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# Negotiation competency in a synchronous virtual computer mediated negotiation environment.

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### Abstract

Recently, an increasing number of organizations have started to negotiate via online channels with their suppliers. There is a big interest in filling the literature gap on this specific topic due to the rapid increase in the use of visual computer mediated communication (CMCv) in negotiations. The focus of this paper is to find which factors of the negotiation competence model will be influenced by a switch from F2F to CMCv. Results implicate a great influence on relationship building and negotiation intelligence through the influence of social presence, which is mainly due to the perceived distance and amount of personal connection possibilities. The length of a relationship is an influencing factor here as it was found that there is a lower need for social presence due to a longer relation, where longer relations result in higher levels of trust. Another influencing factor is the type of organizations. The similarity between the cultures of practitioners also plays a role in the success of CMCv negotiations. Using CMCv or F2F can be a form of negotiation strategy and should be used accordingly to the negotiation situation.

**Keywords:** Negotiation competence model, social presence, computer mediated communication, face-to-face, online.

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### Index of abbreviations

СМС	Computer-mediated communication			
CMCt	Text or audio-based computer mediated communication.			
CMCv	Visual and audio-based computer mediated communication.			
F2F	Face to face communication			
hMNS	Human Mirror Neuron System			
Р	Proposition			
SIPT	Social Information Processing Theory			

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# 1. Computer-mediated communication negotiation will influence the social presence and negotiation competences.

# **1.1** Trust in negotiation procedures is depending on the social presence felt by the negotiators.

Business deals all rise and fall depending on the correct negotiation strategy used. Acquiring good business deals through purchasing will be beneficial for the cost savings of a complete product line. Negotiations can be defined as: "a process of potentially opportunistic interaction by which two or more parties, with some apparent conflict, seek to do better through jointly decided action than they could otherwise" (Lax & Sebenius, 1986, p. 11). Understanding an organization its negotiation behavior is then also vital for reaching business relationship success (Fells, Rogers, & Prowse, 2015).

It has been found that correct forms of communication are seen by suppliers as one of the factors that influence whether a supplier thinks a buyer is an attractive customer to do business with (Ramsay & Wagner, p. 134). Especially trust is argued to be one of the most important factors in B2B relations, where trusted actors are more likely to receive additional benefits (Yamagishi, 2001, p. 142). It has even been found that more competitive negotiation strategies are oftentimes used when trust is low, which results in lower levels of mutual benefit (Gunia, Brett, Nandkeolyar, & Kamdar, 2011). Trust in this context is defined as "the willingness of one party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." (Mayer, Davis, & Schoorman, 1995, p. 712). Negotiation skills are then also vital to effectively communicate the goals, needs, and wants of the negotiator.

Digitalization has increased the popularity of online communications next to in face to face (F2F) communications. Globalization and technological improvements gave then also the possibility to reduce distances between negotiation partners, however, during the global COVID-19 pandemic, which mainly lasted between 2020 and 2022, F2F communications were not possible, and organizations were forced to move towards an allonline business environment. These computer-mediated communications (CMC) occurred either synchronously via virtual conference calls or asynchronous through e-mails. A shift in academic research can be seen with the new uprising of including virtual online environments. Digitalization of negotiations is not new. Past studies already studied asynchronous CMC such as email and chat, and synchronous CMC like communicating through telephones. CMC can be defined as a communicative transaction that occurs through two or more networked computers (Denis, 2005). Such studies have shown that the movement from F2F to CMC drops the social presence levels, and therewith also the levels of trust (Lu, Fan, & Zhou, 2016, p. 229). Biocca (1997) defines social presence as when one person has the sense that they can feel the presence of another intelligence. The level of social presence is the degree to which one person feels access to intentions, intelligence, and sensory impressions of others (Biocca, 1997, p. 1).

It has been noted by several papers that more knowledge will be needed before one could better understand the full influence of technology, especially regarding trust in both the opposite party, as well as technology as a tool (Nadler & Shestowsky, 2006, p. 166; Toorn, Wijst, & Damen, 2014, p. 11; (Nilsson & Mattes, 2015, p. 242) Anther gap identified is the lack of data that is currently existing regarding the mode of communication chosen (Melumad, Inman, & Tuan , 2019). Technological changes have now outpaced current research, which makes it possible to execute further research on social interactions (Dickerson, Gerhardstein, & Moser, 2017, p. 2). Existing data is often from a period when technology was still new and underdeveloped. New technological innovations such as video conferences are then also not often considered (Thompson, Wang, & Gunia, 2010, p. 33). It has then also been called for that relations between social presence and virtual synchronous CMC require further elaborations (Oh, Bailenson, & Welch, 2018, p. 30 (Kojima, Chen, Oka, & Ikegami, 2021, p. 9). Based on the above, the following research question is formulated:

*RQ:* How does virtual computer mediated communication influence negotiation competences?

By combining virtual CMC with negotiation practices will this paper contribute to the existing literature by generating new data on current trends. Literature papers are oftentimes outdated and do not consider recent technological improvements. These newer forms of computer mediated communication means have then also not broadly been discussed throughout literature. It makes specific pieces of technology missing from existing theories and concepts. A specific focus will be on buyer-supplier relationships, where purchasing professionals will be interviewed through a semi-structured interview.

This paper will contribute to the existing literature by applying the social presence theory and media richness theory to new technological improvements that can influence the negotiation competencies of negotiators. By presenting factors that could influence the competences of negotiators will practitioners be given a guideline on when to use online environments, and when to decide against it. Secondly, this paper will give practitioners insights into which factors should be kept in mind and enhanced while executing a virtual online negotiation. Existing literature will be contributed by adding knowledge to the need for more information on negotiations executed on virtual computer mediated communication platforms. Here, it is aimed to get a better understanding of how new technological improvements influence negotiation processes.

The remainder of this paper will be structured as follows; the next chapter will introduce the negotiation competency model. Here, all steps in the model will be elaborated, and it will show what influences negotiations. Afterward, a theoretical framework will be proposed on how the negotiation competency model related to the social presence theory. Following will be a methodology section explaining how the theoretical framework was tested by executing a qualitative research method. After this, results will be shown and discussed, and a conclusion will be drawn based on the found data.

# **1.2** Making a distinction between visual, audio, and text-based communications.

Negotiations are personal interactions where people are aiming to reach certain goals and overcome conflicts (Pruitt & Carnevale, 1993, p. 1), or can be defined as a social interaction process between at least two parties who attempt to resolve conflicts of interest (Lewicki et al. 2010). Roger Fisher, William Ury, and Bruce Patton (1991) defined negotiation as "a process of communicating back and forth to reach a joint decision." Furter in this research the definition of Sax & Sebenius (1986) will be used. Sax & Sebenius (1986) state that negotiations can be defined as: "a process of potentially opportunistic interaction by which two or more parties, with some apparent conflict, seek to do better through jointly decided action than they could otherwise" (Lax & Sebenius, 1986, p. 11). During single-issue negotiations, only one topic is discussed, whereas with multi-issue negotiations two or more topics are discussed. Multi-issue negotiations offer more options for integrative solutions, as

more tradeoffs can be made (Yao, Brett, Zhang, & Ramirez-Martin, 2021, p. 11). With the negotiation competency model will this research focus on multi-issue negotiations.

Computer-Mediated Communication (CMC) is generally used for communication that is not done in person. CMC covers multiple dimensions such as email communication, chat-based communication, and phone calls. In Figure 1 an overview can be found of the different communication mediums. It can be said that a distinction can be made between written and spoken words. Also, a distinction can be made between visual and non-visual. The focus of this research is on video calls. It was chosen to make a distinction between visual and non-visual, where visual CMC will be referred to as CMCv, whereas non-visual will be referred to as CMCt. F2F negotiations will be where both buyer and supplier are together in the same room at the same time and place.

		Medium	Channel	Time
	F2F	Face to face	Visual, Audio	Synchronous
	CMCv	Video calls	Visual, Audio	Synchronous
CMC	CMCt	Teleophone	Audio	Synchronous
		Written, personal	Limited visual	Asynchronous
		Written, formal	Limited visual	Asynchronous
		Numeric, formal	Limited visual	Asynchronous

Figure	1:	Defining	СМС	&	F2F
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# 2. The visibility of the other person influences how people perceive negotiation procedures.

### 2.1 Negotiation Competency Model as a base for comparing CMC and F2F

Several papers have tried to capture and model the process of negotiations. One of the most famous frameworks comes out of the book *getting to yes* by Fisher and Ertel 1995 b. They have proposed a six-step framework on how to reach a win-win agreement.

- Goals of negotiation
- Options of agreement
- Seeking alternatives and defining limitations
- Legitimacy (Being fair will produce a fair agreement)
- Relationship building
- Commitment and the ability to close the deal.

A more recent framework is that of Filzmoser et al (2016), who argue that there are three dimensions to the negotiation process (Filzmoser, Hippmann, & Vetschera, 2016, p. 1171). They have built their framework on the principles of Fisher et al, and argue that issues, communication, and emotions are the three dimensions on which a negotiator gets from preconditions to results. A more general model is that of Smolinski & Xiong (2020), as pictured in Figure 2. From their research, they propose a negotiation competency model, which can be seen as a pyramid of the most important aspects of a negotiation. This model is created to score the negotiator's performance that can be used by scholars, practitioners, and students. (Smolinski & Xiong, 2020, pp. 365-371)



Figure 2: Negotiation competence model. Adapted from (Smolinski & Xiong, 2020, p. 371)

Both the model from Smolinksi & Xiong (2020) and the model from Filzmoser (2016) state that communication and emotions are important aspects during a negotiation. However, the model from Filzmoser (2016) is mainly focused on language and emotionality, whereas the negotiation competence model takes more aspects into account. Fisher & Ertel mainly focus on the relationship building aspect of a negotiation, which is integrated into the relationship building layer of Smolinski & Xiong (2020). The categories of the negotiation competency mode give a more elaborated framework, and important aspects of negotiations are discussed in this framework through each of the four dimensions. The framework proposes that successful negotiations are based on four layers, which each contain several subfactors. Using these factors to score CMCv and F2F negotiations will help to examine where the differences in negotiation competence lay. The remainder of this paper will base its foundation on the Negotiation competence model.

# **2.2.1** Emotions and Language: Important competences to bring goals and intentions across the table.

# **2.2.1.1** Optimal emotion management makes a good environment for creating healthy buyer-supplier relations.

Buyer-supplier negotiations are being put in place to ultimately form a collaboration between two organizations and these negotiations are traditionally executed by human beings. Humans are subjective to their bound rationality and often act based on their own emotions, as humans are emotional decision-makers (Hill, 2008, p. 1). Negation outcomes and procedures are not just based on cognitive analytics but are also influenced by underlying emotional factors. Consequently, negotiations can be seen as an emotional process (Broekens, Jonkers, & Meyer, 2010, p. 138). Especially when negotiation meetings are seen as occasions for social contact will negotiations become not only a business conference but also an emotional process, with emotional negotiators. (Benetti, Ogliastri, & Caputo, 2021, pp. 797-798). Showing and perceiving emotions during negotiations are different between cultures and are based on social norms and values. Emotions can be placed into three categories: positive, neutral, and negative. (Coutts, Mitchell, & Duffy, 2018, p. 27) Some argue that emotions are a hindrance to the process of reaching the desired outcome. Others have argued that the emotional aspects of a negotiation should be seen as a complementary force that can be used as an advantage (Kelly & Kaminskiene, 2016, p. 55).

Better outcomes, win-win situations, maintaining healthy relationships, and encouraging trust can be reached when emotions are managed in an optimal manner (Roschuni, Beckman, Oehlberg, & Agogino, 2010). Especially positive emotions in negotiations can lead to higher individual gains and better outcomes for both parties. Emotions can come across as kindness and stimulate friendship, whereas other times emotions can be interpreted as aggressive and as having a lack of control (Benetti, Ogliastri, & Caputo, 2021, pp. 797-798). Past work on emotions in negotiations shows that positive emotions in beneficial to negotiations are it leads to more prosocial and cooperative orientations, creativity, and innovative thinking, and increases the negotiator's willingness to cooperate (Carnevale & Isen, 1986, p. 12). On the other hand, will negative emotions reduce the other party's interest, and willingness to engage in future collaborations, which reduces mutual benefits (Allred, Mallozzi, Matsui, & Raia, 1997, pp. 183-184). It is argued to be important to be able to both understand the counterpart's perspective and emotions as well as regulate one's own emotions (Kidder, 2017, p. 258). Findings then also show that a

negotiator's skill to regulate their own emotion influences the counterpart's recognition and behavior (Williams & Hinshaw, 2018, p. 178).

Visual access to emotions plays a significant part in the way how emotions are interpreted, where people could easier identify emotions when seeing the counterperson (Carnevale & Isen, 1986, p. 12). Research then also shows that emotional expressions provide give information to the negotiator about the interaction partner through social interaction (Rothman & Northcraft, 2015, p. 66). Emotions can be expressed through:

- facial expressions (Keltner, Kring, & Bonanno, 1999, p. 18)
- tone of voice
- gaze
- posture
- touch
- verbal expressions

The emotions of individuals will be visible and transmittable through facial expressions, but due to facial expressions is it also possible to mirror the emotions of the other person. This phenomenon is also known as emotional contagion and will exist when the behavior of an individual is copied by others so that the mutual emotion is enlarged (Kong Y., 2022, p. 2). Emotional contagion is an automatic and unconscious response of individuals to expressions that are seen around them. An autonomic mimicry is being done by copying movements such as speech, facial expressions, gestures, and eye contact. By doing this one can share feelings and recognize emotions.

Some authors claim that CMC is a medium where emotions are difficult to interpret and express (Rice & Love, 1987, p. 86). Adults have even shown low emotional fluency when using CMCv systems. Other authors state that the difference between synchronous CMC and F2F is insignificant due to the social information processing theory. This theory states that CMC and F2F communications can become similar in the feeling of intimacy if given a long period of learning and experience (Walther, 1996, p. 10). The means of communication also influence the negotiator itself. During a chat-based CMC study, a negotiator was exposed to emotion. It was found that negotiators exposed to more emotion felt more happiness through communication, whereas negotiators exposed to almost no emotion felt high levels of disinterest and got the impression that they were dealing with a software program (Marchi, Targi, Liston, & Parlangeli, 2020, p. 270).

# 2.2.1.2 Verbal language is only 7% of all the communication during a negotiation, body language takes the other 93%.

Being able to correctly transmit one's thoughts and ideas is vital for the quality of the negotiation. Correct communication skills to transfer information are done through the aid of verbal language. Verbal (or oral) language can be defined as words that are spoken out loud. Language shapes the interpretation of the personality of the negotiator, as well as values, interests, and goals (Putnam, 2010, p. 145). Smolinski and Xiong (2020) identified two main topics that are important when considering language in a negotiation setting, these are quality of expression and active listening & questioning. Two of the most important skills that negotiators require for effective social awareness are active listening and reading nonverbal cues.

### Quality of expression

Quality of expression, and with that good communication, are argued to have a significant influence on the efficiency of the negotiation (Schoop, Köhne, & Ostertag, 2010, p. 194). Expressing oneself and understanding the counterpart in a natively spoken language is oftentimes seen as easier compared to a foreign spoken language (Lai, Lin, & Kersten, 2010, p. 538). In a negotiation setting, speaking in a native language often translates to negotiators being more direct and coherent. Speaking in a non-native language will make a negotiator sometimes more indirect and controversial (Garcez, 1992, p. 116). Having confidence in using a language as well as linguistic knowledge plays a part in the effectiveness of using oral communions. Not sufficiently understanding the language of communication can hinder speaking up or being able to voice ideas or questions (Parcon & Reyes, 2021, p. 210). Findings like these show that language affects an individual negotiation and communication performance. One of these communication performances can be seen as persuasion skills that negotiators use to achieve their desired outcome, whereas spoken language skills influence persuasion ability.

### Active listening and questioning

Negotiators often do need good persuasion skills, and on top of that, negotiators also need to be good conversationalists (Zohar, 2015, p. 544). Language and emotion are then also important to understand the opponent, but it can only be effective if one is understanding,

and actively listening to the other party (Kelly & Kaminskiene, 2016, p. 59). Misunderstandings are more often the reason for conflict rather than fundamental differences of interests (Silbey & Merry, 1986, p. 22). Striving for good communication can help reduce misunderstandings and increases negotiation efficiency, active listening can then also bring parties closer together (Fisher, Ury, & Patton, 1991).

Next to spoken language do also body language, and with that, physical communications, play a role during negotiations as body language works synchronously with the movements of the spoken language (Zappavigna, 2018, p. 207). Mehrabian his communication model shows that around 7% of communication is verbal language, 55% is in body langue and 38% is in the tone of voice (Mehrabian, 1981). Non-verbal communication such as hand gestures, spatial relations, tone of voice, dress, smile, eye contact, and facial expressions, can add information or emphasize matters and play a part in the persuasion ability (Stefano, 1977, p. 31). Body language can weaken, complement, or reinforce spoken language (Peleckis, peleckiene, & Peleckis, 2015, p. 63). Especially body positioning, eye contact, and nonverbal encouragers can indicate attending behaviors (Lewicki, Barry, & Saunders, 2016, pp. 170-171) For negotiators, the METTA Model has been created, which aims to help make communication cues more understandable. The METTA model represents movement, environment, touch, tone, and appearance (Thompson, Ebner, & Giddings, 2017, p. 456). Not being able to have access to the richness of body language will have a significant negative impact on the effectiveness of the negotiation (Peleckis, peleckiene, & Peleckis, 2015, p. 63).

# 2.2.2 Negotiation intelligence: the ability to create value for all parties involved.

### 2.2.2.1 Negotiation intelligence requires strategic adaptability.

Knowledge acquisition is the starting point of negotiation intelligence. Negotiation intelligence, sometimes also called strategic adaptability, can be defined as: *"The ability both to recognize the characteristics of one's specific negotiation and the attitude of negotiation partners and to apply efficiently the methods and techniques that optimize performance in such a setting."* (Smolinski & Kesting, 2013, p. 366). One does not need to be a great value claimer or value creator to score high on negotiation intelligence. Instead, one needs to be able to perform well in a wide range of negotiation types. With this, one

requires a diverse skill set and intuition to use the correct methods at the right time (Smolinski & Kesting, 2013, p. 367).

Negotiators often come into a negotiation with a clear goal in mind, this is either a cooperative goal or a value-claiming goal. With the cooperative goal, negotiators have the intention to create value for both parties, and with value claiming one has an individualistic goal in mind (De Dreu, Weingart, & Kwon, 2000, p. 984). Initial strategic intentions are then also based on the goal in mind, and thus depending on their initial relationship and outcome goals. Negotiators shift intentionally or unintentionally between tactics, strategies, and behavior during a negotiation which influences the negotiation outcome (Beersma & De Dreu, 2002, p. 227). Negotiations are human interactions and can be seen as a dynamic process, where communications are driven by social interactions, changes, and adapting to changes while keeping the negotiation goals in mind (Ikle & Leites, 1962, p. 20). Creating the optimal mix of both value-claiming behaviors and relationship-building behaviors is vital for reaching the initial goals, however, switching between strategies can sometimes even conflict with the initial objectives (Wilson & Putnam, 1990, p. 374). The cycle leading to negotiation behavior, Figure 3, visualizes the constant change in strategies and switch in expectations and intentions.

Turning points that initiate the need for strategic adaptability, and thus a behavior change, can be because negotiators are realizing that their current strategy is not aiding towards reaching their goal or because they are adapting their perspective of what is achievable (Weingart, Prietula, Hyder, & Genovese, 1999, p. 390). During this turning point, negotiators will change negotiation strategies by adopting new concepts or start mixing these concepts differently towards a more give-and-take approach (Druckman & Rosoux, 2016, p. 130).

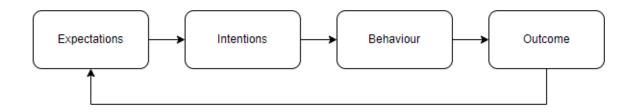


Figure 3: The circle leading to negotiation behavior. Adapted from (Saorin-Iborra, 2008, p. 129)

# 2.2.2.2 Distributive & integrative negotiations: matching the goal of the negotiation with the negotiation strategy.

Negotiations can be fought as a battle where one winner and one loser come out in the end, or negotiations can be used as opportunities where all parties will benefit from the outcome. Viewing negotiations as a war with a win-lose configuration is also referred to as distributive negotiations. In this strategy will the practitioner try to maximize its share of payoffs, regardless of the needs and wants of the other party. Strategies like these can be used in situations where a long-term relationship between two parties is not the goal (Zachariassen, 2008, p. 764). Focusing on distributing values harms efficiency and negotiation relationships (Brett & Thompson, 2016, p. 69). On the opposite spectrum of distributive negotiations are integrative negotiations, where the goal is to reach a win-win situation. With integrative strategies will the negotiator tends to solve problems jointly with the counterparty and explore options to increase mutual benefit (Patton, 2015; Pruitt & Rubin, 1986; Fisher et al., 1981).

Why one uses an integrative strategy or a distributive strategy, is depending on the goals of the negotiation and the relationship between the buyer and supplier. Distributive negotiations generally exist with single-issue negotiations, where a long-term relationship is not beneficial for one or multiple parties as compromised need to be made. Long-term relationships are uncommon, and one is less concerned about how they are perceived by the other party. Outcomes with benefits for all parties involved are the results of integrative negotiations, where the process is to help each other. Integrative negotiations are often multi-issue negotiations and have more long-term relations in mind, where both parties understand each other's interests.

To reach a more efficient and longer-term agreement are integrative negotiations then also superior to distributive negotiations. Some would even argue that there are multiple types of integrative negotiations, namely emotional integrative and impersonal integrative (Benetti, Ogliastri, & Caputo, 2021, p. 792). Practice shows that there is a grey area where it is always possible to shrink the pie, but also almost possible to enlarge the pie if the practitioner is willing to focus on the interests of both parties (Patton, 2015, p. 351). Negotiations are also rarely fully integrative, as oftentimes an element of competitiveness is present, even in the cooperative process (Olekalns et al., 2003; Ott et al., 2016; Putnam, 1990). The Negotiation behavior dichotomy or continuum framework from Saorín-Iborra (2008) shows that there is a broad spectrum of negotiation behaviors. Almost no negotiation is fully integrative or fully distributive, and multiple classifications can be made (Saorin-Iborra, 2008, p. 135).

One can distinguish between distributive and integrative negotiations by using the four principles from the Fisher-Ury-Patton principles:

- 1. Separate people from the problem
- 2. Focus on interest, not position.
- 3. Invent options for mutual gain.
- 4. Insist on objective criteria.

All four principles then also focus on the correct way of understanding the opposite party, questioning, and sharing information. Direct F2F communication opens possibilities to address unclarities directly. It was found that humans generally feel more open to having interactions with each other when being F2F as in such an environment there is a higher form of pressure to share ideas (Vita & Erlik, 2018, p. 236).

# 2.2.2.3 Phases of a multi-issue negotiation process: multi-issue negotiations are more complex are require better communication.

A preparation phase, an ongoing phase, and an agreement phase are the three phases of a multi-issue negotiation process. Several skillsets are required from the negotiation practitioner throughout these phases.

- 1. Understanding interests and options
- 2. State getting
- 3. Making the first offer
- 4. Managing concessions
- 5. Searching for trade-offs
- 6. Generating creative options
- 7. Using objective criteria
- 8. Post-settlement settlement
- 9. Strategic adaptability
- 10. Team performance

An interesting part of the difference between F2F and CMC negotiations is stage setting. Stage setting will occur just before a negotiation begins; it is the small talk beforehand. Small talk is often seen as unimportant; however, it can influence the whole negotiation ahead. Informal communication is spontaneous and situational and usually starts with icebreakers, greetings, general observations, and questions (Subramanian, 2006, p. 4). Two different definitions of small talk can be found back in the literature. Some definition states that small talk is phatic communication which is only there to establish relational bonds but does not hold value (Robinson, 1992, p. 207). Other definitions argue against this by stating that small talk is an intrinsic part of talking and is not by definition without useful information (Coupland, 2003, p. 5). Studies even found that important information is oftentimes shared between two parties during small talk (Lu, Kaufmann, & Carter, 2019, p. 3). It has even been found that negotiators who engage in small talk before the negations were not only more successful at bringing important information across but also were more successful at opening opportunities for mutual benefit (Nadler, 2004, p. 231). Negotiators who engage in structured pre-negotiation stage settings will reach more trust in the relation (Swaab, Lount Jr, Chung, & Brett, 2021, p. 167). Small talk then also helps in reducing anonymity, as it creates a feeling of mutual social identity (Morris, Nadler, Kurtzberg, & Thompson, 2002, p. 91). However, (asynchronous / chat-based) CMC gives a distance towards small talk, where people feel less inclined to engage in personal conversation (Thompson-hayes, Gibson, Towers Scott, & Webb, 2009, p. 211).

# **2.2.3 Trust and Relationship building: Trust is vital for long-term relations.**

### 2.2.3.1 Importance of relationship building long-term relations vs new relations.

Long-term relationships with repeated negotiations and other interactions positively influence trust and solidarity between buyer and supplier (Molm, Whitham, & Melamed, 2012). however, the length of the buyer-supplier relationship is not mentioned as a factor of the negotiation competence model. Figure 4 shows how the relationship history has an impact on the outcome of a negotiation, where the relationship aspect plays the most important role.

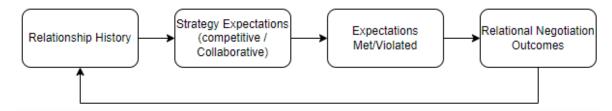


Figure 4: Model of the impact of relationship history on relational negotiation outcomes as mediated by strategy expectations. Adapted from (Thomas, Manrodt, & Eastman, 2015, p. 802)

The length of relations will be taken into consideration as the literature mentions that it can influence the effect of CMCv negotiations. Relationships between F2F contacts and CMCv contacts form differently, but there is no general disadvantage. The social information processing theory (SIPT) suggests that negotiators might require some more time to establish good relations in a CMCv negotiation, but can overtime establish relational communications to reach similar results as F2F negotiators (Walther, 1996, p. 10) Communicative behavior and cultural appreciation are important factors to make this theory work. It has even been argued that SIPT can create stronger social bonds than F2F as some will engage in a higher form of self-disclosure (Walther, 2015, p. 1).

### 2.2.3.2 Influence of national culture: culture influences believes and interpretations.

With the rise of globalization did also negotiations move from local negotiations to negotiations between organizations spread throughout the world. Dealing with suppliers from another country brings along not only different nationalities but also different cultures. The framework of Hofstede shows that culture impacts values and behaviors in organizations (G, 2001, p. 377). Culture values and norms influence then also the negotiation strategies that parties bring to the table, where due to the different cultures some strategies can clash with each other which results in misunderstandings (Brett J. M., 2000, p. 102). Cultures are closely linked with emotion and language, both verbal and nonverbal. One can be fluent in a foreign language but might not be able to properly understand culturally specific nonverbal cues. Additionally, cultures influence emotional processes, which will influence cross-cultural negotiations (Markus & Kitayama, 1991, p. 235)

Comfortable personal distance, comfort with physical touch, expectations on the negotiation place, and divisions between private and public are all part of space orientations, and all differ across cultures. As an example, Italians and Spaniards are more emotional negotiators and negotiation meetings are seen as an occasion for social contact (Benetti, Ogliastri, & Caputo, 2021, pp. 797-798). Scandinavian negotiators are more to the point and often uncomfortable with closeness. Physical contact will in some cultures symbolize trusting relationships and in other cultures viewed as inappropriate. There is also a difference between the east and west, where the west is often more direct and open to sharing information. Asian countries will often be more indirect, and it is more complex to gain important information from Asian negotiators (LeBaron, 2003, p. 3). Literature then also predicts that some cultures can be more comfortable with communication media that

eliminates nonverbal cues and brings more personal space, whereas other cultures will resent such type of communication (Kopelman & Olekalns, 1999, p. 375).

**2.2.3.3 Importance of trust: higher levels of trust facilitate better information sharing.** Culture then also influences how negotiators trust each other. For example, finish people do not trust words, Mexicans base trust on personal relationships, and Americans generally involve lawyers throughout the whole process (Metcalf, Bird, Peterson, Shankamahesh, & Lituchy, 2007, p. 149). Relationship building is a form of mindset and attitude that already start when two parties first meet and shake hands and is present throughout the whole collaboration between two organizations. Elements such as trust, information exchange, and the medium of communication all impact not only the negotiation of the contract itself but also negotiations that inevitably arise during the implementation of that contract. Trust is a key factor is most economic and social interactions where a form of uncertainty is present. Taking trust into account is then also important when dealing with risks, uncertainty, and private information. Trust negotiations enable both parties to gain enough relevant information, such as honesty and reliability to establish a level of trust. It is then also a critical factor that can determine between cooperation and competition negotiations. (Kong, Dirks, & Ferrin, 2014, p. 1241) Trust can establish due to the benevolence, ability, and integrity of the trustee, or due to the willingness of one party to rely on others (Mayer, Davis, & Schoorman, 1995, p. 712).

Multiple definitions of trust can be found throughout the literature. One defines trust as the willingness to be dependable on another party with the expectation that the other party will not take advantage of the trusting party (Josang, Ismail, & Boyd, 2007, p. 620). The use of term vulnerability is used by Rousseau and Mayer, who define trust as "the vulnerability based upon positive expectations of the intentions or behaviors of another" (Rousseau et al., 1998, p. 395) and "The willingness to be vulnerable to another party when that party cannot be controlled or monitored" (Mayer, Davis, & Schoorman, 1995, p. 712). Interorganizational trust can be defined by Zaheer et al. (1998) as "the extent of trust placed in the partner organization by the members of a focal organization, which are based on three components: reliability, predictability, and fairness. Inter-organizational trust has the same elements as inter-personal trust, with the only difference being an individual as both the referent and origin of trust (Zaheer, Bill, & Vincenzo, 1998, p. 143). Before the definition of Zaheer et al (1998) did Ganesan (1994) already state that an important aspect of this trust can be seen as a believe or an expectation about the opposite party that comes from the partner's intentions, expertise, and reliability (Ganesan, 1994, p. 3).

One can say that Ganesan identified three types of antecedents for trust in the form of intentions, expertise, and reliability. Communication, confidential information sharing, and mutual self-disclosure are other factors that are often found together with high levels of trust. Various antecedents of trust can be found in Table 1.

Trust is one of the most critical factors to consider for reaching successful negotiations (Kong, Dirks, & Ferrin, 2014, p. 1235). During F2F negotiations will a trust relationship evolves naturally as all parties are interacting with each other and get to know each other better through it. CMC negotiations oftentimes lack this type of trust medium during communication. Studies found that trust levels were lower in chat communications compared to F2F communications (Toorn, Wijst, & Damen, 2014, pp. 10-11; Naquin & Paulson, 2003, p. 113). F2F interactions thus make way for trust to develop quicker, primarily because the level of social information shared is higher than in CMC situations (Naquin & Paulson, 2003, p. 114) The difference between F2F and chat comes from the difference in social cues to which both parties have access. Especially the lack of nonverbal cues had a significant negative effect on the willingness to trust and a satisfactory agreement (Friedman & Currall, 2003, p. 1330). Also, the absence of smiles, nodding, handshakes, and the scarcity of personal questions influences the trust factor between negotiators (Bunz & Campbell, 2009, p. 14).

Aniecedeni Oj Trusi	Ашог			
Expertise	(Mayer, Davis, & Schoorman, 1995, p. 713; Cheron, Hallagatte			
	Takahashi, Hamaoka, & Oh, 2000, p. 3; Swan, Bowers, &			
	Richardson, 1999, p. 94; Kim, Ferrin, & Rao, 2008, p. 549)			
Confidential	(Cheron, Hallagatte, Takahashi, Hamaoka, & Oh, 2000, p. 3;			
information sharing	McCabe & Sambrook, 2014, p. 817)			
Mutual self-disclosure	(Nilsson & Mattes, 2015, p. 234; Cheron, Hallagatte, Takahashi,			
	Hamaoka, & Oh, 2000, p. 3)			
Similarity &	(Nilsson & Mattes, 2015, p. 234; Kim, Ferrin, & Rao, 2008;			
Likeability	Cheron, Hallagatte, Takahashi, Hamaoka, & Oh, 2000, p. 3)			
Integrity	(Mayer, Davis, & Schoorman, 1995, p. 714; Jarvenpaa, Knoll, &			
	Leidner, 1998, p. 38; McCabe & Sambrook, 2014, p. 817)			

Length of relationship	(Nilsson & Mattes, 2015, p. 234; Swan, Bowers, & Richardson,
	1999, p. 101; McCabe & Sambrook, 2014, p. 817)
Open communication	(Nilsson & Mattes, 2015, p. 234; McCabe & Sambrook, 2014, p.
	817)
Relational norm	(Nilsson & Mattes, 2015, p. 234)
Personality traits	(Nilsson & Mattes, 2015, p. 234; Jarvenpaa, Knoll, & Leidner,
	1998, p. 38; Cheron, Hallagatte, Takahashi, Hamaoka, & Oh,
	2000, p. 3)
Benevolence	(Nilsson & Mattes, 2015, p. 238; Mayer, Davis, & Schoorman,
(Receptivity, empath)	1995, p. 714; Jarvenpaa, Knoll, & Leidner, 1998, p. 38)
(Receptivity, empath) Attributes (Ethnicity,	1995, p. 714; Jarvenpaa, Knoll, & Leidner, 1998, p. 38) (Swan, Bowers, & Richardson, 1999, p. 99; Cheron, Hallagatte,
Attributes (Ethnicity,	(Swan, Bowers, & Richardson, 1999, p. 99; Cheron, Hallagatte,
Attributes (Ethnicity, gender, race)	(Swan, Bowers, & Richardson, 1999, p. 99; Cheron, Hallagatte, Takahashi, Hamaoka, & Oh, 2000, p. 3)
Attributes (Ethnicity, gender, race) Face-to-face	(Swan, Bowers, & Richardson, 1999, p. 99; Cheron, Hallagatte, Takahashi, Hamaoka, & Oh, 2000, p. 3)

# **2.2.4 Moral Wisdom: Understanding the perspective of the opposite party through empathy.**

### 2.2.4.1 Believes and values of the negotiator as a skillset for negotiation success.

Moral wisdom embodies a negotiator's behavioral patterns as it reveals a negotiator's ethics and values. Deceiving and lying to the opposite party is often viewed as unethical behavior. Unethical behavior often goes undetected, however, once unethical tactics are detected, it will harm future relations, trust, and win-win situations (Reitz, Wall, & Love, 1998, p. 14). (Kang & Schweitzer, 2022, p. 2). Opposite to this is good ethical behaviors positively affecting win-win opportunities (Smolinski & Xiong, 2020, p. 383).

Next to ethical behavior is also empathy an important aspect of moral wisdom. Empathy skills are important for negotiation effectiveness and are required to improve the social awareness skills of a negotiator (Toris, 1994, p. 5). Signals of empathy are especially important in the beginning phase of a negotiation process to establish a positive affiliation. Affiliation can be reached already with simple structural mutual connections (Kelly & Kaminskiene, 2016, p. 58).

Several definitions can be used for empathy. Empathy can be defined as a "capability that enables individuals to understand and feel the emotional states of others, resulting in compassionate behavior." (Riess, 2017, p. 78) There are four stages of the empathy process as identified by the emotional intelligence quadrant of Daniel Goleman. (Goleman, Boyatzis, & McKee, 2002).

- 1. The ability to accurately perceive and express one's own emotions (self-awareness).
- 2. The ability to regulate one's own emotions (self-management).
- 3. The ability to appraise and recognize others' emotions (social awareness).
- 4. The ability to use emotions to facilitate performance (relationship management)

One can even go further and distinguish between cognitive and emotional empathy. The first one refers to taking the perspective of the opposite party, and the last one refers to an emotional response to the emotions of the opposite party (Davis, 1983, p. 113). Having empathy in a negotiation is throughout literature not always seen as a positive skill. Studies found that highly empathic people often tend to put the needs of the other party above their own and get involved in the emotions of the counterparty (Galinsky, Maddux, Gilin, & White, 2008, p. 378). However, empathy can also be used as a tool. Recognizing own emotions and understanding how emotions transit through negotiations are tactical assets that can help reach a more successful outcome (Sharma, Agarwal, Agarwal, & Gupta, 2017, p. 1). Understanding the perspective of the counterparty often broadens the perspective and gives way to creative integrative negotiation solutions (Trötschel, Hüffmeier, Loscheider, Schwartz, & Gollwitzer, 2011, p. 771).

Being empathic, and the feeling of another person giving empathy is then also a subjective factor. The conceptual framework of empathy in CMC states that the feeling of empathy results from socioemotional cues. These socioemotional cues, both verbal and nonverbal, stimulate affective resonance, perspective-taking, and emotion regulation in the observer. However, the framework proposes that a communication medium has a filtering effect, through the medium richness, the immediacy of feedback, transmission quality, and content of communication (Grondin, Lomanowska, & Jackson, 2019, p. 6).

Affective resonance is created through visual, auditory, and other visible cues and creates an automatic emotional reacting in the observer. Visual factors such as facial expressions, signs of pain or distress, and social interactions are representations of affective resonance. Furthermore, can affective resonance be observed when parties start to reflect the tone of voice, body movements, and facial expressions. This emotional mimicry has a positive effect

on attitudes and cooperation intentions (Hess & Fischer, 2013, p. 155). Perspective-taking requires more context information about the opposite party as well as known information regarding the opposite party their emotional state. This part is more verbal, as it requires background knowledge of how somebody feels. Studies then also show that communicating one's feelings will stimulate empathy in the opposite party (Decety & Jackson, 2004, p. 77). Emotional regulation is the capacity of oneself to monitor and control the empathy provider's emotional state. Not controlling one's own emotions can result in an unintended negative signal to the opposite party (Powell, 2018, p. 609).

Nonverbal communication holds an influence on the empathy felt, where facial expressions and body gestures have been found to have a positive effect on empathy (Dimberg, Andreasson, & Thunberg, 2011, p. 30). Next to nonverbal communication has also the effect of verbal communication has been studied throughout the literature. The impact on empathy resulting from the difference between phone conversations and F2F communication has already been studied. Empathic statements were found to be very low during phone calls. Also, it was found that open-ended questions, compliments, and jokes were found to be lower during CMC compared to F2F (Wakefield, et al., 2008, p. 285).

### 2.3 Feeling the presence of another person is influenced through CMCv.

Two main theories have emerged regarding the influence CMC has on individuals, these are the social presence theory and the media richness theory. Social presence was first mentioned in 1976 by Short et al to understand the exchange that happened on different media platforms (Short, Williams, & Christie, 1976). Short et al (1976) saw social presence as a quality of the medium itself, with intimacy and immediacy as the core competences. Here it was already found that CMC will influence nonverbal cues. Over the years, social presence has been difficult to define as many research papers created their own definition (Chen, Fang, & Lockee, 2015, p. 1800). A more recent definition is from Kehrwald (2008) where it is mentioned that social presence is the ability of an individual to show the availability of interpersonal relationships in a virtual environment (Kehrwald, 2008, p. 94). Biocca (1997) writes that social presence theory explores how social presence is influenced by CMC, where social presence is defined as having a sense of being with another individual (Biocca, 1997, p. 22).

Social presence has received academic focus as it has been found that it holds an important place in virtual environments with social actors (Oh, Bailenson, & Welch, 2018, p. 3). Various degrees of social presence exist, depending on the communication medium and context arrangements. The degree of how much an individual can have a feeling of the intelligence, sensory impressions, and intentions of others are associated with the levels of social presence (Biocca, 1997, p. 22). When access to visual and audio cues decrease will the social presence drop and a larger psychological distance will be created between the negotiators, few reasons for this are (Geiger, 2020, p. 217):

- Lower social context increased depersonalization.
- Lower tangibility of the other person.
- Lower personal connection.
- Lower feeling of cooperation ideas.
- Lower social influence due to lower communication immediacy.
- Lower emotional connection.

From these aspects of the social presence theory can it be said that CMC is fitting for negotiations as CMC negotiations lead to a lower success rate compared to F2F as in CMC important social psychological functions from F2F are decreased (Geiger, 2020, p. 217). Adding to this the social presence theory predicts that emotions and the feeling of another person, during CMC, are lower compared to F2F meetings (Oh, Bailenson, & Welch, 2018, p. 2; Cortese & Seo, 2012, p. 44).

With this point of view will CMC have a lower social presence compared to F2F communications, as CMC lacks "bandwidth of various communication channels (in the words of media richness theory)" (Geiger, 2020, p. 217). Close to the social presence theory lies the media richness theory, also referred to as the information richness theory. These two theories have different starting points, but, when concerning negotiations, have very similar outcomes (Geiger, 2020, p. 217). Information richness is defined as how information can be exchanged within a certain time interval (Daft & Lengel, 1986, p. 560). In this definition, communication transactions are considered rich when ambiguous issues can be exchanged understandingly directly. Media richness theory is built up on a framework with axed that measure the level of uncertainty and the level of equivocality. A rich medium will be able to give feedback rapidly, can establish a good personal focus, and can handle multiple information sources at once (Lengel & Daft, 1988, p. 226).

A framework has been created in Figure 5. Media of high richness contains immediate feedback, has both audio and visual cues, and contains verbal language as well as body language and tone of voice. Whereas pure computer mediated information sharing has a low media richness.

Information richness	Medium	Feedback	Channel	Source	Language
High	Face to face	Immediate	Visual, Audio	Personal	Body, Natural
1	Teleophone	Fast	Audio	Personal	Natural
	Written, personal	Slow	Limited visual	Personal	Natural
↓ ↓	Written, formal	Very slow	Limited visual	Impersonal	Natural
Low	Numeric, formal	very slow	Limited visual	Impersonal	Numeric

Figure 5: Information richness adapted from (Daft & Lengel, 1986, p. 560).

Media that are low in media richness also have lower levels of social presence, which makes it less optimal for intensive negotiations. However, they can be used to share concrete information (Rice & Shook, 1990, p. 195).

### **2.4 Creating propositions based on the social presence theory.**

# **2.4.1** Social presence theory predicts that CMC negotiations influence the negotiation competences.

The negotiation competency model from above then also shows the factors that can influence a negotiation. Repeating factors through all dimensions are verbal and nonverbal ques. Both the social presence theory and the media richness theory can be used to create a proposition on the effect of these factors on the difference between F2F and synchronous video conferences during buyer-supplier negotiations. The top layer of this pyramid contains language & emotionality, which contains emotion, quality of expression, and active listening (Smolinski & Xiong, 2020). It can be said that all three factors here are based on visual and non-verbal aspects of negotiations. Media richness states that body language will be visible with F2F communication (Daft & Lengel, 1986, p. 560). Social presence theory predicts that emotions are felt more when negotiators have a sense that they are dealing with people (Oh, Bailenson, & Welch, 2018, p. 2). A person will not be able to see the opposite party as well as when they would be during an in-person meeting. For that reason, will the following propositions be formulated as:

P1: Emotional competences will be lower during CMCv negotiations compared to F2F negotiations.

P2: Verbal language competences will be lower during CMCv negotiations compared to F2F negotiations.

*P3: Non-Verbal language competences will be lower during CMCv negotiations compared to F2F negotiations.* 

Moving on to the second layer of the negotiation competency model is negotiation intelligence. Distinguishing between distributive negotiation and integrative negotiation strategies comes from a large part of the questions asked and information shared. Theory predicts that small talk and (personal) questions asked will be lower in digital environments (Thompson-hayes, Gibson, Towers Scott, & Webb, 2009, p. 211). This would have a direct influence on negotiation strategies as integrative negotiations will be less effective (Nadler, 2004, p. 231; Swaab, Lount Jr, Chung, & Brett, 2021, p. 167). A lower level of social presence can make parties feel less guilty in value-claiming situations. The fourth and fifth propositions will then also be as below:

P4: Virtual synchronous CMC negotiations will negatively affect integrative negotiations.
P5: Virtual synchronous CMC negotiations will positively influence distributive negotiations.

Relationship building is the third dimension of the negotiation competency model. Cultures might be comfortable with the feeling of social presence and can prefer less distance in personal space, whereas other cultures have their values in knowing the opposing parties in real life (Kopelman & Olekalns, 1999, p. 375). Understanding different cultures in a negotiation setting is often done through non-verbal cues and information sharing (Markus & Kitayama, 1991, p. 235). Cultures will consequently also influence trust (Metcalf, Bird, Peterson, Shankamahesh, & Lituchy, 2007, p. 149). Many antecedents of trust are based on the perception one negotiator has of the other negotiator. Trust is expected to be lower in CMCv negotiations (Toorn, Wijst, & Damen, 2014, pp. 10-11). As F2F negotiations are expected to have higher media richness with high personal communication will propositions six and seven be stated as follows:

P6: Cultural differences negatively influence the success of CMCv negotiations.P7: Trust will be negatively impacted by CMCv negotiations compared to F2F negotiations.

Long-term relations will positively influence levels of trust between two parties (Molm, Whitham, & Melamed, 2012). It is stated through the social information processing theory that CMCt negotiators need more time to establish a relational connection but can over time reach similar outcomes as F2F (Walther, 1996, p. 10). During longer periods of interaction can personal bonds then also be formed through CMC. The need for social cues might then also be less important over time, where time thus plays a moderating effect (Walther, 1996, p. 10). For that reason, the propositions regarding the length of the relation will be stated as:

P8: The length of the relationship will influence the need for social presence.P9: There is less need for social presence during future negotiations if negotiators have met F2F in the past.

The fourth, and final, dimension of the negotiation competency model is moral wisdom. Empathy is closely linked with emotions, where both verbal and non-verbal cues will be filtered when going through a media platform (Grondin, Lomanowska, & Jackson, 2019, p. 6). Social presence theory and media richness both state that one gets a feeling of talking with another person through both audio and visual means (Dimberg, Andreasson, & Thunberg, 2011, p. 30). For empathy is has been stated that the sense of another person will stimulate empathic remarks and cues (Wakefield, et al., 2008, p. 285). Based on this, the final proposition has been stated:

P10: Perception of empathy will be lower during CMCv negotiations compared to F2F negotiations.

Figure 6 was created based on the stated propositions. In this model are social cues the basis for all negotiation competencies. These will be negatively impacted by video conferences, and positively impacted by the length of a relationship. Included in this model is the control variable "met in person", as well as the control variable "length of the relationship." Social presence is included as it was expected that the social presence aspect of a CMCv negotiation holds the most influence on the negotiation competence model. Underlaying factors of the

negotiation competence model are included, as it is expected that these are influenced the most by the change in social presence.

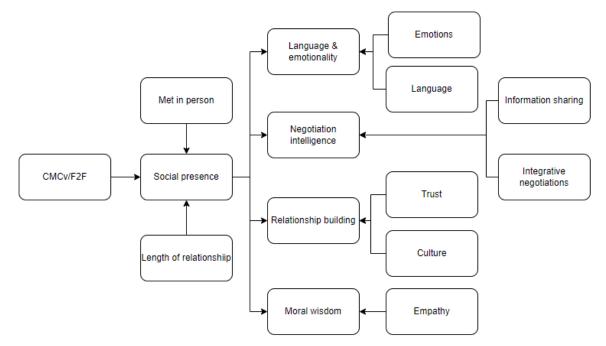


Figure 6: Communication means influence on negotiation competencies. Composed from literature.

# **3.** Methodology: Interviews will give in-depth insight into how an individual purchaser perceives a relationship.

### **3.1 Interviewing 12 purchasing professionals active in different industries.** *Research design*

# Research methods are a strategic path chosen that is related to the expected outcome but based on the type of research problem (Noor, 2008, p. 1602). For this research, both quantitative and qualitative research approaches have been considered. Questionnaires are one of the most common tools chosen for social sciences as they can offer a general data base based on statistical confidence if the sample size has been sufficient (Young, 2016, p. 165). By distributing questionnaires can many different people be reached, and data can be easily analyzed. However, response rates to questionnaires are often lower than 20% (Deutskens, 2004, p. 33), and online distribution can often lead to inaccurate and dishonest data collection (Wardropper, Dayer, Goebel, & Martin, 2021, p. 1656). As a minimum of 100 samples are required was it expected not reachable for this study, and thus were questionnaires not chosen as the main source of data collection? Another option that was considered for this study was observing various negotiations, both online and offline. Observing can behaviors to verbal and non-verbal communications be analyzed. However,

the goal of this research is to understand the effect of verbal and non-verbal communication, not verbal and non-verbal communication in themselves.

Another approach that was considered was one-on-one interviews with purchasing and sales professionals. Interviews can be conducted either in an unstructured, semistructured, or structured form. As this research is aiming at gaining more information regarding a specific item of negotiations will unstructured interviews most likely not reach the in-depth information needed relating to the research question. On the other side, having the interview semi-structured will topics be brought to the awareness of the participant, which will make the participant able to elaborate on topics important to the research question. Also, by interviewing it is possible to gain data on past experiences and for participants possible to compare different experiences. For that reason, semi-structured interviews were conducted.

### Sampling

Participants for interviews were employees in both public and private organizations and were active in either the purchasing or the sales department and were involved with a buyer-supplier relationship. All participants were required to have experienced both F2F and virtual online CMC negotiations at least 1 time. It was aimed to interview participants from various cultures, countries, ages, gender, and industries, as can be seen in Table 2. Interviews were conducted in either Dutch for Dutch negotiators, or in English for participants who were not able to speak Dutch properly. Dutch interview questions and respondent answers were translated into English and later checked by a third party to make sure that the translation is correct. Participants were asked for consent to record the interview to make transcribing more efficient.

Participant information								
Reference Number	Organization type	Product buyer	Project buyer	M/F	Nationality			
R1	Chemistry industry - Manufacturing	х		М	Dutch			
R2	Chemistry industry - Manufacturing	х		М	Dutch			
R3	Chemistry industry - Manufacturing		х	М	Dutch			
R4	Chemistry industry - Trading	х		F	Mexican			
R5	Chemistry industry - Trading	х		F	Mexican			
R6	Chemistry industry - Trading	х		М	Dutch			
R7	Public organization		х	F	Dutch			
R8	Textile industry	х		F	Dutch			
R9	Textile industry	х		М	Dutch			
R10	Food industry	x		М	Dutch			

Table 2: Interview participants.

### Interview protocol design

Interview questions were formulated and structured based on the structure of the negotiation competence model. Questions were sectioned into five parts: language & emotion, negotiation intelligence, relationship building, moral wisdom, and length of the relationship, and can be found in Appendix A. Language and Emotion capacities were measured by asking questions regarding the understandability of the opposite party, the active listening skills of the negotiator and the influence of body language on negotiations. Negotiation intelligence measures the capability of negotiators to adapt their strategy between integrative and distributive negotiations. The goal of the interview questions was to find if negotiators used different tactics, bargaining skills, and information-sharing tactics in CMCv environments. Relationship building related questions are formulated on identifying personal connections between negotiation partiers. Interview questions aimed to gather data on cultural aspects and trust factors as well as on how negotiators tried to make a personal connection with the opposite party during CMCv negotiations. Questions regarding the length of the relationship between buyer-supplier were asked to find potential mediating factors that could influence the need for social presence. Perceptions of one's emphatical capacity as the negotiator were questioned for measuring one's moral wisdom competence. Questions asked in the interview aimed to shine a light on the emphatical feeling a negotiator had during CMCv negotiations.

### Analyses

The interviews were transcribed with the help of automated transcribing programs that automatically converts audio to text. All text was checked manually to correct potential mistakes made by the program. Afterward, the transcripts were then coded with Atlas.ti. A mix of both inductive coding and deductive coding has been used. Deductive coding was applied to the data that could be linked directly to the literature discussed in the previous chapters, mainly regarding topics such as emotions. First, the data were analyzed to look for themes or categories. Afterward, codes were merged to reduce the total amount of codes used. For example, eye movement and hand gestures both fall under the theme of body language. Codes used during the transcribing of the interviews are shown in Figure 7.

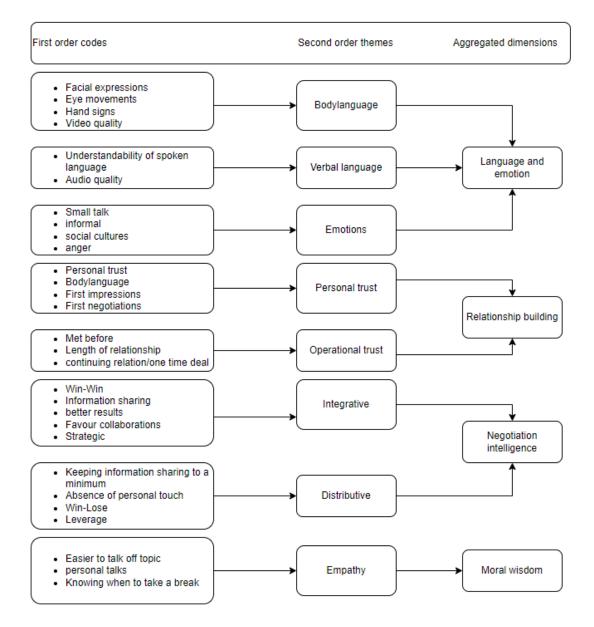


Figure 7: Codes used in Atlas.ti

# 4. Results: CMCv is seen as a blockade of perceiving and understanding body language between two parties.

# 4.1 Overall results: A clear difference between CMCv and F2F negotiations.

This study examined the influence of CMCv platforms on the negotiation competence of negotiators, concerning emotional/language capacity, negotiation intelligence, relationship building, and moral wisdom. The question of whether the distance between the two parties and those differences concerning social presence was addressed. This question was examined by interviewing 10 purchasing professionals to elaborate on their experience regarding CMCv and F2F negotiations, following the order of the negotiation model.

Results are created by using the codes in the program Atlas.ti where a Co-occurrence table, Table 3, and a flow chart, Figure 8, have been created. Figure 10 shows the number of interviewees who mentioned a specific code together with CMv/F2F. For example, the Absence of personal touch was mentioned in relation to CMCv by 7 out of the 10 interview participants. 0 out of the 10 mentioned absence of personal touch with relation to F2F, length of the relationship, or met in person. Figure 8 shows that there is a small overlap between CMCv and F2F negotiations, but only on emotions. All other factors/codes are spread very clearly and linked to only one of the two options. A clear divide can be made in the factors linked to CMCv and can be marked as more distant. Whereas the factors often linked to F2F negotiations are regarding trust, relationships, and openness, where the length of the relationship is closely linked to trust. Relationship building is most often linked to preferring F2F negotiations, whereas a quick formal meeting will oftentimes be done via CMCv. In the upcoming sub-chapters, a more detailed overview of the results will be discussed.

Codes	CMCv	F2F	Length of relationship	Met in person
Absence of personal touch	7			
Asocial cultures	2			
Audio Quality		3		
Preparations		4		
Results		9		
Camera position	6			
Cultures		7		
Language Difficulty				
High Distance	10			
Distracted	2	8		

Easy to talk		10		
Emotions	2	6		
Empathy	3			
Body language		10		
Favor collaborations		7	10	8
First impressions		8		
First negotiations		8		
Good relationships		7	10	7
No preference			4	6
Informal		10		8
Information Sharing		7	2	
Impersonal	9			
Personal connection	3			
Small Talk	2	10		
Operational Trust		4	9	4
Personal Trust		10		8
Quick formal meeting	8			
Relationship building		10		
Strategic		9		
Win-Win		7		

Table 3: Co-occurrence table

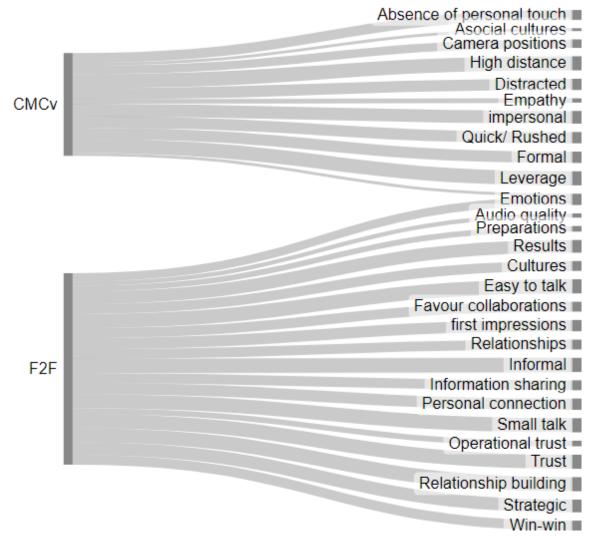


Figure 8: Flow chart F2F CMCv

# **4.2 Language and Emotion: perceived distance reduces the transmission of emotions.**

It was expected that emotional competencies are lower in CMCv negotiations when compared to F2F environments. Results are in line with this prediction as practitioners mentioned that emotions are more easily hidden when negotiating in a CMCv environment. Transmitting emotions where more difficult, as also the personal feeling between the two parties is lower in CMCv negotiations During F2F negotiations were practitioners able to feel the positive or negative emotions from the opposite party, were in F2F also more heated negotiations were experienced. CMCv made it difficult for practitioners to bring emotion across, as well as understand the emotion of the opposite party. Body language was deemed highly important to understand the other party better. Participants felt that once they could see the other person's body language they could find out if the other person's emotions and based on that, trustworthy or not. 6 out of 10 participants mentioned that they like to monitor the body language of the opposite party. If one person from the opposite party was talking, another person from the opposite party will react to what their partner is telling. Based on these reactions, purchasers can see whether the opposite party is being comfortable with what they are stating, or not.

During CMCv negotiations, camera positions were seen to be important aspects in the understanding of emotions and body language. This aspect was mentioned 9 times in combination with CMCv negotiations. If a camera was positioned on every individual, facial expressions were well visible, but perceived as positioned very close so somebody's face. On the other hand, when one camera was installed for a whole boardroom, only the two people up front were visible. The people in the back were oftentimes not visible, and body language could then also not be interpreted properly. Having a badly positioned camera was then also perceived as less favorable, where body language visibility is influenced by quality and position.

A screen between two parties was perceived by all interviewees as a blockade for emotions. However, this blockade could be exploited positively as well. R8 mentioned that she prefers to do negotiations online if she is having a bad day. During a bad day, she believes that she is better at masking her emotions in an online environment. In addition to that, she also mentions that it is easier to stay calm during an online negotiation when the other party starts to get frustrated. Executing difficult negotiations online is preferred by some and avoided by others. 7/10 participants mentioned that they prefer to do difficult negotiations in a CMCv manner as they are less in touch with their counterparts. By being less in touch with the emotions of the other party the purchasers feel that they can make harder demands. For these reasons, P1 can be accepted.

Oral communications were expected to be negatively influenced by CMCv as issues such as lack of linguistic knowledge or external factors such as poor internet connection influence the effectiveness of CMCv negotiations. Findings also show that negotiators believe that in all cases the opposite party was able to express their words verbally in a good manner. It was mentioned here that during the negotiation all international parties were able to make sufficient use of the English language. Only participant R11 mentioned that he experienced a CMCv meeting with a counterparty in China, where the counterparty required a translator. Having a translator in a CMCv meeting felt as if there was even more distance in a negotiation. Based on this no difficulties were perceived regarding verbal language skills and understandability of the opposite party. All participants mentioned that microphones were sufficient to transfer audio correctly and that the quality of the audio does not bother them during the negotiation process. Verbal language skills are influenced by the skills one has in speaking a specific language. Practitioners did not experience any issues regarding communicating verbal language. Having communications in a language both parties are understanding very well will not be influenced by CMCv, and with this P2 cannot yet be supported.

Non-verbal language competencies were found to play a crucial role throughout the negotiation process. Being able to read and transfer non-verbal language was perceived to be highly important during the negotiation. A lack of access to body language was seen to be hindering negotiation processes, and then also unfavorable through highly demanding processes. Due to the positioning of camera angles, and limited personal contact was it oftentimes mentioned that body language was reduced during CMCv negotiations. Based on this, it is possible to accept P3, as there is a difference in non-verbal language competencies in CMCv compared to F2F.

Figure 9 shows which factors from CMCv influence language and emotional capabilities. In this figure, the arrows indicate the perceived influences factors have on language and emotional capabilities. A difference in perceived distance and social cues results from CMCv, which will influence emotional and body language capabilities.

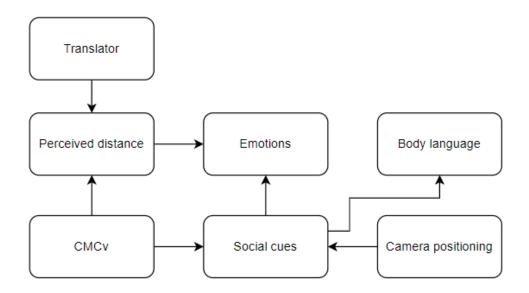


Figure 9: Factors in language and emotional capabilities

### 4.2 Negotiation intelligence: CMCv can be used as a negotiation tactic.

It was expected that CMCv negotiations negatively affect integrative negotiations (P4) and positively affect distributive negotiations (P5). All respondents believed that it is important to establish a good partnership with their supplier, and thus all participated in a form of win-win negotiations. For that reason, true win-lose situations were not measurable in this research. Participant R3 even stated that true win-lose situations are unfavorable, as they experienced a bad buyer-supplier relation resulting from such a negotiation. Thus, all purchasers focused on some sort of mutual benefit. However, different types of CMC platforms were preferred depending on the power situation a buyer was in. All mentioned their power position as a main source of a need for F2F contact. All participants preferred to have F2F contact when they felt as if they were in a lesser position. In this case, they felt as if they had a large interest in the matter at hand, and they needed to get some favor from the opposite party. If the purchaser felt as if they were in a higher position, they preferred to keep the other party "as far away as possible" (R11). Participants preferred CMCv negotiations over a F2F negotiation if they were in a power position over the opposite party. Negotiators prefer F2F communication if they put their supplier in a strategic category.

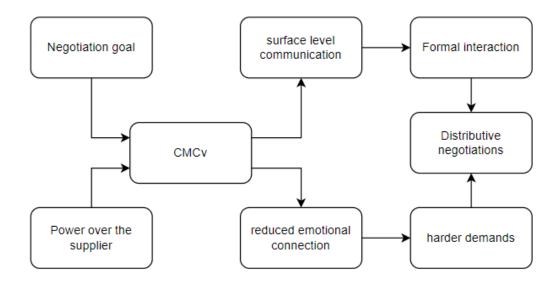
Purely win-lose situations were not executed by any of the participants. However, negotiations are often not just win-lose or win-win. Due to a screen between two parties, some purchasers feel as if they were able to make harder demands. 4 out of 10 felt less guilty about making demands if they were not in the same room as the opposite party.

Participants had a feeling they could find mutual ground for collaboration in both F2F and CMCv negotiations, albeit finding it faster through F2F negotiations. 5/10 mentioned that it was more difficult to get more sensitive information from the opposite party through a CMCv negotiation. CMCv negotiations are oftentimes mentioned as being more formal, where people tend to stick to the more surface levels of communication. CMCv negotiations were also found to be more to the topic, with little to no subconversations and room for out-of-the-box thinking. Only the topic at hand is discussed between the two parties. Finding common ground outside of the topic at hand was oftentimes only discussed during F2F negotiations. F2F negotiations give more time for a negotiation to last, where there is room for these off-topic opportunities.

During the interviews, 7/10 mentioned that the most important information is shared in between meetings, at the coffee machine during small talk. Small talk was seen as a crucial part of long-term contract negotiations. During an informal break-time, people tend to share more information in a less guarded manner. This means that it is easier to extract important information from the opposite party. Small talk moments were then also missed during CMCv negotiations. In these CMCv negotiations, settings were generally stiffer and more guarded.

Stage settings were oftentimes missed in CMCv negotiations. Practitioners mentioned that during CMCv negotiations they would quickly talk about general items such as the weather, but after that quickly dive deeper into the matter at hand. During F2F negotiations, people felt as if they were more able to talk about personal aspects before starting the meeting. However, even when all participants were missing a form of human connection during CMCv, they did not feel as if they could not understand the opposite party. No differences between CMCv and F2F negotiations in understanding the opposite party were found. Results show that especially stage setting and small talks were missed during CMCv negotiations. Here, practitioners felt that they were missing important information and important points to reach a deal close to their initial goals, due to the lack of stage setting and small talks. Especially in win-win situations where emotional connections are vital, where practitioners felt that they were lacking this connection in CMCv negotiations.

In line with the expectations, the findings show that negotiators make strategic use of the effects of CMCv for negotiation strategies. Especially informal moments are found to be important in integrative negotiations, and with this, this shows that the formal/informal difference is an important factor to consider while deciding on CMCv or F2F negotiations, and with that P4 and P5 are supported.



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Figure 10 shows how CMCv holds more possibilities for distributive negotiations where personal connection and intensive communication is not of high importance. Furthermore, the figure shows that both the power a buyer holds over a supplier and the negotiation goal influences the decision for CMCv negotiations. Arrows in the figure indicate the influence factors have on negotiation intelligence.

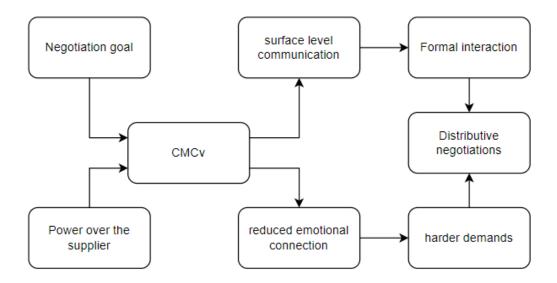


Figure 10: Factors in negotiation intelligence

#### **4.3 Relationship building: small talk is vital for information exchange.**

These small talks and stage-setting moments were also mentioned to be important as a basis for relationship building. 7/10 participants mentioned that they prefer to talk on a more personal basis with their counterparts before, during breaks, and after the negotiation to get to know the person better. This helped with creating an individual connection by getting more familiar with the opposite party. R5 mentioned that sharing personal stories with partners to find similar personal interests helped during negotiation procedures as she has noticed that the opposite party will open up more if they are having a personal connection.

Public organizations scored differently on the relationship building aspect compared to private organizations. Public organizations preferred to not participate much in relationship building beyond necessities. R7 mentioned that she prefers to keep contact with suppliers to a minimum and over platforms and CMCv communications. This to avoid any type of preferred treatment and lower the levels of potential bribes. Meeting the opposite party in real life was initially seen as important for new deals and a startup of a new collaboration. Over time, more factors come to play, such as the length of the relationship. Length of the relationship was seen to make it easier to have negotiations done via CMCv. The need for F2F negotiations was reduced once people knew how the opposite party acts, talks, and behaves.

Also, a difference was mentioned between relations that were made pre-CMCv area and connections made during covid times. Some purchasers preferred to make sure that they have seen the opposite party in person. Others noticed that there is a difference between relations that were formed in person and a CMCv environment. R7 and R8 stated that in public procurement, CMCv negotiations were already happening before Covid times. They noticed that a different relationship forms between negotiations done purely CMCv and purely by F2F. It was even stated that it was perceived as weird when a contact spoken in a purely CMCv environment was suddenly switched to a F2F environment. R7 stated that she gets used to the platform in which she talks to the opposite party. If the platform switches, she must get used to how the person acts. R7 prefers to keep negotiating with people online if they have only spoken to them online. And keep negotiating with people F2F if they have met F2F. 8/10 mentioned that there is a higher trust when they have seen the opposite party in person. R4 stated that business negotiations are a matter of trust, and this trust can only be formed through F2F contact.

R4 mentioned that trust is a basis of collaboration, and that trust is only built when they have seen the other party in person. R11 mentioned that he can do business with Germans by just talking to them CMCv, but that he only wants to do business with Asian organizations if he visits them a few times a year. R11 stated that he does not understand the Asian culture and cannot feel if they are trustworthy on a CMCv meeting. R6 mentioned that he often does business with European countries, and rarely visits them. Keeping European business at an arm-length is seen to be sufficient for R6 if the organization only holds a small value. If the organization holds large value, it is interesting to visit them once every two years. R6 believes that it is sufficient to only visit Europeans when disputes arise, but that visits to European suppliers are not needed regularly. On the other hand, R6 mentions that it is of high importance to visit Asian cultures more often to build trust and get a collaboration going.

Cultural differences were expected to negatively influence the success of CMCv negotiations (P6). Findings show that practitioners were more comfortable with CMCv negotiations when they were communicating with an opposite party with similar cultural values. Practitioners preferred to talk with the opposite party in person when cultural values were different. Arguments for this were that they did not trust the opposite party if they did not see the opposite party. This as social cues and beliefs are different from their own beliefs, which made it harder for practitioners to pick up on possible issues and conflicts during CMCv negotiations. Practitioners mentioned that F2F negotiations are easier when cultural differences are big. For this reason, it can be said that P6 can be supported.

R5 mentioned that it is preferred to keep in regular contact with Latin Americanbased companies to exchange not only business but also personal information. Building good relations with Latin American-based organizations seemed to be important to establish good collaborations. Here, it was preferred to visit the supplier a few times a year to have inperson contact. R9 and R10 mentioned that they do not often visit their suppliers that are far away. They felt that this makes the relationship more difficult as there is less understanding between both parties. As R9 and R10 were only in F2F contact with local suppliers and were more willing to work with local suppliers only. It was mentioned that they have higher trust towards these local partners as they have seen their operations and know the individual on a deeper personal level and had more space for personal bonding activities. R9 and R10 also have contacts in other countries, but they have never met these contacts in person, negotiations will go by CMCv or even CMCt. Trust here is perceived solely on the products that the supplier delivers. R9 and R10 do not believe that they have good relations with the parties that they have not discussed with F2F, as these parties will more often supply wrong quality products compared to the parties where negotiations have been executed F2F. It was proposed that the use of CMCv negotiations will have lower levels of trust compared to F2F negotiations (P7). In line with the expectations was trust viewed as an important factor during both CMCv and F2F negotiations. Therefore, it can be said that levels of trust are lower in CMCv negotiations due to the lack of interpersonal trust. With this, P7 can be supported.

Figure 11 shows that CMCv influences both the amount of small talk as well as stage setting activities. Arrows in Figure 11 direct the factors that influence relationship building capacities. These in turn will influence the effect of levels of trust during a negotiation. Negotiations that are built on trust will positively influence relationship building. Cultural aspects and the type of organization influence the need for a personal connection. Results found that private organizations value personal connections more than public organizations. These personal connections will in turn influence relationship building capacities.

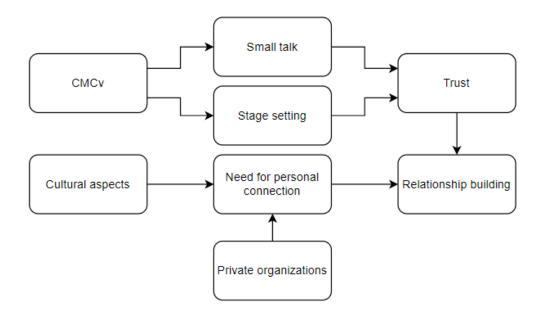


Figure 11: Factors for relationship building.

# 4.4 Length of the relationship: Dynamic connections between trust and knowing the opposite party influences the functionality of CMCv negotiations.

It was predicted that social presence will be influenced by the length of the relationship (P8), and that meeting in person at least once will aid in the success of CMCv negotiations in the future (P9). The length of the relationship greatly influenced the trust between the negotiating parties. Parties who have been in a buyer-supplier relationship for a longer period would trust the competencies of the opposite party more. For that reason, they had a lower need for social cues from the negotiation opponent. Adding to that, previous in-person meetings also play a part in the success of CMCv meetings. Once opposite parties have met in person where the initial impressions have been made and personal connections are formed. Afterward, a lower requirement for social presence was found.

Trust is a factor that was mentioned multiple times in all interviews. First negotiations give first impressions, however trust levels during a relationship change based on the relationship's performance. 9/10 mentioned that they went differently into a negotiation with a long-term partner compared to a new or short-term partner. Long-term partners had operational trust built throughout the relationship. As buyers have more intensive contact with these long-term partners will also personal trust be created. There was then also displayed a lower need to meet long-term partners F2F regularly.

A need for F2F contact was then also mainly when new collaborations were set up. New collaborations begin with low trust, and therefore purchasers preferred to be able to have more connections with the body language and emotions of their counterparty. When relations were more established the need for body language and the feeling of emotions reduced. It was mentioned that once purchasers are familiar with the body language and emotions of their opposite party CMCv negotiations were often sufficient. The reason for this is that purchasers knew how their counterparty would react, and therefore could interpret limited social cues in CMCv interactions more easily.

All practitioners working in a private organization preferred to have seen their counterparty at least once during their relationship. Practitioners in public organizations had a slightly lower preference for meeting the opposite party at least once. It was mentioned that there is a perceived difference in relationships between buyer-supplier relations that have met in person compared to negotiations that have been occurring CMCv only. All believed that it might be possible to get to a similar level, but no one had personal experience with it. Relations that formed out of F2F negotiations were favored and seen as more personal compared to relations that were formed out of purely CMCv negotiations.

For these reasons, P8 and P9 can be accepted. Figure 12 shows that CMCv mainly influences the trust between individuals, whereas the length of a relationship influences the collaboration between two organizations. Arrows here indicate the influences factors have on each other. Trust in the performance capabilities of the opposite party where present when long-term relations are established. The success of CMCv was increased if the trust in the performance of the opposite party was present. Also, interpersonal trust has been established if both parties have met in person before a CMCv negotiation.

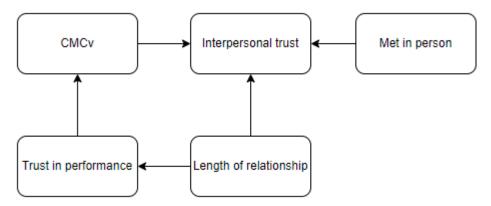


Figure 12: Factors in the length of relationship

# **4.5 Moral wisdom: perceived integrity and personal connection are influenced by CMCv negotiations.**

Empathy was expected to be lower during CMCv negotiations compared to F2F negotiations (P10). Empathy was measured as how well negotiators were able to perceive and understand the opposite party. Being able to stand in the opposite party their shoes is vital for understanding the other ground and being able to reach a mutually beneficial agreement. Opposed to the expectations were feelings of empathy not significantly influenced by CMCv negotiations. Communication of feelings was perceived to be more important than social cues. For all participants, it was sufficient when the opposite party mentioned feelings of distress or communicated reasoning of their own. All participants understood that the opposite party had their interests in the matter and believed that these interests should be valued as such.

Participants mentioned that they believe that they are empathic throughout the negotiation, regardless of the differences between CMCv and F2F. All mentioned that they did not have any issues regarding positioning themselves in the shoes of the opposite party. This is mainly regarding taking the perspective of the opposite party and understanding why they are bringing up certain arguments. Emotions on the other hand are oftentimes mentioned as being more difficult to bring across. CMCv negotiations are seen to be more formal, where less personal information is shared. F2F negotiations were seen to be containing more emotions, whereas in CMCv negotiations people could regulate their emotional state better. 4/10 participants felt that it was easier to mask their own emotions easier due to the distance between the two parties in CMCv negotiations. This made it easier for the participant to deal with stressful or difficult situations.

Responding to the emotion of the opposite party seemed to be easier as the distance reduced the emotional impact. However, the lack of small talk during breaks made it harder to smooth over emotions that were shown during negotiations. Also, it was mentioned that during CMCv negotiations, fewer jokes and friendly comments were made. CMCv negotiations were not preferred if a conflict was the reason for negotiating. Depending on the nature of the conflict 7/10 favor executing a F2F negotiation if disputes had occurred, as it was believed that it is easier to settle disputes F2F. Being in the same room as the opposite party made it easier to read the body language of the opposite party, as well as bring across the emotion felt by the purchaser. For these reasons, this research did not find any evidence that can support P10.

# 4.6 Eight out of ten propositions can be accepted and based on these, the online negotiation effect model can be created.

Not enough evidence was present to accept P3 and P10. An overview of all the propositions can be found in Table 4.

Proposition	Accepted	Rejected
P1: Emotional competences will be lower during CMCv negotiations compared to F2F negotiations.	X	
P2: Verbal language competences will be lower during CMCv negotiations compared to F2F negotiations.		Х
P3: Non-Verbal language competences will be lower during CMCv negotiations compared to F2F negotiations.	Х	
<i>P4: Virtual synchronous CMC negotiations will negatively affect integrative negotiations.</i>	Х	
<i>P5: Virtual synchronous CMC negotiations will positively influence distributive negotiations.</i>	Х	
<i>P6: Cultural differences negatively influence the success of CMCv negotiations.</i>	Х	
P7: Trust will be negatively impacted by CMCv negotiations compared to F2F negotiations.	Х	
P10: Perception of empathy will be lower during CMCv negotiations compared to F2F negotiations.		Х
P8: The length of the relationship will influence the need for social presence.	Х	
P9: There is less need for social presence during future negotiations if negotiators have met F2F in the past.	х	

Table 4: Accepted and rejected propositions.

It is possible to draw up a new model based on these finds, where the components are interacting in a more complex and dynamic way than first expected. This updated model is shown in Figure 13. In the first model (Figure 6), it was assumed that the choice between CMCv and F2F is the starting point of a negotiation. In the new model, two factors that play a part are the negotiation goal and the power the buyer has over the supplier. It has been

found that the power a buyer has over the supplier influences the choice between CMCv and F2F, where F2F is preferred if the power over the supplier is low. The intended outcome, negotiation goal, also plays part in the decision for CMCv was preferred in more distributive situations.

The online negotiation effect model also shows the finding that CMCv influenced the perceived distance between two parties, as a screen between the two parties, feels as if the parties are further away compared to when the opposite party is in the same room. This distance between the two parties holds an influence on how social cues are perceived. Social cues are more easily to see in F2F negotiations compared to CMC situations. The result of these social cues is the understandability of the body language and emotions transmitted and received. Different from the first model is the implementation of social cues that holds and influence emotions and body language. The distinction between emotions, body language, and oral language has been made. Oral language has been removed in the new model as no evidence was found that CMCv holds an influence on oral language.

Different from what the first model proposes that trust now is influenced by the distance between two parties. From the findings, it can be concluded that a closer personal connection influences the levels of trust and improves the negotiation situation Trust is also influenced by the length of the relationship as well as the difference in culture between the two parties. A longer relationship and having similar cultures lead to higher levels of interpersonal trust. This is different from the first model, where it was expected that social presence gets influenced by the length of the relationship. However, it has been chosen to link the length of the relationship to trust as trust levels are found to be the main factor getting influenced by a longer relationship. Trust levels in turn influence relationship building aspects, where a high level of trust creates better relationships. The organizational type was found to be connected to relationship building as it was found that public organizations hold a lower value to relationship building compared to private organizations. Relationship building is done by how negotiators trust the other person as well as the formality between the two parties. Having higher formality will result in less personal connection building, and with that a lower relationship was established. These formalities were also found to be the main influence on negotiation intelligence, where people found it easier to share information when there were informal moments between the formal ones.

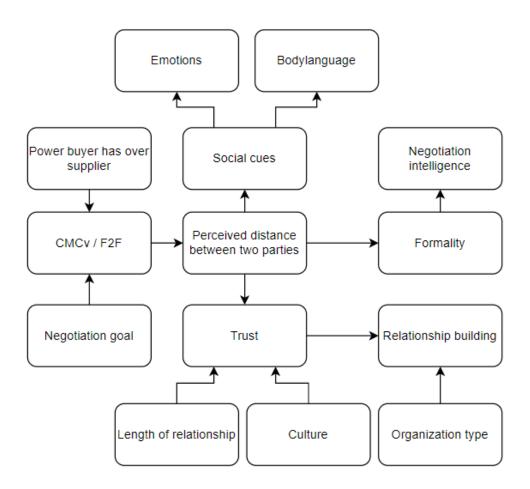


Figure 13: Online negotiation effect model

# 5. Discussions: many findings can be supported by theories from literature.

#### Theoretical contribution by combining CMCv with negotiations.

This paper aims to contribute to the existing literature by gaining additional knowledge on the influence of CMCv on negotiation competencies. Social presence theory and media richness theory were taken as a basis for this research. From this approach, it was found that CMCv does influence negotiation competencies in several ways and that it can be used as a tool when used correctly. Key findings are that non-verbal communications play a significant role during negotiation processes, where a reduction of non-verbal communication influences the negotiation competencies of negotiators. These non-verbal communications also influenced relationship building tactics as levels of trust were reduced during CMCv negotiations. Integrative tactics were found to be better suited for F2F negotiations as information sharing and personal connections were found to be lower in CMCv environments. Below, the key findings will be discussed in more detail and matched to theories already existing in literature.

# Language and Emotion factors are complemented by Verschueren's adaptation theory and the Human Mirror Neuron System theory.

Putting a screen between the two parties creates a perceived distance, which made it easier to manage one's own emotions. Such distances were used as an advantage in negotiations when negotiators did not want to build an emotional connection with the opposite party. These findings contradict findings in the literature who states that there is no difference in emotional communication in CMC compared to F2F (Derks, Fischer, & Bos, 2008, p. 766). Research from Derks et al (2008) included mainly text-based communications and did not include recent available CMCv methods available. By having contradicting findings of Derks et al (2008) it shows that there is a significant difference between the types of CMC used in the emotions felt. Future research should try to shine a light on this contradiction by conducting a deeper study regarding emotions and online platforms, with the inclusion of CMCv.

Media richness theory predicts that rich communication platforms can transfer oral communications and feedback fast and in real-time, where F2F is the highest form of media richness. Oral communications were predicted to be influenced by CMCv as issues such as lack of linguistic knowledge or external factors such as poor internet connection influence the effectiveness of CMCv negotiations. However, results show that oral communications were not influenced in any matter through CMCv negotiations. A reason for this can be Verschueren's adaptation theory (Verschueren, 1999), where it is stated that language use is more of a dynamic process and thus constantly changes and adapts based on the situation one is in. There should then also be done more research in understanding how differences in language skills influence CMCv negotiations, and how the adaptation theory plays a part in this situation.

Non-verbal language competencies were found to play a crucial role throughout the negotiation process, where being able to read and transfer non-verbal cues was perceived to be vital during negotiations. Lacking access to facial expressions, gaze, and posture were factors that are the most harmful for a negotiation. Literature is supported as these findings show that it is more difficult to emphasize oral language, evaluate oral language, and reveal the intention of the opposite party (Peleckis, peleckiene, & Peleckis, 2015). A reason for this is captured by the Human Mirror Neuron System theory (hMNS), where it is stated that humans unintentionally mirror one another. Mirroring both the verbal language of the other party as well as the body language of the other party helps in understanding important social

cues. Research by Dickerson et al (2017) shows that virtual video interactions prove that social cues are different from cues available during F2F communications. These changes in social information influence in turn affect the processing at a cortical level. Low-level social cues in turn disrupt the hMNS and make it more difficult to mirror the opposite party (Dickerson, Gerhardstein, & Moser, 2017, p. 3). The current study did identify that non-verbal language plays a part CMCv negotiations, however, it did not consider the level at which non-verbal language influences CMCv negotiations. Future studies should find which non-verbal competence is more important than others and should with this give managers a guideline on how these non-verbal competencies can still be integrated into CMCv negotiations.

#### Negotiation intelligence, complimented by the Kraljics matrix.

Findings show that negotiators make strategic use of the effects of CMCv for negotiation strategies. Power distance plays a part in deciding how close the personal contact needs to be. It falls in line with the Kraljics matrix, where a difference is made between important and less important suppliers. Maintaining a partnership is important with strategic suppliers, where exploiting buying power is possible at leverage suppliers. (Caniëls & Gelderman, 2005, p. 153). Exploiting of buying power is then also done through CMCv by the purchasing professionals. It was mentioned that they believe to create a sense of power by removing the possibility to create personal contacts. By embracing the distance, it was easier for the purchasing employees to make hard bargains. This is in complete opposite of the findings of Kersten et al (2021), who state that power distance reduces due to the removal of social cues in CMC negotiations (Kersten, Koeszegi, & Vetschera, 2003, p. 7).

In line with this distribution of buyer-supplier power distribution is also the media selection framework where they put media richness against routine VS nonroutine communications (Lengel & Daft, 1988, p. 227). This framework shows that with routine projects a low level of media richness is possible, whereas with non-routine projects a rich medium is needed. This can explain why leverage suppliers, and with that often also routine projects, are sufficient to negotiate over a platform with lower media richness. Creating a personal connection was preferred for suppliers falling into the strategic category of the Kraljics matrix, as it was perceived to be easier to build relationships and execute integrative strategies in an open setting where information sharing is high. CMCv negotiations were oftentimes perceived as being more formal, where the possibility of exploring new possibilities is decreased.

Integrative negotiations require an understanding of the opposite party and stage setting. Findings show that F2F negotiations are formal mixed with informal moments, whereas CMCv is perceived as highly formal. Especially informal moments are found to be important in integrative negotiations, and with this, this shows that the formal/informal difference is an important factor to consider while deciding on CMCv or F2F negotiations. This finding is in line with literature that states that informal knowledge sharing is the most successful manner to reach innovative ideas and knowledge sharing (Taminiau, Smit, & de Lange, 2009, p. 50).

#### *Relationship-building factors are supported by the social capital theory.*

The third layer of the negotiation competence model examined how levels of trust are impacted by CMCv negotiations. In line with the expectations was trust viewed as an important factor during both CMCv and F2F negotiations. Key indicators for trust were found in body language, such as posture and eye movements. Negotiators who hold a relaxed posture were perceived as more trustworthy compared to negotiators who were tense. Negotiators made use of both the body language of the person speaking, as well as the nonverbal language indicators of the rest of the team. Being able to view team dynamics helped in deciding if the other party was being trustworthy. CMCv negotiations removed the social cues on which trust factors are based. Body language such as posture and eye movements are mentioned to be harder or even impossible to read during CMCv negotiations. Differences can be made between individual camera positioning and conference room camera positioning. In both cases, some social cues can be viewed, whereas others are reduced. Dangerous here are potential misinterpretations due to social cues being transmitted differently based on camera positioning. Currently, not enough literature exists on how camera positioning influences the negotiation skills of the purchasing professional, and how this influences the relationship resulting from the negotiation. Future research is needed to find how camera positions can be used in an optimal setting.

Due to social cues being harder to read during a CMCv negotiation will trust levels drop. Therefore, it can be said that it is harder to perceive if the opposite party is being trustworthy. Resonating with this finding is the social capital theory, which indicates that trust can be generated through informal social connections (Glanville & Andersson, 2013, p. 545). Next to social cues do also personal factors play a part in deciding whether a person was trustworthy. Findings support existing literature stating that F2F negotiations give a

higher judgment accuracy regarding the interests of the opposite party (Arunachalam & Dilla, 1995, p. 289). Being able to talk informally to the opposite party created space for personal bonding time. Connecting on a personal level improves the levels of interpersonal trust. Creating time for personal bonding has a significant positive effect on the levels of trust.

F2F negotiations give space for small talks and informal talks, which has a positive effect on personal bonding activities. Conversations were often more formal during CMCv meetings, with a lack of personal bonding activities. Using humor is an important aspect of building trust before starting a negotiation, whereas also in CMC negotiations humor should be integrated into the start-up phase (Kurtzberg, Naquin, & Belkin, 2009, p. 377). Not being able to connect to the opposite party on a personal level has a negative influence on the levels of trust. Therefore, it can be said that levels of trust are lower in CMCv negotiations due to the lack of interpersonal trust. These findings are in line with the literature, where perceived trust is lower during CMCv negotiations compared to F2F negotiations (Damen, van der Wijst, van Amelsvoor, & Krahmer, 2020, p. 1145).

Results show that big cultural differences between negotiators are a reason for preferring F2F negotiations, whereas similar cultures are more likely to choose CMCv negotiation settings. Literature confirms that cross-cultural conflicts are more likely to occur between individuals that come from different cultures. Cross-cultural competence is then also vital in negotiations, where people with different cultures can understand the cultural aspects of the opposite party. Both verbal and non-verbal cues are important to enhance cross-cultural communication (Costin, 2015, p. 187). Cross-cultural competencies are thus more difficult in online situations, where non-verbal cues are less present.

#### Moral wisdom, people often overestimate their empathic capacity.

Both ethical behavior and empathy are important factors for moral wisdom (Smolinski & Xiong, 2020, p. 383). Findings show that all participants deemed themselves to be highly empathetic and acting fairly to the opposite party. Overestimating one's ethical behavior happens frequently, as people often act from their moral capacity (Cicero, 2021, p. 1070). Negotiators frequently misjudge how their own beliefs and values are shared with the opposite party. Studies show that negotiators assume that the opposite party will reflect their beliefs of what is fair, whereas social negotiators assume that the opposite party is willing to co-create value (Van Kleef & Carsten, 2002, p. 59).

Feelings for moral obligations often let humans overestimate their empathic abilities (Keysers & Gazzola, 2014, p. 164). People are inclined to overestimate their capacity to make correct conclusions about the feelings and thoughts of the opposite party (Swann & Gill, 1997, p. 756). Assuming the perspective of the opposite party without clearly getting the perspective of the other party through communication leads to inaccurate judgments (Eyal, Steffel, & Epley, 2018, p. 547). Biased viewpoints from the participants on ethical behavior and empathic abilities can then also be expected to have influenced the results.

#### The length of the relationship influences the need for social presence in online environments.

Social presence was mainly found to be of high importance in establishing new buyer-supplier relationships. Findings show that being able to trust the opposite party for a good performance is of high importance and can even overshadow interpersonal trust. The length of a good and satisfactory relationship then also positively influences the levels of trust (Mungra & Yadav, 2020, p. 219), where established long-term trust is dominant over trust during a negotiation alone. Also, due to a longer relationship, people oftentimes know more about the other organization, such as organizational structure, operations, and product quality. This helps with understanding the opposite party and finding mutual benefits.

Previous literature has shown that personal relations, interpersonal trust, and a higher form of personal communication can be reached with the use of interpersonal strategies (Jensen, 2009, p. 4). However, it was mentioned that it does not matter how long negotiators have known each other, there are still differences between CMCv and F2F relations. Contacts that were established through CMCv negotiations only felt different and more distant compared to relations established through F2F negotiations. With this, the claims from Walther (1996) that relations over CMCv can become similar to relationships over F2F over time are not fully supported. How a negotiator presents themselves through a positive communication style as well as how comfortable one is in CMC helps make it easier to negotiate online (Geiger & Parlamis, 2014, p. 67). Meeting the opposite party at least once in real life helps connect on a personal level, which stimulates informal and personal talks during CMCv negotiations. Having met in person influences the initial levels of social presence. Having personal factors in common with the opposite party or having a personal relationship with the opposite party can make up for the lack of social cues in a CMC negotiation (Pesendorfer, Graf, & Koeszegi, 2007, p. 1328).

# 6. Conclusion: CMCv can be used as an advantage based on the negotiation strategy that is desired.

Managerial implications: lack of body language and social human interaction negatively influence negotiation competences.

In conclusion, it can be stated that especially body language and social human interactions significantly negatively influence social presence during CMCv negotiations and with that also influence the negotiation competencies. Especially the competencies of language and emotion, negotiation intelligence, and relationship building were influenced by the difference in communication media. The effects of CMCv on trust and negotiation intelligence contribute to the literature on CMC negotiation success by providing more data on the argument that there is both a positive and a negative side to online negotiating competencies. Results show that the difference in communication means used is impacting both the negotiation success as well as how the communication means can be used as an advantage in a negotiation strategy. Especially, results follow the expectations of the social presence theory, where it is stated that the feeling of social contact is playing a part in the success of negotiations.

Managers should realize that CMCv negotiations could be used as a negotiation strategy, but that CMCv cannot completely substitute F2F negotiations. Differences between the two forms exist and can be used as an advantage. Important for managers is to identify the goals for the negotiation, the desired relationship with the opposite party, and the relationship that exists. A difference can be made between CMCv and F2F negotiations based on the importance of the supplier. Integrative strategies are best executed in F2F settings as here information sharing, and trust are more present than in CMCv settings. Distances between two parties can also be exploited as low emotional factors give possibilities to harder bargaining powers, and these distributive strategies are more suited for CMCv negotiations. Cultures should also be considered when deciding on a negotiation strategy, as opposition parties have different norms and values, which influence expectations and potential conflict resolutions.

Previous relationships between buyer-supplier should also be considered while deciding between CMCv and F2F settings. Previous relationships come with a higher form of trust and personal connections, and with that require levels of social presence, compared to new relationships. Practitioners should consider that personal interactions matter when new relationships need to be established in a CMCv setting. Social interactions need to occur in CMCv settings as well, as stage setting is important for negotiation success. Managers should consider still taking time to have breaks between topics to give way to small talk so that personal connections can form, and a mutual understanding is created. Informal settings are more difficult to create in CMCv negotiations but are vital for creating win-win situations.

#### *Limitations: interviews in a small sample size.*

Putting a step on the path toward the new field of research regarding CMCv negotiations will also come with limitations in this current work. One of the biggest limitations of this study is the sample size of 10 interviews with only a limited variety of cultures and industries. This number of interviews may be insufficient to make generalized conclusions. Especially the inclusion of only one public organization is insufficient to generate a correct distinction between private and public organizations. Due to the sample size was it decided to make no distinction in gender or age. However, literature mentions that gender and age can play a role in the success of (CMCv) negotiations (Stuhlmacher & Linnabery, 2013, p. 221; Kappes, Häusser, Mojzisch, & Hüffmejer, 2020, p. 2102). The current paper did leave out these aspects of gender and age that could have a moderating effect on the effects of CMCv on the negotiation competencies.

Another limitation of this study is that it considered all aspects of the negotiation competence model. The purpose of this study was to generate a first idea on the influence of CMCv on negotiation competencies. However, by doing so was this study not able to dive deeper into a single aspect of the competencies and stuck to a more surface level.

A third limitation of this study is the fact that there was only a limited amount of research papers were available based on CMCv negotiations. Many existing research papers were based on CMCt only, which might not always apply to CMCv negotiations. Due to the size and scope of this paper were literature assumptions for CMCt generalized and applied to CMCv negotiations as well. It can be possible that in some cases the literature holds insufficient insight into the differences between CMCt and CMCv, which can influence the results of this study.

# Recommendations for future research: older studies on CMC negotiations should be revisited.

New studies should repeat this current study to generate a larger sample size, including a larger base of various industries and cultures. Based on this study, it is recommended to also execute an observatory study. During an observatory study, the online negotiation effect model can be used as a framework to visually see differences in the effect of especially body language, negotiation intelligence, and personal feeling. With this statement, the statement that there should be more research on nonverbal behavior in CMCv settings (Čulo & Skendrović, 2012, p. 326) is supported. Especially future research should consider how the current gap between the body language in CMCv negotiations and F2F negotiations can be closed.

This paper took on the negotiation competence model to measure all aspects of the negotiation competence model. To the author's knowledge is this study the first to research the negotiation competence model in an online environment. Future research and a deeper literature background will be beneficial for the depth of this research topic. However, it would be recommended to dive deeper into single aspects of the negotiation competence model. Especially managers could benefit from further understanding the dynamics of negotiation intelligence, the Kraljics matrix, and CMCv/F2F strategies. A framework would be preferred to create a guideline for practitioners. Additionally, this study did not find any correlation between modal wisdom and CMCv negotiations. This finding is different compared to the expectations and existing literature. Further studies could dive deeper into the influences of CMCv on moral wisdom.

Next to finding more evidence for the proposed model will also a call be made for redoing older papers focused purely on CMCt. It has been found throughout the literature that many papers do not include CMCv in their research. Current information is then also not sufficient to fully grasp the influence CMCv has on negotiations in the short run and collaboration in the long run. During this study, it has been found that small talk influences negotiations, and plays a part in relationship building, however, currently, there is only a limited literature base that measures the exact influence of small talk. There are a few papers that mention a difference in the influence of gender on the success of online communications. Due to the size and scope of this paper was gender not included in the results. It would then also be recommended to look deeper into the effect of gender in CMCv negotiations.

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# Appendix

# Appendix A

# Language and Emotion

- Have you ever had the feeling that you were more inclined to stay quiet during CMCv negotiations?
- How did the CMCv negotiation influence the understandability of the other party?
  - Would there be more issues with language barriers?
- What makes you stay engaged during the negotiation?
  - Would you be more distracted during CMCv negotiations?
- How is your usage of body language and hand gestures?

## Negotiation intelligence

- How much of your own needs are shared during both CMCv and F2F negotiations?
- How much time do you reserve to actively gain important information from your counterparty?
- Do you make time for "off topic" business related discussions?

## **Relationship building**

- Do you keep room for personal information sharing?
  - How is small talk influenced by CMCv?
- How do different cultures influence the negotiation?
  - How well do you understand different cultural values?
- What are important factors that makes you trust the opposite party?
- When will you get a feeling that you can trust the opposite party?
  - $\circ$  Will you trust people more easily when you have seen them in person?

## Moral wisdom

- How do you notice emotions while negotiations in a CMCv environment?
- What makes you believe that the opposite party is involved in the negotiation?
- How are you considering the view of the opposite party?
  - Can you easily place yourself in the shoes of the opposite party?

### Length of the relationship

- How much influence does it have for you if you have met the opposite party in person?
- What will chance for you during CMCv negotiations when you have met the opposite person in real life at least one time before the CMCv negotiation.
  - Will such negotiations be different compared to CMCv negotiations you have with new suppliers?
- Do you have similar relationships with suppliers you have seen in real life compared to relationships with suppliers that you have only spoken to during CMC meetings?