the user uses questions as an adjustment of their statement based on expectation for finding a compromise that benefits (Kloda & Bartlett 2013, p. 56).

Dillon (cited in Huang, Yeomans, Brooks, Minson & Gino 2017, p. 431) stated that question-asking directs conversation by encouraging the other person to reply to the question. Although some use questions as a way to avoid disclosing information themselves, the common is to solicit information from the other. Question-asking is a form of gathering information that is relevant. The information collected is relevant to the question asked. If the question asker feels that they need more information about a specific subject, they could use the question as a request for more information about the subject. Asking questions gives an indication of listening, validation and caring, as well as understanding of what the respondents are saying (Huang et. al 2017, p. 430-431). At the same time, questions can be helpful for the question-asker to gather information it lacks or need more of.

Berger & Calabrese (cited in Huang, Yeomans, Brooks, Minson & Gino 2017, p. 431) stated that when people meet for the first time, they usually ask for more information-seeking questions, they find them valuable. Furthermore, they explain that the reason is because people often know very little information about each other, in their first meeting, and are therefore more interested in gathering information to learn about each other. The content of the conversation may be significant for whether the parties involved in the conversation end up liking each other. As I have mentioned before, in negotiation the relationship between the bargainers could affect how the negotiation will proceed (Bazerman, Curhan, Moore & Valley 2000, p. 283). Asking-question can help obtain information from the partners way of thinking and feeling. On the other hand, asking questions can also help to understand the partner and it also increases the perception of responsiveness. This is likely also to increase respondent interpersonal liking (Huang, Yeomans, Brooks, Minson & Gino 2017, p. 432).

In negotiation, asking good questions allows the bargainers to find information about the opponent position, needs and having supporting arguments that could help them get a successful partnership

in the negotiation. Furthermore, asking- question can be critical to both distributive-, and integrative negotiation (Miles 2013, p. 384). Huang, Yeomans, Brooks, Minson & Gino (2017, p. 434) have through a research found out that the liking do really increase when question-askers ask more questions than question-asker with lower question.

However, Miles (2013, p. 385) have stated that questions alone will not solve the negotiators information gathering needs. He supported this by saying that the counterparts can sidestep the question that is being asked. And can in the worst case scenario answer the question dishonest and mislead their counterpart. In addition to this, even if the counterparts may be well intended in answering the question, they could unconsciously give an answer that is biased. Since they might not be aware of their emotions. By this he means that they could unconsciously want a result from the bargaining that leads to a more beneficial to their side (Miles 2013, p. 385).

On the other hand, Putnam (2010, p. 331) mentions that questions during a negotiation can be an effective method to use for resolving problems in negotiations that have been stalled because of frustration and lack of progress. Both statements substantiate Fisher & Ury (1992) encourage of using questions as a technique to obtain information in negotiation. Asking questions could be a helpful tool for the bargainer under the negotiation. I want to see how big the influence of asking questions can have on the negotiation, and if the amount of questions really provide a successful outcome.

### **3 Methodology**

In the previous chapter *2.0 literature*, I presented a literature review about my research subject. In this chapter, I am going to present the research method that I find suitable to answering my research question. I will therefore present theories regarding my research design and how I have conducted my data collection, and analysis. While also describe my research method in light of the concepts of validity, reliability and generalizability.

The purpose of this chapter is to shed light on quantitative research methods, in order to create understanding about the chosen research methods.

### 3.1 Background for chosen methodology

Methodology is defined as an approach for establishing knowledge about a subject the researcher wants to investigate and understand (Gripsrud, Olsson & Silkoset, 2010). According to Savin-Baden & Major (2013, p. 3) the methodology that the social researchers attend to use could help them investigate the complexities they are facing by decreasing the complicated question and issues around the research subject. Since social researchers tend to face an increasing range of complexity questions and issues regarding their research question, it is essential to find the correct methodology. However, usually the methodology the social research tends to adopt in their investigation are usually compatible with their point of view of the world, and the nature of knowledge and social reality.

In methodology it is common to distinguish between quantitative and qualitative methods.

Quantitative research method is used to measure and/or count the phenomena and the relationship between them (Bell, Bryman & Harley 2019, p. 163). The quantitative research method therefore collects and records data in form of numbers (Johannesen, Christofferson & Tufte, 2011).

According to Lowhorn (2007, p. 1), by collecting data from numbers, quantitative methods give an opportunity to get a general understanding of the research phenomenon. Since with this method we are able to establish statistical conclusions by categories of one or more variables occurring among the research units (Tufte 2018, p. 28). Qualitative research, on the other hand, gives an opportunity to understand the phenomenon by collecting data in form of text, sound and image to find the way people think and feel (Lowhorn 2007, p. 1).

In my master thesis I want to investigate if there is a connection between the amount of questions asked during a negotiation and the negotiation outcome. I find it essential to take into consideration that everyone negotiates, since negotiation is developed when two or more parties attempt to resolve their opposing interest. Therefore, deciding where to eat to whom should be our supplier, to which company we should collaborate with, are considered as negotiation (Lewicki, Saunders, & Barry 2015 p. 3). Negotiation can therefore be seen as part of our daily life and occur whenever individuals try to affect the other parts actions. Based on this I have decided to conduct a study on a sample group to examine and get an understanding of my research question.. Therefore, I have chosen the quantitative research method as my approach for my master thesis, where I collect data and records from numbers, that could indicate how the amount of questions asked during a negotiation affect the negotiation outcome. In addition to quantitative methods, I will use an experiment design to be able to get a full understanding regarding my research question. With

experimental design I will be able to manipulate the data, asking questions, and see how it affects the dependent variable, negotiation outcomes.

### 3.1.1 Quantitative research

Quantitative research method is used to measure and/or count the phenomena and the relationship between them (Bell, Bryman & Harley 2019, p. 163). Bell, Bryman & Harley (2019, p.164) described quantitative research “in broad terms” that it is based on collecting numerical data and has an exhibiting view of the relationship between the theory and the researchers as deductive. Deductive is the approach to the relationship between theory and research in which the latter is conducted with reference to hypothesis and ideas inferred from the former (Bell, Bryman & Harley 2019, p. 164, p. 591).

The approaches of this methods have eleven steps of the quantitative research process; (1) Elaborate theory, (2) Devise hypothesis, (3) Select research design, (4) Devise measures of concepts, (5) Select research site(s), (6) Select research subject/respondents, (7) Administer research instruments/ collect data, (8) Process data, (9) Analyze data, (10) Develop findings/conclusions, and (11) Write up findings/ conclusions. These eleven steps reflect the underlying logic behind the method. However, the order can vary from time to time, but this is the categorize a researcher in quantitative methods always passes by (Bell, Bryman & Harley 2019, p. 164-165).

In quantitative research methods the researcher use measurements to be able to collect data. But also to be able to understand the research phenomena. The reason behind this is because measurement allows us to delineate fine differences between people, organizations, or other entities that can be difficult to recognize (for example, level of satisfaction at work). Measurement can also provide a ground base for getting a more precise estimate for analyzing the degree of a relationship. This is because by using measurement there is a possibility to conduct a correlation analysis (Bryman & Harley 2019, p. 168). Therefore, the reliability in the measurement is highly important. Bell, Bryman & Harley (2019, p.172) stated that reliability has at least three different meanings: stability, internal reliability and inter-rater reliability. *Stability* can be tested by the method test-retest of the measurement. This can be done by administering a test or measurement on one occasion and then do it again but on another occasion with the same sample. In *internal reliability* the degree of the indicator conducted from the measurement makes a scale that is consistent. And if

there is a poor reliability in measurement, it also affects its validity of the measurement. Bell, Bryman & Harley (2019, p.175) stated that if the measurement is not reliable, it cannot be valid.

Validity is important, because it means that the measurement is actually measuring correctly those concepts. In conclusion the data that have been collected is valid and reliable, and therefore the conclusion the quantitative researcher has conducted can be seen as correct (Bell, Bryman & Harley 2019, p. 175). This is important for quantitative researchers because they usually hope that their findings could be generalized. This means that the results of their data have findings that are beyond the confines of the particular contexts of the conducted research. In addition to this, quantitative research attempts to imitate the natural sciences, and develop “law-like” generalization of the social world (Bell, Bryman & Harley 2019, p. 177). Tufte (2018, p.28) stated that this could be done by establishing a statistical conclusion by categories of one or more variables occurring among the research units.

### 3.1.2 Experimental research design

Research design permits us to obtain the most accurate results possible. After the study’s problem is concrete, it is time to select research design (Toledo-Pereya 2012, p 279). There is different research design associated with the research method. Research design, with other words, guides the implementations of the research method and analysis of the subsequent data (Bell, Bryman & Harley 2019, p. 45). Bell, Bryman & Harley (2019, p. 45) stated that there are five different research designs to choose from. These are called experimental -, cross sectional-, longitudinal-, case study- and comparative design. For my master thesis, as mentioned earlier, I have chosen to use an experimental design approach.

In experimental design there are three major characteristics. These are called control, manipulation and observation. *Control* of variables means that the researcher controls the variables that may have an impact on the experimental process, that is not a part of the theory. The second characteristics, *manipulation*, in experimental design implicates the variables that are a part of the theory that is being tested. The third, *observation*, is the researcher who controls what to observe in a particular project. Here the decisions they make, related to the issue and the number of cases to observe, and the observance of what attributes these cases, and what evidence regarding the case should be gathered (Toshkov 2018, p. 19-20).

Bell, Bryman & Harley (2019, p. 49) stated that manipulation in experiment is “*essential for manipulating the independent variable in order to determine whether it has an influence on the dependent variable*”. And it is usually conducted on one of two experimental groups, that represent different types or levels of the independent variables. This means that the experimental group that receives the treatment, that is some kind of manipulation of the independent variable, is compared to the control group that has not received any manipulations. This means that the dependent variable is measured and compared with the results from before and after treatment (Bell, Bryman & Hill (2019, p. 51).

This research design provides the researcher a high level of control, where the researcher is able to manipulate the experimental group. This could be seen as an advantage, since it gives control for the researcher to eliminate rival explanations and eliminate threats to internal validity. The threats could be testing, history, maturation and selection. The threats referring *testing* is to the possibility that the subject may become sensitized to the aim of the experiment. With the control group we assume that they also are experiencing the same “experimental effect” as the experimental group, that allows us to discount the possibility that there is no difference between the groups. *History* is referring to the possibility that events that are unrelated to manipulation could have affected the independent variable. The third threat is referred to as maturation. This threat is about people who may change. The change could have an effect on the dependent variable. The last threats are about selection. This is based on the fact that there could be a difference between the two groups if I had gone for a non-random selection. This could have resulted in variations between the two groups. That also may have had a negative effect on the results (Bell, Bryman & Hill (2019, p. 51). Another advantage with this experimental research is that the researcher has a high level of control and are therefore able to have clear and specific conclusions.

## 3.2 Selection of participants

Lowhorn (2007, p. 1) stated that during a quantitative research approach, the group that is used as a representative sample for the study is chosen properly. He stated furthermore, that if the sample has been choosing properly it could represent the population. The statistical result could apply to everyone. However, as Bell, Bryman & Hill (2019, p. 177) stated it is difficult for the researcher to find a representative sample group for their research. Since it is rarely possible for the researcher to send questionnaires to a whole population to conduct a census. Therefore, we have to find a sample that could be as representative as possible. The reason for this is because if the sample group is as

representative as possible the result could represent the population. With other words, the results could be generalized.

The focal construct I want to investigate during my master thesis is as mentioned, *negotiation* and *question*. Therefore, a perfect representative sample would be an organization that conducts a lot of negotiation. However, I have not been able to get a collaboration with an organization that works with negotiation. That is why I have chosen to use students from University of South-Eastern Norway, with negotiation lectures as their elective, as my sample group for my research question. This sample group is also a more convenient group to conduct my experiment on, since I had the opportunity to use the class that my mentor, Sinem Acar-Burkay, lectures in. In addition to this, the class “negotiation” is also conducted at the same university I attend. Therefore, this allows me to do the research and ensure that the data collection from my experiment is conducted in a “right” way.

### 3.3 The experimental research that inspired my research

The experimental research I have conducted for my research question is on two experimental groups within my sample group, students. This experimental research is inspired by the experimental research approach Pruitt and Lewis conducted in 1975. The experiment they wanted to investigate was about how the process and conditions can lead to the development of a more integrative agreement in bilateral negotiation. Integrative agreement in bilateral negotiation occurs when the agreement is said to be more “integrative” the greater is the joint utility, the more valuable is it for the two bargainers (Pruitt and Lewis 1975, p. 621).

In their research they choose to have ninety-two male undergraduates from the State University of New York at Buffalo as their sample group. Their chosen sample group was given a task that had been inspired from a task Kelly had conducted in 1966. The task required them to pair up and be given a role as a buyer or seller. They had to agree on prices for three commodities; iron, sulfur and coal. The buyer achieved a higher profit on iron, while the seller had a higher profit on coal (Pruitt and Lewis 1975, p. 623). They were given following profit schedules, where they listed nine prices, represented by letters:

TABLE 1  
BUYER AND SELLER PROFIT SHEETS

Buyer						Seller					
Iron		Sulfur		Coal		Iron		Sulfur		Coal	
Price	Profit	Price	Profit	Price	Profit	Price	Profit	Price	Profit	Price	Profit
A	\$2,000	A	\$1,200	A	\$800	A	\$000	A	\$000	A	\$000
B	\$1,750	B	\$1,050	B	\$700	B	\$100	B	\$150	B	\$250
C	\$1,500	C	\$900	C	\$600	C	\$200	C	\$300	C	\$500
D	\$1,250	D	\$750	D	\$500	D	\$300	D	\$450	D	\$750
E	\$1,000	E	\$600	E	\$400	E	\$400	E	\$600	E	\$1,000
F	\$750	F	\$450	F	\$300	F	\$500	F	\$750	F	\$1,250
G	\$500	G	\$300	G	\$200	G	\$600	G	\$900	G	\$1,500
H	\$250	H	\$150	H	\$100	H	\$700	H	\$1,050	H	\$1,750
I	\$000	I	\$000	I	\$000	I	\$800	I	\$1,200	I	\$2,000

Note. Prices were referred to by letters. The numbers under each commodity represents profits to be made on that commodity at the particular price.

Figure 3, experimental table that inspired my study

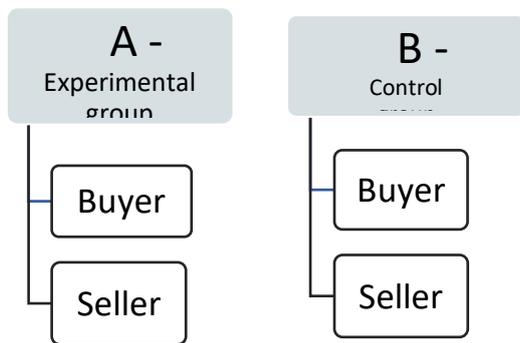
However, they could not see the profit schedule of their opponent. This means that the seller just had their profit sheet that represented their profit for selling. And the buyer just had their own profit schedules shown for reselling each commodity if they purchase that price. Each of the participants were divided in a role, then given the appropriate profit sheet, with information about their position and general information of their “company”. The given information they provided to the participants was to be used freely, partly or all the information for shaping their bargaining stance and give themselves an advantage. This information could also be used to create an additional argument (Pruitt and Lewis 1975, p. 623). I find this experimental process interesting and conducted a similar experiment, in 3. 3. 1 the experimental process I will describe further on how I conducted my experiment.

### 3.3.1 The experimental process

The experimental research I have conducted for my research question is inspired, as mentioned earlier, from Pruitt and Lewis (1975) study on bilateral negotiation. I had 65 participants that I divided in two experimental groups, A and B. The participants from my sample group are, as mentioned earlier, students from University of South-Eastern Norway with an undergraduate-level negotiation course.

The experiments were conducted early in their semester course and were most likely naïve to topics such as *integrative negotiation* and *information exchange*. Therefore, I was interested to see how great impact the question actually has in the outcome of a negotiation, even if the bargainers are naïve to these topics.

I divided my participants in two different groups, called for A and B. Both of these two groups were given the same negotiation scenario. The difference was that one group (A) was asked to ask as many questions as possible, and the other group (B) was not. Therefore, group A could be considered as the experimental group, and group B as the control group. The negotiation scenario was placed in the pharmaceutical industry context and divided the group even more. The reason is that they were given a role in this negotiation scenario. The role they were given was the same as in the experimental group from Pruitt and Lewis (1975), buyer or seller. After handing out the task randomly in class there were two late comers in the class. Therefore, I had two dyads with three members instead of two; two members on the team with the same role in the negotiation.



Here the seller was told that they were the marketing manager of BioFarm. They were told that BioFarm was a large healthcare research organization that revenues approximately 300 million NOK a year. And had a business model of developing new drugs and selling the patent licenses of their new drugs to pharmaceutical companies, like PharmaCare. PharmaCare was a young and fast-growing pharmaceutical company that was interested in buying BioFarms products. Therefore, the students that had the role buyer, were told that they were

purchasing manager of Pharmacare in this scenario.

Both of the managers were told that they were interested in negotiating with each other. On the other side, they were told to find an agreement that has a major impact on the negotiator salary, and on the profitability of their own businesses. But to do so they had to consider three key issues in their negotiation; patent license fee, duration of license, and royalty percentage. The issues were very open-ended. Hence, they could justify their position on the issues. However, if they were not able to reach an agreement on any of those three issues, they could not sign the agreement. Each of the issues had nine different agreement alternatives, denoted by letters from A to I. The expected

profits for each agreement alternative were listed on the profit charts. The profits charts were not allowed to be shown to their counterparts as in Pruitt and Lewis study (1975). The students were given 15 minutes to read the negotiation scenario and 45 minutes to conduct the negotiation with their counterparts. The profit chart for my participants were following:

### PROFIT CHART

#### SELLER

#### Buyer

PATENT LICENSE FEE (Initial fee to be paid by PharmaCare immediately after this agreement is signed and before Profelice is launched in the market. You want this fee to be as high as possible)		DURATION OF LICENSE (You want the shortest possible patent license agreement possible, which is 2 years)		ROYALTY PERCENTAGE (% of Profelice's Total NetSales to be paid to BioFarm once Profelice is launched. You want to keep this percentage as large as possible)	
ALTERNATIVES	<i>Your Expected Profits (in millions)</i>	ALTERNATIVES	<i>Your Expected Profits (in millions)</i>	ALTERNATIVES	<i>Your Expected Profits (in millions)</i>
A: 20 million	0	A: 10 years	0	A: 2%	0
B: 21 million	2.5	B: 9 years	1.5	B: 3%	1
C: 22 million	5	C: 8 years	3	C: 4%	2
D: 23 million	7.5	D: 7 years	4.5	D: 5%	3
E: 24 million	10	E: 6 years	6	E: 6%	4
F: 25 million	12.5	F: 5 years	7.5	F: 7%	5
G: 26 million	15	G: 4 years	9	G: 8%	6
H: 27 million	17.5	H: 3 years	10.5	H: 9%	7
I: 28 million	20	I: 2 years	12	I: 10%	8

PATENT LICENSE FEE (Initial fee to be paid to BioFarm immediately after this agreement is signed and before Profelice is launched in the market. You want this fee to be as low as possible)		DURATION OF LICENSE (You want the longest possible patent license agreement possible, which is 10 years)		ROYALTY PERCENTAGE (% of Profelice's Total Net Sales to be paid to BioFarm once Profelice is launched in the market. You want to keep this percentage as small as possible)	
ALTERNATIVES	<i>Your Profits (in millions)</i>	ALTERNATIVES	<i>Your Profits (in millions)</i>	ALTERNATIVES	<i>Your Profits (in millions)</i>
A: 20 million	8	A: 10 years	12	A: 2%	20
B: 21 million	7	B: 9 years	10.5	B: 3%	17.5
C: 22 million	6	C: 8 years	9	C: 4%	15
D: 23 million	5	D: 7 years	7.5	D: 5%	12.5
E: 24 million	4	E: 6 years	6	E: 6%	10
F: 25 million	3	F: 5 years	4.5	F: 7%	7.5
G: 26 million	2	G: 4 years	3	G: 8%	5
H: 27 million	1	H: 3 years	1.5	H: 9%	2.5
I: 28 million	0	I: 2 years	0	I: 10%	0

At the end of the negotiation, the students were asked to answer a survey online. I used the online page, Qualtrics, for asking questions and for gathering the answers. This was meant to study how questions in negotiation actually affected the outcome. I want to look into if both parties have the same point of view on how the negotiation went, and if they considered the bargaining successful and were satisfied with the result.

Therefore, I parted the survey in five different ways. The first part of the negotiation had control questions, for finding out which group they were in, age, sex and what kind of role they were given. The second part was to find out how the participant prepared for the negotiation. I wanted to see if they took in account their own and their counterpart resistance point during the negotiation before approaching the deal. The third part in the survey was about their agreement in the bargaining; what they had agreed on and what kind of profit they gained from their agreement. I also developed a question that was not a part of the task that they were handed out. The question was concerning if they had negotiated with considering a special condition that helped them find an agreement. According to their agreement there were also questions about how involved asking questions were in their negotiation. I wanted to see if the amount of questions asked in the negotiation had any

connection with the amount of information they felt had gathered. But also, if the profit they gained from the negotiation had a connection with the amount of questions asked.

The next part in my survey was about how satisfied they were with the agreement in the bargaining, and if they were happy with the process. In this part I also wanted to see if they had built a trustworthiness relationship with their counterpart, and if they were satisfied with their impression during the bargaining. At the same time see if they experience any language barrier during the bargaining, since the negotiation tasks were in English. Furthermore, look into if the language barrier had an impact on the amount of questions asked while gathering information, or caused misunderstandings about the agreement during the bargaining. The last part in my survey was about their attentiveness and effort they spend on the negotiation.

After collecting the papers and viewing the answers on my questionnaire in Qualtrics I found out that dyad 7 did not reach an agreement at all. Some individuals had calculated their profit incorrectly from their partners. Here there were three dyads (4, 12 & 24) that had written their profit incorrectly. Where two of the dyads (4 & 24) were in the control group and one dyad (12) were in the experimental group. In addition, I also noticed that one of the members from dyad 22 did not fill in the questionnaire. For that reason, for providing a fair result and not being biased, I have chosen to exclude them in my final data. I have also chosen to merge the members with the same role in the team with three members, to only consider their average answer on the survey. This means that among my 65 participants at the end I had 54 participants. Here there were 54 individual negotiators and 27 negotiation dyads. The data analysis for this thesis will be conducted and based on the information above.

### 3.4 Handling the data

The participants in my experimental study were students from an undergraduate-level negotiation course at USN Campus Ringerike. The study was conducted as a part of their *negotiation* course early in the semester. Because the study was conducted early in the semester the students were naïve to the topics such as integrative negotiation and information exchange at the time of the study.

As I have mentioned in 3.3.1 *The experimental process*, the students were divided into two groups (control group and experimental group), where they had to negotiate with someone from their same group. In addition to this, they were divided once again because of the negotiation scenario the

students were given. The negotiation scenario was placed in the pharmaceutical industry context where they were given a role as buyer or seller. After they had negotiated they had to answer a survey in the online page Qualtrics. The questions they were asked can be viewed in the appendix, *10. 2 Questionnaire*. The survey was meant for collecting data from the participants on how their negotiation process went. Here both groups, control and manipulated groups had to answer the same survey.

The purpose of the survey was to see if there was a difference between the control group and the experimental group (manipulated) with the negotiation outcome. I wanted also to see if questions could have an impact on how both parties view the negotiation process. And see if the experimental group (manipulated) were more satisfied with bargaining with their counterparts and the results. While also looking into if the experimental group (manipulated) considered their negotiation more satisfying because they had obtained more information, assumed, than the controlling group. Since the experimental group (manipulated) has been encouraged to ask more questions to gather information about their counterpart.

There were in total 65 students in the negotiation class when I conducted my experimental study. Although, the experimental study was not mandatory for the students to participate. But all the 65 students chose to participate in the experiment - 27 females and 38 male students. The average age of the male students was 24 years old, and for the female students was 26 years old. The age gap was large between the participants. The oldest and the youngest participants in the experiments were 48 and 19 years old respectively. However, from starting with 65 participants I ended up with 54 participants where there were 54 individual negotiators (33 male and 21 female) and 27 negotiation dyads. The reason for this is that I removed 9 participants from the study because of their lack of information about their negotiation process. There was one dyad (7) that did not reach an agreement and three dyads (4, 12 & 24) that had calculated their profit incorrectly from their partners. Here there were two dyads (4 & 24) that were in the control group and the other dyad (12) was in the experimental group. In addition to this, there was also a dyad (22) where one of the negotiators did not fill out the questionnaire in the survey.

Furthermore, two participants were also “removed” because there were two dyads (11 & 28) that had three members, where two members had the same role. I decided to merge the members with the same role in the dyads to be able to examine their average answer on the survey. The merging of the two dyads (11 & 28) made it possible to “reduce” the number of participants in the dyad, so

they would be accounted as two negotiators instead of three. I considered the merging to be possible for my data collection because the members with the same role in the dyad also had the same gender and age.

To summarize, 11 participants were “removed”, 9 participants lacked information about their negotiation process, while 2 participants got merged within their dyad based on having the role to reduce the negotiators within the dyad.

### 3.4.1 Special conditions to the negotiation agreement

In light of my research question I had developed a question in my questionnaire, as viewed in *appendix, 10. 2 The Questionnaire*, about special additional terms. I wanted to examine if there was a connection with special conditions in the negotiation and the amount of questions being asked.

Lewicki, Saunders & Barry (2015, p. 79) have stated, as mentioned earlier, that during a negotiation the bargainers exchange information to be able to understand each other and find a mutual agreement. Therefore, the question about special conditions was to see if the agreement in the negotiation involved special additional terms. And if they were in a control group or experimental group had a connection if they used additional terms. In my collected data I discovered that there were three dyads (2, 11 & 14) that had an additional term in their agreement. Here there were two dyads (2 & 14) from the experimental group and one dyad (11) in the control group.

In light of Fisher & Ury (1992, p. 33) statement on the main problems in a negotiation is within the communication that is being exchanged, since it can lead to a misunderstanding.

Because the negotiators have misinterpreted what their opponents have said during the negotiation (Fisher & Ury 1992, s. 34). This could have been the case of three other dyads (1, 5 & 15) since one of the negotiators believed that they had an additional term in their agreement and their opponent did not. Two of the dyads (1 & 15) was in the control group and the other dyad (5) was from the experimental group.

## 3.5 Variables measured in the questionnaire

Measurement in quantitative research helps to provide a more precise estimate of the degree of the relationship that is being studied (Bell, Bryman & Hill 2019, p. 168). For my master thesis I want

to investigate the relationship between asking questions and the outcome of a negotiation. To be able to estimate the degree of this relationship in my master thesis I have, as mentioned earlier, chosen to use an experimental research design approach. Where I manipulate the data by having two experimental groups, that represent different types or levels of the independent variables, questions and outcome. To be able to measure the variables I gave my participants a negotiation scenario they had to resolve as a bargainer. Afterwards, the participants had to answer individually an online survey used in Qualtrics with 25 questions as viewed in *appendix 10.2 The Questionnaire*, giving me the possibility to collect their answers on how they resolved the negotiation, and what did they agree on.

I developed five questions in the questionnaire to be able to measure the profit the dyad had agreed on in the negotiation. They were also asked to manually write down their profit gain. This was to make sure if they calculated their profit correctly but also to analyze if the profit changed from an experimental group and a control group. Here I view the profit individual in the team but also the joint profit of the team. And to see if they had some special additional term in their agreement on the negotiation. To make sure that the participants had calculated their profit correctly they were also asked to manually write down their profit gain. Here there were three dyads (4, 12 & 24) that had written their profit incorrectly. Where two of the dyads (4 & 24) were in the control group and one dyad (12) were in the experimental group.

The measurement for information exchange was collected to see how much information the participants felt that they had received from their counterpart in the negotiation. I also asked how many questions they had asked their counterparts to see if this could have a connection with the amount of information they had received. At the same time, disclose if the amount of questions asked could have an impact on the outcome of the negotiation. I used a 8-point scale for the amount of questions being asked, as viewed in the *appendix 2; the questionnaire* (1 = None, 2 = 1-4, 3 = 5-8, 4 = 9-12, 5 = 13-16, 6 = 17-20, 7 = 21-24 & 8 = More than 25). For the measurement of the information gained I had to use a 5-point scale; 1= A great deal, 2= A lot, 3 = A moderate amount, 4 = A little & 5 = None at all.

Measurement of satisfaction: I used four questions to get an understanding of how satisfied the participants were in the negotiation. Two of the questions were based on finding out how satisfied they were with their objective standards and with themselves during negotiation. The remaining questions were to find out if they were satisfied with the negotiation process and the relationship

with their counterpart. Here I used a 7 point scale for the measurement of the four questions; 1 = Extremely dissatisfied, 2 = Moderately dissatisfied, 3 = Slightly dissatisfied, 4 = Neither satisfied nor dissatisfied, 5 = Slightly satisfied, 6 = Moderately satisfied & 7 = Extremely satisfied. Since there were four questions based on satisfaction I wanted to look into the possibility to make a variable that is correlated with one and others. I used SPSS for detecting if it is possible. The results were that they had a highly correlation with each other ( $\alpha = 0.89$ ,  $M = 5.36$ ;  $SD = 1.66$ ). And it was possible to make a new scale variable called *satisfaction*. From now and further this is the variable I will be referring to when analysing satisfaction. For details of all the questions included in the questionnaire, see Appendix, 10. 2 the Questionnaire.

## 3.6 Evaluation of data collection

In this chapter I will establish the credibility of the data collection and point out the limitations related to my study. Furthermore, I will identify the reliability, validity and generalizability of my data collection.

### 3.6.1 Reliability

Reliability in a research is determined whether the researcher truly measures what it invented to measure in their study. It could also be determined on the truthfulness of the research results (Savin-Baden & Major 2013, p. 5). In addition to this, Savin-Baden & Major (2013, p. 473) stated that in quantitative research reliability could be seen as a gold standard. The reason for this is that the measurement in the quantitative research should be consistent and repeatable. This means that the instrument used for measure, should have the same result if it uses the same subjects with similar conditions.

Grønmo (2016, p. 242) defines “reliability as the degree of conformity between different collections of data on the same phenomenon based on the same study plan”. Grønmo (2016), as Savin-Baden & Major, (2013) believes that the test-retest method can be used for checking the reliability of the data.

As mentioned, in this master thesis I am conducting an experimental design where I manipulate my independent variable; the amount of questions that are asked in a negotiation with integrative potential. This signifies that the experimental group that receives the manipulation of the

independent variable, is compared to the control group that has not received any manipulations. The dependent variable is measured and compared with the results from before and after treatment (Bell, Bryman & Hill (2019, p. 51). This research design will give me a certain level of control, however the sample group I have chosen to experiment on is not a representative sample group. One of the criteria in reliability is that instruments used for measuring the research should have the same result if it uses the same subjects with similar conditions. Therefore, the reliability in my research could unfortunately be low.

### 3.6.2 Validity

Validity in a research guarantee if the experiment is designed to effectively measure the subject variables. This means that the validity in a fundamental level should claim the strength of the findings to demonstrate that the findings are correct (Savin-Baden & Major (2013, p. 473). Joppe (cited in Savin-Baden & Major 2013, p. 473) has stated that validity in research truly measures what it was invented to measure in their study. Here the researcher can determine validity by asking a series of questions. Likewise, with Joppe (2000), Bell, Bryman & Hill (2019, p. 278) also believes that the validity of the research could be measured by guaranteeing the questions in the measurement are actually measuring what it is supposed to measure. However, Bell, Bryman & Hill (2019, p. 278) mention two moments that could affect the validity of the research. First is whether the measurement reflects the concept, it is designed to measure. The second is from the error that had arisen from the implementation of the measure in the research process.

By having an experimental design with manipulation on my research, I would get control of my experiment by having two groups where one of them is manipulated, and the other is not. The control group could give an advantage for my study. Because it may provide a certain control that could help me eliminate threats of internal validity.

### 3.6.3 Generalizability

In quantitative research the researcher hopes to discover findings that could be generalized. By having generalized results, their data collection has findings that are beyond the confines of the particular contexts of the conducted research (Bell, Bryman & Hill 2019, p.177). However, in my research I am not able to call my findings general phenomena. The reason for this is linked to the sample group I have chosen. As mentioned, the sample group I have used are students from the

University of South-Eastern Norway Campus Ringerike, with negotiation lectures as their elective. While the perfect sample group, I believe, would be an organization that conducts a lot of negotiation. Therefore, the result from my finding related to profit cannot be generalizable to real individuals that work with negotiation.

## 4 Data Analysis & Results

In this chapter I am going to present the data I have conducted from my experimental research and analyze the result of my research. All data analysis and preparation has been conducted in IBM SPSS Statistics version 26 for Mac and Microsoft Excel. Since I have conducted an experimental research design approach in my master thesis with two groups, I am going to use a t-test and/or ANOVA for analyzing the data.

The significance level the researcher accepts for their study says something about the risk the researchers are willing to accept for explaining their research phenomenon. It is possible to have  $p < 0.05$ ,  $p < 0.1$  and  $p < 0.01$  (Bell, Bryman & Hill 2019, p. 329). The significance level I am going to use for my master thesis is  $p < 0.05$ . Which means that I am willing to accept a risk of 5% (5 of 100) of my results being incorrectly.

### 4.1 Manipulation check

Manipulation check is used to see if the experimental manipulations in fact have a difference between the experimental and the control condition (Allen 2017, p. 476). This can be done through a statistical test as T-Test or ANOVA. For my master thesis I will use the statistical test ANOVA to see if asking questions during the negotiation can have an effect on the subjective or objective outcome. The reason I have chosen ANOVA over t-test is personal preference to ANOVA and there was not any significant difference between the results of the statistical test as viewed in *Appendix 10.3.1 T- Test Results vs ANOVA Results*.

The experimental manipulation for my master thesis is conducted on my independent variable, the amount of questions asked for collecting information. Here I had manipulated the variable by having two groups, as mentioned earlier, experimental and control groups. The experimental group were informed to negotiate as an opportunity to learn more about their counterparts by asking questions. The control group was not informed about this as viewed in Appendix 1A and 1B.

As mentioned above on 3.5 *variables measured in questionnaire*, I used a 8-point scale for measuring the amount of questions being asked (1 = None, 8 = More than 25). In *Appendix 10.3.1.2*, one-way ANOVA results showed that the experimental group (M = 4.32, SD = 1.18) reported that they asked more number of questions in the negotiation than the participants in the control group did (M = 2.79, SD = 1.06),  $F(1, 52) = 24.36$ ,  $p < .001$ , indicating that the manipulation was successful. The difference was significant at the dyad level also,  $F(1, 25) = 17.79$ ,  $p < .001$ .

## 4.2 Dependent Variables

In this chapter I will analyze if the amount of questions can have an impact on the outcome of the negotiation. Within the outcome I will analyze the objective and subjective outcome of the negotiation. Hence, see if the amount of questions has an influence on the individual profits in the negotiation or in joint profit. As for the subjective outcome, I want to analyze the relationship regarding the satisfaction of the negotiators in the negotiation when questions are used for bargaining. Furthermore, see if questions in a negotiation could provide the negotiator to collect more information, which will lead to higher (vs. low) profits or/ and satisfaction.

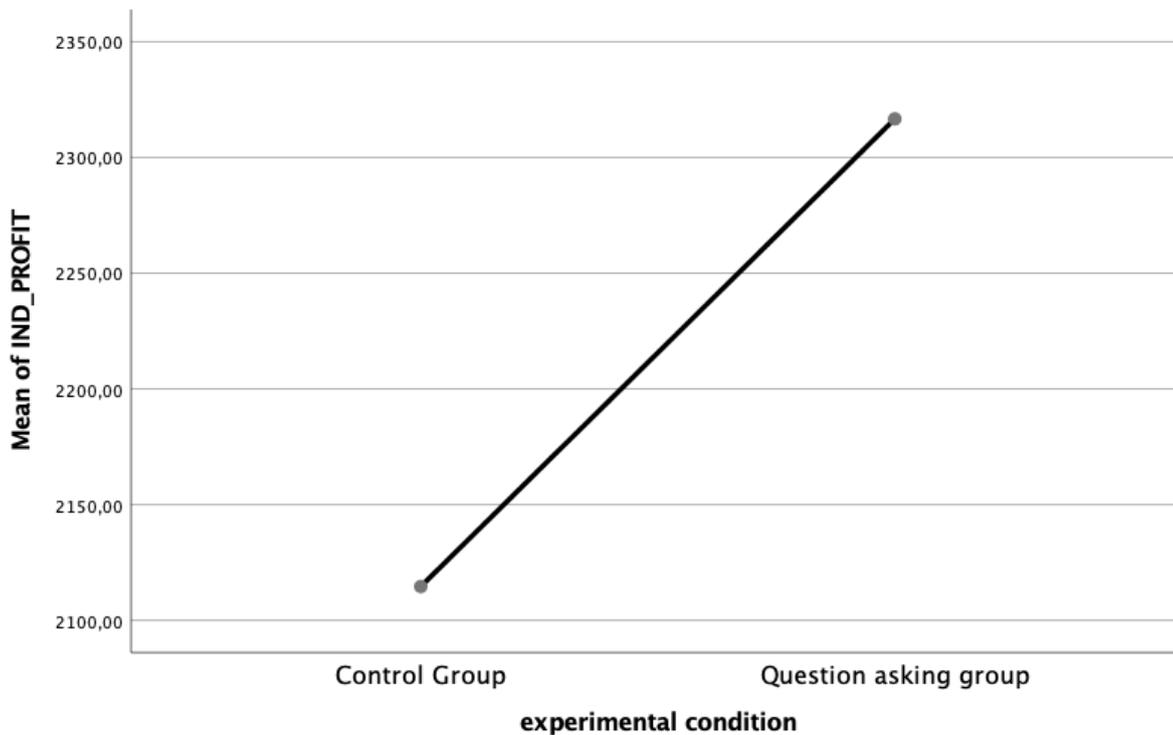
### 4.2.1 Objective Outcome

The objective outcome for my master thesis is, as mentioned earlier, individual profit and joint profit. I am going to analyse the results from my participants to see if numbers in a negotiation could have a positive impact on the negotiation. Simultaneously, analyze if the amount of question could lead to information gathering that could benefit the profits in individual and joint profit.

#### 4.2.1.1 Individual Profits

In individual profit one-way, ANOVA results showed that the experimental group (M = 2316.67, SD = 345.75) reported that they gained more profit by asking questions in the negotiation than the participants in the control group did (M = 2114.58, SD = 440.47),  $F(1, 52) = 3.57$ ,  $p < .06$ . I consider the P-value to be marginally significant, because it is close to what I consider as a significance level ( $p < 0.05$ ) and lower than ( $p < 0.10$ ). The result indicates that the numbers of questions asked had an impact on the individual profit. Therefore, hypotheses 1a is partially

supported. The figure below illustrates how big the difference was between the experimental group and the control group regarding individual profit.

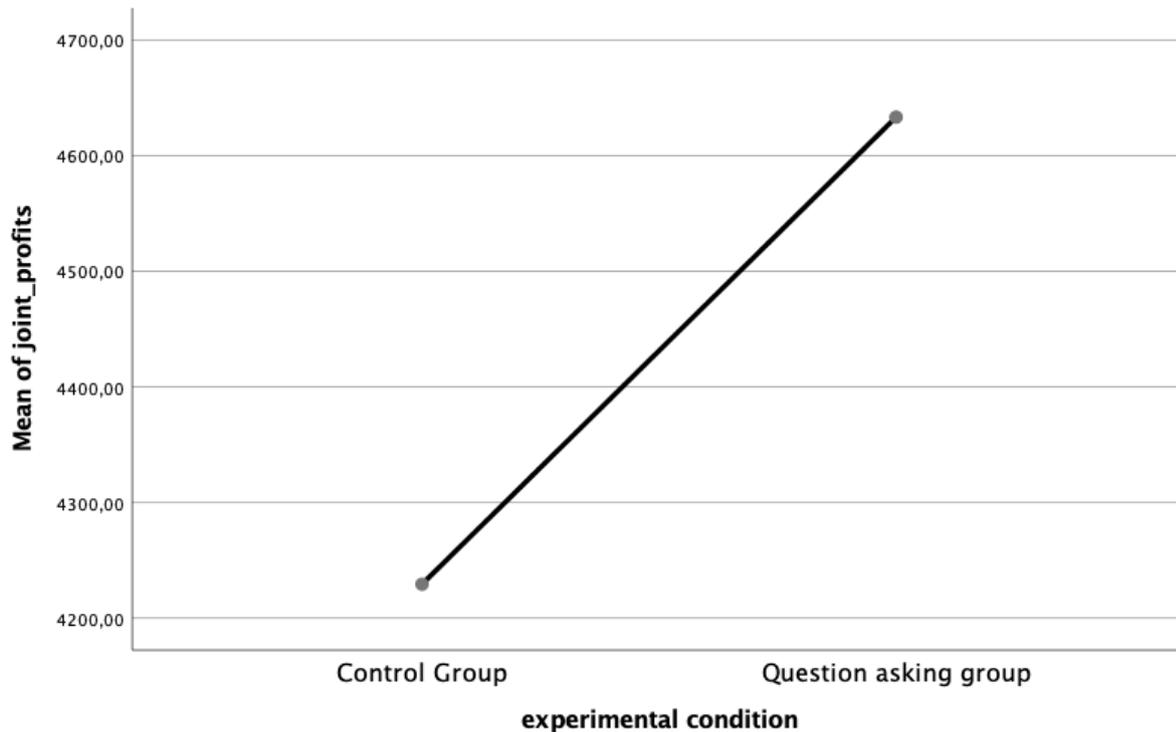


The

results indicate that the amount of question has had a marginally significant impact on the negotiators' individual profit. Next, I am going to analyze if numbers of questions in a negotiation could have an effect on the joint profit.

#### 4.2.1.2 Joint Profits

The joint profit between the experimental group and the control group also indicates that questions in negotiation have an impact on the outcome of a negotiation. The one-way ANOVA results showed that the experimental group ( $M = 4633.33$ ,  $SD = 497.01$ ) had reported that they gained more profit by asking questions in the negotiation than the participants in the control group did ( $M = 4229.17$ ,  $SD = 254.49$ ),  $F(1, 52) = 11.70$ ,  $p < 0.001$ . The difference was significant at the dyad level also,  $F(1, 25) = 5.62$ ,  $p < 0.02$ . Therefore, Hypothesis 1b is supported. In the figure below there is an illustration on the difference between the profit between the experimental group and the control group.



The joint profit was also affected by the use of questions asked in a negotiation. Where the difference is affected by the two groups is numbers of questions in negotiation. With this in mind, it is possible that the reason for the experimental group (question asking) has gained more profit than the control group because they had used more communication in their negotiation. And by receiving more information about their counterparts were therefore more capable to find an agreement that could benefit both of the negotiators.

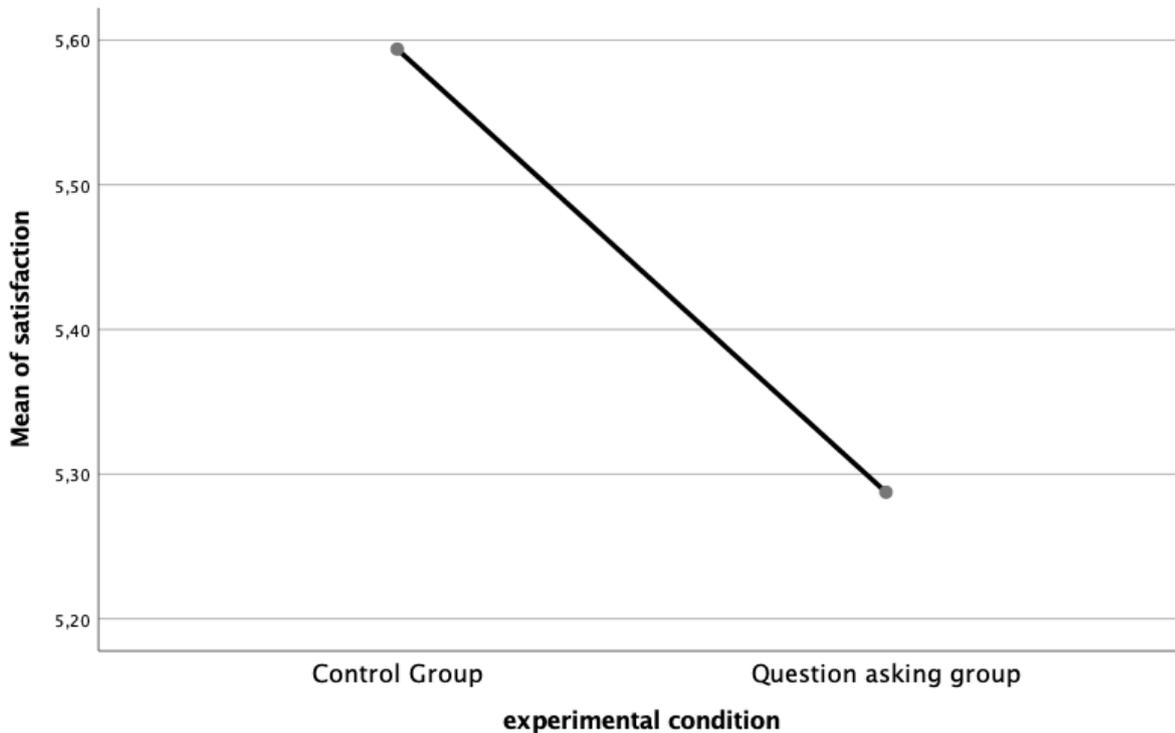
## 4.2.2 Subjective Outcome

The next outcome relationship I want to investigate is regarding the subjective outcome, satisfaction. I want to analyze the results from my participants to see if numbers in a negotiation could have a positive impact on the satisfaction experienced in a negotiation.

### 4.2.2.1 Satisfaction

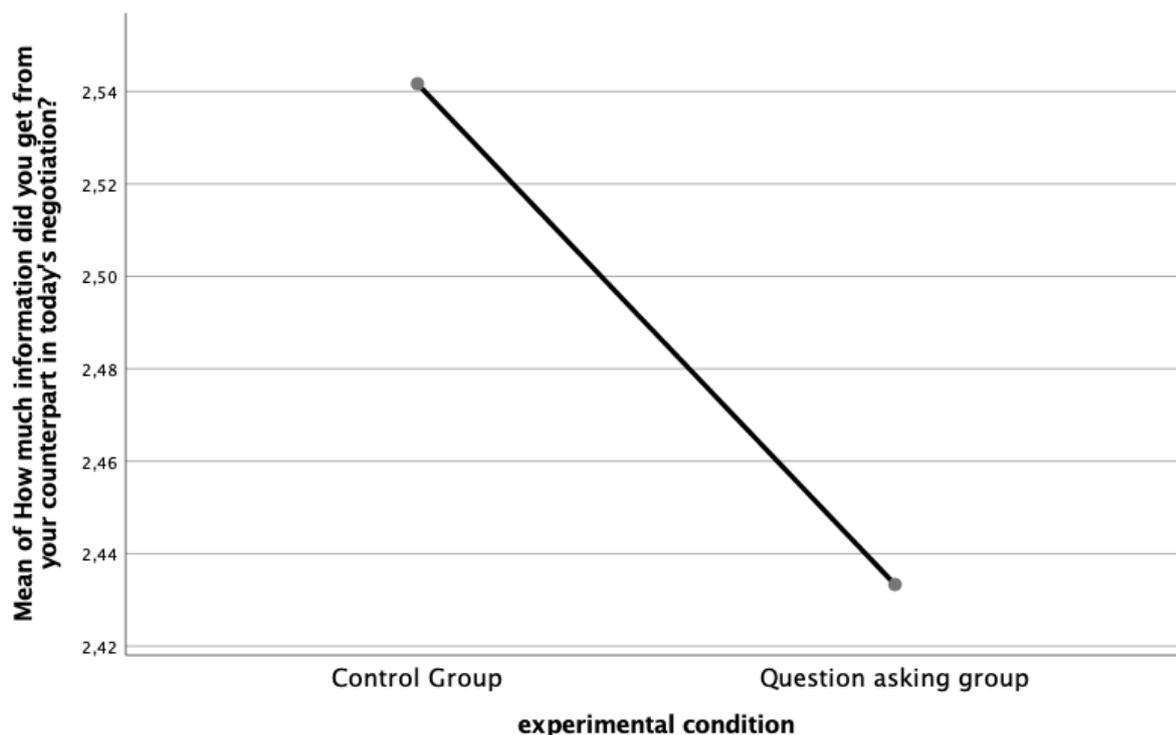
As mentioned, satisfaction was measured on a 7-point scale (1 = Extremely dissatisfied, 7 = Extremely satisfied). The one-way ANOVA results had showed that the experimental (question asking) group ( $M = 5.29$ ,  $SD = 1.10$ ) and the control group reported similar levels of satisfaction ( $M = 5.59$ ,  $SD = 1.16$ ),  $F(1, 52) = 0.99$ ,  $p < 0.33$ . However, as viewed in the figure below the control

group from my experiment were slightly more satisfied than the experimental group. But since the F-value was  $< 1$ , and the p-value was 33% there is not a significant effect on satisfaction based on the amount of questions asked in a negotiation. Therefore, the satisfaction experience between the experimental group and the control group in my experimental research indicates that questions in negotiation does not have an effect on the satisfaction outcome of the negotiation. Hypothesis 2a and 2b is rejected in my study.



#### 4.2.3 Information exchange

Here I am going to analyze if numbers of questions could collect more information during the negotiation, and if it could have an effect on the objective and subjective outcome. Information exchange was measured with one item (“How much information did you get from your counterpart in today's negotiation?”) on a 5-point scale (1= A great deal, 5 = None at all). The one-way ANOVA results showed that the experimental group ( $M= 2.43$   $SD= 0.82$ ) and the control group ( $M=2.54$   $SD=1.10$ )  $F(1, 52) = 1.17$ ,  $p < 0.68$ , had reported a similar level of information gaining in the negotiation. However, there was no significant difference in how much information the two groups reported that they received from their negotiation counterpart. There were no significant differences on a dyad level either,  $F(1, 25) = 0.14$ ,  $p < 0.71$ . Therefore, H3 and H4 are not supported in my study.



### 4.3 Exploratory Analysis

In this chapter I want to analyze the other parts from my research I found interesting regarding asking questions in negotiations. I am going to analyze subjects that have not been a part of my research model and hypothesis but been a part of my questionnaire (appendix 2). The reason they were a part of my questionnaire was to get a better understanding on how they negotiate and their process. Here I will analyze if elements like gender, effort, preparation, and single issue vs. multi issue first offer, can get influenced on numbers of questions used in a negotiation.

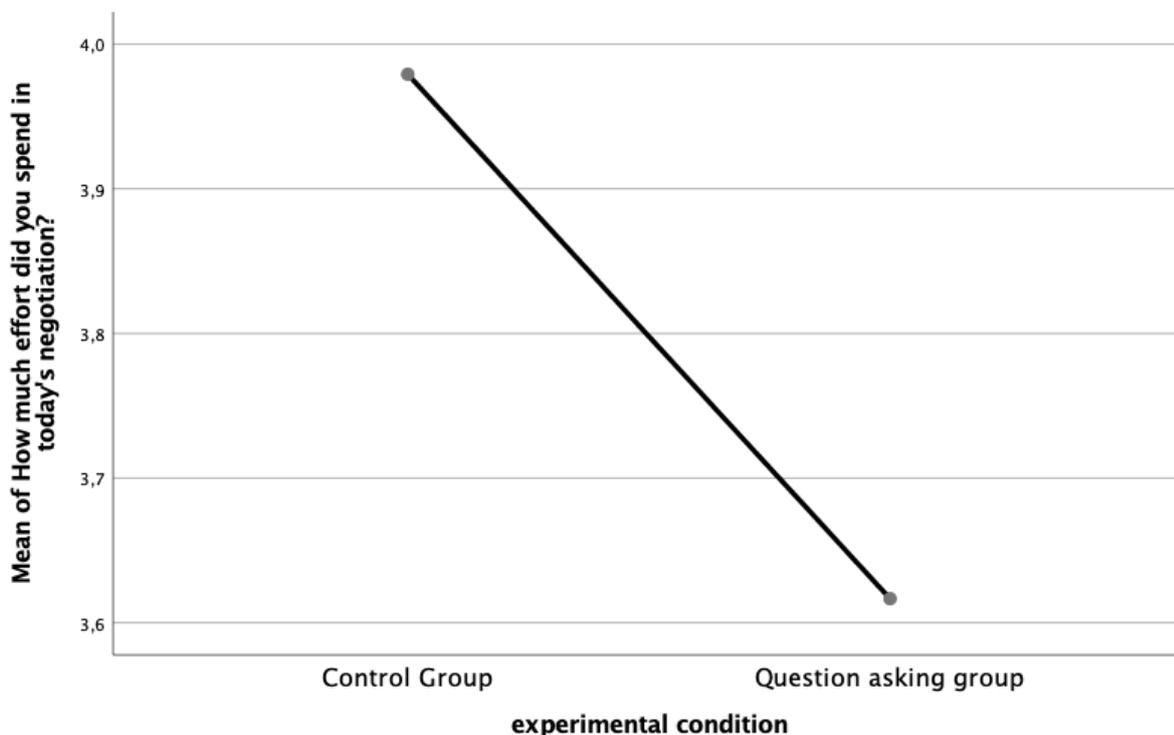
#### 4.3.1 Gender

I was interested to explore if the sex of the negotiator could have any main or interactive effects on the negotiation. This is because gender in negotiation literature has been an attractive construct for the researcher to study, since this is viewed as a factor that could have an effect on the negotiator's behavior during the negotiation process, and outcome. However, in my study one-way ANOVA results showed that gender did not have main effects (one-way ANOVA) on any of the variables in the dataset (all  $p$  values  $> 0.23$ ). Likewise, the results in two-way ANOVA also showed that gender does not have any interactive effects on profits ( $p > 0.40$ ) or on satisfaction ( $p > 0.95$ ).

### 4.3.2 Effort

Effort were used in the questionnaire to see how much effort the participants used in the negotiation. Here I used a 5-point scale; 1=None at all, 2=A little, 3= A moderate amount, 4=A lot, 5=A great deal. In one-way ANOVA the results indicate that the negotiator from the control group negotiated with a little more effort than the experimental group. However, both groups reported a moderate amount of effort, were the control group ( $M=3.98$ ,  $SD=0.70$ ) reported that they spent significantly more effort than the experimental group did ( $M=3.62$ ,  $SD=0.61$ ),  $F(1, 52) = 4.13$ ,  $p = 0.047$ . Since the P-value is below 5%, the difference in effort between the two groups is viewed as being significantly different. This difference was also significant at the dyad level,  $F(1, 25) = 6.41$ ,  $p < 0.02$ .

Controlling for effort, the experimental manipulation still had significant effects on profits ( $p = .037$ ) but not on satisfaction ( $p = .078$ ), indicating that the results cannot be attributed to the differences in effort.



The difference of effort can be due to various reasons. Firstly, it could be that effort is influenced by the use of communication in asking questions in negotiation. Furthermore, providing for the negotiator facilitating the information exchange in the negotiation using communication by asking questions. Where it could be easier for the negotiator to conduct the negotiation, hence feel that they did not have to spend too much effort in the negotiation to come to an agreement. On the other

hand, the control group might have experienced more difficulties and challenges because they did not ask questions, and this might have resulted in higher perceived effort.

### 4.3.3 Preparation

Preparation was analyzed to see if there was a difference between the experimental group and the control group when it comes to how they prepare for a negotiation. For measuring preparation I had 4 items (“Have you carefully considered your own resistance point, target point, BATNA etc. before starting to negotiate?”, “Have you carefully considered your counterpart’s resistance point, target point, BATNA etc. before or during the negotiation?”, “Have you written down your own resistance point, target point, BATNA etc. before starting to negotiate?”, and “Have you written down your counterpart’s resistance point, target point, BATNA etc. before or during the negotiation?”) on a 5-point scale (1= Definitely not, 2=Probably not, 3=Might or might not, 4=Probably yes, and 5=Definitely yes). The ANOVA results on the both groups indicate that there is not a significant difference between the groups. Here the experimental group ( $M= 3.70$ ,  $SD=0.80$ ) reported and the control group reported similar levels of preparation ( $M=3.75$ ,  $SD=0.74$ ),  $F(1, 52) = 0.047$ ,  $p < 0.83$ . There were no significant differences on a dyad level either,  $F(1, 25) = 0.042$ ,  $p < 0.84$ .

The results indicate that both groups only had prepared on a moderate level. Here the results could have been influenced by my choice of using a 5-point scale instead of a 7 -or 8-point scale to measure preparation. However, it can also have something to do with the group of participants I had used for my study; students. The experiment was conducted early in their semester course, where the students were naïve to topics as integrative negotiation and information exchange. With this in mind, the students might not be aware of how to negotiate, and unfamiliar with how they should prepare for a negotiation. Overall, with the current data, this study indicates that question asking instructions did not have a significant effect on how the negotiators prepare for a negotiation. This is in line with my theoretical argument that asking questions could have an effect on the communication during a negotiation, but not necessarily for the negotiation preparation.

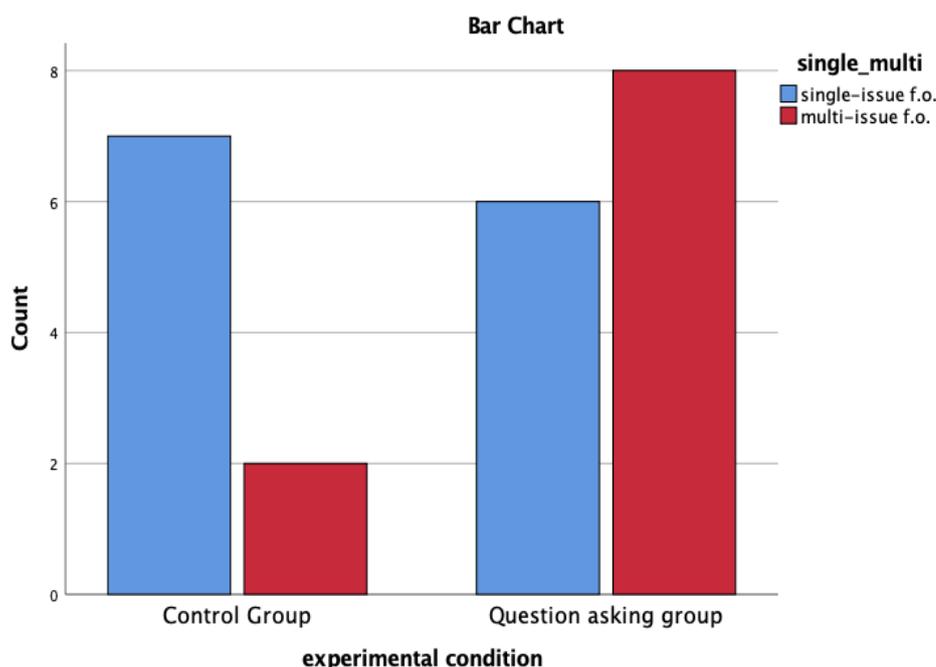
### 4.3.4 Single-Issue vs. Multi- Issue First Offer

In my study I also did an exploratory analysis on if there were a difference between the experimental group and the control group when it comes to their first offers. Here I wanted to

investigate if the offer differed from a single issue and a multi issue offer, depending on which group they belong to. However, because both the independent variable (experimental group: control vs. question asking) and the dependent variable (single- vs. multi-issue first offer) were categorical I chose to use a Chi-square test, to analyze if the two groups could be significantly different in their first offers.

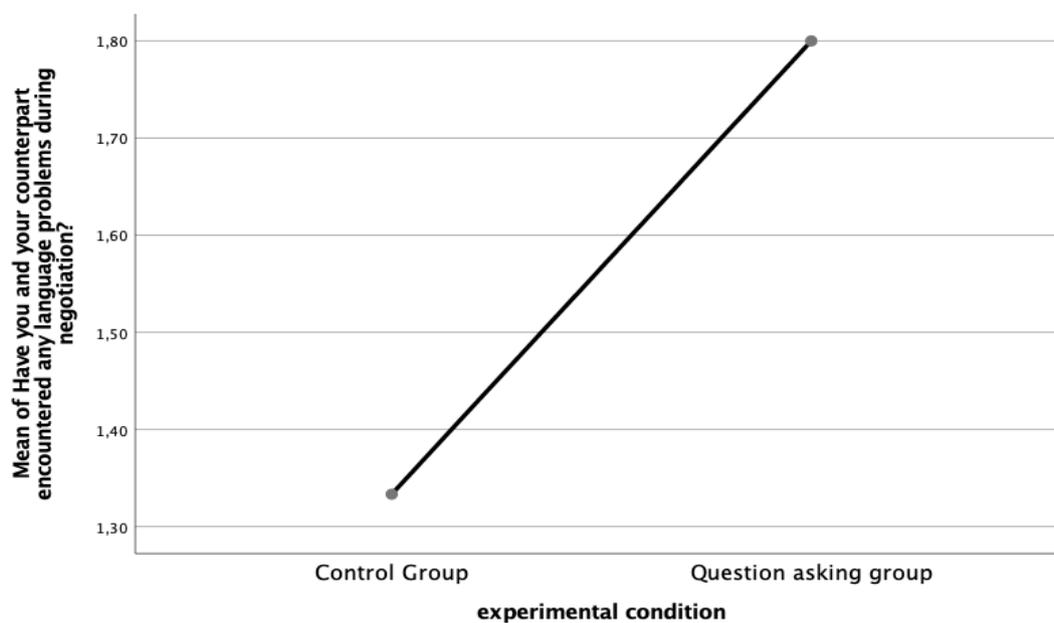
The Chi-square results showed that the experimental group (question asking) reported slightly a greater number of multi-issue (vs. single-issue) first offers. The difference between both groups showed a marginally significant,  $\chi^2(1, N = 53) = 3.62, p < .057$ . At the dyad level it appears that there were 4 dyads (3 from the control group and 1 from the experimental group) that had answered the question about their first offer differently from their counterpart.

This means that one of the negotiators from the dyad had reported that they had a single-issue first offer whereas the other one reported that they had a multi-issue first offer. I excluded them from the dyad-level analysis, leaving 23 of 27 dyads to analyze. Here the results indicate that the experimental group (question asking) reported slightly a greater number of multi-issue first offers than the control group did,  $\chi^2(1, N = 23) = 2.72, p < .099$ . Although the differences were not highly significant, chi-square analysis seems to indicate that asking questions directionally facilitates the likelihood of making multi-issue first offers.



### 4.3.5 Language barrier

Lastly, for my exploratory analysis I wanted to see if the experimental group (question asking) and the control group had experience language barrier when they negotiate, since the negotiation had to be in English. The reason the negotiation task had to be conducted in English was because the course *negotiation* is a course for international students as well as Norwegian students. The results in ANOVA indicated that the experimental group ( $M= 1.80, SD=0.93$ ) experienced a higher language barrier than the control group ( $M=1.33, SD=0.70$ )  $F(1,52) = 4.18, p = 0.046$ . This indicates that there is a significant difference between the groups. Language barrier at a dyad level  $F(1,25) = 3.44, p = .076$ , indicates that there is marginally significant between both groups.



The difference between the two groups could have been related to the amount of questions asked in a negotiation. Because the experimental group (question asking group) was told to ask their counterparts questions to collect more information about their counterparts, and therefore in theory communicate more than the control group. Hence, could have experienced more language barriers by having to speak more in English than the control group. It could also have been that the students from the experimental group had more difficulties to express themselves in English than the control group. And could not express themselves in Norwegian because their counterparts were from foreign countries. Unfortunately, I was not able to conduct any further research to investigate the language barrier since I did not develop questions in my questionnaire where I asked them about their origins; culture and country.

## 5 Discussion of the findings

In this chapter I will discuss the findings related to my research model that have been developed based on my research question and discuss the results that have been presented in *4. 2 Dependent variables*. Based on how questions have affected the negotiation outcome in an objective and subjective perspective. Simultaneously, discuss the information exchange related to my conducted study.

The results from the objective outcome indicated that individual- and joint profit was affected positively by the manipulation in my study. This means that the negotiators in my study had gained profits individually and at dyad level. Keeping this in mind, it is possible that the reason the experimental group (question asking) had gained more profit than the control group may be that they had used more communication in their negotiation by asking questions. Asking questions in a negotiation also indicates in my exploratory analysis that the experimental group did not have to put a lot of effort in the negotiation as the control group did. The reason behind this might be because the negotiator in the experimental group had obtained more information about their counterpart than the negotiator in the control group. Furthermore, by receiving more information about their counterparts, they were able to enclose an agreement that could benefit both of the negotiators. This can be seen through Fisher, Ury & Patton (cited in Barry & Friedman 1988) statement on an integrative negotiation. They believed that an integrative negotiation would benefit more by highly communication exchange between the counterparts, so they could find a mutual agreement benefiting both parties.

Failure in integrative negotiation is often linked with low exchanged information between the parties. Misunderstanding may occur due to poor listening and communication exchange between the parties (Fisher & Ury 1992). Therefore, it is possible to conclude that the three dyads that have been excluded, in the data analysis for measurement, could have suffered from lack of communication between the parties. Two of the dyads (4 & 24) were from the control group that did not receive any information about asking their counterparts for questions to obtain information, as the negotiators from the experimental group. However, the dyad (12) from the experimental group had also written their profits incorrectly. This might be due to poor developed questions asked in a negotiation, and therefore also affected the information gathering. Nonetheless, I have not asked the negotiators which questions they had used and developed for gathering information. Therefore, this part is just an assumption. On the other hand, overall it is possible to conclude that

hypothesis 1a and 1b were supported in my study. Since the amount of questions in a negotiation has a positive impact on the individual- and joint profits in the negotiation.

Although hypothesis 1a and 1b were supported, asking questions in my study did not indicate that the experimental group (questions-asking group) had experienced more information exchange than the control group. Even if the results in profit and single-Issue vs. multi- Issue first offer indicates that the experimental group had communicated more than the control group. Since they were able to come to an agreement that benefited both of the negotiators profitwise. At the same time, through the use of single- vs. multi- Issue first offers the experimental group had negotiated with slightly more number of multi-issue first offers than the control group did. Usually, multi- issue offers indicate that there is more use of communication exchange in the bargaining than in a single issue; they have to negotiate even more to find a consensus agreement that is benefiting both parts.

Walton & Mckersie (1965) statement of information exchange is therefore even more appropriate because in a multi-issue first offer the negotiator has to seek for more information about their counterpart to increase their knowledge. To be able to make accurate judgment and reach integrative agreements. According to Culo & Skendrovic (2012), this will provide the negotiators to better his/hers position to negotiate and reduce a misunderstanding and impasse in negotiation. However, the reason for the difference between the two groups regarding information exchange in my study can be due to various reasons.

The first reason may be because I had only used 1 item (“How much information did you get from your counterpart in today's negotiation?”) to measure the information exchange in the negotiation. By only having 1 item I might not have been able to measure the information exchange they had experienced in the negotiation. Second reason could be due to the difference between perceived and actual information exchange during the negotiation. For instance, even if they have felt that they did not receive and exchange information, the question asking group might have exchanged more information than the control group. It is also possible that they did not feel that there were different levels of information exchange in a negotiation, so it can have been difficult to analyze their level if they are not aware of the level. On the other hand, it might have been that there really was no difference in the level of information exchange, which means that question asked helped profits through another mechanism. Although this might be the case I am not able to justify one reason over the other because I do not have enough measurement for the information exchange in my study.

I have also wanted to see how asking questions in a negotiation could impact the satisfaction experienced in a negotiation. Thompson, Wang & Gunia (2010) stated that integrative negotiation means that the outcome of the negotiation satisfies the interest of both parties involved in the negotiation, where the negotiation provides a possibility for joint gain for both bargainers, and where the situation has a non-zero encounter.

In the experiment that has been conducted there were possibilities for the negotiators to find a solution they both would benefit from and be satisfied with. However, the results from the subjective outcome indicated that asking questions in negotiation does not have an effect on the satisfaction outcome of the negotiation but does have an effect on the objective outcome, profitwise. For this reason, hypothesis 2a and 2b were rejected in my study. This can be due to Curhan (cited in Thompson, Wang & Gunia 2010) thought about subjective outcome measurement. Where Curhan (cited in Thompson, Wang & Gunia 2010) believed that the subjective outcome could be affected by the negotiator multiparty nature. The outcome can be affected by the inner experience of the bargainer during negotiation.

The satisfaction of the inner experience of my participants was not affected by the question asked in the negotiation, since they did not indicate to receive higher satisfaction by using questions. This can be due to what Curhan (cited in Thompson, Wang & Gunia 2010) had stated that the subject outcome can be affected by the inner experience of the negotiator during the negotiation process. In my exploratory analysis there was an indication that the experimental group had experienced a higher language barrier than the control group. The language barrier might have affected the subjective outcome, satisfaction level, during the negotiation where they might have experienced discomfort during the negotiation. Another factor for not receiving a higher satisfaction level could be that the negotiation scenario was given and not placed in real life. The participants might have been more satisfied if the negotiation were placed in a real-life scenario where the profit was given to the participants.

## **6 Limitations**

In my master thesis I have experienced certain limitations within my research. The limitations have been related to elements like information exchange, types of questions, not measuring other subjective outcomes such as trust and by using students as my participants.

Information exchange within my master thesis is limited due to measurement. In my research I have only used 1 item to analyze the information exchange between the negotiators. Within my item there was indication that asking questions does not have an impact on the information exchange in the negotiation. This indication goes against the theories of information exchange within negotiation, that have stated that questions can be helpful for exchanging and obtaining information about their counterpart. Another limitation within my research is that I have not measured what types of questions my participants have used for their negotiation. This means that even if they have used questions under the negotiation the quality of the questions could be poor and therefore not have the same effect as a good developed question would. There could also be limitations within my study connected to subjective outcomes because the results from my research have indicated that asking questions does not have an impact on the subjective outcomes. However, I only analyzed the subjective outcome related to satisfaction and not other subjective outcomes such as trust. The last limitations of my research could be that I have used students as my participants. Therefore, the results from research cannot be generalized with real people, that works with negotiation.

## **7 Ideas for further research**

It would be interesting to address the limitations of the current research in future research projects. Making it possible to investigate deeper on the impact of asking questions in a negotiation and analyze by adding more items of measure, how the information exchange can be influenced by asking questions during a negotiation. Conduct a study with both quantitative and qualitative research, adding a third party that is present during the negotiation to evaluate the questions and amount of questions used in a negotiation and the information exchange. Simultaneously, identify how the negotiators are communicating with each other in a non-verbal way when they are exchanging information by using questions - does the non-verbal communication increase while asking many questions or the opposite.

Another idea could be to measure the effect of asking questions in a negotiation by using a tape recorder to analyze the information exchange. As I have mentioned earlier in *6.0 Limitations*, I did not measure what types of questions my participants had used during the negotiation. Therefore, I would like to have conducted further research on what types of questions in a negotiation is more efficient than others. And see if the amount of questions has the same impact as an efficient

question would have. In addition to this I would have liked to examine if asking questions during a negotiation has an impact on other subjective outcomes such as trust. Finally, I am interested to conduct future research with real managers during a negotiation. To study how the amount of questions has an impact on a negotiation outcome in a professional negotiation process.

## 8 Conclusion

In my master thesis I attempted to investigate if there is a connection between the amount of question asked during a negotiation and the outcome. At the same time, look into how substantial the impact actually is on the outcome. For this reason, I have divided the outcome into two; objective- and subjective outcome. Where I will see if asking questions has an impact on the objective outcome profitwise individual and joint or in a subjective outcome, where negotiators are more satisfied with the negotiation. Therefore, I have developed a negotiation scenario, inspired by Pruitt and Lewis (1975) study on bilateral negotiation, placed in the pharmaceutical industry to be able to analyze the impact of questions-asked during the negotiation and the outcome (objective- and subjective) .

The experimental research I have conducted is on two experimental groups within my sample group, students from a negotiation course in University of South-Eastern Norway, Campus Ringerike. Where one of the experimental groups was manipulated (experimental group) and the other was not (control group). Here the manipulated group were told to see the negotiation as an opportunity to learn more about their counterparts; products, business, and plans, by asking questions to obtain information. And were therefore encouraged to ask numbers of questions during the negotiation process. However, both of the groups were given the same negotiation scenario and given a role of either buyer or seller.

In the negotiation scenario they were told to find an agreement that was going to have a major impact on the negotiator salary, and on the profitability of their own businesses. But to do so they were told to consider three key issues in their negotiation; patent license fee, duration of license, and royalty percentage. The issues were very open-ended, and they could justify their position on the issues. However, they were told that if they could not reach an agreement on any of those three issues, they could not sign the agreement. Each of the issues had nine different agreement alternatives, denoted by letters from A to I. The expected profits for each agreement alternative were listed on the profit charts, that they could not show to their counterpart. Here the students were given 15 minutes to read the negotiation scenario and 45 minutes to conduct the negotiation with their counterparts. At the end of the negotiation, they had to answer a survey in Qualtrics. The survey was meant to see how questions in negotiation actually affected the outcome of their negotiation. And to see if both parties have the same point of view on how the negotiation went, and if they consider the bargaining successful and are satisfied with the result.

The results from the objective outcome indicated that individual- and joint profit was affected by the manipulation in my study positive. This means that the negotiators in my study had gained profits individually and at dyad level by asking questions during the negotiation. The reason for this could be that the experimental group (question asking) had gained more profit than the control group because they had used more communication in their negotiation by asking questions. Thus, we were able to collect more information about their counterpart than the negotiator in the control group, and therefore could come to an agreement benefiting both of the negotiators.

However, in my study asking questions did not indicate that the experimental group (questions-asking group) had experienced more information exchange than the control group but this can be due to various reasons like mentioned earlier. Firstly, I had only used 1 item to measure the information exchange in the negotiation. And the item might have not been able to measure the information exchange they had experienced in the negotiation. Secondly, could be due to the difference between perceived and actual information exchange during the negotiation. For instance, even if they have felt that they did not receive and exchange information, the question asking group might have exchanged more information than the control group. It is also possible that they did not feel that there were different levels of information exchange in a negotiation, so it can have been difficult to analyze their level if they are not aware of the level.

The subjective outcome, in my study, was also not affected by the amount of questions asked during the negotiation. Even if there were possibilities for the negotiators to find a solution, they both would benefit from and be satisfied with. Here there might need to be another mechanism that needs to be fulfilled for the negotiator to be satisfied with the negotiation subjective outcome.

To summarize the results of my findings I have found out that asking questions in a negotiation has an overall effect on the objective outcome, but not in the subjective outcome, at least not alone. There might be other factors that have to be satisfied for the negotiator to experience satisfaction with their negotiation. For that reason, I conclude that overall in a negotiation, it is important to ask questions, to be able to find a solution that is benefiting both parties profitwise.

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# 10 Appendix

## 10.1 Negotiation scenario for the participants

### 10.1.1 Negotiation scenario for the buyer

Background information about today's negotiation:

You are the Purchasing Manager of PharmaCare, a young, fast-growing pharmaceutical company. Currently, PharmaCare sells 3 pharmaceutical products, with total sales revenues of approximately 300 million NOK a year. Based on strategic market analysis, PharmaCare has recently decided to increase the number of products in its product portfolio.

"Profelice" is a break-through antidepressant medicine that has recently been developed by BioFarm, a large organization in health care research. Profelice is expected to replace the market leader, Prozac, due to increased efficacy and reduced side effects.

You, as the purchasing manager of PharmaCare, are very interested in buying and adding Profelice to your product portfolio. Today you are to negotiate and sign a patent license agreement with the Sales Manager of BioFarm. BioFarm is a mid-sized Drug Discovery & Development Company has a proven record of developing successful pharmaceutical products. This agreement will give PharmaCare exclusive rights to develop, market, make, use, and sell Profelice.

Important confidential information from PharmaCare's Board of Directors to you:

Your mission (Control Group):

The agreement you reach today will have a major impact on your salary and on the profitability of PharmaCare. That said, we are also interested in keeping BioFarm as a long-term business partner and selling them other pharmaceutical products in the future.

You are to get the best agreement you can!

Your mission (Experimental Group):

The agreement you reach today will have a major impact on your salary and on the profitability of PharmaCare. That said, we are also interested in keeping BioFarm as a long-term business partner and selling them other pharmaceutical products in the future.

Therefore, you should also use this negotiation as an opportunity to learn more about BioFarm, their products, business, and plans. You should ask questions and get as much information as you can from BioFarm.

The key issues to be negotiated today are: Patent License Fee, Duration of License, and Royalty Percentage. These three issues are the only issues you should negotiate, even though in real life you might want to negotiate other issues. Furthermore, most of the issues are fairly open-ended and thus, you should feel free to develop a justification for your positions on the issues. Please remember that you have to negotiate and resolve all these three issues. Not reaching an agreement on any of those three issues means you cannot sign the agreement.

Each issue has nine different agreement alternatives, denoted by letters from A to I. Your expected profits for each agreement alternative are listed on the Profit Chart below. For example, patent license fee can range from 20 to 28 million NOK. You may settle upon any of the nine alternatives for each of the issues. Thus, there are a very large number of feasible settlements.

When you reach an agreement, you must state it with those letters from A to I. For example A-A-A means that you have gotten the best options in all three issues and your expected total profit out of this deal is 40 million NOK. On the other hand, if you agree on A-E-I, it means that your expected total profit is 14 million NOK.

Now, please get familiar with your profit chart. Remember that your aim is to maximize your profits. Feel free to make notes or write on this paper. It will stay with you during the negotiation. The negotiation will soon start. You have 45 minutes to negotiate.

#### PROFIT CHART

PATENT LICENSE FEE (Initial fee to be paid to BioFarm immediately after this agreement is signed and before Profelice is launched in the market. You want this fee to be as low as possible)		DURATION OF LICENSE (You want the longest possible patent license agreement possible, which is 10 years)		ROYALTY PERCENTAGE (% of Profelice's Total Net Sales to be paid to BioFarm once Profelice is launched in the market. You want to keep this percentage as small as possible)	
ALTERNATIVES	<i>Your Profits (in millions)</i>	ALTERNATIVE S	<i>Your Profits (in millions)</i>	ALTERNATIVES	<i>Your Profits (in millions)</i>
A: 20 million	8	A: 10 years	12	A: 2%	20
B: 21 million	7	B: 9 years	10.5	B: 3%	17.5
C: 22 million	6	C: 8 years	9	C: 4%	15
D: 23 million	5	D: 7 years	7.5	D: 5%	12.5
E: 24 million	4	E: 6 years	6	E: 6%	10
F: 25 million	3	F: 5 years	4.5	F: 7%	7.5
G: 26 million	2	G: 4 years	3	G: 8%	5
H: 27 million	1	H: 3 years	1.5	H: 9%	2.5
I: 28 million	0	I: 2 years	0	I: 10%	0

Very Important: Whatever you do, you shouldn't reveal your profit information to your counterpart. This is your own profit information and you wouldn't want your counterpart to know your profits in detail. You can say whatever else you want during the negotiation.

### 10.1.2 Negotiation scenario for the seller

Background information about today's negotiation:

You are the Marketing Manager of BioFarm, a large healthcare research organizations in Norway, with total revenues of approximately 300 million NOK a year. BioFarm's business model is based on developing new drugs and then selling the patent licenses of the new drugs to pharmaceutical companies.

"Profelice" is a break-through antidepressant drug that has recently been developed by BioFarm. Profelice is expected to replace the market leader, Prozac, due to increased efficacy and reduced side effects.

You, as the marketing manager of BioFarm, are very interested in selling Profelice's patent license to a young, fast growing international Pharmaceutical Company, PharmaCare. Today you are to negotiate and sign an agreement with the Purchase Manager of PharmaCare. This agreement will give PharmaCare exclusive rights to develop, market, make, use, and sell Profelice.

Important confidential information from the BioFarm's Board of Directors to you:

Your mission (Control Group):

The agreement you reach today will have a major impact on your salary and on the profitability of BioFarm. That said, BioFarm is also interested in keeping PharmaCare as a long-term business partner and selling them other pharmaceutical products in the future.

Your mission (Experimental Group):

The agreement you reach today will have a major impact on your salary and on the profitability of BioFarm. That said, BioFarm is also interested in keeping PharmaCare as a long-term business partner and selling them other pharmaceutical products in the future.

Therefore, you should also use this negotiation as an opportunity to learn more about PharmaCare, their products, business, and plans. You should ask questions and get as much information as you can from PharmaCare.

You are to get the best agreement you can!

The key issues to be negotiated today are: Patent License Fee, Duration of License, and Royalty Percentage. These three issues are the only issues you should negotiate, even though in real life you might want to negotiate other issues. Furthermore, most of the issues are fairly open-ended and thus, you should feel free to develop a justification for your positions on the issues. Please remember that you have to negotiate and resolve all these three issues. Not reaching an agreement on any of those three issues means you cannot sign the agreement.

Each issue has nine different agreement alternatives, denoted by letters from A to I. Your expected profits for each agreement alternative are listed on the Profit Chart below. For example, patent license fee can range from 20 to 28 million NOK. You may settle upon any of the nine alternatives for each of the issues. Thus, there are a very large number of feasible settlements.

When you reach an agreement, you must state it with those letters from A to I. For example I-I-I means that you have gotten the best options in all three issues and your expected total profit out of this deal is 40 million NOK. On the other hand, if you agree on A-E-I, it means that your expected total profit is 14 million NOK.

Now, please get familiar with your profit chart. Remember that your aim is to maximize your profits. Feel free to make notes or write on this paper. It will stay with you during the negotiation. The negotiation will soon start. You have 45 minutes to negotiate.

#### PROFIT CHART

PATENT LICENSE FEE (Initial fee to be paid by PharmaCare immediately after this agreement is signed and before Profelice is launched in the market. You want this fee to be as high as possible)		DURATION OF LICENSE (You want the shortest possible patent license agreement possible, which is 2 years)		ROYALTY PERCENTAGE (% of Profelice's Total NetSales to be paid to BioFarm once Profelice is launched. You want to keep this percentage as large as possible)	
ALTERNATIVES	<i>Your Expected Profits (in millions)</i>	ALTERNATIVE S	<i>Your Expected Profits (in millions)</i>	ALTERNATIVES	<i>Your Expected Profits (in millions)</i>
A: 20 million	0	A: 10 years	0	A: 2%	0
B: 21 million	2.5	B: 9 years	1.5	B: 3%	1
C: 22 million	5	C: 8 years	3	C: 4%	2
D: 23 million	7.5	D: 7 years	4.5	D: 5%	3
E: 24 million	10	E: 6 years	6	E: 6%	4
F: 25 million	12.5	F: 5 years	7.5	F: 7%	5
G: 26 million	15	G: 4 years	9	G: 8%	6
H: 27 million	17.5	H: 3 years	10.5	H: 9%	7
I: 28 million	20	I: 2 years	12	I: 10%	8

Very Important: Whatever you do, you shouldn't reveal your profit information to your counterpart. This is your own profit information and you wouldn't want your counterpart to know your profits in detail. You can say whatever else you want during the negotiation.

## 10.2 The Questionnaire

- What is your group number?
- What is your age?
- Sex
  - o Female
  - o Male
- What was your role in today's negotiation?
  - o Pharmicare
  - o Biofarm
- Did you reach an agreement in today's negotiation?
  - o Yes
  - o No
- Have you carefully considered you own resistance point, target point, BATNA etc. before starting to negotiate?
  - o Definitely not
  - o Probably not
  - o Might or might not
  - o Probably yes
  - o Definitely yes
- Have you carefully considered your counterpart's resistance point, target point, BATNA etc. before or during the negotiation?
  - o Definitely not
  - o Probably not
  - o Might or might not
  - o Probably yes
  - o Definitely yes
- Have you written down your own resistance point, target point, BATNA etc. before starting to negotiate?
  - o Definitely not
  - o Probably not
  - o Might or might not
  - o Probably yes
  - o Definitely yes

- Have you written down your counterpart's resistance point, target point, BATNA etc. before or during the negotiation?
  - o Definitely not
  - o Probably not
  - o Might or might not
  - o Probably yes
  - o Definitely yes
- Who made the first offer?
  - o Pharmacare
  - o Biofarm
  - o Don't remember
- What was the first offer?
- What is your agreement?

	A	B	C	D	E	F	G	H	I
Patent license	<input type="radio"/>								
Duration	<input type="radio"/>								
Royalty	<input type="radio"/>								

- Please write down your agreement manually (e.g., A-A-A)
- Did the agreement involve special additional terms? If yes, please list them briefly.
- How much profit did you make with this agreement? (In millions)
- Write down your profit manually (in million NOK)
- How many question did you ask your counterpart during the negotiation today?
  - o None
  - o 1-4
  - o 5-8
  - o 9-12
  - o 13-16

- o 17-20
  - o 21-24
  - o More than 25
- How much information did you get from your counterpart in today's negotiation?
  - o A great deal
  - o A lot
  - o A moderate amount
  - o A little
  - o None at all
- How satisfied are you with your agreement with respect to your objective standards (resistance point, target point, BATNA, etc.)
  - o Extremely dissatisfied
  - o Moderately dissatisfied
  - o Slightly dissatisfied
  - o Neither satisfied nor dissatisfied
  - o Slightly satisfied
  - o Moderately satisfied
  - o Extremely satisfied
- How satisfied are you with yourself in today's negotiation? (did you lose face? Was your behavior principled? Were you a successful negotiator?)
  - o Extremely dissatisfied
  - o Moderately dissatisfied
  - o Slightly dissatisfied
  - o Neither satisfied nor dissatisfied
  - o Slightly satisfied
  - o Moderately satisfied
  - o Extremely satisfied
- How satisfied are you with the negotiation process? (Did the other party listen? Was the process fair?)
  - o Extremely dissatisfied
  - o Moderately dissatisfied
  - o Slightly dissatisfied
  - o Neither satisfied nor dissatisfied
  - o Slightly satisfied

- Moderately satisfied
  - Extremely satisfied
- How satisfied are you with your relationship with your counterpart? (What impression did the other negotiator make on you? Do you trust the other negotiator?)
  - Extremely dissatisfied
  - Moderately dissatisfied
  - Slightly dissatisfied
  - Neither satisfied nor dissatisfied
  - Slightly satisfied
  - Moderately satisfied
  - Extremely satisfied
- Have you and your counterpart encountered any language problems during negotiation?
  - Definitely not
  - Probably not
  - Might or might not
  - Probably yes
  - Definitely yes
- How attentive were you in today's negotiation?
  - None at all
  - A little
  - A moderate amount
  - A lot
  - A great deal
- How much effort did you spend in today's negotiation?
  - None at all
  - A little
  - A moderate amount
  - A lot
  - A great deal

## 10.3 Tables/ Figures

### 10.3.1 T-Test Results VS ANOVA

#### 10.3.1.1 T-Test

<b>Group Statistics</b>										
<b>Independent Samples Test</b>										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
IND_PROFIT	Equal variances assumed	,250	,619	-1,890	52	,064	-202,08333	106,93993	-416,67399	12,50733
	Equal variances not assumed			-1,840	42,980	,073	-202,08333	109,85775	-423,63559	19,46893
How many questions did you ask your counterpart during the negotiation today?	Equal variances assumed	,022	,881	-4,935	52	,000	-1,525	,309	-2,145	-,905
	Equal variances not assumed			-4,993	51,206	,000	-1,525	,305	-2,138	-,912
How much information did you get from your counterpart in today's negotiation?	Equal variances assumed	4,226	,045	,415	52	,680	,108	,261	-,416	,633
	Equal variances not assumed			,401	41,328	,690	,108	,270	-,437	,654
satisfaction	Equal variances assumed	,046	,831	,994	52	,325	,30625	,30798	-,31175	,92425
	Equal variances not assumed			,988	48,184	,328	,30625	,30987	-,31672	,92922
preparation	Equal variances assumed	,194	,661	,216	52	,830	,04583	,21214	-,37986	,47153
	Equal variances not assumed			,218	50,717	,829	,04583	,21049	-,37681	,46847
Have you and your counterpart encountered any language problems during negotiation?	Equal variances assumed	3,146	,082	-2,044	52	,046	-,467	,228	-,925	-,009
	Equal variances not assumed			-2,107	51,883	,040	-,467	,221	-,911	-,022
How attentive were you in today's negotiation?	Equal variances assumed	,010	,922	,622	52	,537	,112	,181	-,251	,476
	Equal variances not assumed			,614	46,846	,542	,112	,183	-,256	,481
How much effort did you spend in today's negotiation?	Equal variances assumed	,462	,500	2,031	52	,047	,362	,178	,004	,721
	Equal variances not assumed			2,001	46,079	,051	,362	,181	-,002	,727
you spend in today's negotiation?		Control Group		27	3,000	,000	,611	,112		
you spend in today's negotiation?		Question asking group		30	3,62	,000	,611	,112		

### 10.3.1.2 ANOVA

#### Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
joint_profits	Control Group	24	4229,1667	346,69767	70,76937	4082,7691	4375,5643	3700,00	4900,00
	Question asking group	30	4633,3333	488,37050	89,16385	4450,9728	4815,6939	4000,00	5200,00
	Total	54	4453,7037	473,03235	64,37155	4324,5907	4582,8167	3700,00	5200,00
IND_PROFIT	Control Group	24	2114,5833	440,47385	89,91135	1928,5875	2300,5791	1350,00	3400,00
	Question asking group	30	2316,6667	345,74590	63,12428	2187,5630	2445,7703	1700,00	2900,00
	Total	54	2226,8519	399,84820	54,41245	2117,7143	2335,9894	1350,00	3400,00
satisfaction	Control Group	24	5,5938	1,15818	,23641	5,1047	6,0828	1,50	7,00
	Question asking group	30	5,2875	1,09719	,20032	4,8778	5,6972	2,75	7,00
	Total	54	5,4236	1,12445	,15302	5,1167	5,7305	1,50	7,00
preparation	Control Group	24	3,7500	,74455	,15198	3,4356	4,0644	2,50	5,00
	Question asking group	30	3,7042	,79768	,14564	3,4063	4,0020	2,25	5,00
	Total	54	3,7245	,76763	,10446	3,5150	3,9341	2,25	5,00
How attentive were you in today's negotiation?	Control Group	24	3,98	,699	,143	3,68	4,27	3	5
	Question asking group	30	3,87	,629	,115	3,63	4,10	3	5
	Total	54	3,92	,657	,089	3,74	4,10	3	5
How much effort did you spend in today's negotiation?	Control Group	24	3,98	,699	,143	3,68	4,27	3	5
	Question asking group	30	3,62	,611	,112	3,39	3,84	2	5
	Total	54	3,78	,671	,091	3,59	3,96	2	5
Have you and your counterpart encountered any language problems during negotiation?	Control Group	24	1,33	,702	,143	1,04	1,63	1	4
	Question asking group	30	1,80	,925	,169	1,45	2,15	1	4
	Total	54	1,59	,858	,117	1,36	1,83	1	4
How many questions did you ask your counterpart during the negotiation today?	Control Group	24	2,79	1,062	,217	2,34	3,24	1	6
	Question asking group	30	4,32	1,178	,215	3,88	4,76	3	8
	Total	54	3,64	1,354	,184	3,27	4,01	1	8
How much information did you get from your counterpart in today's negotiation?	Control Group	24	2,54	1,103	,225	2,08	3,01	1	4
	Question asking group	30	2,43	,817	,149	2,13	2,74	1	4
	Total	54	2,48	,947	,129	2,22	2,74	1	4

### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
joint_profits	Between Groups	2178009,26	1	2178009,26	11,699	,001
	Within Groups	9681250,00	52	186177,885		
	Total	11859259,3	53			
IND_PROFIT	Between Groups	544502,315	1	544502,315	3,571	,064
	Within Groups	7929062,50	52	152481,971		
	Total	8473564,81	53			
satisfaction	Between Groups	1,251	1	1,251	,989	,325
	Within Groups	65,763	52	1,265		
	Total	67,013	53			
preparation	Between Groups	,028	1	,028	,047	,830
	Within Groups	31,203	52	,600		
	Total	31,231	53			
How attentive were you in today's negotiation?	Between Groups	,169	1	,169	,386	,537
	Within Groups	22,706	52	,437		
	Total	22,875	53			
How much effort did you spend in today's negotiation?	Between Groups	1,752	1	1,752	4,126	,047
	Within Groups	22,081	52	,425		
	Total	23,833	53			
Have you and your counterpart encountered any language problems during negotiation?	Between Groups	2,904	1	2,904	4,179	,046
	Within Groups	36,133	52	,695		
	Total	39,037	53			
How many questions did you ask your counterpart during the negotiation today?	Between Groups	31,008	1	31,008	24,357	,000
	Within Groups	66,200	52	1,273		
	Total	97,208	53			
How much information did you get from your counterpart in today's negotiation?	Between Groups	,156	1	,156	,172	,680
	Within Groups	47,325	52	,910		
	Total	47,481	53			

## 10.3.2 AGGREGATE

### Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
JointProfit	Control Group	12	4229,1667	354,48960	102,33233	4003,9347	4454,3986	3700,00	4900,00
	Question asking group	15	4633,3333	497,01490	128,32870	4358,0957	4908,5710	4000,00	5200,00
	Total	27	4453,7037	477,55908	91,90629	4264,7876	4642,6198	3700,00	5200,00
How many questions did you ask your counterpart during the negotiation today?	Control Group	12	2,7917	1,01036	,29167	2,1497	3,4336	1,50	5,50
	Question asking group	15	4,3167	,86843	,22423	3,8357	4,7976	3,00	6,00
	Total	27	3,6389	1,19762	,23048	3,1651	4,1127	1,50	6,00
How much information did you get from your counterpart in today's negotiation?	Control Group	12	2,5417	,72169	,20833	2,0831	3,0002	1,50	3,50
	Question asking group	15	2,4333	,77613	,20040	2,0035	2,8631	1,00	3,50
	Total	27	2,4815	,74008	,14243	2,1887	2,7742	1,00	3,50
preparation	Control Group	12	3,7500	,42972	,12405	3,4770	4,0230	3,13	4,50
	Question asking group	15	3,7042	,66835	,17257	3,3340	4,0743	2,38	4,88
	Total	27	3,7245	,56497	,10873	3,5010	3,9480	2,38	4,88
satisfaction	Control Group	12	5,5938	,81903	,23643	5,0734	6,1141	3,63	6,63
	Question asking group	15	5,2875	,84707	,21871	4,8184	5,7566	4,06	6,75
	Total	27	5,4236	,83319	,16035	5,0940	5,7532	3,63	6,75
single_multi	Control Group	12	1,2917	,39648	,11445	1,0398	1,5436	1,00	2,00
	Question asking group	15	1,5667	,49522	,12786	1,2924	1,8409	1,00	2,00
	Total	27	1,4444	,46685	,08985	1,2598	1,6291	1,00	2,00
How much effort did you spend in today's negotiation?	Control Group	12	3,9792	,40534	,11701	3,7216	4,2367	3,25	4,50
	Question asking group	15	3,6167	,33894	,08751	3,4290	3,8044	2,75	4,00
	Total	27	3,7778	,40628	,07819	3,6171	3,9385	2,75	4,50
How attentive were you in today's negotiation?	Control Group	12	3,9792	,50518	,14583	3,6582	4,3001	3,00	4,50
	Question asking group	15	3,8667	,51640	,13333	3,5807	4,1526	3,00	5,00
	Total	27	3,9167	,50478	,09715	3,7170	4,1164	3,00	5,00
Have you and your counterpart encountered any language problems during negotiation?	Control Group	12	1,3333	,49237	,14213	1,0205	1,6462	1,00	2,50
	Question asking group	15	1,8000	,75119	,19396	1,3840	2,2160	1,00	3,00
	Total	27	1,5926	,67989	,13084	1,3236	1,8615	1,00	3,00

### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
JointProfit	Between Groups	1089004,63	1	1089004,63	5,624	,026
	Within Groups	4840625,00	25	193625,000		
	Total	5929629,63	26			
How many questions did you ask your counterpart during the negotiation today?	Between Groups	15,504	1	15,504	17,790	,000
	Within Groups	21,787	25	,871		
	Total	37,292	26			
How much information did you get from your counterpart in today's negotiation?	Between Groups	,078	1	,078	,138	,713
	Within Groups	14,163	25	,567		
	Total	14,241	26			
preparation	Between Groups	,014	1	,014	,042	,839
	Within Groups	8,285	25	,331		
	Total	8,299	26			
satisfaction	Between Groups	,625	1	,625	,897	,353
	Within Groups	17,424	25	,697		
	Total	18,049	26			
single_multi	Between Groups	,504	1	,504	2,441	,131
	Within Groups	5,162	25	,206		
	Total	5,667	26			
How much effort did you spend in today's negotiation?	Between Groups	,876	1	,876	6,412	,018
	Within Groups	3,416	25	,137		
	Total	4,292	26			
How attentive were you in today's negotiation?	Between Groups	,084	1	,084	,323	,575
	Within Groups	6,541	25	,262		
	Total	6,625	26			
Have you and your counterpart encountered any language problems during negotiation?	Between Groups	1,452	1	1,452	3,435	,076
	Within Groups	10,567	25	,423		
	Total	12,019	26			

### 10.3.3 Chi-Square test of Single-Issue vs. Multi- Issue First Offer

#### Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
experimental condition * single_multi	23	85,2%	4	14,8%	27	100,0%

#### experimental condition \* single\_multi Crosstabulation

Count

		single_multi		Total
		single-issue f.o.	multi-issue f.o.	
experimental condition	Control Group	7	2	9
	Question asking group	6	8	14
Total		13	10	23

#### Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2,718 <sup>a</sup>	1	,099		
Continuity Correction <sup>b</sup>	1,483	1	,223		
Likelihood Ratio	2,836	1	,092		
Fisher's Exact Test				,197	,111
Linear-by-Linear Association	2,600	1	,107		
N of Valid Cases	23				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,91.

b. Computed only for a 2x2 table

